Technical Programme

ICMAT 2009

International Conference on Materials for Advanced Technologies 2009

AND

IUMRS - ICA 2009

International Union of Materials Research Societies-International Conference in Asia 2009

28 June - 3 July 2009, Singapore

Suntec Singapore International Convention & Exhibition Centre

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Organised by

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In association with

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Institute of Materials Research and Engineering A*STAR

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Preface

ICMAT 2009 is the 5th in the series of the "International Conference on Materials for Advanced Technologies" organized by the Materials Research Society of Singapore (MRS-S). It is held together with the International Union of Materials Research Societies' (IUMRS) International Conference in Asia (IUMRS – ICA 2009). Similar to the previous four conferences in this series, this conference is also organized in association with the National University of Singapore (NUS), Nanyang Technological University (NTU), and the Institute of Materials Research and Engineering (IMRE), with the support of A*STAR and many other national and international organizations.

With the participation of more than 7000 delegates including 12 Nobel laureates in the past four conferences, ICMAT has become an icon of Singapore serving the objectives of MRS-S in providing a scientific platform for both local and international materials scientists, engineers and technologists. The ICMAT 2009/IUMRS ICA 2009 consist of 23 technical symposia covering almost all the aspects of Materials Science, Engineering and Technology. Incorporation of GEM4/SMART Symposium on Infectious Diseases, two industrial symposia entitled , "Nanoimprint Lithography" and "Microwave Processing of Materials", and a panel discussion on "Entrepreneurship in Materials Science and Engineering" are the new initiatives of the conference.

There will be 9 Plenary-, 3 Theme-, and 3 Public- Lectures by distinguished scientists including 3 Nobel Laureates. Large numbers of Key-note and Invited talks in the various Symposia are being presented, in addition to Oral and Poster presentations by about 1800 delegates. Our sincere thanks are to all those who made these lectures and presentations possible for the success of the conference.

In order to ensure high quality of work and presentation by researchers, the Proceedings of many of the ICMAT Symposia will be published as Special issues of reputed international Journals with Guest Editors chosen from the organizing committees and after the due process of refereeing. We have also instituted more than 25 poster awards to encourage poster presentations.

ICMAT series are not only organized in association with NUS, NTU and IMRE but are also supported by them in terms of financial assistance, participation and more importantly in the organization of various symposia. The participation of Nobel Laureates has become possible through the generous support of A*STAR for which we are grateful. Several other organizations including DSTA, Singapore Tourism Board, US Army Research Office-Far East, Institute of Physics Singapore, and a large number of co-sponsors, exhibitors, and well-wishers have supported the conference and organization of public lectures in one way or other. I wish to place on record our deep appreciation to all of them for generously supporting the event.

I am grateful to Prof. Tan Chorh Chuan, President of NUS, for his continued support and more importantly for gracing the Closing Ceremony and giving away the poster-awards. I am also thankful to Prof. Shih Choon Fong, Founding President of MRS-S and former President of the NUS, for his continued advice and encouragement in organizing this conference.

It is my pleasant duty to thank all the members of the Organizing Committee and the International and National Advisory Committees for their advice and help. My Chairmen-colleagues of the concerned Symposia, their Organizing Committees, both International and National, have done an excellent job of putting together an exciting scientific/technical program. We are grateful to all the Sponsors, Supporters and Exhibitors for their spontaneous response and encouragement by way of committing funds and extending help in kind.

I would like to place on record our sincere thanks to the authorities of IMRE, in particular it's Executive Director, Dr. Lim Khiang Wee for hosting the office of MRS Singapore at IMRE, and providing necessary secretarial and logistic support for both MRS-S and ICMAT conferences.

A special mention is to be made of Prof. Feng Yuan Ping, Technical Chair, who skillfully handled some of the technical and organizational matters. The continued support of Mr. Ivan Boo, Ms. Lee Fong and several others from Integrated Meetings Specialist Pte Ltd in providing Conference Secretarial service is appreciated.

B.V.R. Chowdari
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17th June 2009

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Singapore 508839
Tel. : +65 6546 4811
Email : marcus@crest-technology.com
Contact : Marcus Chia
Website : www.crest-technology.com
Booth : D9

Distribution of Hi-Tech equipment; scientific and industrial system for quality assurance; failure analysis; research and development in Semiconductor; Microelectronics; Disk Drive; Pharmaceutical/Medical & Biotechnological industries.

CSM Instruments SA

Address : Rue de la Gare 4 Galileo Center
CH-2034 Peseux Switzerland
Tel. : +41 32 557 5619
Fax : +41 32 557 5610
Email : bin.zhang@csm-instruments.com
Contact : Zhang Bin
Website : www.csm-instruments.com
Booth : D7

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Tribometer is for the Wear and Friction studies, with optional High Temperature and Vacuum

Calotest / Calowear is for coating thickness measurement and Coating/Substrate's individual wear rate testing

3D Imaging via Atomic Force Microscope (AFM) & Confocal Microscope provides high quality synchronized topography

DAAD – German Academic Exchange Service

Address : DAAD
Kennedyallee 50 Bonn, Germany 53175
Tel. : +49 (0) 228882-0
Fax : +49 (0) 228882-444
Email : postmaster@daad.de
Contact : Ms Stephanie Knobloch
Website : www.daad.de
Booth : D16

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DKSH Technology Pte Ltd

Address : 34 Boon Leat Terrace
Singapore 119866
Tel. : +65 64719 246
Email : doris.nk.lim@dksh.com
Contact : Doris Lim
Website : www.dksh.com
Booth : D2/D3

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Our solutions are focused on the life science, material science and chemical analysis. We provide comprehensive services that cover the full sales cycle; i.e. from determining our customers' requirements, developing and implementing customized solutions, and installing and integrating the products in the customers' processes.

DKSH Technology is a member of the DKSH Group, which is headquartered in Zurich, Switzerland, and has over 17,000 employees in over 50 countries worldwide.

After 30 years, our diverse customer base extends into many sectors that have contributed to Singapore's rapid development during this period. They are mainly hospitals, universities and research institutes, forensic, agriculture, energy, pharmaceutical, environmental, minerals, life sciences, manufacturing, electronics and semiconductors and laboratory testing companies.

FEI Company of USA (S.E.A) Pte Ltd

Address : No. 1, Jalan Kilang Timor, #04-02
Pacific Tech Centre Singapore 159303
Tel. : +65 6272 0050
Email : andy.ong@fei.com
Contact : Andy Ong
Website : www.fei.com
Booth : A10/A11

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Address : 12 Campus Boulevard
Newtown Square, PA 19073-3273
United States
Tel. : +610 325 9814
Fax : +610 325 9823
Email : mcdonnell@icdd.com
Contact : Helen M. McDonnell
Website : www.icdd.com
Booth : C9

ICDD, a not-for-profit corporation, is dedicated to the collecting, editing and publishing of the Powder Diffraction File (PDF). Our mission is to be the world center for quality diffraction data meeting the needs of the technical community. We promote the application of materials characterization methods by sponsoring the Denver X-ray Conference; its proceedings, Advances in X-ray Analysis and the journal, Powder Diffraction. ICDD and its members conduct workshops and clinics on materials characterization at our headquarters in Newtown Square, Pennsylvania and at X-ray analysis conferences around the world.

ICDD flourishes with a global association of 291 scientific members in 37 countries. We are led by a Board of Directors drawn by ballot from the ICDD membership. ICDD members volunteer their time and energy to serve on many technical and oversight committees. Our members are actively engaged in the field of X-ray diffraction or related disciplines. The membership meets annually to set the direction of the organization, direct scientific work and plan for the future development of ICDD. ICDD funds its scientific and educational mission entirely from the licensing of the Powder Diffraction File and related products. ICDD products and services are sold in over 100 countries.

ITS Science & Medical Pte Ltd

Address : Blk 219 Henderson Road #11-02
Henderson Industrial Park
Singapore 159556
Tel. : +65 6309 3201
Email : info@its-sciencemedical.com
Contact : Tan Sihui
Website : www.its-sciencemedical.com
Booth : B3/B4

ITS Science & Medical Pte Ltd is a leading distributor of scientific equipment and biochemicals in Singapore.

The company offers a wide and comprehensive range of technologically advanced products from manufacturers in US, Europe and Asia who are established brand leaders in their respective fields.

Our main customers are specialists and researchers from research institutions, universities, government departments and private industries who are involved in research and process in the areas of Materials Science, Nano-Science, Semi-conductors, Environment, Chemicals and Biomedical.

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JPK Instruments *Nanotechnology for Life Science*

JPK Instruments AG

Address : Bouchéstrasse 12 Haus 2, Aufgang C
12435 Berlin Germany
HP : +65 9839 9938
Email : ltan@jpk.com
Contact : Lawrence Tan
Website : www.jpk.com
Booth : D6

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JPK was recognized as Germany's fastest growing nanotechnology company in 2007 and 2008 (Deloitte). From its earliest days applying atomic force microscope (AFM) systems, JPK has recognized the opportunities provided by nanotechnology for application from biophysical to biomedical research, tailoring its instrument platforms to meet user requirements.

Headquartered in Berlin and with operations in Dresden, Cambridge (UK) and Singapore, JPK maintains a global network of distributors and support centers and provides on the spot applications and service support to an ever-growing community of researchers.

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King Abdullah University of Science and Technology

Address : King Abdullah University of Science
and Technology
P.O. Box 55455
Jeddah 21534, Saudi Arabia
Tel. : 966 0544 700808
Email : luc@kaust.edu.sa
Contact : Lu Chun
Website : http://www.kaust.edu.sa/
Booth : A1C

King Abdullah University of Science and Technology (KAUST) is being built in Saudi Arabia as an international, graduate-level research university dedicated to inspiring a new age of scientific achievement in the Kingdom that will also benefit the region and the world. KAUST is the realization of a decades-long vision of the Custodian of the Two Holy Mosques, King Abdullah bin Abdulaziz Al Saud.

Korea Bone Bank Co., Ltd

Address : RM402 Acetechnotower 9th.
Gasandong Geumcheongu Seoul 153-782
South Korea
Tel. : +82-2-2104-0475
Email : orienta@empal.com
Contact : Ju Woong Jang
Website : www.kbbcom.co.kr
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Korea Bone Bank (KBB) is the global bio tissue engineering company located in Seoul, South Korea.

The company has founded in 1997, beginning with allograft distributer.

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Address : 67 Ayer Rajah Crescent #07-23
Ayer Rajah Industrial Estate
Singapore 139950
Tel. : +65 6779 7823
Fax : +65 6773 0628
Email : Leonard.Neo@Leica-Microsystems.com
Contact : Leonard Neo
Website : www.leica-microsystems.com.sg
Booth : C7

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Address : 6 Tagore Drive #04-05
Tagore Industrial Building
Singapore 787623
Tel. : +65 6451 1123
Email : info@lmstech.com.sg
Contact : Francis Lim
Website : www.lmsscientific.com
Booth : D8

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Address : 31 Toh Guan Rd East #06-08
LW Techno Centre Singapore 608608.
Tel. : +65 6872 2215
Email : sales@metrohm.com.sg
Contact : Francis Ong, Chong Shey Ling
Website : www.metrohm.com.sg
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Ubi Techpark (Lobby D), Singapore 408564
Tel. : +65 6356 8262
Email : ltloo@msitech.net
Contact : Mr. Loo Lien Tat
Website : www.msitech.net
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NTT Advanced Technology Corporation

Address : Ohsaki MT Building 7F, 5-9-11
Kita-shinagawa, Shinagawa-ku
Tokyo, Japan
Tel. : +81 3 5843 0927
Email : moreinfo@ntt-at.co.jp
Contact : Kumiko Sudo
Website : www.ntt-at.com
Booth : D15

NTT Advanced Technology Corporation (NTT-AT) will exhibit leading-edge products at ICMAT 2009.

The lineup is as follows: Molds for nanoimprint lithography, Precision optics, X-ray optics, Epitaxial wafers, Semiconductor processes, Optical crystal and etc.

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NUS Graduate School for Integrative Sciences & Engineering

Address : NUS Graduate School for Integrative Sciences and Engineering (NGS)
National University of Singapore, Centre for Life Sciences
#05-01, 28 Medical Drive Singapore 117456
Tel. : +65 6516 7531
Fax : +65 6464 1148
Email : ngshwm@nus.edu.sg
Contact : Ho Wei Min
Website : www.ngs.nus.edu.sg
Booth : A3

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Address : 2-2-74, Minami-mikunigaoka, Sakai-ku
Sakai, Osaka 590-0023 Japan
Tel. : +81-722-21-2778
Fax : +81-722-21-2779
Email : tanaka@ostech.co.jp
Contact : Makoto Tanaka
Website : www.ostech.co.jp
Booth : B5C

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Palico Biotech Pte Ltd

Address : 18 Boon Lay Way #06-104 TradeHub21
Singapore 609966
Tel. : +65 6465 1350
Fax : +65 6465 1360
Email : sales@palicobio.com
Contact : Patrick Tham
Website : www.palicobio.com
Booth : A12

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PURAC Biomaterials

Address : #06-19 Nordic European Centre
3 International Business Park
Singapore 609927
Tel. : +65 6349 1350
Email : l.yap@purac.com
Contact : Lynn Yap
Website : www.puracbiomaterials.com
Booth : B1C

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Address : 73 Ayer Rajah Crescent #04-14
Ayer Rajah Industrial Estate
Singapore 139952
Tel. : +65 6854 8138
Fax : +65 6778 3900
Email : YenLeng.Yeo@qiagen.com
Contact : Yeo Yen Leng
Website : www.qiagen.com
Booth : D1C

QIAGEN N.V., a Netherlands holding company, is the leading global provider of sample and assay technologies. Sample technologies are used to isolate and process DNA, RNA and proteins from biological samples such as blood or tissue. Assay technologies are used to make such isolated biomolecules visible.

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Address : 6325 Lusk Blvd San Diego, CA 92121
United States
Tel. : +858 4814400
Email : info@qdusa.com
Contact : Socrates Gomez
Website : www.qdusa.com
Booth : E2

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Raith

Address : Two Chinachem Exchange Square
No. 338 King's Road; North Point
Hong Kong
Tel. : +852 2887 6828
Fax : +852 2887 6122
Email : linden@raithasia.com.hk
Contact : Andre Linden
Website : www.raith.com
Booth : D10/D11

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Address : 26 Ayer Rajah Crescent #03-10
Singapore 139944
Tel. : +65 6571 0888
Email : graham@ri.com.sg
Contact : Graham Bennett
Website : www.ri.com.sg
Booth : A4C/A5/A6

Research Instruments Pte Ltd is a leading distributor of analytical and life science instrumentation and consumables in Singapore, Malaysia and Thailand. We represent US and European manufacturers such as Omicron Nanotechnology, Thermo Scientific Molecular Spectroscopy, TA Instruments, whose advanced lab technology products are used in the research and analysis of polymer and bio-materials.

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Address : 1 Science Park Road, #02-14
The Capricorn Singapore
Science Park II Singapore 117528
Tel. : +65 6779 1200
Email : sapl@sial.com
Contact : S. Devan
Website : www.sigmaaldrich.com
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SYNOTHERM Corporation

Address : No 178, Changxing Road,
Longping High-tech Park
Zhanggongling, Changsha City,
Hunan Province 410126 China
Tel. : +86 731 880 3398
Email : cto@synotherm.com
Contact : Hu Peng
Website : www.synotherm.com./en/
Booth : D14

SYNOTHERM Corporation was founded in 2001 to accelerate the introduction of high temperature microwave technology into the ceramics and metals industries. Since then, it has grown to produce technologically advanced microwave systems for a variety of industries that include mining, waste remediation, implantology, and PM, as well as technical and daily-use ceramics and metals. The company has distinguished leadership and a diverse staff that are all vested in enhancing the state of the art in microwave technology. The direct investment of academic knowledge from Microwave Processing & Engineering Center (MPEC) and the tireless work of so many researchers throughout the world, is raising microwave manufacturing science above radiant heating; and this noble work has manifest into a company with one vision: "To give breath to the New Flame of Creation."

Taylor & Francis Asia Pacific

Address : 240 MacPherson Road
#08-01 Pines Industrial Building
Singapore 348574
Tel. : +65 6741 5166
Fax : +65 6741 6922
Email : sriazhani.puteri@tandf.com.sg
Contact : Azhani Eshak
Website : www.taylorandfrancisgroup.co.uk
Booth : BP01

In 1973, the Chemical Rubber Company sold their manufacturing division and related activities. Concentrating exclusively on publishing, the name was changed to CRC Press, Inc. In 1986, CRC was purchased by Times Mirror Company and subsequently expanded its product line to include a broad range of textbooks and references for scientific, medical, and technical professionals. Information Ventures LLC, in partnership with Warburg Pincus, purchased CRC Press in January 1997 and changed its name to CRC Press LLC. CRC Press became a publicly held company under the ownership of Information Holdings, Inc (IHI) in August 1998. In April 2003, one great tradition joined another as CRC Press became part of the Taylor & Francis Group of companies. Founded in 1798, Taylor & Francis is a leading international academic publisher devoted to disseminating scholarly information of the highest quality.

The Institution of Engineers, Singapore

Address : 70 Bukit Tinggi Road Singapore 289758
Tel. : +65 6469 5000
Email : siewkeow@iesnet.org.sg
Contact : Tan Siew Keow
Website : www.ies.org.sg
Booth : BP02

The Institution of Engineers, Singapore was formally established in July 1966 as the national society of engineers in Singapore. Corporate Membership of IES signifies recognition of engineering experience and

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IES is the premier engineering Institution in Singapore and is called upon by the Government to provide feedback on professional engineering matters. This is evidenced by the large numbers of government committees on which IES members sit. IES sees this as a crucial role since there is no other learned body in Singapore that can represent all engineers in serving the national interest. Our strategy to do this is to reach out to as many qualified engineers as possible in all sectors of our economy, to conduct activities that will draw them to want to become part of IES, and to establish strategic links with specialized international institutions to ensure we are plugged into the global network of technology advances.

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Address : 11 Biopolis Way, The Helios #10-05 Singapore 138667
Tel. : +65 6773 9675
Email : eseetoh@veecoasia.com
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Website : www.veeco.com
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Contact : Sonja Hoffmann
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Activity Locator & Floor Plans

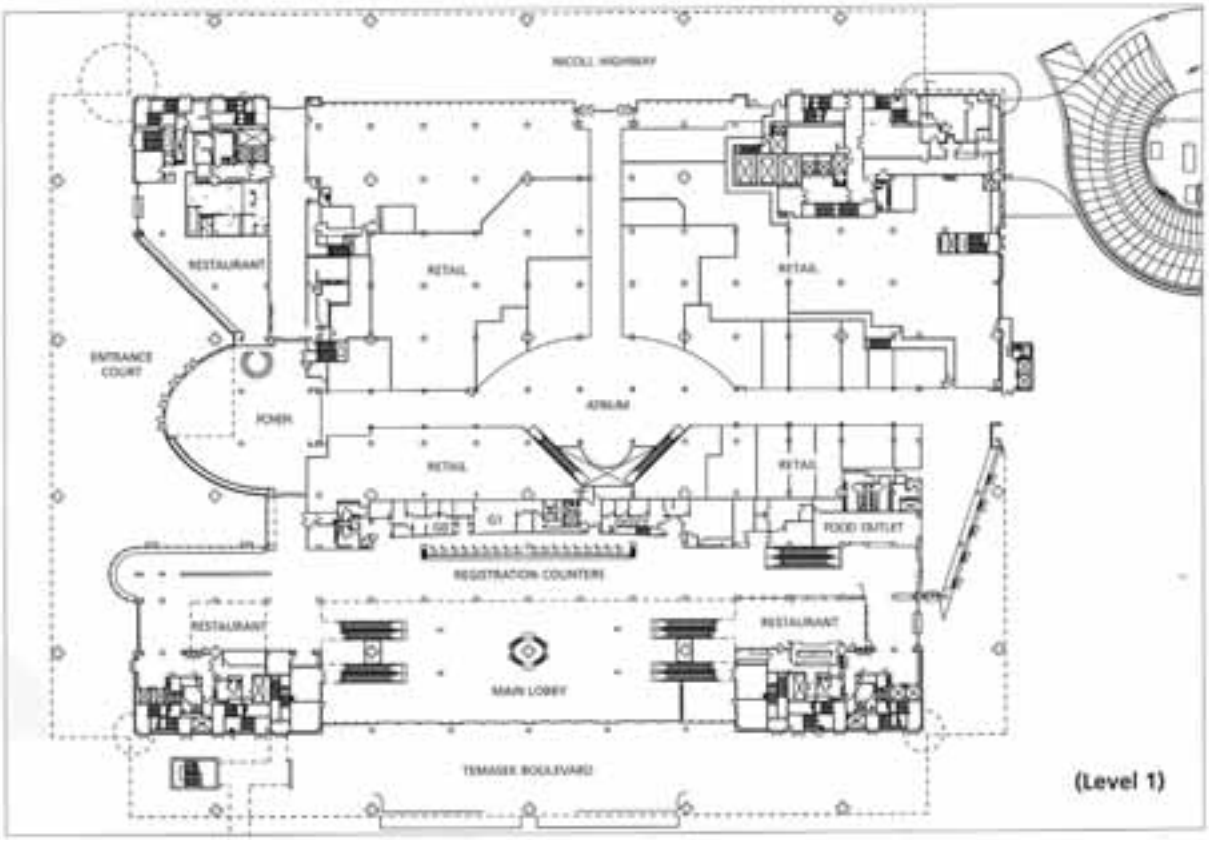
Level 1

Date	Time	Event	Room / Location
Sunday, 28 June 2009	14:00 - 20:00 hrs	Pre-conference Registration	Registration Counter
Monday, 29 June 2009	08:00 - 17:00 hrs	Registration	Registration Counter
Tuesday, 30 June 2009	08:00 - 17:00 hrs	Registration	Registration Counter
Wednesday, 1 July 2009	08:00 - 17:00 hrs	Registration	Registration Counter
Thursday, 2 July 2009	08:00 - 15:00 hrs	Registration	Registration Counter
Friday, 3 July 2009	08:30 - 11:00 hrs	Registration	Registration Counter

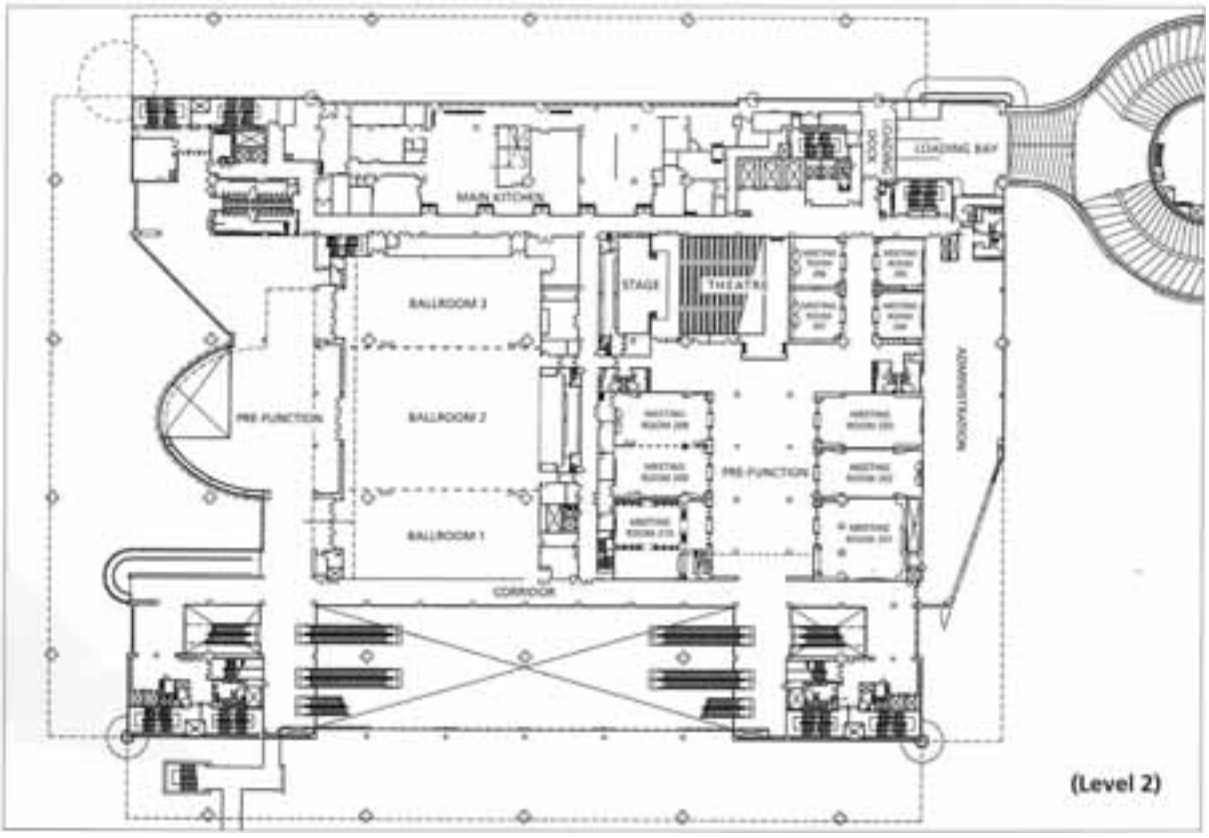
Level 2

Date	Time	Event	Room / Location
Monday, 29 June 2009	09:00 - 10:30 hrs	Opening Ceremony & Plenary Lecture 1	Ballroom 1 & 2
	11:00 - 18:00 hrs	Symposium Technical Sessions	Rooms 201 to 209
	13:00 - 13:45 hrs	Theme Lecture 1	Ballroom 1
Tuesday, 30 June 2009	08:30 - 10:00 hrs	Plenary Lectures 2 & 3	Ballroom 1 & 2
	10:30 - 16:30 hrs	Symposium Technical Sessions	Rooms 201 to 209
	13:00 - 13:45 hrs	Theme Lecture 2	Ballroom 1
Wednesday, 1 July 2009	08:30 - 10:00 hrs	Plenary Lectures 4 & 5	Ballroom 1 & 2
	10:30 - 17:30 hrs	Symposium Technical Sessions	Rooms 201 to 209
	13:00 - 13:45 hrs	Theme Lecture 3	Ballroom 1
Thursday, 2 July 2009	08:30 - 10:00 hrs	Plenary Lectures 6 & 7	Ballroom 1 & 2
	10:30 - 18:00 hrs	Symposium Technical Sessions	Rooms 201 to 209
	13:00 - 14:30 hrs	Panel Discussion	Ballroom 1
	19:00 - 22:00 hrs	Conference Banquet	Ballroom 1 & 2
Friday, 3 July 2009	09:00 - 10:30 hrs	Plenary Lectures 8 & 9	Ballroom 1 & 2
	11:00 - 13:00 hrs	Symposium Technical Sessions	Rooms 201 to 209
	13:00 - 13:30 hrs	Closing & Poster Award Ceremony	Ballroom 1

Level 1, SICEC



Level 2, SICEC



Activity Locator & Floor Plans

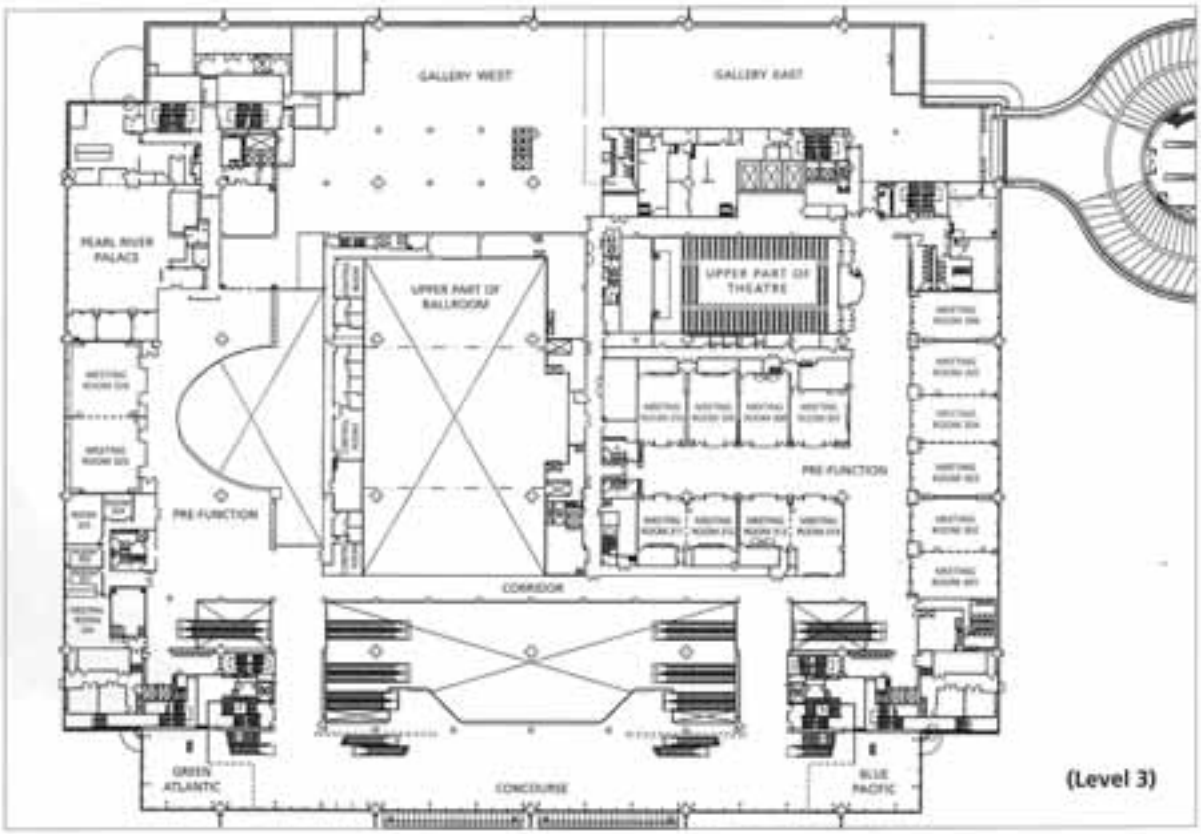
Level 3

Date	Time	Event	Room / Location
Monday, 29 June 2009	11:00 - 18:00 hrs	Symposium Technical Sessions	Rooms 301 to 314, 320, 323, 325-326
	10:30 - 11:00 hrs	Coffee Break	Gallery East & West
	09:00 - 17:00 hrs	Exhibition	Gallery West
	09:00 - 17:00 hrs	Internet Stations	Gallery West
Tuesday, 30 June 2009	10:30 - 16:30 hrs	Symposium Technical Sessions	Rooms 301 to 314, 320, 323, 325-326
	10:00 - 10:30 hrs	Coffee Break	Gallery East & West
	09:00 - 17:00 hrs	Exhibition	Gallery West
	09:00 - 17:00 hrs	Internet Stations	Gallery West
	14:00 - 16:30 hrs	Poster Session	Gallery East
	16:30 - 17:30 hrs	Bus Transfer to UCC for Public Lectures	Gallery East
Wednesday, 1 July 2009	10:30 - 17:30 hrs	Symposium Technical Sessions	Rooms 301 to 314, 320, 323, 325-326
	10:00 - 10:30 hrs	Coffee Break	Gallery East & West
	09:00 - 17:00 hrs	Exhibition	Gallery West
	09:00 - 17:00 hrs	Internet Stations	Gallery West
	15:30 - 17:30 hrs	Poster Session	Gallery East
	17:30 - 18:30 hrs	Bus Transfer to UCC for Public Lectures	Gallery East
Thursday, 2 July 2009	10:30 - 18:00 hrs	Symposium Technical Sessions	Rooms 301 to 314, 320, 323, 325-326
	10:00 - 10:30 hrs	Coffee Break	Gallery East & West
	09:00 - 17:00 hrs	Internet Stations	Gallery West
	16:00 - 18:00 hrs	Poster Session	Gallery East
	13:00 - 17:30 hrs	Industrial Symp 1 - Nanoimprint Lithography	Room 302
Friday, 3 July 2009	11:00 - 13:00 hrs	Symposium Technical Sessions	Rooms 301 to 314, 320, 323, 325-326
	10:30 - 11:00 hrs	Coffee Break	Gallery East & West
	09:00 - 12:00 hrs	Internet Stations	Gallery West
	09:00 - 17:00 hrs	Industrial Symp 2 - Microwave Processing of Materials	Room 310
	10:30 - 13:00 hrs	British Council INYS	Room 308

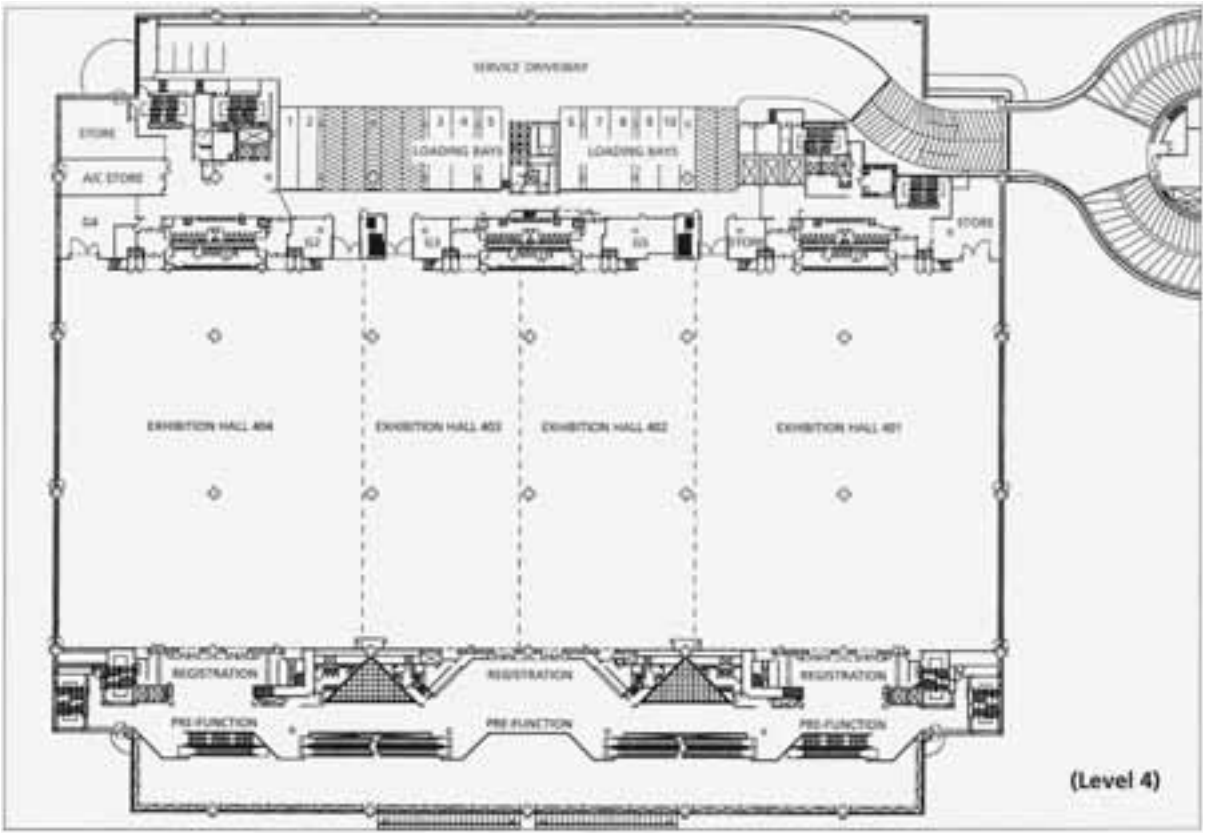
Level 4

Date	Time	Event	Room / Location
Monday, 29 June 2009	12:30 - 14:00 hrs	Lunch	Hall 401
Tuesday, 30 June 2009			
Wednesday, 1 July 2009			
Thursday, 2 July 2009			
Friday, 3 July 2009			

Level 3, SICEC



Level 4, SICEC



Poster Presentation Schedule

Venue: Level 3, Gallery East

Tuesday, 30 June 2009 (14:00 – 16:30 hrs)
Symposium C) Advanced Delivery of Therapeutics: New Challenges for Materials

Symposium E) Nanostructured Magnetic Materials and their Applications

Symposium H) Carbon Nanotubes: Synthesis, Characterisation and Applications

Symposium L) NEMS/MEMS Technology and Bio Devices

Symposium M) DNA Nanoscience and Biophysics

Symposium P) Optical Fiber Devices and Applications

Symposium Q) Computational Materials Design at All Scales: From Theory to Application

Symposium S) Novel Routes of Solution Processing

Symposium U) Mechanical Behavior of Micro- and Nano-Scale Systems

Symposium V) Materials Education: New Tools and Resources

Wednesday, 1 July 2009 (15:30 – 17:30 hrs)
Symposium A) Advanced Biomaterials and Regenerative Medicine

Symposium B) Nanomaterials for Bioimaging and Biosensing

Symposium F) Nanostructured Materials for Electrochemical Energy Systems:
Lithium Batteries, Supercapacitors and Fuel Cells

Symposium G) Plasmonics and Applications

Symposium I) Carbon Rich Materials (CRMs) and Applications

Symposium N) Plastic Electronics

Symposium R) Single Crystals; Growth and Applications for Research and Industry

Thursday, 2 July 2009 (16:00 – 18:00 hrs)
Symposium D) Functional Ceramic Materials, Oxide Thin Films and Heterostructures

Symposium J) Nanodevices and Nanofabrication

Symposium K) Nano Patterning & Surface Characterization

Symposium O) Compound Semiconductor Photonics: Materials, Devices and Integration

Symposium T) Advanced Component Manufacture from Light Materials

British Council INYS poster session (15:00-17:00hrs) Level 3 Foyer

Presentation Guidelines

Oral Presentations

Please note that the time allocated to each oral presentation is 15 minutes including questions and answers.

Powerpoint or Acrobat PDF slides for presentation on a LCD video projector are recommended.

Oral presentation rooms will be equipped with the following items:

- A computer running WINDOWS operating system, with MS Office, Acrobat Reader 8.0.
- An LCD video projector

We recommend that presenters bring their presentation files in a format compatible with one of the above applications, and stored in a CD-ROM or a USB thumb drive (flash disk).

Alternatively, they can use their own notebook computer. If you choose to use your own notebook computer, we recommend that you bring a backup copy of the presentation in a CD-ROM or a USB thumb drive.

All presenters can upload their presentation files into the computer in their assigned presentation room on the morning of their presentation from 08:15 hrs onwards, or during the tea breaks. An assistant will be in the room to help you.

Note:
- AC voltage is 230V in Singapore.
- The connector from the LCD projector to your computer is limited to a D-sub 15 pin male connection.

Poster Presentations

Poster Board
You will be provided with a poster board to mount/display your poster. The maximum permitted dimensions for your poster is AO size.

Posters MUST be in Portrait format. Your session code will be indicated on the board.

Please note that the width of the poster board may not be exceeded under any circumstances.

You will be provided with the material to mount your poster onto the board.

Poster Size – AO size
1189 (height) by 841mm (width) or
46.81 (height) by 33.11 (width) inches

Setting Up and Removing Posters
Presenters are to put up their posters by 10:00 hrs on the day of their presentation. Kindly remove your poster(s) on the same day by 18:00 hrs

Presenters are responsible for the dismantling of their posters. Posters left behind after 18:00 hrs will be disposed of and are not the responsibility of the organizer.

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Suntec Singapore International Convention & Exhibition Centre
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www.suntecsingapore.com

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Suntec Singapore is conveniently accessible by MRT and buses.

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The nearest MRT Station is City Hall. You can then take a 10 minutes' walk via the underground City Link Mall. Alternatively, you can hop on board our Suntec City Courtesy Shuttle Bus– pick-up point is outside the City Hall Station entrance at St Andrew's Cathedral, opposite Capitol Building.

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• Nicoll Highway

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Tel: 68870151

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#02-063/065/067 (Topics), Suntec City Mall
Tel: 6336 0094

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Materials Research Society of Singapore - Upcoming Activities

Public Lecture by

Prof. C.N.R. Rao, FRS
Jawaharlal Nehru Centre for
Advanced Scientific Research
Bangalore, India

Venue: TCT-LT (old LT2),
Nanyang Technological University
Topic: Trends in Chemistry of Materials
Time/Date: 6.00 pm, 3 August 2009

International Conference on
Materials for Advanced Technologies (ICMAT 2011)

26 June - 1 July 2011
Singapore

Public Lectures by Nobel Laureates

27 – 28 June 2011
University Cultural centre
National University of Singapore

For updates on these, please visit the website at:
www.mrs.org.sg

Opening Ceremony & Plenary Lecture 1

Opening Ceremony

Monday, 29 June 2009
09:00 – 09:45 hrs
Level 2, Ballroom

09:00 Welcome by Dragon Dance Troupe

09:05 **Opening Remarks**
Prof. B.V.R. CHOWDARI
Organising Chairman & President of the Materials Research Society of Singapore

Welcome Remarks
Prof. Howard E. KATZ
President, Int'l Union of the Materials Research Societies,
Johns Hopkins University, USA

Welcome Address
Prof. TAN Eng Chye
Deputy President (Academic Affairs) & Provost,
National University of Singapore

Inauguration
Dr. NG Eng Hen
Minister for Education and
Second Minister for Defence, Singapore

Declaration of Conference Opening

Presentation of Memento

09:45 **Plenary Lecture 1**
Prof. Peter GRUENBERG
Nobel Laureate in Physics,
Institut fur Festkorperforschung
Forschungszentrum Julich GmbH, Germany

10:30 **End of Opening Ceremony**
Tea Break

Plenary Lecture 1

Monday, 29 June 2009
09:45 – 10:30 hrs
Level 2, Ballroom
Chair:
TAN Eng Chye
National University of Singapore, Singapore

Peter GRUENBERG
Nobel Laureate in Physics
Institut fur Festkorperforschung,
Forschungszentrum Julich GmbH, Germany

Spinpolarisation: from the EPR paradox to coupling and Giant Magnetoresistance in layered magnetic structures

The discovery of spatial quantization of spins in a magnetic field by Stern and Gerlach (SG) in 1922 is one of the basic experiments for our understanding of quantum mechanics. In this lecture I want to discuss first a thought experiment designed by Einstein Podolsky and Rosen (EPR) using the principle of the SG-experiment as suggested by Bohm in order to test Heisenberg's uncertainty principle. For practical reasons this experiment could never be realized however new experiments started by Aspect and by Zeilinger using polarized light and comparison with Bell's inequality relation support the uncertainty principle.

In the second part of the lecture I will discuss the effect of the spatial quantization on various magnetic properties, in particular interlayer exchange coupling (IEC), Giant Magnetoresistance (GMR) and tunnel magnetoresistance (TMR) in layered magnetic structures.

In GMR magnetic alignment in these layered structures has an effect on electrical resistivity. There is also an inverse effect to this called "Current Induced Magnetic Switching" where spinpolarized currents have an impact on magnetic order. In this lecture emphasis will generally be laid on a basic physical understanding of the phenomena.

Plenary Lecture

Plenary Lecture 2

Tuesday, 30 June 2009
08:30 – 09:15 hrs
Level 2, Ballroom
Chair:
Subra SURESH
Massachusetts Insititute of Technology, USA

Peter C. DOHERTY
Nobel Laureate in Medicine
Department of Microbiology and Immunology,
The University of Melbourne, Australia

Title: Virus Killers and Killer T cells

A major challenge for those of us who are interested in minimizing the toll of infectious disease is that RNA viruses with poor genomic fidelity throw off large numbers of variants that emerge as viable escape mutants following immune selection. This is a particular problem for designing vaccines to combat the "killer" viruses that cause AIDS, hepatitis C and influenza, all of which are major causes of human morbidity and mortality. Of these, our greatest success has been with influenza, though it is necessary to maintain constant global surveillance and to design new vaccines annually. Considerable effort is being made via the multi-centre HIV/AIDS neutralizing antibody consortium to develop strategies for skewing B cell immunity towards more conserved, shared determinants, such as the binding site on the external HIV Env molecule that engages with the CD4 cell-surface receptor. If successful, there will be a big push to apply such approaches to other pathogens. In the meantime, it is the case that the "killer" cytotoxic T lymphocytes (CTLs) that are specific for virus peptides presented by self major histocompatibility complex class I (MHCI) glycoproteins tend to be directed at relatively conserved virus components. The nature of the effector and memory phases of CTL-mediated immunity will be discussed, together with the limitations and potential benefits of vaccines that emphasize this aspect of host responsiveness.

Plenary Lecture 3

Tuesday, 30 June 2009
09:15 – 10:00 hrs
Level 2, Ballroom
Chair:
Richard FRIEND
Cambridge University, United Kingdom

Andrew WEE
National University of Singapore, Singapore

Epitaxial Graphene: Growth, Structure and Molecular Interactions

The discovery of graphene has opened up a new paradigm in nanoelectronics that could offer better performance than conventional semiconductor devices owing to its unusual Dirac fermion behaviour of its electrons that gives rise to superior mobility and the unique anomalous quantum Hall effect [1-3]. One of the key challenges is the growth of high quality epitaxial graphene, and the main approaches are the chemical vapour deposition of hydrocarbons on metal surfaces and thermal decomposition of silicon carbide (SiC).

In this talk, I describe our studies using in situ scanning tunnelling microscopy (STM), synchrotron photoemission (PES) and density functional theory (DFT) calculations to investigate the structure of the various reconstructions of 6H-SiC(0001) prior to its thermal decomposition to form epitaxial graphene (EG) [4]. Using a cobalt-decoration technique coupled with STM, the evolution of epitaxial graphene was found to preferentially begin at step edges of the silicon carbide surface and occurs with the loss of Si and breakdown of the C-rich ($\sqrt{6} \times \sqrt{6}$)R30° template, which provides the C source for graphene growth [5]. A new C-rich phase is formed at the interface which acts as a buffer layer for graphene from the underlying SiC substrate. STM reveals that graphene lies 2.3 ±0.3 Å above the buffer layer, larger than sp3 C-C bond length (1.54 Å) but shorter than graphite interlayer separation (3.37 Å), suggesting a pseudo van der Waals interfacial interaction. We show that the transition from monolayer EG to trilayer EG adopts a bottom-up growth mechanism [6]. With the increase in annealing temperature, the fluorescence yield of Si K-edge NEXAFS indicates an increase in disorder of Si atoms in the SiC substrate beneath the surface due to out-diffusion of Si atoms to the surface forming increased Si vacancies [7]. The interaction of EG and the SiC substrate is critical to its electronic and physical properties. Raman spectroscopy was used to study the structure of EG and its interaction with SiC substrate [8]. All the Raman bands of EG are blueshifted from that of bulk graphite and graphene made by micromechanical cleavage, and this is

attributed to compressive strain induced by the substrate. We demonstrate that the electronic structures of EG grown on Si- and C-terminated SiC substrates are quite different.

We demonstrate that EG thermally grown on 6H-SiC(0001) can be p-doped via a novel surface transfer doping scheme of modifying the surface with the electron acceptor, tetrafluoro-tetracyanoquinodimethane (F4-TCNQ) [9]. PES reveals that electron transfer from graphene to adsorbed F4-TCNQ is responsible for the p-type doping of graphene. This surface transfer doping scheme by surface modification with appropriate molecular acceptors represents a simple and effective method to non-destructively dope EG for future nanoelectronics applications. Preliminary molecular self-assembly studies on EG will also be discussed.

[1] K. S. Novoselov, A. K.Geim, S. V. Morozov, D. Jiang, M. I. Katsnelson, I. V. Grigorieva, S. V. Dubonos, A. A. Firsov, Nature 438, 197 (2005).

[2] Y. Zhang, Y.-W. Tan, H. L. Stormer, P. Kim, Nature 438, 201 (2005).

[3] C. Berger, Z. Song, X. Li, X. Wu, N. Brown, C. Naud, D. Mayou, T. Li, J. Hass, A. N. Marchenkov, E. H. Conrad, P. N. First, W. A. de Heer, Science 312, 1191 (2006)

[4] W. Chen, H. Xu, L. Liu, X. Y. Gao, D. C. Qi, G. W. Peng, S. C. Tan, Y. P. Feng, K. P. Loh, A. T. S. Wee, Surf, Sci. 596, 176 (2005).

[5] S. W. Poon, W. Chen, E. S. Tok, A. T. S. Wee, Appl. Phys. Lett. 92, 104102 (2008).

[6] H. Huang, W. Chen, S. Chen, A. T. S. Wee, ACS Nano 2, 25 (2008)

[7] X. Y. Gao, S. Chen, T. Liu, W. Chen, A. T. S. Wee, T. Nomoto, S. Yagi, K. Soda, J. Yuhara, Phys. Rev. B 78, 201404 (2008).

[8] Z. H. Ni, W. Chen, X. F. Fan, J. L. Kuo, T. Yu, A. T. S. Wee, Z. X. Shen, Phys. Rev. B 77, 115416 (2008).

[9] W. Chen, S. Chen, D. C. Qi, X. Y. Gao, A. T. S. Wee, J. Am. Chem. Soc. 129, 10418 (2007).

Plenary Lecture 4

Wednesday, 1 July 2009
08:30 – 09:15 hrs
Level 2, Ballroom
Chair:
LIM Hock
Temasek Lab, Singapore

Sir John B. PENDRY
FRS, The Blackett Laboratory, Imperial College, UK

Metamaterials, Non Linear Plasmonic Phenomena and Negative Refraction at Optical Frequencies

Negative refraction is a new phenomenon in optics that gives access to many remarkable possibilities. Perhaps the most remarkable of these is the prescription for focussing light with resolution limited only by precision of manufacture, not by intrinsic physics. Demonstrations have been made for microwaves and even at optical frequencies but the latter are so far confined to very small distances of less than a micron. Here we propose a scheme designed to give negative refraction of light on everyday length scales. The scheme exploits the link between negative refraction and phase conjugation which can be represented as a transition between positive and negative frequency states, but requires non linearity. Metamaterials are ideally placed to enhance and exploit non linear phenomena. The sub wavelength structures that comprise metamaterials will typically concentrate the energy of incident radiation in a very small volume and this in turn leads to substantial enhancement of non linear effects. An experimental realisation is proposed and under ideal circumstances this lens can exhibit sub wavelength resolution limited only by the strength of the phase conjugated signal.

Plenary Lecture 5

Wednesday, 1 July 2009
09:15 – 10:00 hrs
Level 2, Ballroom
Chair:
Freddy BOEY
Nanyang Technological University, Sinagpore

Chad MIRKIN
Department of Chemistry, Northwestern University, USA

Nanostructures in Medicine and Biology

We have recently reported new methods for the control of protein expression using oligonucleotide-functionalized gold nanoparticle materials. These "antisense particles", as well as similarly functionalized siRNA particles, exhibit a range of unique properties that make them very well-suited for gene regulation. In particular, the particles are highly resistant to nucleases, exhibit high entry ability into multiple cell types as a result of their DNA shell, are generally non-toxic, and can be further modified with designer nucleic acids, siRNAs, and other chemical functionalities. These nanoparticle conjugates are capable of simultaneous cellular entry, semi-quantitative mRNA detection, and genetic control. These developments represent significant advances in gene regulation and detection technologies.

Plenary Lecture 6

Thursday, 2 July 2009
08:30 – 09:15 hrs
Level 2, Ballroom
Chair:
Howard KATZ
Johns Hopkins University, USA

Hartmut MICHEL
Nobel Laureate in Chemistry,
Max Planck Institute of Biophysics, Frankfurt am Main, Germany

Membrane Proteins - Importance, Functions, Mechanism

All living cells are surrounded by membranes. In addition, cells of higher organisms are compartmentalized by internal membranes. Biological membranes consist of lipids and membrane proteins. The lipids have a more passive role and lead to the electric insulator properties of biological membranes. As a consequence electric voltages can be generated and maintained across membranes. The proteins inserted into membranes are more active players. Functionally they can be classified as follows:

(i) Transporters and channels allow the passage or transport selected substrates across the membranes.
(ii) Many of them act as sensors and signal receptors and transduce the signals across the membranes.
(iii) Others are involved in biological electron transfer, e.g. in cellular respiration or photosynthesis.
(iv) Some act as enzymes, in particular for hydrophobic substrates.

Membrane proteins constitute about 30 % of all proteins, but more than 50 % of all drugs act by blocking or activating membrane proteins. Therefore there is a big interest in medicine and the pharmaceutical industry to understand membrane proteins. Handling of membrane proteins is difficult, because there surface is partly hydrophobic and partly hydrophilic. Nevertheless a few of them could be crystallized and their structures could be determined by X-ray crystallography. Examples of membrane proteins involved in transport and in electron transfer will be presented and their mechanisms of action will be discussed.

Plenary Lecture 7

Thursday, 2 July 2009
09:15 – 10:00 hrs
Level 2, Ballroom
Chair:
Anthony CHEETHAM
Cambridge University, United Kingdom

Akihisa INOUE
WPI, Advanced Institute for Materials Research, Tohoku University, Japan

Development and Applications of Bulk Metallic Glasses

In the late 1980's, we found a number of metallic glassy alloys exhibiting a large supercooled liquid region before crystallization in multi-component La-, Mg- and Zr-based systems. We also noticed that the stabilization phenomenon of their supercooled liquid enabled us to fabricate bulk metallic glasses (BMGs) with critical diameters above several millimeters by slow cooling processes. Following these pioneering developments, the fabrication of BMG was confirmed in another Zr-based alloy by Caltech group in 1993. Since then, much attention has been paid to BMGs because of their novelties in basic science and engineering aspects. At present, new materials science and engineering fields on BMGs have been established. Focusing on new achievements obtained for the past several years, we fabricated some new BMGs with unique characteristics based on technologically-important transition metals, such as Zr-, Ti-, Fe-, Co-, Ni- and Cu-based alloys. We have also succeeded in achieving the maximum diameter for glass formation as large as 30 mm for Zr- and Cu-based systems, 12 mm for Ti-based system, 18 mm for Fe-Co-based system and 20 mm for Ni-based system, even employing the copper mold casting technique. These large size BMGs possess nearly the same fundamental properties as those for the BMGs with diameters of millimeters. We have further reported that BMGs with diameters above 10 mm are formed in Zr-Al-Ni-Cu system with Zr compositions higher than 65 at% and these Zr-rich BMGs exhibit high Poisson's ratio, high ductility, high fracture toughness, high fatigue strength and high stability of mechanical properties to annealing-induced embrittlement. The new Ti-based BMGs without allergic and toxic elements also exhibit good compatibility to bio-tissues. Application stages of BMGs in Fe-, Co-, Ti- and Zr-based systems have been advanced in the following parts and devices, e.g., choke coil, power inductor, electro magnetic shielding, magnetic and position sensors, micro-geared motor, pressure sensor, Colliori flow meter, surface coating layer, precise polishing medium, magnetic and structural parts in electric magnetic control-type spring drive watches, medical operation instruments and so forth.

Plenary Lecture 8

Friday, 3 July 2009
09:00 – 09:45 hrs
Level 2, Ballroom
Chair:
TJIN Swee Chuan
Nanyang Technological University, Singapore

Jean-Marie BASSET
University of Lyon, France

From Material Science to Single Site Catalysis

Catalysis is the number one technology in chemical industry and petroleum refining: 95 percent of all products (volume) are synthesized by means of catalysis. The advantages of catalytic processes are due to the mild reaction conditions, their cost efficiency, and their environmentally friendly character.

Nevertheless sometimes catalysis is not selective enough, which increases products involved in green house effects (like CO2, NOx or particles). New reactions are needed (for example, methane, which is abundant in the world, is not selectively transformed into valuable products. Catalysis using bio-based raw materials will gain more and more interest for the progressive replacement of fossil fuels.

A predictive approach of catalysis is emerging due to the spectacular progresses made in the synthesis of well defined materials. The nano-control of active site via a pluridisciplinary approach is one of the ways to address this issue of catalytic "environmental" or "energy" performances. It is now possible to achieve the rational design and synthesis of well defined materials with the expected structure, acidity, porosity in the field of oxides, carbon based materials or zerovalent mono and pluri metallic particles of given size and composition. The grafting of organometallic compounds onto these materials results in the synthesis of "single site" catalysts both on oxide or metallic nanoparticules. The characterisation of the grafted organometallic complexes results from the use of a variety of techniques coming from surface science and molecular chemistry: in situ IR, in situ 1H, 13C NMR, 2D NMR, EXAFS, Surface Microanalysis, determination of the stoichiometry of surface reactions. The detailed knowledge of the structure of the active site which results from this careful determination allows one to determine elementary steps of heterogeneous catalysis and a structure activity relationship can be achieved in several cases. A new generation of catalysts, new catalytic reactions, improvement of existing catalysts, related to energy and environment have been discovered on these materials.

Examples will be given in the field of Energy, Petroleum, Environment, Chemistry: Ziegler-Natta depolymerisation, Alkane metathesis, Methane coupling to ethane, Methane-olysis of alkanes, Direct transformation of ethylene to propylene, Metathesis of olefins, Dehydrogenation of paraffins, Epoxidation of alkanes.

Plenary Lecture 9

Friday, 3 July 2009
09:45 – 10:30 hrs
Level 2, Ballroom
Chair:
FENG Yuan Ping
National University of Singapore, Singapore

Frederick F. LANGE
University of California, Santa Barbara, USA

A Materials World: Revolutions in Society

Throughout our existence, new materials has revolutionized our social/economic infrastructure. Metals— copper, bronze, iron, and today, aluminum and titanium— produced some of the first changes. Likewise, inorganic materials ranging from concrete to the glasses have done the same. Our life would be difficult without the electronic material, silicon. Easily molded and blown, polymers, and polymer composites that contain carbon fibers, have replaced some metals and glasses in many applications. Polymers now offer opportunities to replace many of the "hard" electronic materials for devices and displays. Biomolecules that form the much softer biomaterials, with complicated architectures, within our body are beginning to be produced outside of the body. The lecture will present several historical events where materials have revolutionized society, culminating with how the wide band-gap gallium nitride alloys will revolutionize how we light up the world.

Closing & Poster Award Ceremony

Friday, 3 July 2009
13:00 - 13:30 hrs
Level 2, Ballroom 1

Guest-of-Honour:
TAN Chorh Chuan
President
National University of Singapore

Theme Lectures

Theme Lecture 1

Monday, 29 June 2009
13:00 – 13:45 hrs
Level 2, Ballroom
Chair:
Andy HOR
National University of Singapore, Singapore

James L. HEDRICK
IBM Research, San Jose, CA, USA

Hierarchical Supermolecular Structures for Sustained Drug Release

The targeting and controlled release of therapeutic agents or probe molecules to specific organs and specific cells in the body is one of the major challenges in developing more effective therapies. Central to this goal are the many materials challenges associated with the encapsulation, transport and release of such agents at a specific time and place in the exceedingly complicated and dynamic environment of living organisms. Living organisms have evolved a variety of interfaces and barriers to control the trafficking of small and large molecules in and out of cells, organs and tissues. Many pathologies are associated with the encapsulation, transport and release of foreign agents into healthy cells (viral and bacterial infections). An understanding of these processes is critical to the illumination of the molecular mechanism of disease, but also provides a guide to developing strategies to deliver therapeutic agents to specific cells and tissues. Nature's ability to assemble macromolecules into highly cooperative and functional assemblies provides an inspiration for our efforts do devise synthetic design criteria to interrogate and exploit the relationship between molecular structure, non-covalent interactions and processing conditions to create new functional macromolecular assemblies.

Our program approaches a set of clustered problems of fundamental and therapeutic interest. We have developed modular self-assembly strategies to investigate the use of non-covalent interactions to assemble multifunctional assemblies that can encapsulate small molecules and probes, and exhibit responsive behavior to external stimuli. The foundation for this platform is based on our organocatalytic approach to biocompatible/degradable macromolecules with precisely defined molecular weights, end-group fidelity and backbone functionality.

Theme Lecture 2

Tuesday, 30 June 2009
13:00 – 13:45 hrs
Level 2, Ballroom
Chair:
Seeram RAMAKRISHNA
National University of Singapore, Singapore

Martyn POLIAKOFF
The School of Chemistry, The University of Nottingham, United Kingdom

Supercritical Fluids: Clean solvents for Cleaner Materials

Supercritical fluids are gases such as CO2 or steam, compressed until they are nearly as dense as liquids. In this state, they show an intriguing combination of properties normally associated with gases and liquids. In this lecture, I outline some recent applications of supercritical fluids from our own laboratories and elsewhere for the cleaner preparation of materials including thin films, nanoparticles and gas inclusion compounds.

I thank my colleagues, coworkers and collaborators, particularly those in AstraZeneca, the SI Group, Promethean Particles Ltd, Thomas Swan & Co Ltd and INVISTA Performance Technologies for their help and support. We are grateful for funding from the EPSRC, EU Marie Curie Programme and the Royal Society.

Theme Lecture 3

Wednesday, 1 July 2009
13:00 – 13:45 hrs
Level 2, Ballroom
Chair:
LIM Seh Chuan
National University of Singapore, Singapore

Karl Ulrich KAINER
Magnesium Innovation Centre, GKSS Research Centre Geesthacht, Germany

Magnesium Alloys and their Processing for Use in Structural and Medical Applications

Magnesium and its alloys as the lightest available construction metal offer a wide range of opportunities for the usage in transportation and 3C industries. While magnesium cast components have found their application the interest is now spreading to wrought alloys due to the possibility to get even more homogeneous and improved properties compared to cast parts. Castings are still form the majority of applications of magnesium alloys, although efforts to develop adequate wrought alloys have increased. In the presentation, the alloy requirements for processing of cast and wrought alloys will be discussed. The various processing routes and alloy compositions result in specific microstructures and properties which determine the potential use of these alloys.

Today, the spectrum of available alloys covers standard alloys as well as alloys for use at elevated temperatures. The trend will be to further diversify the alloy compositions and to improve the alloy properties. Areas of concern still remain the wrought processing and the high temperature (creep) and corrosion properties of magnesium alloys. The presentation will provide an overview of the historical and current use of magnesium as well as of the trend in development of alloys and processes including an outlook on future applications. A completely different but most promising application is the use of magnesium based materials in medical applications due their low elastic modulus, appropriate strength in comparison to bone, and their excellent diodegradability and bioresorbability. Adjusted corrosion behaviour can result in a controlled absorption of the material in a human body and therefore a second time surgery may no longer be necessary. Examples of recent developments in these sectors will be given.

Panel Discussion

Entrepreneurship in Material Science and Engineering

Thursday, 2 July 2009
13:00 – 14:30 hrs
Level 2, Ballroom

Moderator:
LIM Khiang Wee
Institute of Materials Research and Engineering, Singapore

Panelists:
Freddy BOEY
Nanyang Technological University, Singapore

Yet-Ming CHIANG
Massachusetts Insititute of Technology, USA

Richard FRIEND
Cambridge University, United Kingdom

Chad MIRKIN
Northwestern University, USA

Entrepreneurship in Science and Engineering is related to the formation of spin-off companies which commercialize scientific results. In this context, the formation of spin-off companies by scientists themselves is becoming ever more important.

In order to inspire ICMAT 2009 participants to pursue entrepreneurial activities by showcasing some successful examples of scientist-entrepreneurs and providing a forum for information and discussion, this panel discussion will be held together with ICMAT 2009.

All ICMAT 2009 delegates are welcome to attend.

Public Lectures

Peter Doherty
Nobel Laureate in Medicine

Tuesday, 30 June 2009
18:00 – 19:00 hrs
University Cultural Centre,
National University of Singapore
Chair:
George RADDA
A*STAR, Singapore

Living in an Evidence-Based World

Our capacity to "interrogate" nature has been progressing with incredible speed, in ways that would not have seemed possible even a decade ago. In biomedical research, for example, being able to make transgenic mice that express human genes and the possibilities that have been opened by obtaining the whole sequence of human (and other) genomes has already led to enormous advances. Much of this type of science is now characterized by the acquisition of very large data sets that are being analyzed by "systems biology" approaches requiring massive computational resources. The "big science' that has long been characteristic of areas like experimental physics has now come to biology. Contemporary science in general, whether it is concerned with the nature of immune responses or the climate systems that so constrain our physical environments, is increasingly the science of complexity. As we seek to understand the emerging evidence, we realize that both our existence as physiological beings and where we stand in nature is a function of multiple interactive effects, only some of which can be modified by human intervention. While this should cause us to approach the issue of our long-term survival with some sense of due humility it should also suggest that, providing we engage fully with reality, we have the capacity to drive the human future in positive and sustainable ways. The first, essential step is to begin making the changes that will ensure the good health of this small planet and its myriad of life forms. This in turn requires that we continually inform ourselves by using the best available science to evaluate what is happening, both within ourselves and in the green world around us, and that we act rationally on the basis of what we have learned.

Peter Gruenberg
Nobel Laureate in Physics

Tuesday, 30 June 2009
19:00 – 10:00 hrs
University Cultural Centre,
National University of Singapore
Chair:
Andrew WEE
National University of Singapore, Singapore

Spintronics and its applications

Due to the discovery of the Giant Magnetoresistance (GMR) effect in 1988, in subsequent years readable storage capacity of hard disk drives (HDD) could be increased by approximately a factor of 100. This remained not the only application in this new field, sometimes also called spintronics. In conjunction with a permanent magnet attached to a moving part it can be used to sense its position speed or rotation. This principle can be applied in macroscopic systems such as traffic as well as on the micro- and nano scale for the detection of biomolecules. Progress in GMR soon also stimulated new efforts in tunnel magnetoresistance (TMR) with the result that TMR effects of the order of 500% have been observed (as compared to only 20% in equivalent GMR structures). They are now also used in HDDs and challenge GMR. In GMR magnetic alignment in these layered structures has an effect on electrical resistivity. There is also an inverse effect to this called "Current Induced Magnetic Switching" where spinpolarized currents have an impact on magnetic order. The possibility of using this in magnetic data storage is obvious.

Public Lectures

Hartmut MICHEL
Nobel Laureate in Chemistry

Wednesday, 1 July 2009
19:00 – 20:00 hrs
University Cultural Centre,
National University of Singapore

Chair:
Keith CARPENTER
Institute of Chemical and Engineering Sciences, Singapore

Biofuels - can they help to reduce global warming or to solve the energy crisis?

It becomes generally accepted that the global warming which we undoubtedly observe, is the result of an increased concentration of greenhouse gases like carbon dioxide and methane in the atmosphere. Within this scenario it is evident that we have to reduce the emissions of carbon dioxide in order to stop or to decrease global warming. It will be necessary to switch from energy mainly based on fossil energy to renewable energy. One big hope is the use of biofuels like bioethanol, biodiesel, sundiesel, biogas and so on. Biofuels are products derived from photosynthesis of plants. It will be shown that the overall efficiency of photosynthesis is very low: less than one percent of the energy of the sunlight is stored in the form of biomass, and there is not much hope for a substantial improvement. Biogas and biodiesel per area unit and year contain about 0.4 % of the energy of the sunlight which the area unit has received in the same time. In addition at least 50 % of the energy which is contained in biogas or biodiesel had to be invested from conventional (fossil) energy sources to produce the biogas or biodiesel. Therefore, production and usage of biogas or biodiesel is not carbon dioxide neutral.

By comparison, usage of photovoltaic cells is more efficient by a factor of 50 to 100 with respect to energy conversion, and electric engines are fourfold as efficient as combustion engines. Consequently driving a car using electric batteries, loaded by photovoltaic cells, and electric engines requires only 0.2 % of the land that would be required using biofuels and combustion engines. Growing energy plants therefore is a very inefficient way of land use. The usage of biofuels made of palm oil or soy beans from tropical countries will enhance the deforestation, lead to a loss of the tropical rain forest and increase climatic changes. In addition we shall lose biodiversity and many biological compounds which might help fighting human diseases.

Industrial Symposia

Industrial Symposium I
Nanoimprint Lithography

Thursday, 2 July 2009
13:00 – 17:30 hrs
Level 3, Room 302

Chairs
Hong Yee LOW
Institute of Materials Research and Engineering, Singapore

Correspondence
Jaslyn LAW
Institute of Materials Research and Engineering, Singapore
3 Research Link, Singapore 117602
Tel: (65) 68727746
Fax: (65) 68720785
Email: lawj@imre.a-star.edu.sg

Scope of Symposium
The Nanoimprint Lithography (NIL) Industrial Symposium is sponsored by Exploit Technologies Pte Ltd (ETPL), the strategic marketing and commercialization arm of A*STAR, and organized by The Institute of Materials Research and Engineering (IMRE). This half-day industrial symposium aims to update the recent developments, markets and technology in NIL. It also serves as a platform for industrial partners, venture capitalists, companies interested in NIL applications to acquire an understanding of the landscape and explore business opportunities/potential partnerships and expand industrial utilization of NIL technologies.

Industrial Symposium II
Microwave Processing of Materials

Friday, 3 July 2009
09:00 – 17:00 hrs
Level 3, Room 310

Chairs
Manoj GUPTA
National University of Singapore, Singapore

Dinesh K. AGRAWAL
Pennsylvania State University, USA

Co-Chairs
Hu PENG
Changsha Syno-Therm Co., Ltd, China

Qingfa LI
Singapore Institute of Manufacturing Technology, Singapore

Balaji RAO
Turbine Overhaul Services Pte Ltd, Singapore

Ramesh SINGH
Universiti Tenaga National, Malaysia

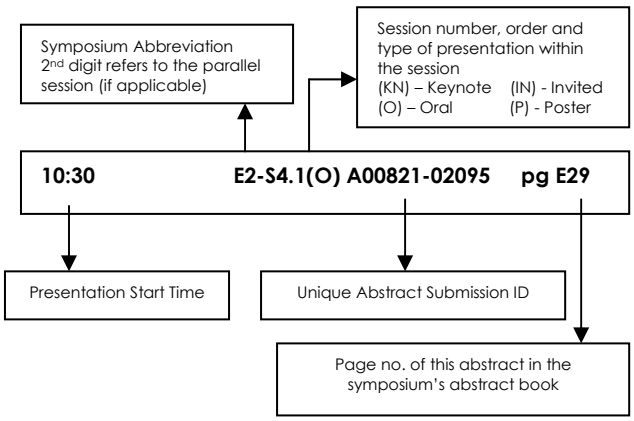
Correspondence
Kenneth K.G. TAN
Dawnyx Technology Sdn Bhd
Tel: (60) 12-770 2404
Fax: (60) 6-952 8661
Email: icmat@dawnyx.com

Scope of Symposium
Microwave processing of materials is emerging as an innovative technology for future applicable to many diverse fields and variety of materials. Recent developments in this field worldwide are attracting attention of various industries. This symposium aims to provide to the relevant and interested industries to such recent developments, commercialization of the microwave technology in the area of ceramics, composites, metals, etc. Symposium topics will also cover other microwave applications especially related to chemistry, waste processing, and alternative and unconventional energy sources.

SYMPOSIUM A

Advanced Biomaterials and Regenerative Medicine

The programme codes you will see in the following pages are decoded using an example below:



Symposium A: Advanced Biomaterials and Regenerative Medicine

Level 3, Room 303

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session A-S1** **Advanced Biomaterials and Regenerative Medicine I**	(10:30 - 12:30) **Session A-S4** **Advanced Biomaterials for Cancer Treatment I**	(10:30 - 12:30) **Session A-S6** **Advanced Biomaterials for Cancer Treatment I**	(10:30 - 12:30) **Session A-S9** **Understanding Origins of Fracture and Composite Biomaterials**	(11:00 - 13:00) **Session A-S12** **New Development in Biomaterials Engineering**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session A-S2** **Advanced Biomaterials and Regenerative Medicine I**	(14:00 - 17:00) **Session A-S5** **Biofunctionalization of Metals I**	(14:00 - 16:00) **Session A-S7** **New Developments in Scaffolds for Tissue Regeneration**	(14:30 - 16:00) **Session A-S10** **Engineering the Cell-Biomaterial Interface**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session A-S8** **POSTER SESSION**	(16:00 - 18:00) **Session A-S11** **Engineering the Cell-Biomaterial Interface**	
(16:30 - 18:30) **Session A-S3** **Advanced Biomaterials and Regenerative Medicine I**	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

A-S1: Advanced Biomaterials and Regenerative Medicine I

Monday, 29 June 2009
11:00 - 12:30
Level 3, Room 303
Chairs: SH Teoh, Hildebrand HF

11:00 A-S1.1-2(KN) A00847-01641 pg A38
History and Use of Biomaterials, Implants and Prostheses in Ancient Cultures
Hartmut F. HILDEBRAND

11:30 A-S1.3-4(KN) A02823-05077 pg A89
Advanced Biomaterials Technolgy and Regenerative Therapy
Yasuhiko TABATA

12:00 A-S1.5-6(KN) A02949-05041 pg A91
Fetal Stem Cells and Opportunities for Regenerative Medicine
Jerry CHAN, Zhi-Yong ZHANG, Mark CHONG, Eddy LEE, Yi-Ping FAN, Citra MATTAR, Swee-Hin TEOH, Arijit BISWAS, Mahesh CHOOLANI

A-S2: Advanced Biomaterials and Regenerative Medicine I

Monday, 29 June 2009
14:00 - 16:15
Level 3, Room 303
Chairs: Thian ES, Kikuchi M

14:00 A-S2.1-2(IN) A01575-02742 pg A68
Influence of Hydroxyapatite/Collagen Bone-Like Nanocomposite on Osteoclastic Differentiation of Mouse Bone Marrow Cells Cocultured with Osteoblasts
Masanori KIKUCHI, Atsushi IRIE

14:30 A-S2.3(O) A03011-05140 pg A93
The Use of a Bioresorbable Three-dimensional Polycaprolactone (PCL) Scaffold for Ridge Preservation – Preliminary Findings
Bee Tin GOH, Luan Yook TEH, Raymond PECK, Danny TAN, Ho Kok SEN, Zhiyong ZHANG, Dietmar W. HUTMACHER, Swee Hin TEOH

14:45 A-S2.4(O) A02131-03671 pg A77
Biaxial-rotating Bioreactor Promoted Cellular Proliferation, Viability, Osteogenesis In Vitro and Enhanced Ectopic Bone Formation In Vivo
Zhiyong ZHANG, Jerry CHAN, Toon Tien FOO, Woon Shin CHONG, Yhee Cheng CHNG, Swee Hin TEOH

15:00 A-S2.5(O) A01355-03090 pg A58
Bone and Vascular Cells in Cultures on Oxidized Cellulose-Based Scaffolds
Lucie BACAKOVA, Martin PARIZEK, Pavel HAVELKA, Tomas SOPUCH, Vera LISA

15:15 A-S2.6(O) A01368-02387 pg A59
Tissue Engineering Bone: Phenotypical and Functional Characterisation of Ovine MPC and Osteoblasts In Vitro and In Vivo
Johannes C. REICHERT, Thor FRIIS, Verena M. C. QUENT, Stan GRONTHOS, Dietmar W. HUTMACHER

15:30 A-S2.7(O) A01803-03332 pg A71
Nanostructured Apatites Deposited by Electrohydrodynamic Atomisation for Bone Tissue Engineering
Eng San THIAN, Zeeshan AHAMD, Jie HUANG, Mohan EDIRISINGHE, Suwan JAYASINGHE, Deborah IRELAND, Roger BROOKS, Neil RUSHTON, William BONFIELD, Serena BEST

15:45 A-S2.8(O) A01286-02241 pg A56
Self-assembly of Co-polymeric Membranes on 3-D Porous Biodegradable Polymers to Promote Tissue-engineered Bone
Muwan CHEN, Dang Quang Svend LE, Jens Vinge NYGAARD, Xuenong ZOU, Cody BÜNGER

16:00 A-S2.9(O) A00794-01390 pg A36
In Vivo Osteoinduction of rhBMP-2 Contained Demineralized Bone Matrix Gel Type
Hyang KIM, Jee-Yeon JEONG, You-Lim BANG, Seung-Hyuk KIM, Nam-Ho PARK, Joo-Hong PARK, Joo-Woong JANG

A-S3: Advanced Biomaterials and Regenerative Medicine I

Monday, 29 June 2009
16:30 - 18:30
Level 3, Room 303
Chairs: Thian ES, Feinberg S

16:30 A-S3.1-2(IN) A02515-04309 pg A86
Pharmacological Manipulation of an Oral Mucosa Progenitor/stem Cell Population
Kenji IZUMI, Ken INOKI, Cynthia MARCELO, Stephen FEINBERG

17:00 A-S3.3(O) A00646-01160 pg A31
Novel Glycosurfaces by Surface-Initiated ATRP
Anca MATEESCU, Jianding YE, Ravin NARAIN, Maria VAMVAKAKI

17:15 A-S3.4(O) A00504-00924 pg A26
Chitosan Hydrogels and Nanosized Structures Formed with Anionic Polysaccharides
Yury SHCHIPUNOV, Nadya IVANOVA, Sergey SARIN

17:30 A-S3.5(O) A01843-03197 pg A73
Fabrication and Alignment of Porous Scaffold for Vessel Tissue Engineering Using Electrospinning Technology
Yabin ZHU, Yuxin LIU, Weigang YIN, Mary B CHAN-PARK

17:45 A-S3.6(O) A00936-01638 pg A40
Cell-selective Films for Layered Vascular Tissue Engineering
Mark CHONG, Swee Hin TEOH, Chuen Neng LEE, Mahesh CHOOLANI, Jerry CHAN

18:00 A-S3.7(O) A01315-02762 pg A57
Engineered PEG-RGD Hydrogels for Controlling Cell Migration
Daniela GUARNIERI, Antonia DE CAPUA, Maurizio VENTRE, Assunta BORZACCHIELLO, Carlo PEDONE, Daniela MARASCO, Menotti RUVO, Paolo Antonio NETTI

18:15 A-S3.8(O) A02531-04332 pg A86
***In vivo* Implant of a New Generation of Neural Collagen-based Guides**
Alessandro SANNINO, Angelo QUATTRINI, Amleto PICCINNO, Luca SALVATORE

A-S4: Advanced Biomaterials for Cancer Treatment I

Tuesday, 30 June 2009
10:30 - 12:30
Level 3, Room 303
Chairs: SH Teoh, Feng SS

10:30 A-S4.1-2(KN) A02920-04991 pg A90

Nanomedicine: Nanoparticles of Biodegradable Polymers for Oral Chemotherapy
Si-Shen FENG

11:00 A-S4.3(O) A03009-05136 pg A92
The LETS Biodevice Implant: Development of a Novel Concept and Biodevice to Guide Cancer Treatment
Terence A. TAN, Lilli BRANDTNER, Soi-Khoon YEW, John DANGERFIELD, Brian SALMONS, Bin-Tean TEH, Khee-Chee SOO, Walter GÜNZBERG, Swee-Hin TEOH

11:15 A-S4.4(O) A02461-04199 pg A83
Influence of Platinum Nanotopographies on Protein Adsorption and Cellular Behavior
Morten FOSS, Alireza DOLATSHAHI-PIROUZ, Christian P. PENNISI, Christian SEVCENCU, John Lundsgaard HANSEN, Arne Nylandsted LARSEN, Vladimir ZACHAR, Ken YOSHIDA, Flemming BESENBACHER

11:30 A-S4.5(O) A00855-01486 pg A39
Encapsulation of Paclitaxel by Self-Emulsifying O/W Formulations Prepared from Mixed Nonionic Surfactants
Jen-Ting LO, Bing-Hung CHEN

11:45 A-S4.6(O) A02919-04989 pg A89
Supramolecular Polymeric Biomaterials for Drug and Gene Delivery
Jun LI

12:00 A-S4.7(O) A01239-02124 pg A52
Synthesis, Processing and Property Testing of Electrospun Biodegradable Polyesters for Use as Nerve Guides
Boontharika THAPSUKHON, Winita PUNYODOM, Robert MOLLOY, Puttinan MEEPOWPAN, Pitt SUPAPHOL

12:15 A-S4.8(O) A00098-00832 pg A14
Photothermal and Photocatalytic Cell-killing Effect of Au Colloidal Nanoparticles and Au-capped T_iO_2 Nanocomposite Photocatalysts on HeLa Cell
Md. Abdulla- AL-MAMUN, Yoshihumi KUSUMOTO, Aki MIHATA, Bashir AHMMAD, Manickavachagam MURUGANANDHAM

A-S5: Biofunctionalization of Metals I

Tuesday, 30 June 2009
14:00 - 17:00
Level 3, Room 303
Chairs: Hanawa T, Nebe JB

14:00 A-S5.1-2(IN) A00590-01077 pg A28
Biofunctionalization of Metals with Biofunctional Molecules and Biomolecules
Takao HANAWA

14:30 A-S5.3-4(IN) A00942-01658 pg A41
Mechanical Biofunctionalization of Titanium Alloys by Lowering Young's Modulus
Mitsuo NIINOMI, Hattori TOMOKAZU

15:00 A-S5.5-6(IN) A00632-01196 pg A30
Fabrication and Evaluation of Calcium Phosphate Films Coated on Blast-treated Ti-6Al-4V Substrate
Takayuki NARUSHIMA

15:30 A-S5.7-8(IN) A01260-02180 pg A55
Biocompatibility Evaluation of Biodegradable Magnesium Alloys
Akiko YAMAMOTO

16:00 A-S5.9-10(IN) A01466-02544 pg A65
Understanding Bone Texture as a Bone Quality Index for Design of Biofunctional Metal Implants
Takayoshi NAKANO

16:30 A-S5.11-12(IN) A01528-02670 pg A67
Sensitivity of Osteoblasts to Topographical and Chemical Features of Metal Implants
J. Barbara NEBE, Henrike JESSWEIN, Arne WEIDMANN, Birgit FINKE, Claudia MATSCHEGEWSKI, Regina LANGE, Ulrich BECK, Karsten SCHROEDER

A-S6: Advanced Biomaterials for Cancer Treatment I

Wednesday, 1 July 2009
10:30 - 12:30
Level 3, Room 303
Chairs: Griesser H, Blannchemain N

10:30 A-S6.1-2(KN) A02608-04455 pg A87
Prevention of Bacterial Colonization of Biomaterials Surfaces and Implants by Ultrathin Antibacterial Coatings
Hans GRIESSER, Hardi YS, Chi NDI, Susan SEMPLE, Sameer AL-BATAINEH, Krasimir VASILEV, Marek JASIENIAK, Stefani GRIESSER

11:00 A-S6.3-4(IN) A01250-02153 pg A54
Biomaterials Functionalised with Cyclodextrins for Prolonged Release of Antibiotics
Nicolas BLANCHEMAIN, Nicolas TABARY, Guillaume VERMET, Thomas LAURENT, Stephane LEPRETRE, Feng CHAI, Christel NEUT, Michel MORCELLET, Bernard MARTEL, Hartmut F. HILDEBRAND

11:30 A-S6.5-6(IN) A01242-02189 pg A53
Cell Selectivity and Antithrombolytic Effect of Polyester Vascular Prosthetic Material Grafted with Acrylic Acid
Feng CHAI, Nicolas BLANCHEMAIN, Maria Rosa AGUILAR, Maude JIMENEZ, Imen KACEM, Elixene JEAN-BAPTISTE, Bernard MARTEL, Julio SAN ROMAN, Hartmut F. HILDEBRAND

12:00 A-S6.7(O) A02283-03897 pg A81
Addressable Nanoarrays of Tethered Lipid Bilayer Rafts for Advanced Nanomedicine
HeaYeon LEE, BongKuk LEE, Tomoji KAWAI

12:15 A-S6.8(O) A00174-00697 pg A16
Hybrid Plasmachemical Reactor for Biomaterials Processing
Tatiana VASILIEVA

A-S7: New Developments in Scaffolds for Tissue Regeneration

Wednesday, 1 July 2009
14:00 - 16:00
Level 3, Room 303
Chairs: Calvert P, Chai F

14:00 A-S7.1(O) A00859-01494 pg A39
Freeform Fabrication of Fiber Reinforced Hydrogels
Paul CALVERT, Swati MISHRA, Animesh AGRAWAL

14:15 A-S7.2(O) A02487-04250 pg A85
Electrospun Bioactive Nanofibers as Biomimic ECMs from Structure Properties to Functions for Tissue Engineering
Xiumei MO

14:30 A-S7.3(O) A00020-00587 pg A13
Fabrication of Three-dimensional Scaffolds Using Two-photon Polymerization
Maria FARSARI, Anthi RANELLA, Vasilia MELISSINAKI, Carsten REINHARDT, Arune GAIDUKEVICIUTE, Frederik CLAEYSSENS, Maria VAMVAKAKI, Costas FOTAKIS, Boris N. CHICHKOV

14:45 A-S7.4(O) A00972-01690 pg A42
Biodegradable Poly[(*R*)-3-hydroxybutyrate] (PHB) – Based Thermogelling Polymers for Drug Delivery and Tissue Engineering Applications
Xian Jun LOH, Jun LI

15:00 A-S7.5(O) A01214-02069 pg A51
Micro/nano-grooved 3D Polymeric Scaffolds Fabricated by a Piezoelectric Transducer (PZT)-assisted Bioplotter
SeungHyun AHN, Kim GEUNHYUNG

15:15 A-S7.6(O) A00238-00437 pg A18
Distinct Tissue Responses to Porous Silk Fibroin Scaffolds (PSFSs) and Polyvinyl Alcohol (PVA) Sponges in vivo
Guoping GUAN, Lun BAI, Baoqi ZUO, Mingzhong LI, Zhengyu WU, Yonglin LI

15:30 A-S7.7(O) A01010-01766 pg A44
A New Method of Producing Homogeneous PLGA Microspheres with High Encapsulation Efficiency
Xigeng MIAO

15:45 A-S7.8(O) A01906-03942 pg A73
Effects of Rigidity Sensing on Fibrotic Cellular Activity
Nur Aida ABDUL RAHIM, Roger KAMM, Hanry YU

A-S8: Poster Session

Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Gallery

A-S8.001(P) A00008-00438 pg A12
Surface Bioactivation of Cobalt-base Alloy During Investment Casting Process
Hossein MINOUEI, Mohammad Hossein FATHI, Mahmood MERATIAN, Ahmad KERMANPUR, Hossein GHAZVINIZADE

A-S8.002(P) A00011-00458 pg A12
Effect of Casting Parameters on Wear Behavior of ASTM F-75 Cobalt-base Alloy
Hossein GHAZVINIZADEH, Mahmood MERATIAN, Ahmad KERMANPUR, Mohammad Hossein FATHI, Hossein MINOUEI

A-S8.003(P) A00018-00104 pg A12
Effects of freeze-drying on bovine pericardium tis
Virgilio TATTINI JUNIOR, Marina MAIZATO, Adolfo A. LEIRNER, Marisa M. BEPPU, Olga Z. HIGA, Bronislaw POLAKIEWICZ, Ronaldo N. M. PITOMBO

A-S8.004(P) A00057-00069 pg A14
Carbon Nanotube-Reinforced Hydroxyapatite Composite Layers for Biomedical Applications
Cengiz KAYA, Figen KAYA, Cem B USTUNDAG

A-S8.005(P) A00104-02117 pg A14
Electrochemical Behaviour of Titanium and Niobium in Fluoride Containing Artificial Saliva
Bavya Devi KARUPPASAMY

A-S8.006(P) A00105-02167 pg A15
Surface Modification of Titanium and its Alloys Using Hydrogen Peroxide Solution for Biomedical Application
Karthega MANI, Rajendran NALLAIYAN

A-S8.007(P) A02610-04458 pg A88
In vitro Differentiation of Bone Marrow-derived Mesenchymal Stem Cells into 3D Epidermis-like Cells in Organotypic Coculture
Kun MA, Filip LACO, Seeram RAMAKRISHNA, Susan LIAO, Casey K. CHAN

A-S8.008(P) A00181-01875 pg A16
Heparin-immobilized Gold Nanoparticles for Targeted Cancer Cell Death
Kyuri LEE, Hyukjin LEE, Ki Hyun BAE, Tae Gwan PARK

A-S8.009(P) A00187-01058 pg A17
Physical, Chemical and Thermal Properties of 8 MeV Electron Beam Irradiated C108 (*Bombyx Mori*) Silk Fibers
Sangappa SYHALABHAVI, Ganesh Sanjeev, Subramanya, Somashekar RUDRAPPA

A-S8.010(P) A00197-00376 pg A17
The Degradation Behavior of PLGA Blend and Gradient Coatings
Min QI

A-S8.011(P) A00229-00429 pg A18
Nixtric Oxide Detection Using Wavelength Modulation Spectroscopy and its Applications in Breath and Cell Death Diagnostics
MITRAYANA, FJM HARREN, Wasilah ROHMAH

A-S8.012(P) A00239-01807 pg A18
Preparation, Morphological Characterization and in vitro Biocompatibility of a Collagen-liposomes-entrapped Chondroitin Sulphate Composite
Otilia ZARNESCU, Lucia MOLDOVAN, Oana CRACIUNESCU, Mihaela TRIF, Magdalena MOISEI

A-S8.013(P) A00310-00574 pg A19
The Influence of Galactosylated PDMS on Hepatocytic Function
Ko-Liang KUO, Hau-min LIOU, Fu-Yin HSU

A-S8.014(P) A00318-03057 pg A19
Influence of Molecular-scale Topography of Collagen and Gelatin Electrospun Fibrous on the Phenotype and Proliferation of MG63 Osteoblast-like Cells
Cheng-Jie LIN, Shiao-Wen TSAI, Fu-Yin HSU

A-S8.015(P) A00347-00648 pg A20
SLS of Porous Scaffolds from Titanium and Nitinol, as Carrier Matrix for Stem Cells
Igor SHISHKOVSKY, Yuri MOROZOV, Larisa VOLOVA

A-S8.016(P) A00361-00703 pg A20
Narrowly Distributed Nano Hydroxyapatite Powders Prepared by Sol-gel Precipitation Method
Sanosh KUNJALUKKAL, Min-Cheol CHU, Avinash BALAKRISHNAN, Yong-Jin LEE, Taik-Nam KIM, Seong-Jai CHO

A-S8.107(P) A03025-05155 pg A94
Reduced Basis Methods for Fast Evaluation of Iliac Crest Trabecular Bone Elastic Properties
Kathy LAM, Revanth Reddy GARLAPATI, Yoon-Sok CHUNG, Taeyong LEE

A-S9: Understanding Origins of Fracture and Composite Biomaterials

Thursday, 2 July 2009
10:30 - 12:30
Level 3, Room 303
Chairs: Ambrosio L, Rosei F

10:30 A-S9.1-2(KN) A00421-00804 pg A23
On the Origins of Fracture Resistance and its Biological Degradation in Human Bone
Robert RITCHIE

11:00 A-S9.3-4(IN) A02479-04233 pg A84
Composite Biomaterials for Tissue Repair and Regeneration
Luigi AMBROSIO, Roberto DE SANTIS, Vincenzo GUARINO, Antonio GLORIA, Raucci MARIA GRAZIA

11:30 A-S9.5-6(IN) A00499-01826 pg A25
Surface Nanopatterning to Control Cell Growth
Federico ROSEI

12:00 A-S9.7(O) A00829-01442 pg A37
Human Osteoblast-like Cells on Composites of Carbon Nanotubes and Non-degradable Polymers
Lubica GRAUSOVA, Elena FILOVA, Lucie BACAKOVA, Aneta FRACZEK, Blazewicz STANISLAW

12:15 A-S9.8(O) A02459-04198 pg A82
Properties and Structure of Bioactive Glasses Containing Titanium
Richard MARTIN, Robert MOSS, Robert NEWPORT

A-S10: Engineering the Cell-Biomaterial Interface

Thursday, 2 July 2009
14:30 - 16:00
Level 3, Room 303
Chairs: Dai JW, Wang CH

14:30 A-S10.1-2(IN) A02765-04730 pg A88
Activation of Collagen Based Biomaterials using Collagen Binding Growth Factors
Jianwu DAI

15:00 A-S10.3-4(IN) A02555-04599 pg A87
BMP-2 Plasmid Loaded PLGA/HAp Composite Scaffolds for Treatment of Bone Defects in Nude Mice
Hemin NIE, Mei-Ling HO, Chih-Kuang WANG, Chi-Hwa WANG, Yin-Chih FU

15:30 A-S10.5(O) A00128-00592 pg A15
Experimental Studies on Engineering of Liposomal Preparations
Aditya MITTAL, Rahul GROVER

15:45 A-S10.6(O) A00597-01892 pg A29
The Control of Anchorage-dependent Cell behavior within a Hydrogel / Microcarrier System in an Osteogenic Model
Chunming WANG, Dong-an WANG

A-S11: Engineering the Cell-Biomaterial Interface

Thursday, 2 July 2009
16:00 - 18:00
Level 3, Room 303
Chairs: Dai JW, Wang CH

16:00 A-S11.1(O) A01150-02193 pg A48
An Improved Injectable Polysaccharide Hydrogel: Modified Gellan Gum for Long-term Cartilage Regeneration in vitro
Yihong GONG, Feng ZHANG, Dong-an WANG

16:15 A-S11.2(O) A01821-03170 pg A72
Evaluation of In vivo Antimicrobial Properties of 3D Bioactive Polycaprolactone Honeycomb Scaffold
Yiling, Erin TEO, Swee Hin TEOH, Shin Yeu ONG, Jia LU, Shabbir MOOCHHALA

16:30 A-S11.3(O) A01299-02268 pg A56
Development of Neurons on the Regenerated Silk Fibroin Materials
Lian XIN, Jing QU, Feng ZHANG, Mingzhong LI, Baoqi ZUO, Huanxiang ZHANG

16:45 A-S11.4(O) A01429-02471 pg A63
Safety and Pharmacokinetics of Triamcinolone Acetonide-loaded Poly(e-caprolactone) Intraocular Implants in Rabbit Eyes
Nan KAIHUI, Chen HAO, Li GUOXING, Li YULI, Shun SUNMAO, Hou JIANGPING, Cheng LINGYUN

17:00 A-S11.5(O) A01589-03829 pg A69
Structure-Function Relationships in Spider Silk
Cameron P BROWN, Catalin HARNAGEA, Silvia LICOCCIA, Federico ROSEI

17:15 A-S11.6(O) A01762-03086 pg A70
Poly(ethyleneimine) Based Biodegradable Cationic Polymer as Non-viral Gene Delivery Vector
Weiwei WANG, Wenzhong LI, Eva FLICK, Xu LI, Karola LÜTZOW, Andreas LENDLEIN, Hans-Heinrich GATZEN, Gustav STEINHOFF, Nan MA

17:30 A-S11.7(O) A01811-03187 pg A72
3D Fibrous Matrices Having Different Porosities and their CHO Cell Culture Performance
Yanwei TANG, Alessandra SUTTI, Tong LIN

17:45 A-S11.8(O) A02026-03486 pg A95
Development of Functional Nanofibers for Controlled Release of Basic Fibroblast Growth Factor
Min sup KIM, Heungsoo SHIN

A-S12: New Development in Biomaterials Engineering

Friday, 3 July 2009
11:00 - 13:00
Level 3, Room 303
Chairs: Teoh SH, Yu H

11:00 A-S12.1-2(KN) A02979-05094 pg A91
Engineering *in vitro* Drug Testing Platforms
Hanry YU

11:30 A-S12.3-4(IN) A03021-05151 pg A93
Efficacy of Anti-Resorptive and Chemotherapeutic Treatment on Bone Metastatic Disease
X. CHEN, L. S. FONG, X. YANG, P. MARUTHAPPAN, Y. S. CHUNG, H. J. OH, Taeyong LEE

12:00 A-S12.5(O) A02937-05020 pg A90
Design Considerations for the Development of Artificial Liver Device
Hwa Liang LEO, L. XIA, S. F. ZHANG, X. Y. TUO, T. M. CHENG, G. F. XIAO, Hanry YU

12:15 A-S12.6(O) A01007-02056 pg A43
Phase Transfer Cell Culture for Self-Forming Cartilage Regeneration
Kai SU, Yihong GONG, Dong-an WANG

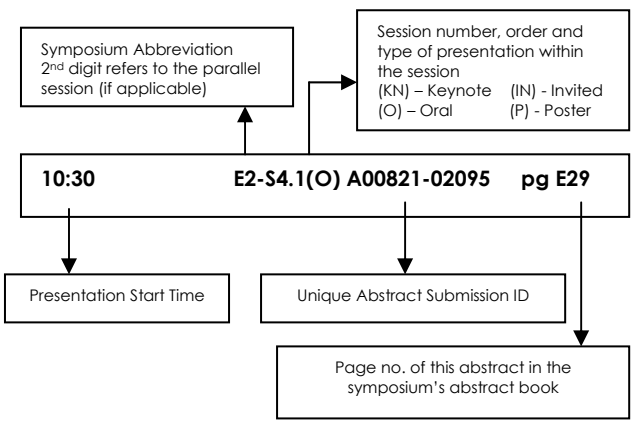
12:30 A-S12.7(O) A00762-01344 pg A34
Improvement in Mechanical Properties of Dental Cast Ti-29Nb-13Ta-4.6Zr Alloy by Microstructural Control
Harumi TSUTSUMI, Mitsuo NIINOMI, Toshikazu AKAHORI, Masaaki NAKAI, Hisao FUKUI, Michiharu OGAWA

12:45 A-S12.8(O) A01494-02599 pg A67
Synthesis, Characterization and Biomedical Application of Poly(ester-urethane) Adhesive
Manawwer ALAM, Alok RAY

SYMPOSIUM B

Nanomaterials for Bioimaging and Biosensing

The programme codes you will see in the following pages are decoded using an example below:



Symposium B: Nanomaterials for Bioimaging and Biosensing

Programme Overview

Level 3, Room 306

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 13:00) **Session B-S4**	(10:30 - 13:00) **Session B-S5**	(10:30 - 13:00) **Session B-S9**	(10:30 - 11:00) Coffee Break
(11:00 - 13:00) **Session B-S1**				(11:00 - 13:00) **Session B-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:00) **Session B-S2**	(14:00 - 16:45) **Session B-S5**	(14:00 - 16:00) **Session B-S7**	(14:30 - 16:00) **Session B-S10**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session B-S8** **POSTER SESSION**		
(16:30 - 18:15) **Session B-S3**			(16:00 - 18:30) **Session B-S11**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	19:00 - 22:00 hrs Conference Banquet @ Suntec	

B-S1

Monday, 29 June 2009
11:00-13:00
Level 3, Room 306

11:00 B-S1.1-2(KN) A00491-00901 pg B13
Controlling the Optical Properties of Inorganic Nanocrystal Heterostructures
Gregory SCHOLES

11:30 B-S1.3(O) A00278-00509 pg B10
Large-scale Preparation of Semiconductor Photoluminescent Quantum Dots and Their Bioimaging Application
Ming-Qiang ZHU, Jin-Hua LIU, Jun-Bing FAN, Feng LONG, Lin-Jing SHEN

11:45 B-S1.4(O) A00326-00602 pg B11
Origin of Manganese Luminescence Enhancement in Mn-doped ZnS Nanoparticles
Tze Chien SUM, Edbert Jarvis SIE, Hairuo XU, Wee Shong CHIN, Cheng Hon Alfred HUAN

12:00 B-S1.5-6(IN) A01580-02754 pg B29
Highly Luminescent Water-Soluble InP Nanocrystals with Thick ZnS Shell Prepared via Reactive Phase Transfer and Photochemical Processing
Norio MURASE, Chunliang LI, Masanori ANDO, Hiroyuki ENOMOTO

12:30 B-S1.7(O) A00519-00952 pg B13
Effect of Surfactant Concentration on the Formation of ZnSe Nanoparticles Synthesized by Wet Chemical Route
See Yau LEE, Sabar Derita HUTAGALUNG, Azizan AZIZ, Ishak MAT

12:45 B-S1.8(O) A00807-01413 pg B18
Synthesis of Silver Nanoparticles Using Acacia Gum as a Reducing Agent
Rashmi SANGHI, Preeti VERMA, Vandana SINGH

B-S2

Monday, 29 June 2009
14:00-16:00
Level 3, Room 306

14:00 B-S2.1-2(IN) A00304-00562 pg B10
Self-assembling Optoelectronic Nanostructures Inspired by b-amyloids: Synthesis, Characterization and Prospects for Bioelectronics
John D. TOVAR

14:30 B-S2.3-4(IN) A01377-02402 pg B26
Fabrication of Arrays of Sub-50-nm Nanofin structure via Photolithography and Nanocoating
Shigenori FUJIKAWA

15:00 B-S2.5(O) A00370-01756 pg B11
Development of Nanoarchitectured Amperometric Biosensors
C. Retna RAJ, Bikash Kumar JENA

15:15 B-S2.6-7(IN) A00643-04943 pg B15
Nano-scale Self-Assembly for Functional Materials and Devices
JatinderVir YAKHMI

15:45 B-S2.8-9(IN) A01009-04609 pg B22
Applications of Carbon Nanotube Networks in Biomolecular Detection
Lain-Jong LI

B-S3

Monday, 29 June 2009
16:30-18:15
Level 3, Room 306

16:30 B-S3.1-2(IN) A01877-03238 pg B35
Novel Functionalized and Nanostructured Conducting Polymers for Biosensing
Jadranka TRAVAS-SEJDIC

17:00 B-S3.3(O) A01199-02048 pg B23
Detection of Thiols by MOS Capacitor for Biosensor Applications
Narayana THOTA, Elgar KANHERE, Enakshi BHATTACHARYA

17:15 B-S3.4(O) A01358-02385 pg B25
Self-assembling of Novel Multifunctionalizing Oligoarylenedithiols on Plasmonic Metal Nanoparticles for Label Free Bio-sensing
Maria LOSURDO, Maria GIANGREGORIO, Scott WOLTER, Giuseppe BIANCO, Alessandra OPERAMOLLA, Gianluca FARINOLA, Francesco BABUDRI, Francesco NASO, April BROWN, Giovanni BRUNO

17:30 B-S3.5-6(IN) A00384-00705 pg B12
Conjugated Polyelectrolytes as Platforms for Biomacromolecule Detections
Shu WANG

18:00 B-S3.7(O) A02275-03925 pg B41
Understanding Nanoparticle-biomolecule Interactions by Fluorescence and Raman Spectroscopy
Anup KALE, Haribhau GHOLAP, Satishchandra OGALE

B-S4

Tuesday, 30 June 2009
10:30-13:00
Level 3, Room 306

10:30 B-S4.1-2(IN) A00843-01466 pg B19
Gold Nanoparticles with Tailored Size and Shape for Biosensing
Luis M. LIZ-MARZÁN,
Isabel PASTORIZA-SANTOS,
Jorge PÉREZ-JUSTE,
Ana SANCHEZ-IGLESIAS,
Enrique CARBO-ARGIBAY,
Victor MYROSHNYCHENKO,
F. Javier GARCIA DE ABAJO

11:00 B-S4.3-4(IN) A01638-02838 pg B31
Biological Applications of Colloidal Nanoparticles
Wolfgang PARAK

11:30 B-S4.5(O) A00743-01316 pg B16
Synthesis of II-VI Semiconductor Quantum Dots Applications for Live Cell Imaging
Narendra SINGH, Chiung Wen KUO, Peilin CHEN

11:45 B-S4.6(O) A02558-04372 pg B44
Imaging Endogenous Metabolites Directly in Latent Fingerprints Using Silica Nanoparticles and SALDI-TOF Mass Spectrometry
Angelina LIM, Matthew BENTON, Frederic ROWELL, Jan MA

12:00 B-S4.7-8(IN) A02674-04592 pg B45
The Sonochemical Synthesis of Functional Nanomaterials
Muthupandian ASHOKKUMAR

12:30 B-S4.9(O) A00976-01695 pg B22
Synthesis and Characterization of Gold Nanoparticles via Reduction Methods with Difffrent Reducing Agent
Norfazila MOHD SULTAN, Mohd Rafie JOHAN

12:45 B-S4.10(O) A01452-02520 pg B28
Concerns for Biotoxicity of the Nanomaterials
Arjumand WARSY, Nadia ALEISA, Maha DHAGASTANI

B-S5

Tuesday, 30 June 2009
14:00-17:00
Level 3, Room 306

14:00 B-S5.1-2(IN) A01197-02145 pg B23
Nanostructures for Bio-Chemical Sensors
Ajay AGARWAL

14:30 B-S5.3(O) A01430-03036 pg B27
Tunable Light Emission Using Quantum Dot Coated Upconverters
Tich-Lam NGUYEN, Paul SPIZZIRRI, Gerry WILSON, Paul MULVANEY

14:45 B-S5.4(O) A01759-03088 pg B33
Synthesis of Nanoparticles of Porous Iron Carboxylates for Biomedical Applications
Daniela HEURTAUX, Tamim CHALATI,
Patricia HORCAJADA, Christian SERRE,
Ruxandra GREF, Brigitte GILLET, Catherine SEBRIE,
Jong San SAN, Gerard FEREY, Patrick COUVREUR

15:00 B-S5.5(O) A02068-03558 pg B37
SERS Detection of DNA at Sub-Picomolar Level on Silicon Nanotips Arrays
Hsin-I HSIUNG, Hung-Chun LO, Li-Chyong CHEN, Kuei-Hsien CHEN

15:15 B-S5.6(O) A02620-04480 pg B44
Controllable Magnetic Bead Motion on Patterned NiFe Elliptical Lines for Biosensing Applications
CheolGi KIM, Anandakumar SARELLA,
SudhaRani VISHNUBHOTLA, J-R JEONG

15:30 B-S5.7-8(IN) A00853-04384 pg B20
Biodetection and Diagnosis Strategies by Using SERS and SEFS
Ramon A. ALVAREZ-PUEBLA

16:00 B-S5.9-10(IN) A02230-04476 pg B40
A GMR Sensor- and High-moment Magnetic Nanoparticle-based Biomedical Sensing System of Zeptomol (10^{-21} mol) Sensitivity: An Integrated Platform Potentially Leading to Personalized Medicine
Wang JIAN-PING, Yuanpeng LI, Jing YING,
Yao XIAOFENG, Xing CHENGGUO,
Balasubramanian SRINIVASAN

16:30 B-S5.11(O) A02210-03989 pg B39
Enhancing the Sensitivity of Silicon Nanowire Bio-Chemical Sensor
Cai Ying Joycelyn LOW, Ajay AGARWAL, Ignatius TAY

16:45 B-S5.12(O) A02464-04211 pg B42
Detection of WSSV Virus with Differential Pulse Voltammetry Technique on Thin ITO Film
Suthisa LEASEN, Somsak DANGTIP,
Jiraporn SRISALA

B-S6

Wednesday, 1 July 2009
10:30-13:00
Level 3, Room 306

10:30 B-S6.1-2(KN) A01596-02776 pg B30
Fabrication of Biocompatible Nanoparticles for Molecular Imaging and Drug Delivery
Horst WELLER

11:00 B-S6.3-4(IN) A00497-00913 pg B13
The Preparation of Colloidally Stable, Water Soluble, Biocompatible, Semiconductor Nanocrystals with a Small Hydrodynamic Diameter
Paul MULVANEY

11:30 B-S6.5-6(IN) A02296-03920 pg B42
Homogenous, Highly Emissive QDs-Silica Core-Shell Nanocomposite from Visible to Near Infrared; Their Applications in Two-Photon Imaging of Human Mesenchymal Stem Cells
Pi-Tai CHOU, Chih-Wei LAI

12:00 B-S6.7-8(IN) A01750-03052 pg B32
Size Controllable Supramolecular Nanoparticles for Molecular Diagnostics and Therapeutics
Hsian-Rong TSENG, Hao WANG, Shutao WANG

12:30 B-S6.9(O) A01599-02781 pg B30
Synthesis of Ternary ZnCdTe Quantum Dots with Highly Red Photoluminescence Properties
Norhayati ABU BAKAR, Vivi FAUZIA, Akrajas ALI UMAR, Muhamad MAT SALLEH, Muhammad YAHAYA

12:45 B-S6.10(O) A01308-04290 pg B25
Non-covalent Interaction of Single Walled Carbon Nanotubes with Ethylene-vinyl Acetate Copolymer Conductive Composite Films for Sensor Application
S. N. JAISANKAR, S. BALAKRISHNAN, Asit B. MANDAL

B-S7

Wednesday, 1 July 2009
14:00-16:00
Level 3, Room 306

14:00 B-S7.1-2(IN) A02918-04986 pg B46
A General Approach to Generate Multifunctional Nano-architectures from DNA-based ABC Monomers for Biosensing and Drug-delivery-coupled Imaging
Dan LUO

14:30 B-S7.3(O) A00664-01254 pg B15
Conductive Molecular and Nanostructural Building Blocks for DNA Biosensing
Hsiao-hua YU

14:45 B-S7.4(O) A00023-00024 pg B8
Facile Synthesis of Cu_2O Nanocrystals with Systema
Michael H. HUANG, Chun-Hong KUO

15:00 B-S7.5-6(IN) A00775-01361 pg B17
The New Applications of Beta-lactam Antibiotics Derivatives in Imaging of Gene Expression and Detection of Drug Resistant Bacteria
Rongrong LIU, Yanmei YANG, Bengang XING

15:30 B-S7.7(O) A01178-02041 pg B23
Nanoporous Electromembrane in Bioanalysis
Binh Thi Thanh NGUYEN, Yin THU NYINE, Chee-Seng TOH

15:45 B-S7.8(O) A01886-03256 pg B35
An Air-Supported Liquid Crystal System for Real-Time and Label-Free Characterizations of Phospholipases and Their Inhibitors
Deny HARTONO, Xinyan BI, Kun-Lin YANG, Lin-Yue Lanry YUNG

B-S8: Poster Session

Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Gallery

B-S8.01(P) A00006-00018 pg B8
Examination of Au Nanocrystal-Directed Growth of Au-C_2O Core-Shell Nanostructures
Chun-Hong KUO, Michael H. HUANG

B-S8.02(P) A00072-04679 pg B8
Synthesis, Structure, Electrochemical Properties of Nano Layered Organice-inorganic Perovskites Containing $Fe(CN)_6^{3-}$ Layers and its Application for Detection of DNA Hybridization
Jing WU, Liu HANXING, Cao MINGHE

B-S8.03(P) A00222-00418 pg B9
Assembly of Gold Nanostructures into Chains and Three-Dimensional, Highly Ordered Superstructures
Tian MING, Zhenhua SUN, Jianfang WANG

B-S8.04(P) A00278-00510 pg B10
A Versatile Energy-Efficient Approach to CdTe Quantum Dots at Moderate Temperature
Ming-Qiang ZHU, Jin-Hua LIU, Jun-Bing FAN, Feng LONG, Lin-Jing SHEN

B-S8.05(P) A00519-00948 pg B13
Optical Properties of Manganese-Doped ZnSe Nanoparticles Synthesized by Wet Chemical Route
See Yau LEE, Sabar Derita HUTAGALUNG, Azizan AZIZ, Ishak MAT

B-S8.26(P) A01998-03448 **pg B36**
Ultra-Sensitive Cholesterol Biosensor Based on ZnO Nanoparticles Grown in Solution
Sang Hoon KIM, Mohammad VASEEM, Ahmad UMAR, Yoon Bong HAHN

B-S8.27(P) A02080-03589 **pg B37**
Highly Sensitive and Selective Detection of Mercury Ions by Using Oligonucleotides, DNA Intercalators and Conjugated Polymers
Xinsheng REN, Qing-Hua XU

B-S8.28(P) A02190-03749 **pg B38**
Gold Nanoparticles for Immuno Sensing using Darkfield Imaging
Dorothee WASSERBERG, Remco VERDOOLD, Felicia UNGUREANU, Vinod SUBRAMANIAM, Rob KOOYMAN

B-S8.29(P) A02202-03780 **pg B38**
Fabricated of Chemical and Biosensors Based on ZnO Nanostructures by Electrochemical Principle
Ahmad UMAR, A. Ali HAJRY, Shafeequi AHMAD, Yoon-Bong HAHN

B-S8.30(P) A02231-03810 **pg B40**
Creation of Multi-Functional Biointerface Using by Plasma-Processing
Hiroshi ENDO, Shohei FUJITA, Yasuhiro MIYAHARA, Nagahiro SAITO, Osamu TAKAI

B-S8.31(P) A02313-03960 **pg B42**
15-Crown-5 Functionalized Au Nanoparticles Synthesized via Single Molecule Exchange on Silica Nanoparticles: Its Application to Probe 15-Crown-5/ K^+/15-Crown-5 "Sandwiches" as Linking Mechanisms
Mei-Lin HO, Yu-Chun CHEN, Pi-Tai CHOU

B-S8.32(P) A02489-04270 **pg B43**
The Synthesis and Characterization of QD Incorporated Nano-hybrid Materials
Eunhae KOO, Mie IM, Dohyung RYU, Sangil HYUN, Changyeol KIM, Kwangyeon CHO, Sungho YOON

B-S8.33(P) A02533-04334 **pg B43**
Synthesis and Characterization of MWNT-ZnO Nanoparticle Composite
Sameera IVATURI, Ravi BHATIA, Prasad VISHNU BHOTLA

B-S9

Thursday, 2 July 2009
10:30-13:00
Level 3, Room 306

10:30 **B-S9.1-2(IN) A01847-03203** **pg B34**
Synthesis, Properties and Assembly of Complex Nanocrystal Structures
Liberato MANNA

11:00 **B-S9.3(O) A00178-00567** **pg B9**
Synthesis and Charaterisation of Magnetic-Fluorescent Composite Colloidal Nanostructures
Fabien GRASSET, Stéphane CORDIER, Yann MOLARD, Frédéric DORSON, Tangi AUBERT, Victor ROULLIER, Valérie MARCHI-ARTZNER, Michel MORTIER, Hajime HANEDA

11:15 **B-S9.4(O) A00426-01578** **pg B12**
Synthesis and Optical Spectroscopy of CdSe Quantum Dots Semiconductor
Nor Aliya HAMIZI, Mohd Rafie JOHAN

11:30 **B-S9.5-6(IN) A02221-03797** **pg B39**
Bioconjugated Nanostructures for Diagnosis and Therapy
Natividad GALVEZ, Belen FERNANDEZ, Jose Manuel DOMINGUEZ-VERA, Rafael CUESTA, Ana B. HUNGRIA, Jose J. CALVINO

12:00 **B-S9.7-8(IN) A00920-01617** **pg B22**
Dendron-Modified AFM Probes for Sensing DNA and Proteins and Mapping mRNA on Tissue Surface
Joon Won PARK

12:30 **B-S9.9(O) A02684-04616** **pg B45**
Label-free Electrical Detection of DNA using Gold Nanoparticle Enhancement in Carbon Nanotube Networked Field-Effect Transistors
Xiaochen DONG, Dongliang FU, Peng CHEN, Lain-Jong LI

12:45 **B-S9.10(O) A02808-04804** **pg B47**
Selective Sensing of Biomaterials Using Metal-clad Waveguide Biosensor
Shahid MEHMOOD

B-S10

Thursday, 2 July 2009
14:30-16:00
Level 3, Room 306

14:30 **B-S10.1-2(KN) A02602-04441** **pg B44**
Nanocomposite Engineering of Nanocrystalline Materials
Jackie Y. YING

15:00 B-S10.3-4(IN) A01415-02453 pg B27
Oligonucleotide-based Sensing or Manipulating Elements
Yoshihiro ITO

15:30 B-S10.5(O) A01540-02689 pg B29
Positively Charged Silver Nanoparticles for Surface Enhanced Resonant Raman Spectroscopy of Dye-Labelled DNA
Ron GILL, Gerald LUCASSEN

15:45 B-S10.6(O) A01604-03986 pg B30
Development of Iron Oxide Nanoparticle Based Electrochemical Immunosensor for the Detection of Human PSA
Viswanathan SWAMINATHAN, Al PALANIAPPAN, B. S. SHAZZHARIF, Raju V. RAMANUJAN

B-S11

Thursday, 2 July 2009
16:00-18:30
Level 3, Room 306

16:00 B-S11.1-2(IN) A00471-01294 pg B12
Advanced Functional Nanocrystals for Bioimaging and Biosensing
Ming-Yong HAN

16:30 B-S11.3(O) A02275-03882 pg B41
Fluorescent Quantum Dot Labels for Rapid and Facile Immunodetection of Multiple Proteins
Sonia GAWANDE, Anup KALE, Haribhau GHOLAP, Padma SHASTRY, Satishchandra OGALE

16:45 B-S11.4(O) A01273-03413 pg B24
Single Walled Carbon Nanotubes (SWCNT) for Herbicide Detection
Ju Nie TEY, Sonu GANDHI, I Putu Mahendra WIJAYA, Jun WEI, C. Raman SURI, Isabel RODRIGUEZ, Subodh G. MHAISALKAR

17:00 B-S11.5-6(W) A01687-02916 pg B31
Routes to Biomedical Applications of Mesoporous Silica.
Chung-Yuan MOU

17:30 B-S11.7-8(IN) A02773-04738 pg B45
Electroconductive Hydrogels: Co-networks of Poly(HEMA-co-PEGMA-co-HMMA-co-MPC) and Polypyrrole (PPy) for Implantable Biosensors and Deep Brain Stimulation
Anthony GUISEPPI-ELIE

18:00 B-S11.9(O) A02926-05005 pg B47
Simulation of the Thickness Dependency of Enzyme Mediator Variations within Hydrogel Biorecognition Membranes
Abdur Rub ABDUR RAHMAN, Gusphyl JUSTIN, Anthony GUISEPPI-ELIE

18:15 B-S11.10(O) A00842-01588 pg B19
Studies on Technologically Important Carbonate-free Ferroelectric Nanostructures and their Biosensing Applications
Abhijit ROY, Dambarudhar MOHANTA

B-S12

Friday, 3 July 2009
11:00-13:00
Level 3, Room 306

11:00 B-S12.1-2(IN) A00889-01547 pg B21
Core-shell Upconversion Fluorescent Nanoparticles for Imaging and Photodynamic Therapy of Cancer
Yong ZHANG, Zhengquan LI, Haisheng QIAN, Huichen GUO, Niagara MUHAMMAD IDRIS

11:30 B-S12.3(O) A00758-01337 pg B17
Development of Biosensor for Detection of Mutations in DNA Using the Principle of FRET
Pramod Kumar BHATNAGAR,
Paramatma Chandra MATHUR, Anamika ANEJA, Nidhi MATHUR

11:45 B-S12.4(O) A00876-02293 pg B20
Controlled Synthesis and Biomedical Applications of Monodisperse Magnetic Nanocrystals
Yanglong HOU

12:00 B-S12.5-6(IN) A02282-03896 pg B42
Fluorescent Rare-earth Based Oxides Nanomaterials: From Nanocrystals to Nanorods and Cytotoxicity Study
Timothy Thatt Yang TAN

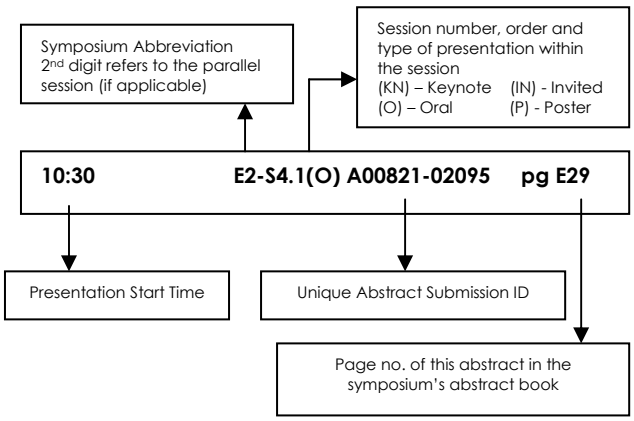
12:30 B-S12.7(O) A02495-04265 pg B43
Synthesis and Characterization of Rare Earth Nano Compounds for Bio Labeling Applications
Muhammad Anis UR-REHMAN, Ali ABDULLAH

12:45 B-S12.8(O) A00740-01311 pg B16
Building an Artificial Cell Wall: Functional Biomolecule Assemblies in a Biomimetic Membrane Scaffold
Adam MECHLER, Stefania PIANTAVIGNA, Slavica PRAPORSKI, George MCCUBBIN, C. Jo CORBIN, Alan J. CONLEY, Lisandra L. MARTIN

SYMPOSIUM C

Advanced Delivery of Therapeutics: New Challenges for Materials

The programme codes you will see in the following pages are decoded using an example below:



Symposium C: Advanced Delivery of Therapeutics: New Challenges for Materials

Level 3, Room 310

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:45) **Session C-S4** **Unique Material Design for Drug/Gene Delivery-I**	(10:30 - 12:30) **Session C-S6** **Unique Material Design for Drug/Gene Delivery-II**	(10:30 - 12:45) **Session C-S9** **Unique Material Design for Drug/Gene Delivery-III**	(10:30 - 11:00) Coffee Break
(11:00 - 12:00) **Session C-S1** **Novel Carriers for Drug/Gene Delivery-I**				
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:00) **Session C-S2** **Novel Carriers for Drug/Gene Delivery-II**	(14:00 - 16:30) **Session C-S5** **POSTER SESSION**	(14:00 - 16:45) **Session C-S7** **Functional Materials for Tissue Engineering**	(14:30 - 18:00) **Session C-S10** **Functional Biomaterials and Cytotoxicity**	
(16:15 - 16:30) Break				
(16:30 - 18:15) **Session C-S3** **Novel Carriers for Drug/Gene Delivery-III**		(16:45 - 17:30) **Session C-S8** **Drug/Gene Delivery**		
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	19:00 - 22:00 hrs Conference Banquet @ Suntec	

C-S1: Novel Carriers for Drug/ Gene Delivery-I

Monday, 29 June 2009
11:00-12:00
Level 3, Room 310
Chairs: Sangyong Jon, Yi Yan Yang

11:00 C-S1.1-3(KN) A02884-04951 pg C39
Block Copolymer Micelles as Smart Nanocarriers for Tumor Targeting
Keiji ITAKA, Kazunori KATAOKA

11:45 C-S1.4-6(KN) A02918-04987 pg C40
DNA-based Hydrogels for Drug Delivery and P-gels for Protein Production without Any Living Cells
Dan LUO

C-S2: Novel Carriers for Drug/ Gene Delivery-II

Monday, 29 June 2009
14:00-16:00
Level 3, Room 310
Chairs: Chi-Hwa Wang, Yi Yan Yang

14:00 C-S2.1-2(IN) A01794-03140 pg C24
Multifunctional Superparamagnetic Iron Oxide Nanoparticles for Combined Cancer Imaging and Therapy
Sangyong JON, Mi Kyung YU, Jinho PARK, Vaishali BAGOLKOT

14:30 C-S2.3-4(IN) A01872-03230 pg C24
Block Copolymers of Polyphosphoester for Drug and Gene Delivery
Jun WANG

15:00 C-S2.5-6(IN) A02555-04367 pg C32
Microparticles Developed by Electrohydrodynamic Atomization for the Local Delivery of Anticancer Drug to Treat C6 Glioma
Jingwei XIE, Chi-Hwa WANG

15:30 C-S2.7(O) A02922-04995 pg C41
Efficient Delivery of Hydrophobic and Hydrolysis Susceptible N-epoxymethyl-1, 8-naphthalimide (ENA) Using Functional Polycarbonate Micelles
Jeremy P. K TAN, Fredrik NEDERBERG, Sung Ho KIM, Uttam SURANA, James L. HEDRICK, Yi Yan YANG

15:45 C-S2.8(O) A02116-03645 pg C27
Co-Delivery of p53 and Doxorubicin Using Self-Assembled Cationic Oligopeptide Nanoparticles to Achieve Synergistic Effect in Cancer Therapy
Nikken WIRADHARMA, Yen Wah TONG, Yi-Yan YANG

C-S3: Novel Carriers for Drug/ Gene Delivery-III

Monday, 29 June 2009
16:30-18:15
Level 3, Room 310
Chairs: Ho Sup Yoon, Yi Yan Yang

16:30 C-S3.1-2(IN) A02896-04950 pg C39
Bcl-2 Family Proteins in Apoptosis and Cancer
Ho Sup YOON

17:00 C-S3.3(O) A02420-04123 pg C31
Peptide-based Carrier for Targeted Intracellular Delivery of Proteins into Glioma Cells
Chunxiao WU, Seong Loong LO, Jerome BOULAIRE, Michelle Li Wen HONG, Hui Min BEH, Doreen Siu Yi LEUNG, Shu WANG

17:15 C-S3.4(O) A01258-02169 pg C18
Folate-coupled Poly(amino ester) for Cancer Targeted Delivery of siRNA
Dhananjay JERE, Rohidas AROTE, Hu-Lin JIANG, You-Kyoung KIM, Myung-Haing CHO, Chong-Su CHO

17:30 C-S3.5(O) A00910-04533 pg C16
mPEG-b-PAA-b-PLA Triblock Copolymer for the Formation of Shell-Stabilized Micelles as Vehicles for Delivery of Cancer Therapeutics
Eugene Shi Guang CHOO, Junmin XUE

17:45 C-S3.6(O) A02125-03657 pg C28
Gelatin-siloxane Nanoparticles Decorated with Membrane-lytic Peptides for Gene Delivery
Pei YIN, Zu-yong WANG, Jun WANG, Ya-fei ZHANG, Lei REN

18:00 C-S3.7(O) A02871-04912 pg C38
Co-Delivery of Paclitaxel and Herceptin Using Cationic Micellar Nanoparticles: Achieving Enhanced Cytotoxicity and Targeting
Ashlynn LZ LEE, Yong WANG, Han Yin CHENG, Shazib PERVAIZ, Yi Yan YANG

C-S4: Unique Material Design for Drug/ Gene Delivery-I

Tuesday, 30 June 2009
10:30-12:45
Level 3, Room 310
Chairs: Xia Lou, Yi Yan Yang

10:30 C-S4.1-3(KN) A02921-04993 pg C40
A Novel Family of Amphiphilic Glycopolymers via Controlled Ring-Opening Polymerization of Functionnalized Cyclic Carbonates for Targeted Drug Delivery
James L. HEDRICK, Philippe DUBOIS, Fabian SURIANO, Jeremy P. K. TAN, Russell C. PRATT, Yi Yan YANG

11:15 C-S4.4-5(IN) A02475-04229 pg C31
Crosslinked Gelatin Microspheres for Controlled Delivery of Oligodeoxynucleotides
Xia LOU

11:45 C-S4.6-7(IN) C00001 pg C44
DNA and siRNA Delivery Using Degradable Poly (amino ester)s
Chong-Su CHO

12:15 C-S4.8(O) A02228-04017 pg C28
Synthesis, Characterization, and Drug Delivery Properties of Star-Shaped PLA-PEG Block Copolymer with Cholic Acid Core
Yishu CHEN, Jie LIANG, Yujiang FAN

12:30 C-S4.9(O) A00106-00485 pg C7
Antitumor Effect of Bioabsorbable Fiber Mat Including Antimetabolites
Hiroshi UYAMA, Takayuki MINO, Chun Man LEE, Toru KITAGAWA, Yoshiki SAWA

C-S5: Poster Session

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Gallery

C-S5.01(P) A00247-04312 pg C8
Anti-diabetic Effect of Gold Nanoparticles
Abhimanyu K. SINGH, Awadhesh K. RAI, Prashant K. RAI, Geeta WATAL

C-S5.02(P) A00307-00571 pg C10
Selection of HER2 Extracellular Domain Specific Aptamers Using Capillary Electrophoresis
Lihan TAN, Koon Gee NEOH, Woo-Seok CHOE

C-S5.03(P) A00360-00661 pg C10
Genotoxicity of Corrosion Eluates Obtained from Fixed Orthodontic Brackets
Daniel RIBEIRO, Fernanda ANGELIERI

C-S5.04(P) A00360-00662 pg C11
In Vitro Evaluation of Genetic Damage Induced by Three Radiopacifiers Used in Clinical Practice
Ribeiro DANIEL, Oyama LILA, Joao Paulo MARCONDES, Danielle ALMEIDA, Mariza MATSUMOTO, Daisy SALVADORI

C-S5.05(P) A00741-03106 pg C14
Transmembrane Delivery of the Cell-Penetrating Peptide Conjugated Mesoporous Silica Nanoparticles
Yi-Ping CHEN, Yann HUNG, Chung-Yuan MOU

C-S5.06(P) A00887-01555 pg C15
Synthesis of Functionalized Dendrons for Surface Modifications of Biodegradable Nanoparticles
Say Chye Joachim LOO, Charlotte HUANG

C-S5.07(P) A00906-02181 pg C16
Folate-Chitosan-graft-Polyethylenimine as an Akt1 shRNA Aerosol Delivery Carrier for Lung Cancer Therapy
Hulin JIANG, Cheng-Xiong XU, You-Kyoung KIM, Rohidas AROTE, Dhananjay JERE, Myung-Haing CHO, Chong-Su CHO

C-S5.08(P) A00995-02138 pg C17
Hybrid System Composed of Baculovirus and Galactosylated PEI for Efficient Gene Carrier
You-Kyoung KIM, Jae Young CHOI, Hu Lin JIANG, Myung-Haing CHO, Yeon Ho JE, Chong-Su CHO

C-S5.09(P) A01023-02384 pg C17
Synthesize Novel Adsorbent of Pillared Clay and Their Application for Decolorizing of Crude Clove Oil
Yateman ARRYANTO

C-S5.10(P) A01116-01935 pg C18
Peptide-Immobilized Chitosan Nanoparticles for M Cell Targeting
Mi-Kyong YOO, Jin-Huk CHOI, Sang-Ki KANG, Ji-Shan QUAN, Yun-Jaie CHOI, In-Kyu PARK, Hee-Sam NA, Hyun-Chul LEE, Chong-Su CHO

C-S5.11(P) A01270-02204 pg C19
Nanoparticles of Porous Iron Carboxylates as New Drug Carriers
Patricia HORCAJADA, Christian SERRE, Ruxandra GREF, Tamim CHALATI, Guillaume MAURIN, Gerard FEREY, Patrick COUVREUR

C-S5.12(P) A01278-02234 pg C20
Swelling and Drug Release Characteristics of pH Responsive Semi–IPN Hydrogels of Polyacrylamide and κ-Carrageenan
Vishalakshi B., Jyothi D. MUMBREKAR, Narayana CHARYULU R.

C-S5.13(P) A01471-02561 pg C20
Synergistic Anti-tumor Activity of Paclitaxel-incorporated Conjugated Linoleic Acid-coupled Poloxamer Thermosensitive Hydrogel In Vitro and In Vivo
DingDing GUO, Cheng-Xiong XU, Ji-Shan QUAN, Chung-Kil SONG, Hua JIN, Dae-Duk KIM, Yun-Jaie CHOI, Myung-Haing CHO, Chong-Su CHO

C-S5.14(P) A01479-02566 pg C20
Folate Conjugated-Poly(Ester Amine) for Cancer Therapy
Rohidas AROTE, Soon-Kyoung HWANG, Mi-Kyong YOO, Hu-Lin JIANG, You-Kyoung KIM, Dhananjay JERE, Yun-Jae CHOI, Myung-Haing CHO, Chong-Su CHO

C-S6: Unique Material Design for Drug/ Gene Delivery-II

Wednesday, 1 July 2009
10:30-12:30
Level 3, Room 310
Chairs: Andrew George, Yi Yan Yang

11:15 C-S6.4-6(KN) A02995-05117 pg C43
Gene Delivery with Non Viral Vector Systems for Induction of Immunological Tolerance
Andrew GEORGE, Adnan KHAN, Frank LARKIN, Wei Yang SEOW, Yi-Yan YANG

12:00 C-S6.7(O) A02367-04044 pg C29
Nanodiamond-Based Therapeutic Vehicles for the Treatment of Hepatocarcinoma
Edward CHOW, Houjin HUANG, Mark CHEN, Xueqing ZHANG, Robert LAM, Eiji OSAWA, Michael BISHOP, Dean HO

12:15 C-S6.8(O) A02039-03506 pg C26
Delivery Platform for Hydrophobic Drugs via Layer-by-Layer Approach
Satish PATIL, Uttam MANNA

C-S7: Functional Materials for Tissue Engineering

Wednesday, 1 July 2009
14:00-16:45
Level 3, Room 310
Chairs: Rachel Ee, Yi Yan Yang

14:00 C-S7.1-3(KN) A02960-05067 pg C42
Preparing Bone Using an Injectable Hydrogel Scaffold
Jöns HILBORN, Kristoffer BERGMAN, Tim BOWDEN, Dmitri OSSIPOV, Thomas ENGSTRAND

14:45 C-S7.4-5(IN) A02640-04536 pg C34
Peptide-Poly(ethylene glycol) Hybrid Hydrogels for Cartilage Repair Applications
Rachel EE, Shaoqiong LIU, Quan TIAN, James HEDRICK, Yi Yan YANG

15:15 C-S7.6-7(IN) A02831-04852 pg C37
Bioengineering of the Hematopoietic Stem Cell Niche for Ex Vivo Expansion of Cord Blood Hematopoietic Progenitor Cells
Chou CHAI, Kam LEONG

15:45 C-S7.8-9(IN) A00504-01146 pg C13
Biomimetic Fabrication of Hybrid Silica and Titania Nanocomposites on Biopolymer Templates
Yury SHCHIPUNOV, Irina POSTNOVA, Irina SEMILETOVA

16:15 C-S7.10(O) A00808-01415 pg C15
Cell-Surface Interactions: Examining the Biological-Physical Interface
Ille C. GEBESHUBER, Burhanuddin Yeop MAJLIS, Lukas NEUTSCH, Franz GABOR

16:30 C-S7.11(O) A02107-03628 pg C26
Nanostructured Silicon as Bioactive and Biocompatible Material
Lyubov OSMINKINA, Maxim GONGALSKY, Victor TIMOSHENKO, Andrey KUDRYAVTSEV, Azha GAYDAROVA, Andrey DURNEV

C-S8: Drug/Gene Delivery

Wednesday, 1 July 2009
16:45-17:30
Level 3, Room 310
Chairs: Rachel Ee, Yi Yan Yang

16:45 C-S8.1(O) A02952-05054 pg C42
Chitosan Nanoparticles- new Adjuvants in Vaccine Delivery System
Vijayashree NAYAK, Nirmala L., Sanjay Kumar DHAKER

17:00 C-S8.2(O) A02475-04448 pg C32
Synthesis and Characterization of Porous Poly(HEMA-co-NIPAAm) for Controlled Drug Delivery
Yuli SETIYORINI, Xia LOU

17:15 C-S8.3(O) A00505-00964 pg C13
Biodegradable Fibrous Mats for Delivery of Hydroxycamptothecin
Chengying XIE, Xiaoming LUO, Ye YANG, Xiaohong LI

C-S9: Unique Material Design for Drug/Gene Delivery-III

Thursday, 2 July 2009
10:30-12:45
Level 3, Room 310
Chairs: Joachim Say Chye Loo, Yi Yan Yang

10:30 C-S9.1-2(IN) A02414-04117 pg C30
Controlled Delivery of ABL in a Non-cytotoxic Regulation of Cancerous Cell Growth
Yen Wah TONG, Shuang ZHAO

11:00 C-S9.3-4(IN) A02945-05034 pg C41
Molecular and Cellular Biology of Keloid Scar
Thang T. PHAN

11:30 C-S9.5(O) A02660-04566 pg C35
Biomimetic Scaffolds for the Expansion and Injectable Delivery of Human Mesenchymal Stem Cells in Cartilage Repair
Shaoqiong LIU, Quan TIAN, Anandamoy RUDRA, James L HEDRICK, Yi Yan YANG, Pui Lai Rachel EE

11:45 C-S9.6(O) A02563-04380 pg C33
Synthesis and Characterization of Novel Functional Polycarbonates for Delivery of Anticancer Drugs
Chuan YANG, Chloe TAN YI TING, James L. HEDRICK, Yi Yan YANG

12:00 C-S9.7(O) A00128-00263 pg C8
Experimental Studies on Engineering of Liposomal Preparations
Aditya MITTAL, Rahul GROVER

12:15 C-S9.8(O) A02606-04452 pg C33
Design, Syntheses and Evaluation of Hemocompatible Antimicrobial Pegylated–Polymers Containing Functional Quaternary Ammonium Groups
Shrinivas VENKATARAMAN, Ying ZHANG, Lihong LIU, Yi Yan YANG

12:30 C-S9.9(O) A00068-00408 pg C7
Silica Nanotubes: Nanostructured Systems for Ultrasound Triggered Controlled Drug Delivery and Biosensing
Shobhna KAPOOR, Aninda Jiban BHATTACHARYYA

C-S10: Functional Biomaterials and Cytotoxicity

Thursday, 2 July 2009
14:30-18:00
Level 3, Room 310
Chairs: Yen Wah Tong, Yi Yan Yang

14:30 C-S10.1-2(IN) A01929-03329 pg C25
Potential *In Vitro* Cytotoxic Effects of Gold Nanoparticles
Lin-Yue Lanry YUNG

15:00 C-S10.3(O) A00455-00888 pg C12
Magnetic Nanoparticle Carriers for Drug Targeting in Cancer Treatment
Sibnath KAYAL, Raju V. RAMANUJAN

15:15 C-S10.4-6(KN) A02602-04445 pg C33
Nanostructure Processing of Advanced Biomaterials and Biosystems
Jackie Y. YING

16:00 C-S10.7(O) A00441-00831 pg C12
Thermoresponsive Polymer - Iron Oxide Nanoparticles for Multimodal Cancer Therapy
Sreekanth PURUSHOTHAM, Jason CHANG, Helmut RUMPEL, Irene KEE, Robert NG, Pierce CHOW, Chee Kiat TAN, Raju RAMANUJAN

16:15 C-S10.8(O) A00368-00673 pg C11
Fabrication of Nano-sized and Nano-coated Drugs Particles for Drug Delivery Applications
Mitali KAKRAN, NG SAHOO, Lin LI

16:30 C-S10.9(O) A00284-00520 pg C9
Folic Acid Conjugated Superparamagnetic Iron Oxide Nanoparticles: A Novel Drug Delivery System for the Treatment of Cancer
Nidhi ANDHARIYA, Bhupendra CHUDASAMA

16:45 C-S10.10(O) A00269-00522 pg C8
Biodegrdable Polymeric Magnetic Nanopartcles: A Potential Drug Delivery System for Anticancer Therapeutics
Bhupendra CHUDASAMA, Nidhi ANDHARIYA

17:00 C-S10.11(O) A00725-01290 pg C14
Cytotoxicity and Genotoxicity of Silver Nanoparticles
Asharani PV NAIR, Manoor Prakash HANDE, Suresh VALIYAVEETTIL

17:15 C-S10.12(O) A01270-02212 pg C19
In vivo Toxicity Studies of New Drug Nanocarriers: Porous Iron Carboxylates
Patricia HORCAJADA, Ruxandra GREF, Christian SERRE, Patrick COUVREUR, Gerard FEREY

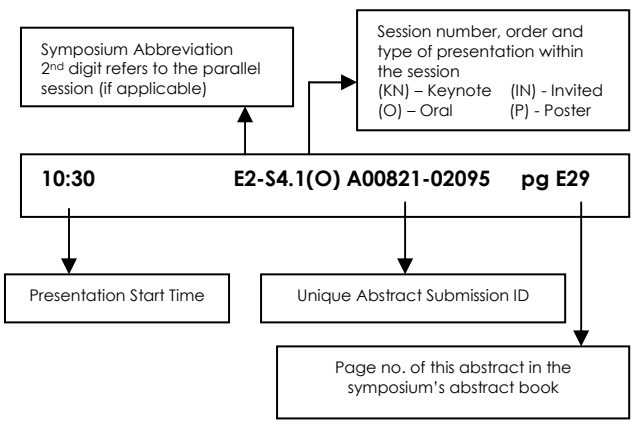
17:30 C-S10.13(O) A01785-03130 pg C23
Homogeneously Distributed Nano-Silver in Porous Polyetheretherketone Parts by Use of Laser Sintering
Dirk POHLE, Cornelia DAMM, Thomas RECHTENWALD, Helmut MÜNSTEDT

17:45 C-S10.14(O) A02325-04025 pg C29
Microfluidics Reaction Technology (MRT): Drug Nanocrystallization and Nanoencapsulation Applications
Thomai "Mimi" PANAGIOTOU

SYMPOSIUM D

Functional Ceramic Materials, Oxide Thin Films and Heterostructures

The programme codes you will see in the following pages are decoded using an example below:



Symposium D1: Functional Ceramic Materials, Oxide Thin Films and Heterostructures

Parallel Session on Level 3, Room 301

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session D1-S4**	(10:30 - 12:30) **Session D1-S6**	(10:30 - 12:30) **Session D1-S9**	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session D1-S1**				(11:00 - 13:15) **Session D1-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session D1-S2**	(14:00 - 16:30) **Session D1-S5**	(14:00 - 15:30) **Session D1-S7**	(14:30 - 16:30) **Session D1-S10**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session D1-S8**	(16:00 - 18:00) **Session D-S11** **POSTER SESSION**	
(16:30 - 18:00) **Session D1-S3**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	19:00 - 22:00 hrs Conference Banquet @ Suntec	

Symposium D2: Functional Ceramic Materials, Oxide Thin Films and Heterostructures

Parallel Session on Level 3, Room 302

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session D2-S1**	(10:30 - 12:30) **Session D2-S4**	(10:30 - 12:30) **Session D2-S6**	(10:30 - 12:30) **Session D2-S9**	(11:00 - 13:00) **Session D2-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session D2-S2**	(14:00 - 16:30) **Session D2-S5**	(14:00 - 15:30) **Session D2-S7**		
(16:15 - 16:30) Break		(15:30 - 17:30) **Session D2-S8**	(16:00 - 18:00) **Session D-S11** **POSTER SESSION**	
(16:30 - 18:00) **Session D2-S3**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	19:00 - 22:00 hrs Conference Banquet @ Suntec	

D1-S1

Monday, 29 June 2009
11:00 - 12:30
Level 3, Room 301

11:00 D1-S1.1-2(KN) A02764-04729 pg D132
Electrical Field Control of Ferromagnets Using Multiferroics
Ramamoorthy RAMESH

11:30 D1-S1.3-4(IN) A02671-04587 pg D129
Investigations on Room Temperature Magnetoelectric Multiferroics
Ram S. KATIYAR, A. KUMAR, M. K. SINGH, R. PALAI, J. F. SCOTT

12:00 D1-S1.5(O) A01347-02350 pg D80
Structures and Magnetic Properties of Pulsed Laser Deposited Cobalt Ferrite Films
Hui DING, Thirumany SRITHARAN

12:15 D1-S1.6(O) A01899-03272 pg D104
Enhanced Magnetization and Trigonal Distortion of t_{2g} Orbital in Epitaxially Constrained $BiFeO_3$ Thin Films with Rhombohedral Symmetry
Sangwoo RYU, Jae-Young KIM, Young-Han SHIN, Hyun M. JANG

D2-S1

Monday, 29 June 2009
11:00 - 12:30
Level 3, Room 302

11:00 D2-S1.1-2(IN) A02536-04342 pg D125
Transmitting Conducting Oxide Layers for Thin Film Silicon Solar Cells
Jatindra Kumar RATH

11:30 D2-S1.3(O) A00320-00676 pg D33
The Fabrication of an Al/$MgCaTiO_3$ /Si(100) MIS Device and its Characteristics of Photo-sensitivity
Sheng Tsung CHEN, Ming Chang SHIH

11:45 D2-S1.4(O) A01057-01834 pg D65
Influence of Potential Barrier Height of the Interface Glass on Electrical Performance of Screen Printed Ag Thick-film Contacts of Si Solar Cells
Yaping ZHANG, Yunxia YANG, Jianhua ZHENG, Guorong CHEN, Chen CHENG, James C.M. HWANG, Boon S. OOI, Andriy KOVALSKIY, Himanshu JAIN

12:00 D2-S1.5(O) A01119-02228 pg D70
Enhancement for UV-shielding and Hydrophilicity for Protective Film
Jung Whan YOO, Dong Shin YUN, Hyeong Seok LEE, Seung Ho LEE

12:15 D2-S1.6(O) A01144-01953 pg D71
Ga_2O_3 Thin Film Growth by Plasma-assisted Molecular Beam Epitaxy
Min-Ying TSAI, Mark E. WHITE, James S. SPECK

D1-S2

Monday, 29 June 2009
14:00 - 16:15
Level 3, Room 301

14:00 D1-S2.1-2(KN) A01831-03894 pg D100
Growing Integration Layer [GIL] Method: Novel Concept and Realization of Functional Oxide Layers on Metallic Materials without Firing
Masahiro YOSHIMURA, Naota SUGIYAMA, Nobuhiro MATSUSHITA, Xin-Min WANG, Takeshi WADA, Fen-Xiang QIN, Akihisa INOUE, Masahiro TSUKAMOTO, Kazuhiro NAKATA

14:30 D1-S2.3-4(IN) A00193-00542 pg D27
Advanced Porous Ceramics through the Microstructure Control
Kiyoshi OKADA, Toshihiro ISOBE, Yoshikazu KAMESHIMA, Akira NAKAJIMA

15:00 D1-S2.5-6(IN)
Title not available at time of print
George A. SWATZKY

15:30 D1-S2.7(O) A00179-01037 pg D26
In-situ Detection of Porosity Initiation during Aluminum Anodizing by High-Resolution Curvature Measurements
Quentin VAN OVERMEERE, Bernard NYSTEN, Joris PROOST

15:45 D1-S2.8(O) A01759-03087 pg D97
Thin Film of Flexible Porous Metal-Organic-Frameworks by Dip-coating Method
Patricia HORCAJADA, Christian SERRE, David GROSSO, Cedric BOISSIERE, Clement SANCHEZ, Gerard FEREY

16:00 D1-S2.9(O) A01263-02183 pg D75
Effect of Sr Substitution on Transport Properties of $Ba_5DyTi_3V_7O_{30}$ Ceamics
Priyadharsaini Sanghamitra SAHOO, Sunanda Kumari PATRI, Anuradha PANIGRAHI, Ram Naresh Prasad CHOUDHARY

D2-S2

Monday, 29 June 2009
14:00 - 16:15
Level 3, Room 302

14:00 D2-S2.1-2(KN) A01866-03224 pg D100
Giving a New Life to an Old Material ZnO
Masashi KAWASAKI

14:30 D2-S2.3(O) A00607-02262 pg D46
Deposition and Characterizations of ZnO Thin Films on Al_2O_3 (0001) Substrates with III-arsenide Intermediate Layers
Hongfei LIU, Soo Jin CHUA, Guang Xia HU, Hao GONG

14:45 D2-S2.4(O) A00362-00663 pg D35
Hydrothermal Epitaxy of ZnO Films in Water
Yuebin ZHANG, Sean LI, Gregory GOH

15:00 D2-S2.5(O) A01467-02546 pg D86
Effect of Lithium Doping on Zinc Oxide Thin Films Properties Prepared by Ultrasonic Spray Pyrolysis
Akhadiana MORRIS, Wei GAO

15:15 D2-S2.6(O) A02400-04144 pg D118
ZnO Based Transparent Conductive Multilayer Films for Dye Sensitized Solar Cell Applications
Diptiranjan SAHU, Jow-Lay HUANG

15:30 D2-S2.7(O) A02179-03744 pg D112
Detection of Low Concentration CO in Air Using ZnO:Al/Au Thin Films Deposited By Co-sputtering
Le Hung NGUYEN, Eunseong AHN, Seongyong PARK, Hoocheol JUNG, Hyojin KIM, Dojin KIM

15:45 D2-S2.8(O) A01478-02565 pg D86
Nanoscale Modification of Oxide and Nitride Film Surface by Energetic Ions
Santanu GHOSH

16:00 D2-S2.9(O) A01743-03395 pg D96
Synthesis and Characterization of Zinc Oxide (ZnO) Nanomaterials though the Horizontal Vapor Phase Growth Method
Alvin Noe LADINES, Gil Nonato SANTOS, Reuben QUIROGA

D1-S3

Monday, 29 June 2009
16:30 - 18:00
Level 3, Room 301

16:30 D1-S3.1-2(IN) A00864-01499 pg D57
Zero Gap Materials: A New Platform for Spintronics, Electronics and Optics
Xiao-Lin WANG

17:00 D1-S3.3(O) A01405-04146 pg D84
Comparison of H_2S Sensing Response of Hetero-structure Sensor (CuO-SnO_2) Prepared by rf sputtering and Pulsed Laser Deposition
Manish VERMA, Arijit CHOWDHURI, K. SREENIVAS, Vinay GUPTA

17:15 D1-S3.4(O) A02312-03952 pg D116
Electronic Properties of the Cu_2O Nanoneedles (p-layer) and ITO (n-layer) Heterojunction
Meenal DEO, Sarfraj MUJAWAR, Kashinath BOGLE, Nagarajan VALANOOR, Satishchandra OGALE

17:30 D1-S3.5(O) A01284-02238 pg D76
Effect of Annealing Temperature on the Properties of ZnS Thin Film Grown by Chemical Bath Deposition (CBD) Technique for PV Application
Norhabibi Saadah MUSA, Huda ABDULLAH, Sahbudin SHAARI, Nowshad AMIN, Kamaruzzaman SOPIAN

17:45 D1-S3.6(O) A01284-02279 pg D77
Influence of Post-annealing Temperature on the Properties Exhibited by In doped ZnO Thin Films for Anti-reflecting Coating Application
Norazia MOHD NOR, Huda ABDULLAH, Nughoro Pratomo ARIYANTO, Abd. Amir KADHUM, Sahbudin SHAARI, Chang Fu DEE

D2-S3

Monday, 29 June 2009
16:30 - 18:00
Level 3, Room 302

16:30 D2-S3.1-2(IN) A02094-04524 pg D109
$SrZrO_3$-based Thin Films For Resistive Switching Memory Application
Tseung-Yuen TSENG

17:00 D2-S3.3-4(IN) A01892-03261 pg D103
The Structure and Microwave Properties of Dielectric Tunable (Ba,Sr)TiO_3-based Composite Ceramics
Jiwei ZHAI, Jingji ZHANG, Xi YAO, Zhengkui XU

17:30 D2-S3.5(O) A00014-00014 pg D20
Colossal Dielectric Response in All-ceramic Percolative Composite PMN-PT – $Pb_2Ru_2O_{6.5}$
Vid BOBNAR, Marko HROVAT, Janez HOLC, Marija KOSEC

17:45 D2-S3.6(O) A00528-00960 pg D43
Observation of High Dielectric Constant in Polymer/AlCuFe-Nanoquasicrystalline Composites
Srinivas VEETURI, Venkatesh CHANDRAGIRI

D1-S4

Tuesday, 30 June 2009
10:30 - 12:30
Level 3, Room 301

10:30 D1-S4.1-2(IN) A02941-05026 pg D139
Structure and Properties of Domain Walls in Multiferroic $BiFeO_3$ Thin Films
C. T. NELSON, Y. ZHANG, Y. B. CHEN, C. M. FOLKMAN, S. H. BAEK, C. B. EOM, Xiaoqing PAN

11:00 D1-S4.3-4(IN) A02793-04770 pg D133
Labile Ferroelastic Nanodomains in Bilayered Ferroelectric Thin Films
Varatharajan ANBUSATHAIAH, Daisuke KAN, Fransiska C. KARTAWIDJAJA, Reza MAHJOUB, Miryam A. ARREDONDO, Samantha WICKS, Ichiro TAKEUCHI, John WANG, Nagarajan VALANOOR

11:30 D1-S4.5(O) A00311-02539 pg D32
Effect of Fe Diffusion in MgO/Fe Seedlayers to Attain (100) Oriented Pt Underlayer for Perrovskite Films with *c*-axis Orientation
Tatsuro MATSUMOTO, Kazuhiro TAMAI, Yuji MURASHIMA, Kazuki KOMAKI, Shigeki NAKAGAWA

11:45 D1-S4.6(O) A00135-00643 pg D24
Thermoelectric Response Of Electron-doped $CaMnO_3$ Perovskites
Yang WANG, Yu SUI, Xianjie WANG, Wenhui SU, Hongjin FAN

12:00 D1-S4.7(O) A00746-01320 pg D53
Electrical Properties of a-IGZO Thin Film Transistor with ZrO_2 Gate Dielectric Depending on Source/Drain Contact Resistance
Jae Sang LEE, Seongpil CHANG, Sang-Mo KOO, Sang Yeol LEE

12:15 D1-S4.8(O) A00459-00858 pg D40
Electro-mechanical Properties of Sm_2O_3-doped Ceria Films
Mária HARTMANOVÁ, Vojtech NÁDAŽDY, Vilma BURŠÍKOVÁ, Vladislav NAVRÁTIL, Catina MANSILLA, František KUNDRACIK

D2-S4

Tuesday, 30 June 2009
10:30 - 12:30
Level 3, Room 302

10:30 D2-S4.1-2(IN) A01450-02526 pg D85
Physics of Functional Oxide Interfaces
Hanns-Ulrich HABERMEIER

11:00 D2-S4.3-4(IN) A02513-04307 pg D123
Electronic Reconstruction at Oxide Interfaces
Alexander BRINKMAN, Mark HUIJBEN, Maarten VAN ZALK, Huijben JEROEN, Guus RIJNDERS, Dave BLANK, Hans HILGENKAMP

11:30 D2-S4.5-6(IN) A02273-03880 pg D115
Oxide Nanoelectronics On Demand
Cheng CEN, Jeremy LEVY, Stefan THIEL, German HAMMERL, Christof W. SCHNEIDER, Jochen MANNHART, C. Stephen HELLBERG, Kris E. ANDERSEN

12:00 D2-S4.7(O) A01207-02060 pg D75
X-ray Photoemission Spectroscopy Study of Ni/TiO_2(001) Interfaces
Jisheng PAN, Junguang TAO, Alfred HUANG, Zheng ZHANG, Daniel LI, Jianwei CHAI, Shijie WANG, Changqing SUN

12:15 D2-S4.8(O) A00851-02483 pg D57
ZnO, Al-doped ZnO/PEDOT:PSS Hetrojunctions: Diode Like Behavior
Bhupendra K SHARMA, Neeraj KHARE

D1-S5

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Room 301

14:00 D1-S5.1-2(IN) A00641-01155 pg D47
Panoscopic Assembling of Ceria Nanoparticles using Plate-like Titanate for UV-shielding Application via Solution Processes
Tsugio SATO, Xiangwen LIU, Shu Y

14:30 D1-S5.3-4(IN) A01983-03422 pg D106
Design of Interconnections of Novel Complex Oxide Nanoparticles
Satoshi WADA, Petr PULPAN, Ai NOZAWA

15:00 D1-S5.5-6(IN) A01828-03179 pg D99
Fabrication and Some Properties of Textured Ceramics by Colloidal Processing in a Strong Magnetic Field
Yoshio SAKKA, Tohru SUZUKI, Tetsuo UCHIKOSHI

15:30 D1-S5.7(O) A01323-02313 pg D79
Fabrication and Unique Properties of Ordered Multifunctional Oxide Nanodot Arrays Derived from Template-Assisted PLD
Xingsen GAO, Lifeng LIU, Balaji BIRAJDAR, Brian RODRIGUEZ, Michael ZIESE, Wo LEE, Marin ALEXE, Dietrich HESSE

15:45 D1-S5.8(O) D-00001 pg D141
Solid State Catalysis Of Epitaxial Oxide Thin Films
S. DHAR, F. ROCCAFORTE, K. P. LIEB,
T. VENKATESAN

16:00 D1-S5.9(O) A01129-01941 pg D70
Novel Nanostructured Vanadium Phosphate Phases
Arunabha DATTA

16:15 D1-S5.10(O) A00120-00757 pg D24
Sol-gel Synthesis and Structure-property Relations in Silver Nanoparticles – Dispersed on GeO_2 Matrix
Bidhu Bhusan DAS, Jose JOSE

D2-S5

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Room 302

14:00 D2-S5.1-2(IN) A02153-03704 pg D111
Tunable Two-Dimensional Electron Gases at Oxide Interfaces
German HAMMERL, Stefan THIEL,
Christoph RICHTER, Christof W. SCHNEIDER,
Jochen MANNHART, Jean-Marc TRISCONE,
Toni SCHNEIDER, Marc GABAY, Jeremy LEVY,
Kristopher ANDERSEN

14:30 D2-S5.3-4(IN) A01628-03686 pg D92
Band Offset Control at Manganite-titanate Heterojunctions
Yasuyuki HIKITA, Shinsuke NISHIKI,
Naoyuki NAKAGAWA, Mitsuru NISHIKAWA,
Takeaki YAJIMA, Tomofumi SUSAKI,
Hidenori TAKAGI,
Harold Y. HWANG

15:00 D2-S5.5(O) D-00002 pg D141
Femto-Second Laser Excitation Studies Of Oxide Thin Films And Heterostructures
X. WANG, G. YOU, Q-H. XU, J. HUIBEN,
H. HILGENKAMP, T. VENKATESAN, ARIANDO

15:15 D2-S5.6(O) A00627-01148 pg D46
The Effects of Carbon Nano Tubes (CNT) and Carbon on Y-123 High Temperature Superconductors
Sedigheh DADRAS, Vahid DAADMEHR,
Kee Hoon KIM

15:30 D2-S5.7(O) A00871-02707 pg D58
Superconductivity, Critical Current and Flux Pinning in LaFeAsO1-xFx Compounds
Mahboobeh SHAHBAZI, Germanas PELECKIS,
Zhenxiang CHENG, Xiaolin WANG,
Satyabrata PATNAIK, Karan SINGH

15:45 D2-S5.8(O) A01941-03348 pg D105
Control of Y_2BaCuO_5 Particle Formation in Bulk, Single Grain Y-Ba-Cu-O High Temperature Superconductor
Wai Kong YEOH, Y H SHI, S K PATHAK,
R A DENNIS, David CARDWELL,
Hari Babu NADENDLA, K IIDA, M STRASIK

16:00 D2-S5.9(O) A01990-03484 pg D107
Synthesis and Characterization of Lithium Transition-Metal Ceramic Oxide Materials, and Their Applications in Rechargeable Lithium Ion Batteries (LIB)
Pushpaka SAMARASINGHA, Athula WIJAYASINGHE,
Lakshman DISSANAYAKE

16:15 D2-S5.10(O) A01031-01898 pg D64
Synthesis and Characterization of Carbon Doped Molybdenum Oxide Nanoneedles by Reactive RF Sputtering
Anurat WISITSORAAT, Chaiyan OROS,
Dissayuth PHOKHARATKUL, Pichet LIMSUWAN,
Adisorn TUANTRANONT

D1-S6

Wednesday, 1 July 2009
10:30 - 12:30
Level 3, Room 301

10:30 D1-S6.1-2(KN) A02552-04406 pg D126
Interplay of Nanoscale Phases in Some Ferroelectric Oxides
Haydn CHEN

11:00 D1-S6.3(O) A01578-03360 pg D90
Process, Phase Stability and Ionic Conductivity of Multidoped Lanthanum Strontium Ferrite Perovskite Oxides
Zhengliang GONG, Xiong YIN, Liang HONG

11:15 D1-S6.4(O) A00005-01947 pg D19
Influence of A-site Modification on the Dielectric, Ferroelectric and Relaxor Behavior of Lead-Free $BaBi_4Ti_4O_{15}$ Ceramics
Sunil KUMAR, Kalidindi B R VARMA

11:30 D1-S6.5(O) A00498-01562 pg D42
Enhancement of Ferromagnetic and Dielectric Properties in Lanthanum Doped $BiFeO_3$ Nanopowders
Yi DU, Zhenxiang CHENG, Mahboobeh SHAHBAZI, Shi Xue DOU, Xiaolin WANG, Michael SUSNER, Michael SUMPTION, Edward COLLINGS

11:45 D1-S6.6(O) A01360-02373 pg D80
Fabrication of PLZT Dielectrics on Base-Metal Foils for Embedded Capacitors
Utham BALACHANDRAN, Manoj NARAYANAN, Beihai MA

12:00 D1-S6.7(O) A02676-04594 pg D129
The Ultraviolet Electroluminescence of the ZnO Nanorods/ Organic Heterojunction Devices
Suling ZHAO, Xu ZHENG, Pengzhi KAN

12:15 D1-S6.8(O) A00674-01216 pg D49
Optical Emission and Absorption Spectra of Zn Embedded ZnO Nanostructure and Zn-ZnO Core-shell Nanostructure
Avijit GHOSH, Ram Naresh Prasad CHOUDHARY

D2-S6
Wednesday, 1 July 2009
10:30 - 12:30
Level 3, Room 302

10:30 D2-S6.1-2(IN) A02126-03658 pg D110
Dilutely doped Anatase TiO_2: New Science and Applications
Satishchandra OGALE

11:00 D2-S6.3(O) A00457-00847 pg D39
Fabrication of Nd^{3+}:Y_2O_3 Transparent Ceramics for Laser Application
Jian ZHANG, Hua GONG, Dingyuan TANG, Jan MA, Liqiong AN, Shiwei WANG

11:15 D2-S6.4(O) A01128-01936 pg D70
Effect of N-incorporation on the Electronic Structure of Rutile TiO_2
Jian Wei CHAI, Ji Sheng PAN, Zheng ZHANG, Shi Jie WANG, Ming YANG, Qian CHEN

11:30 D2-S6.5(O) A02418-04120 pg D119
Photoemission Study on the Degree of Ta doping on Anatase (001) and Rutile (001) TiO_2 Single-crystal and their Structure Stability
Iman SANTOSO, C. K. YOUNG, A. R. BARMAN, D. SHANKAR, Andrivo RUSYDI, Andrew WEE, T. VENKATESAN

11:45 D2-S6.6(O) A00666-01592 pg D48
Synthesis and Luminescence of $YNbO_4$:Eu^{3+} by a Flux Method
Eun Young LEE, Young Jin KIM

12:00 D2-S6.7(O) A02421-04130 pg D119
Large-Scale Growth of Single-Crystalline TiO_2 Nanowires and Their Visible-Light Photocatalytic Activity
Nguyen THI QUYNH HOA, Young-Soo PARK, Tran Thanh TUNG, Eui-Tae KIM

12:15 D2-S6.8(O) A01404-03286 pg D83
Effects of dc bias, Uniaxial Compressive Stress, and Annealing on Giant Dielectric Properties of (Li, V)-doped NiO Ceramics
Sarawut PONGHA, Prasit THONGBAI, Teerapon YAMWONG, Santi MAENSIRI

D1-S7
Wednesday, 1 July 2009
14:00 - 15:30
Level 3, Room 301

14:00 D1-S7.1-2(IN) A02662-04572 pg D128
Electromagnons, Ferroelectric Soft Modes and Magnetoelectric Coupling in Multiferroics
Stanislav KAMBA, Veronica GOIAN, Dmitry NUZHNYY, Jirka HLINKA, Christelle KADLEC, Milan ORLITA, June LEE, Darrell SCHLOM

14:30 D1-S7.3-4(IN) A02132-03672 pg D110
Magnetic Control of Electric Polarization in Fe-oxides
Yasujiro TAGUCHI, Shintaro ISHIWATA, Yusuke TOKUNAGA, Nobuo FURUKAWA, Hideaki SAKAI, Hiroshi MURAKAWA, Yoshinori ONOSE, Taka-hisa ARIMA, Yoshinori TOKURA

15:00 D1-S7.5-6(IN) A01549-02699 pg D90
An In-situ Study of Phase Development and the Properties of $BiFeO_3$ at High Pressure
Robert FREER, Michael THRALL, Feridoon AZOUGH, Robert CERNIK, Ray JONES, Michael MORLIDGE, David TAYLOR, James GRIFFITHS

D2-S7
Wednesday, 1 July 2009
Level 3, Room 302

14:00 D2-S7.1-2(IN) A02866-04904 pg D136
Epitaxial Functional Oxide Films: A View From the World of Ferroelectrics
Stephen STREIFFER, Matthew HIGHLAND, Timothy FISTER, Marie-Ingrid RICHARD, Dillon FONG, Jeffrey EASTMAN, Paul FUOSS, Carol THOMPSON, Brian STEPHENSON

14:30 D2-S7.3-4(IN) A00820-01428 pg D54
Crystal Structure and Electrical Property of Ferroelectric Thin Film Deposited under Magnetic Field by Pulsed Laser Deposition
Naoki WAKIYA, Naonori SAKAMOTO, Desheng FU, Hisao SUZUKI, Kazuo SHINOZAKI

15:00 D2-S7.5-6(IN) A01897-03274 pg D103
Room-Temperature Ferroelectricity and Giant Magnetoelectric Coupling in Mn-doped InP
Hyun M. JANG

D1-S8
Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Room 301

15:30 D1-S8.1-2(IN) A00780-01545 pg D53
Origins of Multiferroicity in Rare-earth Manganites of Spiral-spin Order: Monte Carlo Simulation
Junming LIU, Shuai DONG, Qichang LI

16:00 D1-S8.3-4(IN) A00696-01250 pg D50
Design and Development of Pb/Bi based Multifunctional Materials
Ram Naresh Prasad CHOUDHARY, Sunanda Kumari PATRI

16:30 D1-S8.5(O) A00109-00389 pg D23
Multiferroic Behaviors in $(Ni_{0.5}Zn_{0.5})Fe_2O_4$/ $Pb(Zr_{0.53}Ti_{0.47})O_3$ Composite Thick Films
Wei CHEN, Xiaofeng CHEN, Zhihong WANG, Weiguang ZHU, Ooi Kiang TAN

16:45 D1-S8.6(O) A00367-00811 pg D36
Nano-scaled Fully Strained La0.8Sr0.2MnO3/BaTiO3 Perovskite Super-lattice
Zhen YANG, Chang KE, Wei-guang ZHU

17:00 D1-S8.7(O) A01518-02646 pg D89
Charge Order and Its Destruction Effects on Magnetocaloric Properties of Manganites
Krishnamoorthi C, Siu Bin Z, Suresh Kumar V, Mahendiran R

17:15 D1-S8.8(O) A01098-01896 pg D68
Structure and DC Conductivity Studies of Sm^{3+} Substituted Ni-Zn Ferrites
Gowdra Jayadevappa SHANKARAMURTHY, Halepoojar Siddalingappa JAYANNA, Eshwarappa MELAGIRIYAPPA

D2-S8
Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Room 302

15:30 D2-S8.1-2(IN) A02036-04585 pg D108
Barium Strontium Titanate Ferroelectric Tunable Photonic and Phononic Crystals
Helen Lai-wa CHAN, Kwok Lung JIM, Chi Wah LEUNG

16:00 D2-S8.3-4(IN) A02262-03858 pg D114
Nonlinear Dynamics of Domain Wall Propagation in Epitaxial Ferroelectric Thin Films
Ji Young JO, Sang Mo YANG, Tae Heon KIM, Ho Nyung LEE, Jong-Gul YOON, Sungyoung PARK, Younghoon JO, Myung Hwa JUNG, Tae Won NOH

16:30 D2-S8.5-6(IN) A02456-04192 pg D121
Domain Imaging Mechanisms in Ultrathin Ferroelectric Structures
Andreas RUEDIGER

17:00 D2-S8.7(O) A01148-02735 pg D72
Optimised Deposition Processes for Doped Lead Zirconate Titanate Thin Films
Sharath SRIRAM, Madhu BHASKARAN, Arnan MITCHELL

17:15 D2-S8.8(O) A01198-02044 pg D74
Monodomain to Multidomain Transitions Induced by Depletion Layers in Ferroelectric Thin Films
Nathaniel NG, Rajeev AHLUWALIA, Srolovitz DAVID

D1-S9
Thursday, 2 July 2009
10:30 - 12:30
Level 3, Room 301

10:30 D1-S9.1-2(KN) A00029-00031 pg D21
Can Aqueous Synthesized ZnO be Our Future Semicond
Frederick F LANGE

11:00 D1-S9.3-4(IN) A00728-01291 pg D52
Hydrothermal Synthesis of Alumina Microfibers with Mesoporous Structures and its Adsorbing Ability
Zhenfeng ZHU, Hui LIU, Hongjun SUN, Dong YANG

11:30 D1-S9.5(O) A01267-04492 pg D75
Interesting Dielectric and Magnetic Characteristics of Sr2TiMnO6 Ceramics
Preethi MEHER, Kalidindi. B. R VARMA

11:45 D1-S9.6(O) A01321-02310 pg D78
A Low-temperature Solution Combustion Synthesis, Characterization and Luminescence Studies of Orange $CaSiO_3$: Pb, Mn Phosphor
Madesh Kumar M, Nagabhushana H, Chikkahanumantharayappa, Nagabhushana B.M

12:00 D1-S9.7(O) A01353-02823 pg D80
Comparison of Electrical Properties of Microwave and Conventionally Processed NiO-YSZ
Ajay KUMAR, Kanchan SINGH, Anirudh SINGH, S. SEKHON

12:15 D1-S9.8(O) A00638-01149 pg D46
Tribological Behavior of Si_3N_4-hBN Ceramic Materials with Water Lubrication
Wei CHEN, Yimin GAO

D2-S9

Thursday, 2 July 2009
10:30 - 12:30
Level 3, Room 302

10:30 D2-S9.1-2(IN) A02890-04938 pg D137
Engineering Exotic Phenomena at Ferroelectric Oxide Interfaces : A First-principles Perspective
Philippe GHOSEZ

11:00 D2-S9.3-4(IN) A02860-04891 pg D135
Relaxor Ferroelectric Behaviors in $Sr_4(La_xNd_{1-x})_2Ti_4Nb_6O_{30}$ Tungsten Bronze Ceramics
Xiang Ming CHEN, Xiao Li ZHU

11:30 D2-S9.5-6(IN) A01499-02605 pg D87
VO_2 Thin Films: Solution Processing and Thermochromic Properties
Y.-F. GAO, L. KANG, Z ZHANG, J. DU, Z. CHEN, C. CAO, H. LUO

12:00 D2-S9.7(O) A00015-00410 pg D21
Thermoelectric Effect in Highly Doped $SrLaTiO_3$, Quantum Wells and Heterostructure
Harry KWOK

12:15 D2-S9.8(O) A01423-02481 pg D84
Electrical, Optical and Electrochromic Properties of VO_2-WO_3 Nanocomposite Thin Films
Ajay KAUSHAL, Rajendra N. GOYAL, Davinder KAUR

D1-S10

Thursday, 2 July 2009
14:30 - 16:30
Level 3, Room 301

14:30 D1-S10.1-2(IN) A02917-05045 pg D139
Multilayered Ferroelectric Micro Sensors for Biomedical Applications
S. E. VALAVAN

15:00 D1-S10.3(O) A01772-03105 pg D97
Colossal Electroresistnance and Current-induced Multilevel Resistivity Switching in $Nd_{0.5}Ca_{0.5}MnO_3$ and La_2NiMnO_6
Mahendiran RAMANATHAN, Alwyn REBELLO

15:15 D1-S10.4(O) A01801-03463 pg D98
Inkjet Printing Approach to Fabricate Non-sintered Dielectric Film with High Packing Density for 3D Package Integration Technology
Jihoon KIM, Hun Woo JANG, Eunhae KOO, Hyo Tae KIM, Young Joon YOON, Jong-hee KIM

15:30 D1-S10.5(O) A02188-03993 pg D113
Vibration Damping with Control on Friction due to Oxide Thin Film Layer to Eliminate Noise in a Brake Friction Composite
Kavapatti L. SUNDARKRISHNAA

15:45 D1-S10.6(O) A02491-04257 pg D122
Effect of Deposition Temperature on Alumina Films Obtained by Atmospheric Pressure Chemical Vapor Deposition
Indra NASUTION

16:00 D1-S10.7(O) A02891-04939 pg D137
High Temperature Interface Superconductivity in Copper Oxide Multilayers
Adrian GOZAR, G. LOGVENOV, A. T. BOLLINGER, I. BOZOVIC

16:15 D1-S10.8(O) A02853-04880 pg D135
Effects of Anodization Parameters on Titania Nanotube Arrays and the Performance of Dye-sensitized Solar Cells
Zhibin XIE, Stefan ADAMS, John WANG, Daniel BLACKWOOD

D-S11: Poster Session

Thursday, 2 July 2009
16:00 - 18:00
Level 3, Gallery

D-S11.001(P) A00007-00290 pg D19
Substrate Effects on the Characteristics of ZnO Thin Films Prepared by DC-Sputtering Technique
Nidhal JANDOW, Kamarulazizi IBRAHIM

D-S11.190(P) A02862-04897 pg D136
Dielectric Properties $Bi_{3.15}Nd_{0.85}Ti_3O_{12}$ Ceramic with a Core-Shell Structure
Guangqing KANG, John WANG, Kui YAO, Jiagang WU

D-S11.191(P) A02909-04975 pg D138
Effect of Deposition Parameters on Structural and Surface Characterization of Magnetron Sputtered MgO Thin Films
Chandra Bhal SINGH, Surajit SARKAR, Vandana SINGH, Satyendra KUMAR

D-S11.192(P) A02910-04976 pg D138
Characterization of Si doped MgO Thin Films for Plasma Display Panels
Surajit SARKAR, Pradeep Kumar RAI, Chandra Bhal SINGH, Vandana SINGH, Satyendra KUMAR

D-S11.193(P) A02917-04985 pg D138
Novel Ferroelectric Capacitor for Non-volatile Memory Storage and Biomedical Tactile Sensor Applications
Shiyang LIU, Lynn CHUA, S. E. VALAVAN, Kian Chuan TAN

D-S11.194(P) A02944-05033 pg D140
An Investigation of Structural, Magnetic and Dielectric Properties of R2NiMnO6 (R = rare earth, Y)
K. V. RAMANUJACHARY, R. J. BOOTH, R. FILLMAN, H. WHITAKER, Abanti NAG, R. M. TIWARI, J. GOPALAKRISHNAN, S. E. LOFLAND

D-S11.195(P) A02989-05108 pg D140
Synthesis of ZnO Nanorods and Highly Textured Films by Hydrothermal Route
Tong LI, H. M. FANG, J. M. XUE, J. DING

D2-S11.196(P) D-00002 pg D141
Femto-Second Laser Excitation Studies Of Oxide Thin Films And Heterostructures
X. WANG, G. YOU, Q-H. XU, J. HUIBEN, H. HILGENKAMP, T. VENKATESAN, ARIANDO

D2-S11.197(P) D-00003 pg D141
Ta Doped TiO_2: Substitutionality and Bandgap Variation
A. Roy BARMAN; S. DHAR; M. R. MOTAPOTHULA; T. K. CHAN; M. BREESE; G. OSIPOWICZ; T. VENKATESAN

D1-S12

Friday, 3 July 2009
11:00 - 13:15
Level 3, Room 301

11:00 D1-S12.1(O) A00376-00695 pg D36
Analysis of Brittle Ceramics Experiencing High Velocity Impact
Yu-Liang CHEN, Chia-Shih LIN

11:15 D1-S12.2(O) A00075-00431 pg D22
Studies on TIG Welded Monel 400 and Characterization of Oxide Film Formed on the Weldment Exposed Under Air Oxidation and Na_2SO_4 + NaCl (60%) at 700°C
Anand NATARAJAN, Devendranath Ramkumar KASINATH, Arivazhagan NATARAJAN, Narayanan SOCKALINGAM, Jayaganthan RENGASWAMY

11:30 D1-S12.3(O) A00082-00309 pg D22
The Effect of Process Parameters on Mullite Based Ceramic Nanocomposite Coatings
Raj VAIRAMUTHU, Mubarak Ali MUHAMATH BASHA

11:45 D1-S12.4(O) A00112-00292 pg D23
Nanoparticles of the Giant Dielectric Ceramic, $CaCu_3Ti_4O_{12}$, from a Complex Oxalate Precursor Route
P. THOMAS, K. DWARAKANATH, K. B. R. VARMA, T. R. N. KUTTY

12:00 D1-S12.5(O) A00639-01150 pg D47
Effect of Doping of Cobalt and Lanthanum (Independently and Simultaneous) on Nature of Ferroelectric to Paraelectric Transition
Om PARKASH, Sindhu SINGH, Devendra KUMAR, Prabhakar SINGH

12:15 D1-S12.6(O) A01699-04972 pg D96
Influence of Hydrogen in Magnetron Sputtering Deposition of MgO Thin Films for Plasma Display Panels
Chandra Bhal SINGH, Vandana SINGH, Satyendra KUMAR

12:30 D1-S12.7(O) A01819-03168 pg D98
Effect of Surface-layer on Giant Dielectric Properties of $Li_{0.05}Ti_{0.05}Ni_{0.90}O$ Ceramic
Prasit THONGBAI, Teerapon YAMWONG, Santi MAENSIRI

12:45 D1-S12.8(O) A02167-03728 pg D111
Electric-field Control of Magnetic Domain Structures in Ferroelectric/Ferromagnetic Heterostructures
Yiwei LIU, Bin CHEN, Kuibo YIN, Run-Wei LI

13:00 D1-S12.9(O) A02180-03755 pg D113
The Effects of Annealing Temperature and Barium Oxide on the ZnO Varistor Degradation
Elham NEMATI CARI BOZORG, Ali NEMATI

D2-S12

Friday, 3 July 2009
11:00 - 13:00
Level 3, Room 302

11:00 D2-S12.1(O) A01531-02680 pg D89
Quantum Effects in Group IV Nanostructures Embedded into Crystalline Rare Earth Oxides on Silicon Substrates
Apurba LAHA, Marcel JESTREMSKI, Ashkar ALI, Eberhard BUGIEL, Dong WONG, Andreas FISSEL, Suman DUTTA, Joerg OSTEN

11:15 D2-S12.2(O) A02212-03786 pg D113
Highly Oriented PZT Films Grown On Si with Improved Ferroelectric and Piezoelectric Properties
Thang D. PHAM, Mai T.N. PHAM, Guus RIJNDERS, Dave H.A. BLANK

11:30 D2-S12.3(O) A02234-03941 pg D114
Preparation and Photocatalystic Properties of the Mesoporous Fe-doping Nanometer TiO_2
Yucheng WU, Rong REN, Fengtao WANG, Linyun SONG

11:45 D2-S12.4(O) A02320-04832 pg D117
Magneto-electrical Studies in LSMO-BTO Bulk and Nano Composites
Pawan KUMAR, Vikash SINGH, R.K. DWIVEDI, Ravikant PRASAD, H.K. SINGH

12:00 D2-S12.5(O) A02432-04155 pg D120
Detailed Studies of Multiferroic Properties in $LaFeO_3$-$PbTiO_3$ Solid-solutions
Anupinder SINGH, Ratnamala CHATTERJEE

12:15 D2-S12.6(O) A02718-04668 pg D130
Synthesis of Corundum Nanocrystalls
Georgy PANASYUK, Lidiya AZAROVA, Igor VOROSHILOV, Victor BELAN, Dmitry SHABALIN, Irina KOZEROZHETS

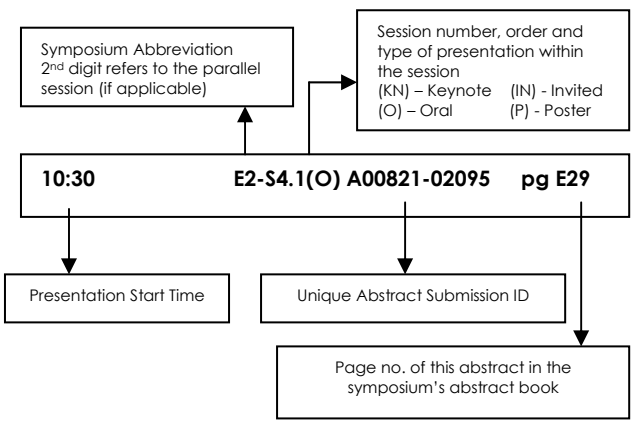
12:30 D2-S12.7(O) A02909-04974 pg D137
Optimization of Thickness of Magnetron Sputtered MgO Thin Films Thickness as Protective Layer for Plasma Display Panels
Chandra Bhal SINGH, Vandana SINGH, Debjit DATTA, Surajit SARKAR, Satyendra KUMAR

12:45 D2-S12.8(O) A02947-05037 pg D140
Fabrication and Mechanism of Large Area and Uniform Silver Dendritic Micro-structures
Hui LIU, Yang YANG, Xiaopeng ZHAO, Zhenfeng ZHU

SYMPOSIUM E

Nanostructured Magnetic Materials and Their Applications

The programme codes you will see in the following pages are decoded using an example below:



Symposium E(1): Nanostructured Magnetic Materials and their Applications

Level 2, Room 202

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session E1-S1**	(10:30 - 12:30) **Session E1-S4**	(10:30 - 12:30) **Session E1-S6**	(10:30 - 12:30) **Session E1-S9**	(11:00 - 13:00) **Session E1-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session E1-S2**	(14:00 - 16:30) **Session E-S5** **POSTER SESSION**	(14:00 - 15:30) **Session E1-S7**	(14:30 - 16:00) **Session E1-S10**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session E1-S8**		
(16:30 - 18:00) **Session E1-S3**			(16:00 - 18:00) **Session E1-S11**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

Symposium E(2): Nanostructured Magnetic Materials and their Applications

Level 2, Room 205

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session E2-S1**	(10:30 - 12:30) **Session E2-S4**			
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session E2-S2**	(14:00 - 16:30) **Session E-S5** **POSTER SESSION**			
(16:15 - 16:30) Break				
(16:30 - 18:00) **Session E2-S3**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

E1-S1

Monday, 29 June 2009
11:00-12:30
Level 2, Room 202
Chairs: Wei D.H & Veeturi Srinivas

11:00 E1-S1.1(O) A00323-00595 pg E18
Induced Magneto-optical Inversion in Bidispersed Magnetorheological Fluid
Rajesh PATEL

11:15 E1-S1.2(O) A00326-00604 pg E18
Magneto-Optical Spectroscopy of Nanostructured Magnetic Materials
Tze Chien SUM, Ali Sucipto TAN, Guo Zhong XING, Song Wee NGIAM, Bangchuan ZHAO, Lan WANG, Tom WU, Cheng Hon Alfred HUAN

11:30 E1-S1.3(O) A00534-00975 pg E25
Fluorescent Magnetic Nanocarrier for Enhanced Two Photon Triggered Drug Delivery
Shashwat S. BANERJEE, Dong-Hwang CHEN

11:45 E1-S1.4(O) A01251-02156 pg E38
Magnetic and Optical Anisotropy in Epitaxial Cobalt Films
Nikolai YAKOVLEV, Nikolai SOKOLOV, Andrey KAVEEV

12:00 E1-S1.5(O) A01495-02602 pg E45
Effect of Particle Size on Magnetic and Magneto-optical Properties of $CoFe_2O_4$ Nanoparticles
Krishna Surendra MUVVALA, S Ramachandra Rao MAMIDANNA

12:15 E1-S1.6(O) A02176-03739 Pg E63
Single-Crystal Magnetic MFe_2O_4 Nanotubes/ Nanorings Fabricated via Thermal Transformation
HaiMing FAN, Jiabao YI, Yi YANG, K. W. KHO, Z. X. SHEN, Jun DING, X. W. SUN, Malini C. OLIVO, Y. P. FENG

E2-S1

Monday, 29 June 2009
11:00-12:30
Level 2, Room 205
Chairs: Srikanth Hariharan & Sable Sharad

11:00 E2-S1.1-3(KN) A00839-01724 pg E29
Observation and Manipulation of Domain Walls in Soft Magnetic Nanowires
John CHAPMAN, Kerry O'SHEA, Damien MCGROUTHER, Stephen MCVITIE

11:45 E2-S1.4-5(IN) A00248-00463 pg E15
A New Spintronic Material $(Fe,Co)_x$-C_{1-x} /Si Nanostructure
Xiaozhong ZHANG

12:15 E2-S1.6(O) A00312-03065 pg E17
Directional Alignment of FeCo Crystallites in Si/NiFe/ Ru/FeCoB Multilayer with High Anisotropy Field above 500 Oe
Ken-ichiro HIRATA, Toshimitsu MATSUU, Shunsuke GOMI, Shigeki NAKAGAWA

E1-S2

Monday, 29 June 2009
14:00-16:15
Level 2, Room 202
Chairs: Bahadur Dhirendra & Yakovlev Nikolai

14:00 E1-S2.1(O) A00250-00467 pg E15
Aliovalent-Ion and Magnetic Field Induced Phase Transition in Multiferroic $BiFe_{1-x}Ti_{-x}O_3$ System
Kanhaiya Lal YADAV, Manoj KUMAR

14:15 E1-S2.2(O) A01023-02917 pg E34
Synthesis of Hexagonal Mesoporous Material from Indonesian Natural Bentonite
Yateman ARRYANTO, Syahrul KHAIRI

14:30 E1-S2.3(O) A01961-03394 pg E55
Compositional Dependent Study of Magnetocaloric Effect in La Based Manganites
Suresh Kumar VANDRANGI, Vinayak B. N, Mark LAM, Mahendiran RAMANATHAN

14:45 E1-S2.4(O) A02203-03857 pg E64
Enhanced Magnetic Properties of Polymer Lanthanum Yttrium Iron Garnet Composite
Noorhana YAHYA, Muhammad KASHIF, Nadeem NASIR, Alex SEE

15:00 E1-S2.5(O) A02213-03788 pg E65
Nanostructured Multiferroic Double Perovskite Thin Films
Deepak , Nitin CHOUDHARY, Ritu VISHNOI, Davinder KAUR

15:15 E1-S2.6(O) A02439-04156 pg E71
Effect of Bi Doping on the Electrical, Magnetic and Magnetocaloric Properties of $La_{0.7-x}Bi_xSr_{0.3}MnO_3$
Sujit Kumar BARIK, Ramanathan MAHENDIRAN

15:30 E1-S2.7(O) A02901-04960 pg E80
BaW Hexaferrite Precursor in Presence of CTAB and Tween 80: Dielectric and Magnetic Properties
R. B. JOTANIA, R. B. KHOMANE, A. S. DESHPANDE, C. C. CHAUHAN, B. D. KULKARNI

15:45 E1-S2.8(O) A00408-00830 pg E22
Preparation and Characterisation of Copper(II) Complex of 2,2'-[Nonane-1,9-Diylbis(Nitrilomethylidyne)]Diphenol as Spintronic Material
Jia Ti TEE, Norbani ABDULLAH, Kong Mun LO, Hairul Anuar TAJUDDIN

16:00 E1-S2.9(O) A00885-01539 Pg E30
Intrinsic Ferromagnetism in Transition Metal Doped In_2O_3
Bangchuan ZHAO, HuiWen HO, Bin XIA, LiXiu GUAN, ZhiRen XIAO, Jer-Lai KUO, Lan WANG

E2-S2

Monday, 29 June 2009
14:00-16:15
Level 2, Room 205
Chairs: Lai Chih-Huang & Lo Chieh-Tsung

14:00 E2-S2.1-3(KN) A02908-04970 pg E80
Perspectives for 10 Tbits/in^2 Magnetic Recording
Tow Chong CHONG

14:45 E2-S2.4-5(IN) A02044-03517 pg E57
Large-Area Fabrication of Nano-network to Nano-dot Arrays for High Density Magnetic Recording
M. Tofizur RAHMAN, Chih-Huang LAI

15:15 E2-S2.6(O) A00396-04776 pg E21
Ion Beam Modification of Exchange Coupling to Fabricate Patterned Media
Mojtaba RANJBAR, S.N. PIRAMANAYAGAM, R. SBIAA, K. O. AUNG, Z. B. GUO, T.C. CHONG

15:30 E2-S2.7(O) A00958-04767 pg E32
Ion-implantation Studies on Perpendicular Media
Nikita GAUR, S.N. PIRAMANAYAGAM, C.S. BHATIA, Siegfried L. MAURER, Ronald W. NUNES

15:45 E2-S2.8(O) A01123-05001 pg E36
Nanogranular *L*10 FePt-C-Ta2O5 Composite Media for Perpendicular Recording Applications
Kelvin M. CHER, J. S. CHEN, B. C. LIM, J. F. HU, P. W. LWIN, B. LIU

16:00 E2-S2.9(O) A01431-02489 pg E42
AFM Study of Nanostrucutred FePt Thin Films
Pei Ling LOW, Boon Hoong ONG, Mitsunori MATSUMOTO, Teck Yong TOU

E1-S3

Monday, 29 June 2009
16:30-18:00
Level 2, Room 202
Chairs: Chen Dong Hwang & Yi Jiabao

16:30 E1-S3.1(O) A01041-01813 pg E35
Ferromagnetic Nanostructures by Atomic Layer Deposition: From Thin Films towards Core-shell Nanotubes
Julien BACHMANN, Robert ZIEROLD, Kristina PITZSCHEL, Detlef GÖRLITZ, Juan ESCRIG, Dora ALTBIR, Kornelius NIELSCH

16:45 E1-S3.2(O) A01428-02515 pg E42
Magnetron Sputtered Nanostructured Ferromagnetic Shape Memory Alloy Thin Films
Ritu VISHNOI, Ashvani KUMAR, Ajay KAUSHAL, Deepak, Nitin CHOUDHARY, Davinder KAUR

17:00 E1-S3.3(O) A01790-03271 pg E51
Estimation of the Size Distribution of Magnetic Nano-particles Using Magnetization Curve by VSM
Wenzhong LIU, Ming ZHOU, Li KONG, Jingjing CHENG

17:15 E1-S3.4(O) A01802-03150 pg E51
The Mechanism of Magnetic Moment Enhancement in1-D Bimetallic Multi-Sandwich Molecular Wires
Lei SHEN, Shuo-Wang YANG, Yuanping FENG

17:30 E1-S3.5(O) A01824-03819 pg E52
High Resolution Magnetic Force Microscopy Using Tips with a Narrow Dipole
Ei-Leen TAN, Seidikkurippu Nellainayagam PIRAMANAYAGAM, Seng Kai WONG, Rachid SBIAA, Kyaw Oo AUNG, Yew Seng KAY

17:45 E1-S3.6(O) A02161-03767 pg E62
Observation of a Cubical-like Micorstructure of Strontium Iron Garnet ($Sr_3Fe_5O_{12}$) and Yttrium Iron Garnet ($Y_3Fe_5O_{12}$) Prepared via Sol-gel Technique
Noorhana YAHYA, Nadeem NASIR, Muhammad KASHIF, Lee Chaw TENG

E2-S3

Monday, 29 June 2009
16:30-18:00
Level 2, Room 205
Chairs: Zhang Xiaozhong & Sbiaa Rachid

16:30 E2-S3.1(O) A01675-03452 pg E48
Substrate Effects on Magnetic FePt Nanofilm
Pei Ling LOW, Bee Eng YONG, Boon Hoong ONG, Mitsunori MATSUMOTO, Teck Yong TOU

E

16:45 E2-S3.2(O) A01810-03160 pg E52
Magnetization Reversal of (Co/Pd) Magnetic Nano-dots
Rachid SBIAA, Zhong Hua CHO, S. N. PIRAMANAYAGAM, Randall LAW, Seng Kai WONG

17:00 E2-S3.3(O) A02086-03592 pg E59
Magnetic Properties and Phase Change Features in Fe-doped Ge-Sb-Te
Wen-Dong SONG, Lu-Ping SHI, Tow-Chong CHONG

17:15 E2-S3.4(O) A02446-04279 pg E72
CoPt-SiO_2 Perpendicular Magnetic Recording Media with Ru/Ru-SiO_2 Interlayers
Ho PIN, Tang RUJUN, Chen JINGSHENG, Chow GAN MOOG, Hu JIANGFENG

17:30 E2-S3.5(O) A02457-04194 pg E73
Interlayer Exchange Coupling Effect of $L1_0$ CoPt Based Exchange Coupled Composite Media
Yang YANG, Jingsheng CHEN, GanMoog CHOW, Jiangfeng HU

17:45 E2-S3.6(O) A02933-05013 pg E80
FeTaC Magnetic Soft Underlayer for $L1_0$ FePt based Perpendicular Recording Media
Phyoe Wai LWIN, J. F. HU, B. C. LIM, K. M. CHER, T. J. ZHOU, B. LIU

E1-S4

Tuesday, 30 June 2009
10:30-12:30
Level 2, Room 202
Chairs: Athinarayanan Sundaresan & Nielsch Kornelius

10:30 E1-S4.1-3(KN) A02523-04318 pg E75
Nanomagnets: Poles or no Poles
Chia-Ling CHIEN

11:15 E1-S4.4(O) A00615-01119 Pg E26
Multi-level Storage and Reduction of Spin Transfer Currents in Perpendicular Magnetic Anisotropy Magnetoresistive Devices
Randall LAW, Rachid SBIAA, Ei-Leen TAN, Thomas LIEW

11:30 E1-S4.5(O) A02146-03698 Pg E61
Effect of Cation Substitution on Magnetic and Magnetoelectric Properties of the BiFeO3 Perovskite
Vinayak Bharat NAIK; Ramanathan MAHENDIRAN

11:45 E1-S4.6(O) A02446-04175 pg E72
Annealing Atmosphere Effect on the Microstructure and Magnetic Properties of Fe(Co)Pt-TiO_2 Nanocomposite
Tang RUJUN, Chen JINGSHENG, Chow GAN MOOG, Hu JIANGFENG

12:00 E1-S4.7(O) A02560-04654 pg E75
One-dimensional Nanostructured Magnonic Crystals
Z.K. WANG, V.L. ZHANG, H.S. LIM, S.C. NG, M.H. KUOK, S. JAIN, A.O. ADEYEYE

12:15 E1-S4.8(O) A02741-04714 pg E77
Exchange Bias in Co-Cr_2O_3 Nanocomposites
Muhammad Farooq NASIR, Sadia MANZOOR, Kevin O'GRADY

E2-S4

Tuesday, 30 June 2009
10:30-12:30
Level 2, Room 205
Chairs: Chapman John & Wang Lan

10:30 E2-S4.1(O) A00821-02095 pg E29
Growth and Magnetic Properties of Fe-Ni based Amorphous Nanocolumns Obtained by Oblique Angle Vapour Deposition
Senoy THOMAS, Salim AL-HARTHI, Imad AL-OMARI, Raju. V. RAMANUJAN, M. R. ANANTHARAMAN

10:45 E2-S4.2(O) A01465-02541 pg E44
Magnetic & Electrical Behaviour of Zn Substituted Ferrichromates
Vivek NANOTI

11:00 E2-S4.3(O) A01554-02760 pg E45
DC Electrical Resistivity and Curie Temperature Study of Nanocrystalline Mg-Cd Ferrites
Ashok GADKARI, Tukaram SHINDE, Pramod VASAMBEKAR

11:15 E2-S4.4-5(IN) A01868-03227 pg E53
Effective Approach for the Remarkable Improvement of Microwave Permeability
Desheng XUE, Xiaolong FAN, Guozhi CHAI, Huigang SHI

11:45 E2-S4.6(O) A00159-00759 pg E13
Effect of Microstructure on Electrical and Magnetic Properties of Ni-Mg-Zn Nano Ferrites
Rangappa B. PUJAR, Priya P. KULKARNI, Vaishali R. BOTE, Bantesh K. BAMMANNAVAR, Lalasing R. NAIK, Baburao K. CHOUGULE

12:00 E2-S4.7(O) A00359-01797 pg E20
Size-dependence of Calorimetric Properties of Iron-oxide Nanoparticles for Magnetic Particle Hyperthermia
Mathew KALLUMADIL, Paul SOUTHERN, Quentin PANKHURST

12:15 E2-S4.8(O) A00477-00881 pg E22
Nanostructured Magnetic Particles with Polystyrene and Their Magnetorheological Applications
Fei Fei FANG, Hyoung Jin CHOI

E-S5: Poster Session

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Gallery

E-S5.01(P) A00039-00040 pg E11
Synthesis and Magnetic Properties Studies of NiS
Lu TIAN, Lee Yong YEP, Tien Teng ONG, Jiabao YI, Jun DING, Jagadese J. VITTAL

E-S5.02(P) A00095-00585 pg E11
Low Temperature Molecular Beam Epitaxy of Ferromagnetic Silicide for Spin-Transistors with SiGe Channel
Masanobu MIYAO, Kohei HAMAYA, Taizoh SADOH

E-S5.03(P) A00159-03295 pg E13
Temperature Dependent Resistivity and Microstructure of Mg-Zn Nano Ferrites
Bheemaray B. VANDAL, Bassappa S. MULLUR, Bantesh K. BAMMANNAVAR, Rangappa B. PUJAR

E-S5.04(P) A00189-00368 pg E13
The Structural Properties of Magnetite/Porous silica Nanocomposite and its Applications in Cosmetics
Youngjun YANG, Takjin OH, Hakhee KANG

E-S5.05(P) A00191-00926 pg E14
Spin Waves in Ferromagnetic Rectangular Arrays
Fu Sheng MA, Hock Siah LIM, Zhi Kui WANG, Ser Choon NG, Meng Hau KUOK, Adekunle Olusola ADEYEYE

E-S5.06(P) A00256-00893 pg E16
Domain Wall Trapping in Nanoscopic Asymmetric Rings
Xinghua WANG, Wengkung PENG, Wensiang LEW

E-S5.07(P) A00262-01681 pg E16
Ferromagnetic and Structural Properties of Fe_3Si Thin Films on Si substrates
Siao Li LIEW, Debbie Hwee Leng SENG, Hui Ru TAN, Dongzhi CHI

E-S5.08(P) A00274-00559 pg E17
Non-innocent Ligand Metal Complexes: Metal - Organic Magnets
Komala PANDURANGAN, Grace MORGAN, Helge MÜLLER-BUNZ

E-S5.09(P) A00356-01266 pg E19
Magnetism at Atomic Level of Nanocrystalline Calcium Hexaferrites
Sharad SABLE, Kishor REWATKAR, Vivek NANOTI

E-S5.10(P) A00366-01632 pg E20
Excessive-Ferrocene-Induced Fe-Filled Carbon Nanotubes Synthesized by Floating Catalytic Chemical Vapor Deposition and Their Magnetic Property
Jin CHENG, Xiaoping ZOU

E-S5.11(P) A00381-01485 pg E21
Giant Magneto-impedance Effect of Melt Spun $Co_{64}Fe_4Ni_2B_{19-x}Si8Cr_3Al_x$ (x = 0, 1, 2, and 3) Soft Magnetic Ribbons
Amir KEYVANARA, Reza GHOLAMIPOUR, Shamseddin MIRDAMADI, Farzad SHAHRI, Ali MOHAMADI

E-S5.12(P) A00410-00792 pg E22
The Synthesis and Magnetic Properties of Iron Phosphide Nanorods
Chieh-Tsung LO, Po-Yu KUO

E-S5.13(P) A00475-00875 pg E22
Electric Polarization in a Rashba Strip Coupled With a Spiral Spin Density Wave
Zhiyong ZHANG, Lang CHEN

E-S5.14(P) A00498-01570 pg E23
Effects of Chromium Substitution on Magnetic Properties of $Bi_2Fe_4O_9$
Yi DU, Zhenxiang CHENG, Shi Xue DOU, Xiaolin WANG

E-S5.15(P) A00561-02682 pg E25
Magnetic and Hydrogenation Properties of Nanocrystalline $MgCo_{2-X}$ Ni_X System
Devendra VYAS, Pragya JAIN, Ankur JAIN, Indra Prabh JAIN

E-S5.16(P) A00587-01070 pg E25
Magnetic Properties of Cobalt Nanoparticles Covered by a Polymer Chitozan Molecule
Polina TERESHCHUK

E-S5.17(P) A00593-01081 pg E26
Spin Polarization and Spin Transport in Ferromagnetic / Organic Structure
Yilin MI, Ming ZHANG, Hui YAN

E-S5.18(P) A00626-01131 pg E27
A Study of the Relaxation Dynamics of Nanoscopic Magnetic Clusters in Manganite Single Crystals using Femtosecond Time-resolved Spectroscopy
Ali Sucipto TAN, Bang Chuan ZHAO, Edbert Jarvis SIE, Lan WANG, Cheng Hon Alfred HUAN, Tze Chien SUM

E1-S6

Wednesday, 1 July 2009
10:30-12:30
Level 2, Room 202
Chairs: Li Sean & Hou Yanglong

11:15 E1-S6.4(O) A01283-02236 pg E39
High Coercive Field and Magnetization Reversal in Core-shell Cum Nanotwin Driven Ni/NiO Nanospheres
Gunadhor S. OKRAM, Ajay SONI, Debashibhai T. ADROJA, Niranjan P. LALLA, Thoudinja SHRIPATHI

11:30 E1-S6.5(O) A01442-02505 pg E43
Magnetic Behavioural Studies of Nano-particles of Substituted Calcium Hexaferrites
Kishor REWATKAR

11:45 E1-S6.6(O) A02090-03600 pg E59
Phase, Morphology and Magnetic Characterisation of Aluminium Substituted Yttrium-iron Garnet Nanoparticles Prepared Using Sol Gel Technique
Noorhana YAHYA, Ramadan AL HABASHI, Krzysztof KOZIOL, Rafal Dunin BORKOWSKI

12:00 E1-S6.7(O) A02342-04022 pg E68
An Optical Limiter Based on Ferrofluids
Swapna S. NAIR, Jinto THOMAS, Suchand SANDEEP C.S., Anantharaman M.R., Reji PHILIP

12:15 E1-S6.8(O) A02901-04959 pg E79
Structural, Thermal and Magnetic Properties of Ba-Ca Hexaferrite Particles Synthesized by Reverse Micelle and Co Precipitation Routes
C. C. CHAUHAN, K. R. JOTANIA, S. K. MENON, R. B. JOTANIA

E1-S7

Wednesday, 1 July 2009
14:00-15:30
Level 2, Room 202
Chairs: Xiao John & Pandya Dinesh

14:00 E1-S7.1-2(IN) A01755-03067 pg E49
Attacking Cancer Cell by Heat and Drug via Magnetic Nanoparticulates
Dhirendra BAHADUR

14:30 E1-S7.3(O) A00132-00281 pg E12
Biological Synthesis and Characterization of Cubo-octahedral Nanomagnets
Mohit NARESH, Manish SHARMA, Aditya MITTAL

14:45 E1.S7.4(O) A02804-04810 Pg E78
Effect of Interlayer Diffusion on Magnetic and Transport Properties of Co/Pd-based Pseudo Spin Valves
Taiebeh TAHMASEBI, Randall LAW, Rachid SBIAA, S. N. PIRAMANAYAGAM, Tow-Chong CHONG

15:00 E1-S7.5(O) A01027-01795 pg E34
Suitability of Commercial Colloids in Magnetic Hyperthermia
Paul SOUTHERN, Mathew KALLUMADIL, Masaru TADA, Takashi NAKAGAWA, Quentin PANKHURST, Masanori ABE

15:15 E1-S7.6(O) A01391-02424 pg E40
Encapsulated Nickel Nanoparticles: Preparation and Characterization
Vijutha SUNNY, D Sakthi KUMAR, Yasuhiko YOSHIDA, Magdalena MAKAREWICZ, Wojciech TABIS, M R ANANTHARAMAN

E1-S8

Wednesday, 1 July 2009
15:30-17:30
Level 2, Room 202
Chairs: S.N. Piramanayagam & Yahya Noorhana

15:30 E1-S8.1(O) A02138-03682 pg E61
Preparation of Biocompatible Iron Oxide Nanorods: *In Vivo* Study on Bio-Distribution and Pharmacokinetics
Bharathi SHIVA, Seetha MAHALINGAM, Nataraj D., Mangalaraj D.

15:45 E1-S8.2-3(IN) A01771-03103 pg E50
Intensive Enhancement of Magnetic Properties in Rare Earth and Cobalt Codoped ZnO based Spintronic Materials
Sean LI

16:15 E1-S8.4(O) A00513-00938 pg E24
Energy Efficient Magnetic Nanomaterials
Raju RAMANUJAN, Shekhar BHAME, Swaminathan VISWANATHAN, Pratap DEHERI, Shashwat SHUKLA, Liu YAN, Jia YAN, Zhongwu LIU

16:30 E1-S8.5(O) A00876-01835 pg E30
Controlled Synthesis of Anisotropic Magnetic Nanocrystals
Luihui ZHANG, Yanglong HOU

16:45 E1-S8.6(O) A00900-01585 pg E30
Microwave-induced Dehydration of Autocombustion Barium Ferrite Nanoparticles
Ahmad NURUDDIN, Suyatman, Novrita IDAYANTI

17:00 E1-S8.7(O) A01002-02653 pg E33
Novel Reduction Diffusion Synthesis of $Nd_2Fe_{14}B$
Shekhar BHAME, Pratapkumar DEHERI, Viswanathan SWAMINATHAN, Raju RAMANUJAN

17:15 E1-8.8(O) A02466-04214 pg E73
Ferromagnetism Induced by Amorphous Phase in $Zn_{1-x}Al_xO$ Film
Yuwei MA, Jun DING, Jiabao YI, Tun Seng HERNG, Chee Mang NG, Nina BAO, Xuelian HUANG

E1-S9

Thursday, 2 July 2009
10:30-12:30
Level 2, Room 202
Chairs: Stamps Robert L. & Liu Kai

10:30 E1-S9.1-2(IN) A01869-03228 pg E53
Surface Anisotropy and Tunable Exchange Bias in Magnetic Nanostructures
Hariharan SRIKANTH

11:00 E1-S9.3(O) A00113-00328 pg E12
Synthesis, Charecterization and Magnetic Properties of Zn Substituted Li-Ni Nano Ferrites
Ravinder G. KHARABE, Bantesh K. BAMMANNAVAR, Baburao K. CHOUGULE

11:15 E1-S9.4(O) A00528-00983 pg E24
Anamalous Magnetic Behavior in $Fe_2VAl_{1-x}B_x$ Heusler Alloys
Srinivas VEETURI, Vasundhara MUTTA, Vasudeva Rao V., Chandrasekhar-Rao TURUMELLA

11:30 E1-S9.5(O) A01004-04213 pg E33
Fe:TiO_2 Nanosystem: Within and Beyond the Solubility Limit
Tushar JAGADALE, Pravarthana D, M. IKRAM, Amit CHAWLA, R CHANDRA, B LEFEZ, B HANNOYER, Satishchandra OGALE

11:45 E1-S9.6(O) A01330-02500 pg E40
Enhancement of Ferromagnetic Behavior in Cu Doped ZnO:Fe
Khalil ZIQ, Afef ISMAIL, Ahmed SALEM, Shakeel AHMED, Ayman GHANNAM

12:00 E1-S9.7(O) A01602-03126 pg E46
Room Temperature Ferromagnetism in Co-doped Titania Thin Films
Sudesh SHARMA, Sujeet CHOUDHARY, Neeraj PANWAR, Subhash KASHYAP, Dinesh PANDYA

12:15 E1-S9.8(O) A02071-03683 pg E58
On the Ferromagnetism in Nanocrystalline ZnO:Ni
Vidhi GOYAL, Kanwal Preet BHATTI, Sujeet CHAUDHARY

E1-S10

Thursday, 2 July 2009
14:30-16:00
Level 2, Room 202
Chairs: Wang Jian-ping & Tan Ei Leen

14:30 E1-S10.1(O) A02071-04108 pg E58
Giant Magnetroresistance and X-ray Reflectivity Studies in Ion-beam Sputtered Co/Cu Multilayers
Uday SINGH, Priyanka GUPTA, Braj Bhushan SINGH, Kanwal Preet BHATTI, Sujeet CHAUDHARY

14:45 E1-S10.2(O) A02191-03751 pg E63
Heat Treatment Effect on Magnetic and Magnetoresistance of Mn-doped Si Thin Films
Lan Anh TRAN THI, Hyeong Kyu LIM, Young Eon IHM, Dojin KIM, Hyojin KIM, Jin Hee KIM, Jung Won CHANG, Van Dai NGUYEN

15:00 E1-S10.3(O) A02346-04027 pg E69
Electrical Spin Injection from TiO_2:Co into Si(100)
Edy SUPRIYANTO, Aip SARIPUDIN, Budi MULYANTI, Pepen ARIFIN, Moehamad BARMAWI

15:15 E1-S10.4(O) A02421-04160 pg E70
Room-Temperature Ferromagnetism of Undoped and Transition Metal Doped $TiO_{2-\delta}$ Nanobelts Grown by Metalorganic Chemical Vapor Deposition
Nguyen THI QUYNH HOA, Zonghoon LEE, Velimir RADMILOVIC, Eui-Tae KIM

15:30 E1-S10.5(O) A02499-04427 pg E74
Transport and Magnetotransport Properties of the Diluted Magnetic Semiconductor Mn-doped GaAs with a Quantum Well InGaAs
Ljudmila SHCHUROVA, Vladimir KULBACHINSKII

15:45 E1-S10.6(O) A02715-04666 pg E77
Magnetism Study of p and n Type Doped ZnO Thin Films by Sol-gel Method
Daxue XIA, Jianbin XU, Rong ZHANG

E1-S11

Thursday, 2 July 2009
16:00-17:45
Level 2, Room 202
Chairs: Chen Jingsheng & Ziq Khalil

16:00 E1-S11.1(O) A02834-04854 pg E78
Effect of Vanadium Content on Magnetic Properties of Doped ZnO Thin Films
Liwei WANG, Fujun ZHANG, Zheng XU, Suling ZHAO, Lifang LU, Xurong XU

16:15 E1-S11.2(O) A01772-03104 pg E50
Giant Magnetoimpedance in Ferromagnetic and Antiferromagnetic Oxides
Mahendiran RAMANATHAN

16:30 E1-S11.3-4(IN) A02991-05112 pg E81
Vortex State Reversal in Artificially Structured Nanomagnets
Kai LIU

17:00 E1-S11.5-6(IN) A01861-03217 pg E53
Spin and Charge Pumping in Magnetic Tunneling Structures
T MORIYAMA, W.G. WANG, R CAO, X FAN, J KOLODZEY, S.H. CHEN, C.R. CHANG, Y TSERKOVNYAK, B.K. NIKOLIC, John Q. XIAO

17:30 E1-S11.7-8(IN) A02230-03871 pg E65
Nanoscale Spin Torque Transfer Materials, Devices and Systems: From Memory to Computation
Jian-Ping WANG, Xiaofeng YAO, Andrew LYLE, Yisong ZHANG, Hui ZHAO

E1-S12

Friday, 3 July 2009
11:00-13:00
Level 2, Room 202
Chairs: Xue Desheng & Ramanathan Mahendiran

11:00 E1-S12.1-3(KN) A00928-01651 pg E31
Spin Current, Charge Current, Heat Current and Spin-Electronics
Sadamichi MAEKAWA

11:45 E1-S12.4-5(IN) A02567-04387 pg E75
Control of Magnetization Dynamics Using Patterned Structures
Robert L. STAMPS, K. L. LIVESEY, M. KOSTYLEV, P. J. METAXAS

12:15 E1-S12.6(O) A00190-00920 pg E14
Measurement of Spin Dynamics of a Triangular Nanomagnet
Cheng Sheng LIN, Hock Siah LIM, Chen Chen WANG, Adekunle Olusola ADEYEYE, Zhi Kui WANG, Ser Choon NG, Meng Hau KUOK

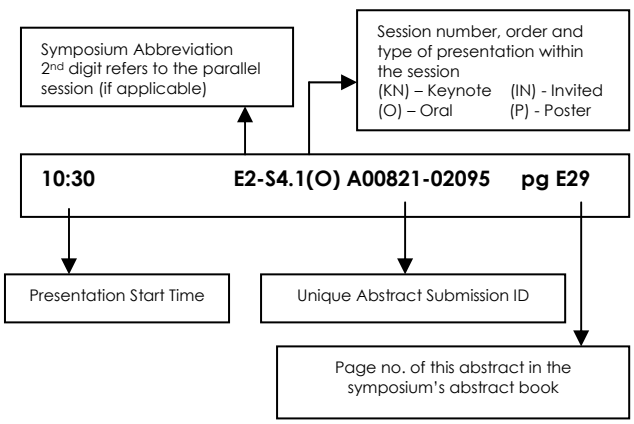
12:30 E1-S12.7(O) A00103-01380 Pg E12
Single Step Synthesis of Superparamagnetic Iron Oxide Nanoparticles for Biomedical Applications
Dipak MAITY,Jun DING, Jun-Min XUE

12:45 E1-S12.8(O) A02108-03633 Pg E60
Highly Textured Growth of $Mn_{1-x}Zn_xFe_2O_4$ Film on Glass Substrate
Jiabao YI; Jun DING; Xuelian HUANG

SYMPOSIUM F

Nanostructured Materials for Electrochemical Energy Systems: Lithium Batteries, Supercapacitors and Fuel Cells

The programme codes you will see in the following pages are decoded using an example below:



Symposium F1: Nanostructured Materials for Electrochemical Energy Systems: Lithium Batteries, Supercapacitors and Fuel Cells

Level 2, Room 203

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 13:00) **Session F1-S4 Anode Materials**	(10:30 - 13:00) **Session F1-S6 Fundamentals**	(10:30 - 13:00) **Session F1-S9 Novel Synthesis**	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session F1-S1 Cathode Materials**				(11:00 - 13:00) **Session F1-S12 Techniques / Miscellaneous**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session F1-S2 Novel Approaches in Supercapacitors / Lithium Batteries**	(14:00 - 16:30) **Session F1-S5 Cathode Materials: Olivine / Polyanion based Electrodes**	(14:00 - 15:45) **Session F1-S7 Anode Materials / Electrolytes**	(14:30 - 16:15) **Session F1-S10 Solid State Batteries / Electrodes**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session F-S8 POSTER SESSION**	(16:15 - 16:30) Break	
(16:30 - 18:45) **Session F1-S3 Electrolytes**	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(16:30 - 18:30) **Session F1-S11 Synthesis and Characterization of Electrodes / Electrolytes**	
			19:00 - 22:00 hrs Conference Banquet @ Suntec	

Symposium F2: Nanostructured Materials for Electrochemical Energy Systems: Lithium Batteries, Supercapacitors and Fuel Cells

Level 2, Room 204 (Monday - Tuesday) / Room 205 (Wednesday)

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 13:00) **Session F2-S4** **SOFC / PEMFC**	**ROOM 205** (10:30 - 13:30) **Session F2-S6** **Lithium Battery / Miscellaneous**		(10:30 - 11:00) Coffee Break
(11:00 - 12:45) **Session F2-S1** **SOFC**				
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session F2-S2** **PEMFC/ DMFC**	(14:00 - 16:15) **Session F2-S5** **Fuel Cells / Lithium Batteries**	(15:30 - 17:30) **Session F-S8** **POSTER SESSION**		
(16:15 - 16:30) Break				
(16:30 - 17:30) **Session F2-S3** **SPFC / H2 production & storage**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	19:00 - 22:00 hrs Conference Banquet @ Suntec	

F1-S1: Cathode Materials

Monday, 29 June 2009
11:00 - 12:30
Level 2, Room 203
Chairs: Yamada and Prabaharan

11:00 F1-S1.1-2(IN) A01481-02571 pg F51
From Li_2MnO_3 to Li(Ni,Mn,Co)O_2 Oxides: An Overview of the Structure Evolution
Claude DELMAS, Adrien BOULINEAU, Laurence CROGUENNEC, Francois WEILL

11:30 F1-S1.3-4(IN) A01366-02381 pg F47
First Principles Modeling of Nano and Bulk Materials for Li Batteries
Gerbrand CEDER

12:00 F1-S1.5(O) A02868-04906 pg F89
Comparative Study of Lithium Transport Kinetics in Olivine Cathodes for Li-ion Batteries
Nonglak MEETHONG, Yu-Hua KAO, Yet-Ming CHIANG

12:15 F1-S1.6(O) A00211-02877 pg F16
Crystal Structure of Li2MSiO4 (M = Fe, Mn)
Shin-ichi NISHIMURA, Shogo HAYASE, Ryoji KANNO, Masatomo YASHIMA, Noriaki NAKAYAMA, Atsuo YAMADA

F2-S1: SOFC

Monday, 29 June 2009
11:00 - 13:00
Level 2, Room 204
Chairs: Jiang and Traversa

11:00 F2-S1.1-2(IN) A00385-00708 pg F19
Towards Fuel Cell Commercialization – NRC's Focused R&D Program
Dave GHOSH

11:30 F2-S1.3-4(IN) A02248-03833 pg F74
Electrode Reaction Mechanism of LSCF and LSM Studied by in situ Electrochemical XAS
Yoshiharu UCHIMOTO, Yuki ORIKASA, Koji AMEZAWA, Tatsuya KAWADA

12:00 F2-S1.5-6(IN) A02194-03759 pg F72
Effects of Low Hydrocarbons on the SOFC Anode
Sangho YOON, Yongmin KIM, Joongmyeon BAE

12:30 F2-S1.7(O) A01134-01944 pg F38
Electrical Conductivity of Ce0.8Gd0.2O1.9 Synthesized by Aqueous Gel-casting Technique
Hong Quan HE, San Ping JIANG

12:45 F2-S1.8(O) A01356-02369 pg F46
Phosphorus Poisoning Effects on Nickel/Yttria-stabilized Zirconia Anode of Solid Oxide Fuel Cells
Mingjia ZHI, Chengcheng XIANG, Nianqiang Nick WU

F1-S2: Novel Approaches in Supercapacitors / Lithium Batteries

Monday, 29 June 2009
14:00 - 16:15
Level 2, Room 203
Chairs: Abe and Imanishi

14:00 F1-S2.1-2(IN) A02037-03509 pg F66
Enhanced Supercapacitive Behaviors of Manganese Dioxides
Shinichi KOMABA, Tomoya TSUCHIKAWA

14:30 F1-S2.3-4(IN) A02517-04308 pg F80
On the Use of Nano-materials and Nano-structures in Rechargeable Batteries and EDL (super) Capacitors
Doron AURBACH

15:00 F1-S2.5-6(IN) A02426-04141 pg F78
Design of Naoporous Carbon Electrode for High Voltage Operation of Electric Double Layer Capacitor
Soshi SHIRAISHI

15:30 F1-S2.7(O) A01301-04000 pg F43
Vanadium Oxide (V_2O_5) Nanobelts for Supercapacitor Applications
Eugene KHOO, Jan MA, Pooi See LEE

15:45 F1-S2.8(O) A02507-04295 pg F79
Carbon Nanotube Based Charge Storage and Energy Conversion Devices
Grace WEE, Andreas KIEBELE, Jason MA, George GRUNER, Subodh MHAISALKAR, Martti KAEMPGEN

16:00 F1-S2.9(O) A01600-02782 pg F57
Studies on the 4V-cathode, $LiVPO_4F$ for Li-ion Batteries
Reddy M.V., Rao G.V. SUBBA, Chowdari B.V.R

F2-S2: PEMFC/ DMFC

Monday, 29 June 2009
14:00 - 16:15
Level 2, Room 204
Chairs: Chu and Ghosh

14:00 F2-S2.1-2(IN) A01630-02825 pg F59
Nanoscale Electrocatalysts and Mechanistic Understanding by Electrochemical Impedance Spectroscopy
I-Ming HSING

14:30 F2-S2.3-4(IN) A02651-04545 pg F85
Novel Composite Membrane Based on Pore-Filling Electrolyte for Direct Methanol Fuel Cells
Tien Hoa NGUYEN, Xin WANG

15:00 F2-S2.5-6(IN) A02774-04849 pg F88
Direct Methanol Fuel Cell (DMFC) vs In-direct (Reforming) Methanol Fuel Cell (RMFC)
Deryn CHU

15:30 F2-S2.7(O) A02063-03548 pg F68
Achieving High Proton Conductivities in Polymer Electrolyte Membranes for Fuel Cells Applications
Thuy D. DANG, Zongwu BAI

15:45 F2-S2.8(O) A01365-02380 pg F47
Ab Initio Prediction of Nano-scale Platinum Dissolution in Aqueous Environments
Kristin PERSSON, Byungchan HAN, Gerbrand CEDER

16:00 F2-S2.9(O) A00861-01495 pg F33
Oleylamine-Mediated Synthesis of Monodisperse Pd-Composite Nanoparticles for Catalytic Formic Acid Oxidation
Vismadeb MAZUMDER, Shouheng SUN

F1-S3: Electrolytes

Monday, 29 June 2009
16:30 - 18:45
Level 2, Room 203
Chairs: Ceder and Kawamura

16:30 F1-S3.1-2(IN) A01439-02496 pg F49
Development of Sulfide Glass-ceramic Electrolytes for All-solid-state Lithium Rechargeable Batteries
Akitoshi HAYASHI, Masahiro TATSUMISAGO

17:00 F1-S3.3-4(IN) A00068-00414 pg F12
Soft Matter as a Versatile Source for Generation of Novel Lithium Battery Electrolytes
Aninda Jiban BHATTACHARYYA

17:30 F1-S3.5-6(IN) A01848-03205 pg F61
Micro Lithium Ion Batteries Prepared by Pulsed Laser Deposition
Junichi KAWAMURA, Naoaki KUWATA, Osamu KAMISHIMA, Takeshi HATTORI

18:00 F1-S3.7(IN) A00028-00357 pg F12
Advanced Si-Based Electrolyte for Lithium Ion Battery
Zhengcheng ZHANG, Robert WEST, Khalil AMINE

18:30 F1-S3.8(O) A02140-03711 pg F71
Cross Surface Charge Percolation for High Energy Density Lithium Storage
Qing WANG, Shaik M ZAKEERUDDIN, Ivan EXNAR, Michael GRAETZEL

F2-S3: SPFC / H2-production & storage

Monday, 29 June 2009
16:30 - 17:30
Level 2, Room 204
Chairs: Hsing and Wang Xin

16:30 F2-S3.1-2(IN) A01517-02695 pg F54
Probing and Mapping Gas-electrode Interactions in SOFC Using in situ Raman Spectroscopy
Kevin BLINN, Harry ABERNATHY, Meilin LIU

17:00 F2-S3.3(O) A00640-01228 pg F25
Methanol-to-Hydrogen Decomposition and Electrochemical Hydrogen Absorption in Carbon Nanostructured Materials
Nail SULEIMANOV, Sergei KHANTIMEROV, Eugene KUKOVITSKY, Robert SCHEUERMANN, Dierk HERLACH

17:15 F2-S3.4(O) A00857-01487 pg F32
Regeneration of Spent-$NaBH_4$ Back to $NaBH_4$ by Using High-energy Ball Milling
Hsiao-Ting YEN, Bing-Hung CHEN, Cheng-Hong LIU, Fanghei TSAU, Chan-Li HSUEH, Jie-Ren KU

F1-S4: Anode Materials

Tuesday, 30 June 2009
10:30 - 13:00
Level 2, Room 203
Chairs: Notton and Yang

10:30 F1-S4.1-2(IN) A02587-04420 pg F83
Carbon Nanospheres for Negative Electrode of Lithium-ion Batteries
Takeshi ABE

11:00 F1-S4.3-4(IN) A01373-02392 pg F48
Nano-Micro Composites as High Capacity Anode Materials for Li-ion Batteries
Hong LI, Zhaoxiang WANG, Xuejie HUANG, Liquan CHEN

11:30 F1-S4.5-6(IN) A00753-01333 pg F29
Reversible and High Capacity Nanostructured Electrode Materials for Li-ion Batteries
Jaephil CHO

12:00 F1-S4.7(O) A00217-00706 pg F17
New Preparation Methods of Composite Electrodes Containing Tin, Cobalt and Carbon Atoms for Lithium Ion Batteries
Ricardo ALCÁNTARA; Francisco NACIMIENTO; Uche NWOKEKE; Inés RODRÍGUEZ; José Luís TIRADO

F

12:15 F1-S4.8(O) A01566-02728 pg F56
Li-Storage and Cyclability of $CdFe_2O_4$ as Anode for Li-Ion Batteries
Yogesh SHARMA, N. SHARMA, G. V. SUBBA RAO, B. V. R. CHOWDARI

12:30 F1-S4.9(O) A02354-04035 pg F76
Preparation and Electrochemical Properties of $Li_4Ti_5O_{12}$ as an Electrode Material
Jiangfeng XU, Zhimin BAI

12:45 F1-S4.10(O) A01563-02725 pg F56
Nanocomposites, (SnO.½ VO_x) as Anodes for Li- ion Batteries
B DAS, M V REDDY, G V SUBBA RAO, B V R CHOWDARI

F2-S4: SOFC / PEMFC

Tuesday, 30 June 2009
10:30 - 13:00
Level 2, Room 204
Chairs: ML Liu and Bae

10:30 F2-S4.1-2(IN) A02772-04737 pg F87
Power Generating Property of Direct CH_4 Fueled SOFC using $LaGaO_3$ Electrolyte
Sakai TAKAAKI, Hao ZHONG, Hiroshige MATSUMOTO, Tatsumi ISHIHARA

11:00 F2-S4.3-4(IN) A02293-03924 pg F75
Nanostructured Oxide Thin Films for Miniaturized Solid Oxide Fuel Cells (SOFCs)
Enrico TRAVERSA

11:30 F2-S4.5-6(IN) A00713-01276 pg F29
Effect of Fabrication Route on the Mechanical and Electrochemical Properties of SOFC's
Sammes NIGEL

12:00 F2-S4.7(O) A02725-04691 pg F86
Electrical Characterization of Zirconia Based sol Gel Electrospun Fibres
Adrian LOWE, Yan FENG, Li LU

12:15 F2-S4.8(O) A02252-03845 pg F74
Fabrication of Morphology Controlled Platinum Nanoparticles and their Electrochemical Applications
Ting LEI, Jinyuan CHEN

12:30 F2-S4.9(O) A02147-03699 pg F72
Synthesis and Assessment of $SrTiO_3$-based Perovskite as Anode Materials for Solid Oxide Fuel Cells
Wei WANG, Teng Sheng PEH, Siew Hwa CHAN, Tian Shu ZHANG

12:45 F2-S4.10(O) A01684-03025 pg F59
Study on Graphite Nano-fiber as Catalyst Support for Proton Exchange Membrane Fuel Cell
Hongfeng XU, Lu LU

F1-S5: Cathode Materials: Olivine / Polyanion based Electrodes

Tuesday, 30 June 2009
14:00 - 16:30
Level 2, Room 203
Chairs: Chiang and Bhattacharya

14:00 F1-S5.1-2(IN) A01188-02031 pg F40
$LiMnPO_4$ Cathode Material for High Performance Li Ion Battery
Ivan EXNAR

14:30 F1-S5.3-4(IN) A02225-03800 pg F73
New Mechanisms of Li^+ Insertion/Extraction into Highly Defective LixFeyPO4 Powders
Christian MASQUELIER, Pierre GIBOT, Stephane HAMELET, Montse CASAS CABANAS, Stephane LEVASSEUR, Clare GREY, Jordi CABANA, Dominique BONNIN, Jean-Marie TARASCON

15:00 F1-S5.5-6(IN) A00826-01440 pg F32
$LiFePO_4$ – Defect Chemistry, Phase Transformation to $FePO_4$, and Mixed Conducting Networks
Katja WEICHERT, Ruhul AMIN, Wilfried SIGLE, Janez JAMNIK, Yong-Shen HU, Yu-Guo GUO, Rajesh TRIPATHI, Joachim MAIER

15:30 F1-S5.7(O) A01924-03312 pg F62
Storage Performance of LiFe1-xMnxPO4 Nanoplates
Saravanan KUPPAN, Jagadese. J VITTAL, M V V REDDY, B V R CHOWDARI, Palani BALAYA

15:45 F1-S5.8(O) A01061-02607 pg F37
Li^+ Ion Pathways in $LiFePO_4$ and Related Olivines
Stefan ADAMS

16:00 F1-S5.9(O) A01498-02741 pg F53
Facile Synthesis of $LiMn_2O_4$/MWNTs Hybrid Nanomaterials as Cathode Materials of Li-Ion Batteries
Xian-Ming LIU, Zheng-Dong HUANG, Peng-Cheng MA, Jang-Kyo KIM

16:15 F1-S5.10(O) A02959-05064 pg F93
A Group of New Polyanion Materials $Li_xM_2(MoO_4)_3$ {0 ≤ x≤3}[M=Co, Ni] for Lithium Batteries: Findings and Issues
K. M. BEGAM, M. S. MICHAEL, S. R. S. PRABAHARAN

F2-S5: Fuel Cells / Lithium Batteries

Tuesday, 30 June 2009
14:00 - 16:15
Level 2, Room 204
Chairs: Takaaki and Wu

14:00 F2-S5.1-2(IN) A02553-04366 pg F82
New Materials for PEM Fuel Cells
Sebastian JOSEPH, Sergio GAMBOA, Juan Manuel SIERRA, Edgar VAENZUELA, Joel MOREIRA

14:30 F2-S5.3(O) A00806-01419 pg F31
MWNTs Supported Nanocrystalline Metal-metal Oxide as Methanol Tolerant Oxygen Reduction Reaction Electrocatalyst for Proton Exchange Membrane Fuel Cell
R. Imran JAFRI, Sundara RAMAPRABHU

14:45 F2-S5.4(O) A00130-00473 pg F14
Nanostructured Non-noble Catalysts for Oxygen Electrodes
Viacheslav BARSUKOV, Volodymyr KHOMENKO, Kostyantyn LYKHNYTSKY

15:00 F2-S5.5(O) A01443-02513 pg F49
Inhibitor Effect of Sodium Benzoate on Corrosion Behaviour of Nanocrystalline Pure Iron Metal in Near-neutral Aqueous Solutions
Vahid AFSHARI, Changiz DEHGHANIAN

15:15 F2-S5.6(O) A01994-03555 pg F65
Electrochemical Deposition of Highly-Oriented Zinc Oxide Nanorods Suitable for use in Dye-Sensitized Solar Cells
Mohammad Reza KHAJAVI, Daniel John BLACKWOOD

15:30 F2-S5.7(O) A02542-04431 pg F81
Effect of Processing Parameters on Pore Structure and Thickness of Anodic Alumina Membranes
Mohammad AHMADI DARIAKENARI, Mohsen SEIFI, Hadi TABAIAN, Hossein KAZEMIAN

15:45 F2-S5.8(O) A00648-02280 pg F26
Preparation, Structural and Impedance Studies of Nanosized $LiNiVO_4$ Electrode Material
Selvasekarapandian SUBRAMANIAM, Sakunthala AYYASAMY, Nithya HELLER, Arun Kumar DORAI, Hema MUTHUSAMY, Christopher Selvin P., Sanjeeviraja C.

16:00 F2-S5.9(O) A02601-04443 pg F84
Attempt to Directly Synthesize Magnesium Borohydride from its Constituent Elements
Chung-Kiak POH, Zaiping GUO, Xuebin YU, Zhenguo HUANG, Hua-Kun LIU

F1-S6: Fundamentals

Wednesday, 1 July 2009
10:30 - 13:00
Level 2, Room 203
Chairs: Delmas and Doublet

10:30 F1-S6.1-2(IN) A02876-04918 pg F90
Phase Stability of Nanostructured Storage Materials during Electrochemical Cycling
Yet-Ming CHIANG, Ming TANG, Nonglak MEETHONG, Yu-Hua KAO

11:00 F1-S6.3-4(IN) A02046-03520 pg F67
From Powder to Network: The Impact of Wiring and Particle Size on Storage Performance
Janko JAMNIK, Bostjan ERJAVEC, Robert DOMINKO, Miran GABERSCEK

11:30 F1-S6.5-6(IN) A02757-04726 pg F86
The Impact of Surface and Interface Energy on Nano-sized Insertion Compounds
Marnix WAGEMAKER, Fokko MULDER, Anton VAN DER VEN

12:00 F1-S6.7-8(IN) A02535-04336 pg F81
New Concepts of Redox Centres in Electrode Materials for Li-Ion Batteries: A Step by Step Theoretical Approach
Marie-Liesse DOUBLET, Jerome BERNARDI, Frederic LEMOIGNO

12:30 F1-S6.9(O) A01781-03124 pg F61
Updated References for the Structural, Electronic and Vibrational Properties of TiO_2(B) Bulk Using First-principles DFT Calculations
Mouna BEN YAHIA, Frederic LEMOIGNO, Sebastien FILHOL, Marie-Liesse DOUBLET, Thomas BEUVIER, Mireille RICHARD-PLOUET, Luc BROHAN

12:45 F1-S6.10(O) A00119-00362 pg F13
Synthesis and characterization of carbon coated $LiNi_{1/3}Co_{1/3}Mn_{1/3}O2$ cathode material for Li-ion batteries
Nupur Nikkan SINHA, Munichandraiah NOOKALA

F2-S6: Lithium Battery / Miscellaneous

Wednesday, 1 July 2009
10:30 - 13:30
Level 2, Room 205
Chair: Balaya

10:30 F2-S6.1(O) A02841-04863 pg F89
Size Effect on Hydrogen Adsorption in Coiled Carbon Nanotubes
Gayathri VENKATACHARI, Devi NEELAMEGAM RAJAN

10:45 F2-S6.2(O) A01304-02542 pg F43
Studies on Dielectric Properties in Polymer-clay Nanocomposite Electrolyte
Dillip K. PRADHAN, Naba K. KARAN, Reji THOMAS, Ram S. KATIYAR

11:00 F2-S6.3(O) A02956-05061 pg F91
Nonaqueous Electrolyte Containing Boron Based Anion Receptors (BBAR)
L. F. LI, B. XIE, G. X. FENG, H. S. LEE, X. Q. YANG, H. LI, L. Q. CHEN, X. J. HUANG

11:15 F2-S6.4(O) A00710-01334 pg F28
Structural and Electrical Characteristics of $Bi_4V_{2(1-x)}Ni_{2x}O_{11-3x}$, $0.00 \leq x \leq 0.1$
Govind BICHILE, Vijendra CHAUDHARI, Suhas DESAI

11:30 F2-S6.5(O) A01943-03352 pg F63
Lithium Ion Solid State Electrolyte Fabrication Methods and the Effect on Microstructure and Conductivity
Paul JOHNSON, Nigel SAMMES, Nobuyuki IMANISHI, Osamu YAMAMOTO

11:45 F2-S6.6(O) A02085-03596 pg F68
Preparation and Characterization of Proton-conducting Phosphoric Acid-doped Silica Gel Electrolyte for Secondary Battery at Room Temperature
Sudhakar BANSOD, Kamal SINGH

12:00 F2-S6.7(O) A00535-01087 pg F22
Study of Nano-dispersed Polymer Electrolyte Thin Films and its Electrical and Dielectric Properties
Prem Narain GUPTA, Govind Kumar PRAJAPATI, Rupesh ROSHAN

12:15 F2-S6.8(O) A02105-03622 pg F69
Enhanced Ionic Conductivity in Poly (Methyl Methacrylate) (PMMA) /Layered Lithium Trivanadate (LIV_3O_8) Nanocomposite Gel Polymer Electrolytes
Ashok KUMAR, Madhurrya DEKA

12:30 F2-S6.9(O) A00130-00472 pg F13
Nanostructured Composite Anode Materials for Lithium-ion Batteries
Viacheslav BARSUKOV, Volodymyr KHOMENKO, Oksana ZAYATS, Viktor TVERDOKHLEB

12:45 F2-S6.10(O) A01492-03613 pg F53
Effect of Dopants on the Synthesis of Polyaniline and Its Characterization
Muthusamy PARAMASIVAM

13:00 F2-S6.11(O) A00903-01584 pg F34
Tremella-like Molybdenum Dioxide Consisting of Nanosheets as an Anode Material for Lithium Ion Battery
L.C. YANG, Q.S. GAO, Y.H. ZHANG, Y. TANG, Y.P. WU

13:15 F2-S6.12(O) A02954-05060 pg F90
To Study the Effect of Dopant AgI in Transport of Silver Ions in the Superionic Glass System x AgI – (55-x) $[2Ag_2O – B_2O_3] – 5TeO_2$ where x = 40, 45, ….65
D. K. KANCHAN, Dharmesh H. KOTHARI

F1-S7: Anode Materials / Electrolytes

Wednesday, 1 July 2009
14:00 - 16:00
Level 2, Room 203
Chairs: Wagemaker and Weichert

14:00 F1-S7.1-2(IN) A02622-04481 pg F85
Nanostructured Si Materials as Anode for Li-ion Batteries
Yong YANG

14:30 F1-S7.3-4(IN) A00217-00409 pg F17
On the Use of the Reverse Micelles Synthesis of Nanomaterials for Lithium-ion Batteries
María José ARAGÓN, Pedro LAVELA, Bernardo LEÓN, Carlos PÉREZ-VICENTE, José Luis TIRADO, Candela VIDAL-ABARC

15:00 F1-S7.5(O) A00817-01426 pg F31
Silicon Nanowires as Negative Electrode for Lithium-ion Microbatteries
Barbara LAIK, Diane UNG, Amael CAILLARD, Costel Sorin COJOCARU, Didier PRIBAT, Jean Pierre PEREIRA RAMOS

15:15 F1-S7.6(O) A00656-01180 pg F26
On the Mechanism of Li-ion Conductivity of Solid Nano-Composite Electrolytes
Grigory POTEMKIN, Aleksandr STENGACH, Ivan DAVIDOV, Andrey ANISSIN

15:30 F1-S7.7(O) A02532-04345 pg F80
Dispersed Phase Polymer Composites: Mechanism of Improvement in Ionic Conductivity and Stability Properties
A. K. THAKUR

15:45 F1-S7.8(O) A01603-02855 pg F58
Ta-doped $Li_6Zr_2O_7$: A New Li-fast Ion Conductor
Prasada Rao RAYAVARAPU, Reddy M.V.V., Adams STEFAN, Subba Rao G.V., Chowdari B.V.R.

F-S8: Poster Session - Lithium Batteries, Supercapacitators and Fuel Cells

Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Gallery
Chairs: Aurbach, Jamnik, Menetrier, Masquelier

F

F-S8.77(P) A02767-04911 **pg F87**
Structural and Electrochemical Properties of Nanocrystalline $LiCoPO_4$ having Olivine Structure
Awalendra K. THAKUR

F-S8.78(P) A02779-04749 **pg F88**
Reality Check on Using $NaAlH_4$ as a Hydrogen Storage Material
Pramoch RANGSUNVIGIT, Yindee SUTTISAWAT, Boonyarach KITIYANAN, Santi KULPRATHIPANJA

F-S8.79(P) A03027-05158 **pg F94**
Li Intercalation/Deintercalation in V2O5 Nanowires Supported by Ni Microtubes Arrays
Mansour Al Hoshan, William H. Smyrl

F1-S9: Novel Synthesis

Thursday, 2 July 2009
10:30 - 13:00
Level 2, Room 203
Chairs: Doeff and Cho

10:30 **F1-S9.1-2(IN) A00896-01563** **pg F33**
Nano Electrode Materials for Lithium Ion Batteries
L. C. YANG, L. J. FU, N. H. ZHAO, Y. SHI, Y. P. WU

11:00 **F1-S9.3-4(IN) A01265-02197** **pg F42**
Synthesis of Uniformly Sized $LiMnPO_4$ Nanoparticles in Nonaqueous Solution and their Electrochemical Properties
Takayuki DOI, Shota YATOMI, Shigeto OKADA, Jun-ichi YAMAKI

11:30 **F1-S9.5-6(IN) A01685-02914** **pg F60**
Nanostructured Anodes and Cathodes for Lithium-Ion Batteries
Yu-Guo GUO

12:00 **F1-S9.7-8(IN) A01362-02376** **pg F46**
Micro and Nanostructured Materials for Lithium Battery Applications
Daniel ABRAHAM, Martin BETTGE, Steve BURDIN, Scott MACLAREN, Ivan PETROV, Ernie SAMMANN

12:30 **F1-S9.9(O) A00902-01583** **pg F34**
A Novel Approach for Mass Synthesis of V_2O_5 Nanorods
Alexey GLUSHENKOV, Ying CHEN, Vladimir STUKACHEV, Gennady KUVSHINOV, Mohd Faiz HASSAN, Hua Kun LIU

12:45 **F1-S9.10(O) A00257-01066** **pg F19**
Enhancement of Electrochemical Properties by Doping of PEG into the MoO3 Nanobelts for Lithium Battery Application
Madhu Mohan VARISHETTY, Bin HU, Chen WEN

F1-S10: Solid State Batteries / Electrodes

Thursday, 2 July 2009
14:30 - 16:15
Level 2, Room 203
Chairs: Doi and Abraham

14:30 **F1-S10.1-2(IN) A02957-05062** **pg F92**
Nanometal Oxides for Electrochemical Li-Ion Capacitors and Batteries: Effects of Porosity and Particle Size
S. R. S. PRABAHARAN, B. RAMBABU

15:00 **F1-S10.3-4(IN) A02467-04362** **pg F79**
Development of Solid-State Lithium Ion Battery Using Polymer Electrolyte
Nobuyuki IMANISHI, Yasuo TAKEDA

15:30 **F1-S10.5-6(IN) A01316-02303** **pg F44**
All-solid-state Batteries Seen from a Multi-dimensional Perspective
Peter NOTTEN

16:00 **F1-S10.7(O) A01234-02551** **pg F41**
Composites Solid Electrolytes for All Solid State Batteries
Berangere RAGUENET, Pascal G. YOT, Annie PRADEL

F1-S11: Synthesis and Characterization of Electrodes / Electrolytes

Thursday, 2 July 2009
16:30 - 18:30
Level 2, Room 203
Chairs: Tirada and Guo

16:30 **F1-S11.1-2(IN) A01591-02770** **pg F57**
Nanostructured Electrode Materials Made by Combustion Synthesis
Marca DOEFF, James WILCOX, Jiajun CHEN, Anthony CHERN, Albert AUMENTADO

17:00 **F1-S11.3-4(IN) A01908-03291** **pg F62**
Synthesis of $Li_4Ti_5O_{12}$ by Spray-Dry Method and its Electrochemical Property as the Anode Material for Li-ion batteries
Naoaki KUMAGAI, Daisuke YOSHIKAWA, Yoshihiro KADOMA, Koichi UI

17:30 **F1-S11.5(O) A02725-04689** **pg F85**
Doped Cobaltite Nanofibres for Energy Conversion Applications
Adrian LOWE, Khairunnadim Ahmad SEKAK, Tai Hou (Lennie) TENG, Jose RAJAN

17:45 **F1-S11.6(O) A01541-02690** **pg F54**
Mobile Ion Transport Pathways In xLiBr – (1-x) (0.6Li2O-0.4P2O5) Glasses
Tho THIEU DUC, Prasada Rao RAYAVARAPU, Adams STEFAN

F

18:00 F1-S11.7(O) A01560-02720 pg F55
Charecterisation of $LiCo_{1-x}Mg_xPO_4$ Olivine Cathode Material for Li Ion Batteries by Sol-gel Route
Selladurai SUBRAMANIAN, Poovizhi NAKKEERAN

18:15 F1-S11.8(O) A00432-00816 pg F19
Impedence Spectroscopy Studies on Plasticized Polymer Electrolyte System [PEO- LiCF3SO3 –DBP]
Siti Mariah MOHD YASIN, Mohd Rafie JOHAN

F1-S12: Techniques / Miscellaneous

Friday, 3 July 2009
11:00 - 12:45
Level 2, Room 203
Chairs: Exnar and Li

11:00 F1-S12.1-2(IN) A00955-01676 pg F36
What Does NMR Tell Us about Lithiation Processes in Nanosized Materials?
Michel MENETRIER

11:30 F1-S12.3-4(IN) A01485-02578 pg F52
Synthesis and Characterization of Carbon-Composited Li[Ni1/3Co1/3Mn1/3]O2
Bin LIN, Zhaoyin WEN, Xiuyan WANG, Xiangwei WU, Yu LIU

12:00 F1-S12.5(O) A02958-05063 pg F92
Neutron Scattering Study of Diffusion and Disorder in Cu-Se Superionic Conductor
S. A. DANILKIN, C. LING, R. MACQUART, M. RUSSINA, Z. IZAOLA, T. SAKUMA

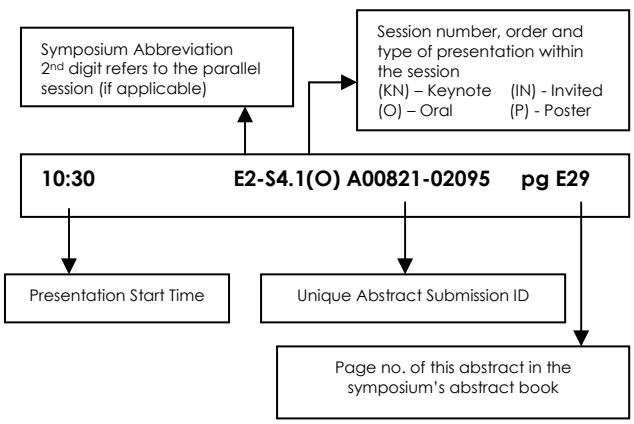
12:15 F1-S12.6(O) A00648-02275 pg F25
Preparation and Characterization of Nanosized Li1.2V3O8 Electrode Material by AC Impedance Spectroscopy
Sakunthala AYYASAMY, Selvasekarapandian SUBRAMANIAM, Nithya HELLER, Arun Kumar DORAI, Hema MUTHUSAMY, Christopher Selvin P., Sanjeeviraja C.

12:30 F1-S12.7(O) A01266-02191 pg F42
Polyaniline Modified Glassy Carbon Electrodes for Heavy Metal Tracing
Zhaomeng WANG, Erjia LIU

SYMPOSIUM G

Plasmonics and Applications

The programme codes you will see in the following pages are decoded using an example below:



Symposium G: Plasmonics and Applications

Level 3, Room 307

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:45) **Session G-S1** **Plasmonics Opening Session**	(10:30 - 12:30) **Session G-S4** **Plasmonic Nanostructures and Quantum Effects**	(10:30 - 12:30) **Session G-S6** **Plasmonic Nanostructures and Devices**	(10:30 - 12:30) **Session G-S9** **Plasmonic Optics and Nanoimaging**	(11:00 - 12:30) **Session G-S12** **Plasmonics and Applications**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session G-S2** **Photonic and Plasmonic Nanostructures and Devices**	(14:00 - 16:30) **Session G-S5** **Plasmonic Waveguides**	(14:00 - 15:15) **Session G-S7** **Fabrication Technique for Plasmonic Structures**	(14:30 - 18:00) **Session G-S10** **Plasmonic Particles and Nanoantennas, Cloaking**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session G-S8** **POSTER SESSION**		
(16:30 - 17:30) **Session G-S3** **Surface Enhanced Raman Spectroscopy and Emission Enhancement**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	19:00 - 22:00 hrs Conference Banquet @ Suntec	

G-S1: Plasmonics Opening Session

Monday, 29 June 2009
11:00-12:30
Level 3, Room 307
Chair: Boris Luk`yanchuk (DSI, Singapore),
Daniel Pickard (NUS, Singapore)

11:00
Opening Address by Prof. T. C. Chong (DSI, A*STAR, Singapore)

11:15 G-S1.2-3(KN) A02770-04734 pg G38
Plasmonics at the Nanoscale: Taking Light in New Directions
Naomi HALAS

11:45 G-S1.4-5(IN) A02569-04582 pg G37
Transformation Optics Applied to the Design of Plasmonic Devices
John PENDRY

12:15 G-S1.6-7(IN) A02950-05046 pg G39
New Horizons of Nanoplasmonics: from SPASER to Attoseconds
Mark I. STOCKMAN

G-S2: Photonic and Plasmonic Nanostructures and Devices

Monday, 29 June 2009
14:00-16:15
Level 3, Room 307
Chairs: E. P. Li (IHPC, Singapore),
M. Brongersma (Stanford University, USA) and
G. Blumberg
(Bell Laboratories, Murray Hill, USA)

14:00 G-S2.1-2(IN) A01350-02355 pg G22
Mimicking EIT, BEC, Ferromagnetism, the Mössbauer and the Bunn Effects in Photonic Metamaterials
Nikitas PAPASIMAKIS, Eric PLUM, Vassili FEDOTOV, Nikolay ZHELUDEV

14:30 G-S2.3-4(IN) A00413-00794 pg G11
Transforming Light and Cloaking with Photonic Metamaterials
Vladimir M. SHALAEV, Alexander V. KILDISHEV, Vladimir P. DRACHEV, Uday K. CHETTIAR, Wenshan CAI

15:00 G-S2.5-6(IN) A02294-03915 pg G34
Magnetic Light Emitters: Plasmon-enhanced Magnetic Dipole Transitions
Rashid ZIA

15:30 G-S2.7-8(IN) A02235-03817 pg G32
Optical Shielding Nano-Systems Achieved by Multiple Metallic Nano-Cylinders under Plasmon Resonances
Le-Wei LI, Hao-Yuan SHE, Olivier J. F. MARTIN, Juan R. MOSIG

16:00 G-S2.9(O) A01060-01841 pg G18
Localization and Enhancement of SP Waves from Plasmonic Waveguide by a Dipole Nanoantenna
Mingxia GU, Ping BAI, Hong Son CHU, Er Ping LI

G-S3: Surface Enhanced Raman Spectroscopy and Emission Enhancement

Monday, 29 June 2009
16:30-17:30
Level 3, Room 307
Chairs: N. Halas (Rice University, USA) and
Rashid Zia (Brown University, USA)

16:30 G-S3.1(O) A00218-00707 pg G10
Self-Assembled, Nanoscaled Metal Structures for Surface Enhanced Raman Spectroscopy
Hsing-Lin WANG, Nathan MACK, Seaho JEON, Hung-Hsing SHIH

16:45 G-S3.2(O) A01652-02944 pg G28
Near-field Raman Imaging by Optically Trapped Dielectric Microsphere
Johnson KASIM, Yu Meng YOU, Chao Ling DU, Yun MA, Chun Xiao CONG, Ze Xiang SHEN

17:00 G-S3.3(O) A00213-02230 pg G9
Surface Plasmon Enhancement of Thin-Film Amorphous Silicon Solar Cells
Yuriy AKIMOV, Wee Shing KOH, Er Ping LI

17:15 G-S3.4(O) A01734-03016 pg G30
SERS Study of a Single Silver Nanowire with Hotspots
Hailong HU, Yumeng YOU, Chaoling DU, Yun MA, Ting YU, Zexiang SHEN

G-S4: Plasmonic Nanostructures and Quantum Effects

Tuesday, 30 June 2009
10:30-12:15
Level 3, Room 307
Chair: H. Atwater (CALTECH, USA) and
N. Zheludev (University of Southampton, UK)

10:30 G-S4.1-2(KN) A02123-04485 pg G31
Active Plasmonic Components and Metamaterials
Harry ATWATER

11:00 G-S4.3-4(IN) A02548-04358 pg G37
Quantum Description of Plasmons in Strongly Coupled Metallic Nanostructures
Peter NORDLANDER

11:30 G-S4.5-6(IN) A01674-02894 pg G29
Controlling Light in Hybrid Plasmonic Nanostructures
Anatoly ZAYATS

12:00 G-S4.7-8(IN) A00835-01457 pg G14
Multicomponent Loschmidt Echo and Mixing in Quantum Evolution Dynamics of Systems with Discrete Dense Spectra
Efim KATS, Victor BENDERSKII, Lyudmila GAK

G-S5: Plasmonic Waveguides

Tuesday, 30 June 2009
14:00-16:30
Level 3, Room 307
Chairs: V. Shalaev (Purdue University, USA) and P. Norlander (Rice University, USA)

14:00 G-S5.1-2(IN) A02524-04322 pg G36
Channel and Wedge Plasmons in the Optical and THz Regimes
Luis MARTIN-MORENO, Sergio G. RODRIGO, Antonio I. FERNANDEZ-DOMINGUEZ, Esteban MORENO, F. J. GARCIA-VIDAL

14:30 G-S5.3-4(IN) A01587-02817 pg G27
Guiding of Surface Plasmon Polaritons in Laser Fabricated Structures
Boris CHICHKOV, Maria FARSARI, Roman KIYAN, Carsten REINHARDT, Andreas SEIDEL

15:00 G-S5.5-6(IN) A00966-03545 pg G16
TeraHertz Plasmonic Waveguides and Antennas for Bridging the TeraHertz Gaps
Tahsin AKALIN

15:30 G-S5.7-8(IN) A00114-00716 pg G7
Long-range Surface Plasmon on Thin Plasma Film with Launching Current Flows
Yung-Chiang LAN

16:00 G-S5.9(O) A02440-04162 pg G36
Compact Plasmonic Devices with Low Polarization-Dependent Loss
Kristjan LEOSSON, Tiberiu ROSENZVEIG, Petur HERMANNSSON, Malte GATHER, Alexandra BOLTASSEVA

16:15 G-S5.10(O) A01741-04612 pg G30
Homogeneous Waveguide Confined By Side Metal
Xiaoguang TU, Ting MEI, Jinghua TENG, Siew Lang TEO, Norman ANG, Ah Bian CHEW

G-S6: Plasmonic Nanostructures and Devices

Wednesday, 1 July 2009
10:30-12:30
Level 3, Room 307
Chairs: L. Martin-Moreno (University of Zaragoza, Spain) and B. Chichkov (Laser Zentrum Hannover, Germany)

10:30 G-S6.1-2(IN) A02526-04324 pg G36
Plasmonic Nanostructures for Photo-catalytic Reactors
Din Ping TSAI, Yuan Hsing FU, Kuo Pin CHIU, Cheng Hung CHU, Hong Yi CHUNG, Fu Hau CHEN, Lian Da LIN, Li Han HUANG, Chun Da SHUE

11:00 G-S6.3-4(IN) A02272-03948 pg G33
Simulation of Plasmonic Devices with Gain using Multi-Level Multi-Electron FDTD Method
Seng-Tiong HO, Bipin BHOLA, Xi CHEN, Yingyan HUANG

11:30 G-S6.5(O) A00114-00717 pg G8
Plasmonic Transistor Based on Resonant Tunneling Effects Caused by Surface Plasmon Excitations
Peng-Hsiao LEE, Yung-Chiang LAN

11:45 G-S6.6(O) A01257-02178 pg G22
An Innovative Platform for Transmission Localized Surface Plasmon Transducers: Au/Al_2O_3 Nanocomposite Film
Shuyan GAO, Naoto KOSHIZAKI, Emiko KOYAMA, Hideo TOKUHISA, Takeshi SASAKI, Yoshiki SHIMIZU, Jae-Kwan KIM, Youngsong CHO, Deok-Soo KIM

12:00 G-S6.7(O) A01038-01811 pg G17
Polarization-Independent Surface-Plasmon-Enhanced High-Speed Ultraviolet p^+-AlGaN/*i*-GaN/n^+-GaN Photodetectors
Jie DENG, Qiaoqiang GAN, Liangcheng ZHOU, Volkmar R. DIEROLF, Filbert J. BARTOLI, James C. M. HWANG, Clarisse MAZUIR, Winston V. SCHOEFELD

12:15 G-S6.8(O) A02387-04094 pg G34
Characteristics Polymer Layer in Polymer Light Emitting Diode Investigated by SPR Spectroscopy
Hendro , Mitra DJAMAL, Rahmat HIDAYAT, Masayoshi OJIMA, Koji MURATA, Hitoshi KUBO, Akihiko FUJII, Masanori OZAKI

G-S7: Fabrication Technique for Plasmonic Structures

Wednesday, 1 July 2009
14:00-15:15
Level 3, Room 307
Chairs: Din Ping Tsai,
(National Taiwan University, Taipei, Taiwan) and
Seng-Tiong Ho
(Northwestern University, Evanston, Illinois, USA)

14:00 G-S7.1-2(IN) A00058-00108 pg G7
Making Plasmonic Structures via Lithography and Imprint
Alexandra BOLTASSEVA, Paul WEST,
Rasmus B. NIELSEN, Claus JEPPESEN

14:30 G-S7.3-4(IN) A01694-03201 pg G29
Multiple-particle Nanoantennas for Enormous Enhancement and Polarization Control of Light Emission
Hongxing XU

15:00 G-S7.5-6(IN) A01663-02878 pg G29
Tuning Surface Plasmon Resonance Effects by Laser Nanoengineering
Minghui HONG, Lukyanchuk BORIS, Luping SHI,
Tow Chong CHONG

G-S8: Poster Session

Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Gallery
Chairs: A. Boltasseva (Technical University of Denmark, Kongens Lyngby, Denmark),
Ken Ostrikov (Plasma Nanoscience Centre Australia, CSIRO Materials Science and Engineering, Lindfield, Australia) and Maria Kafesaki
(Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology - Hellas (FORTH), Crete, Greece)

G-S8.01(P) A00162-00354 pg G8
Surface Plasmon Differential Imaging for Sensing Applications
Ciaran STEWART, Ian HOOPER, John Roy SAMBLES,
Nickolas JOHNSTON, Mark PITTER, Mike SOMEKH

G-S8.02(P) A00404-00785 pg G11
Surface Enhanced Raman Scattering Observation on Metal Nanobowls
Yun MA, Yu Meng YOU,
Sureshkumar CHANDRASEKAR, Chin Leong ONG,
Xian Ting ZENG, Ze Xiang SHEN

G-S8.03(P) A00433-00817 pg G11
Transmission Properties in Metamaterials Structures: Zero Equivalent Index and Point Defect Effects
Lang CHEN, Viet Cuong NGUYEN

G-S8.04(P) A00543-02401 pg G12
Characterization of Surface Plasmon-Like Modes in Metallic Photonic Crystals
Ruey-Lin CHERN

G-S8.06(P) A00773-01962 pg G13
Design and Analysis of Voltage Controllable Metal-Insulator-Metal Waveguide Plasmonic Bragg Reflector
Ashwani KUMAR, Siu Fung YU

G-S8.07(P) A00784-02265 pg G13
Ultrafast Resonant Higher-Order Optical Nonlinearities of Silver Nanoplatelet Colloids
Jayabalan JESUMONY, Asha SINGH, Rama CHARI

G-S8.08(P) A00814-01600 pg G13
Absorption Properties of Au-Sn0_2 Nanoparticles
Geetika BAJAJ, Ravi SONI

G-S8.09(P) A00846-01471 pg G14
Nanoparticles on Nanofiber-polymer Brush Surface: A Novel Composite Material
Pradipta MAITI

G-S8.10(P) A00848-01517 pg G15
Nonlinear Optical Studies on Chemically Disordered FePt Nanoparticles Using Z-Scan Technique
Sai MUTHUKUMAR, Benoy ANAND,
Raghavender BERUKUTI,
Siva SANKARA SAI, Venkataramaniah KAMISETTI,
Sonnathi NEELESHWAR, Yang Yuan CHEN,
Cheng Lung CHEN, Shang Wei CHOU,
Chai Chun CHEN

G-S8.11(P) A00870-02288 pg G16
Parametric Oscillatory Instability in Nanoelectromechanical Systems as Detectors of Modulated Terahertz Radiation Exhibiting the Plasma and Mechanical Resonances
Vladimir LEIMAN, Aleksey ARSENIN,
Anatoly GLADUN, Vyacheslav SEMENENKO,
Victor RYZHII

G-S8.12(P) A00945-01660 pg G16
Emission Enhancement of Semiconductor Nanowires Based on Surface Exciton-plasmon Polaritons
Xuejin ZHANG, Pengwei WANG, Xinzheng ZHANG,
Yongyuan ZHU, Dapeng YU, Ting MEI

G-S9: Plasmonic Optics and Nanoimaging

Thursday, 2 July 2009
10:30-12:30
Level 3, Room 307
Chairs: M. Stockman (Georgia State University, Atlanta, USA) and A. Zayats (Queen's University of Belfast, United Kingdom)

10:30 G-S9.1-2(IN) A02768-04732 pg G37
Poynting Vector Optics of Multilayer Superlenses
Eugen TATARTSCHUK, Ekaterina SHAMONINA

11:00 G-S9.3-4(IN) A01044-01818 pg G18
Plasmonic Nanoimaging
Zhaowei LIU

11:30 G-S9.5(O) A01436-02491 pg G26
Layer Structure Effects of Silver Lens System on Its Imaging Quality using Spatial Convolution Formulation
Indra KARNADI, Alexander A. ISKANDAR, May On TJIA

11:45 G-S9.6(O) A00738-01308 pg G12
Gold Nanoarray on Colloidal Template by Glancing Deposition for Localized Surface Plasmon Resonance
Nan ZHANG, Di FAN, Xiaodong ZHOU

12:00 G-S9.7(O) A00020-00470 pg G7
Laser Fabrication of Nonlinear and Metallic Photonic Nanostructures
Maria FARSARI, Carsten REINHARDT, Konstantina TERZAKI, Arune GAIDUKEVICIUTE, Aleksandr OVSIANIKOV, Anastasia GIAKOUMAKI, Costas FOTAKIS, Maria VAMVAKAKI, Boris CHICHKOV

12:15 G-S9.8(O) A01231-02111 pg G21
Enhancement in the Efficiency of Light Extraction from Semiconductor Laser Microcavity with Plasmonics Effect
Eng Huat KHOO, Erping LI, Seng Tiong HO, Iftikhar AHMED

G-S10: Plasmonic Particles and Nanoantennas, Cloaking

Thursday, 2 July 2009
14:30-18:00
Level 3, Room 307
Chairs: E. Shamonina (University of Erlangen-Nuremberg, Germany) and Zhaowei Liu (Electrical & Computer Engineering, University of California at San Diego, USA)

14:30 G-S10.1-2(IN) A01507-02620 pg G26
Ion Beam-based Fabrication of Metal Nanoparticle Composites for Nonlinear Optical Applications
Naoki KISHIMOTO, Keisuke SATO, Jin PAN, Yoshihiko TAKEDA

15:00 G-S10.3-4(IN) A00994-01739 pg G17
Optical Trapping and Transport of Particles in Air with Vortex Beams
Vladlen SHVEDOV, Andrei RODE, Yana IZDEBSKAYA, Anton DESYATNIKOV, Wieslaw KROLIKOWSKI, Yuri KIVSHAR

15:30 G-S10.5-6(IN) A00852-01482 pg G15
Optical Metamaterials: Possibilities and Limitations
Maria KAFESAKI, Raluca PENCIU, Thomas KOSCHNY, Eleftherios ECONOMOU, Costas SOUKOULIS

16:00 G-S10.7(O) A01141-01997 pg G20
Epsilon-near-zero Material Makes a Universal Cloak
Alexey VINOGRADOV, Evgeniy LIZNEV, Alexander DOROFEENKO, Said ZOUHDI

16:30 G-S10.8(O) A01420-02460 pg G25
Plasmon Coupling of Gold Nanorods at Short Distances in Different Geometries
Alison FUNSTON

16:45 G-S10.9(O) A01337-02337 pg G22
Enhanced Saturation Absorption due to Gold Nanoparticles Embedded as Core in Core-shell Silver Nanoprisms
Mohan DHONI, Ji WEI

17:00 G-S10.10(O) A02169-03733 pg G31
Colloidal Synthesis of Plasmonic Metallic Nanoparticles
Qingbo ZHANG, Jianping XIE, Jim Yang LEE

17:15 G-S10.11(O) A01229-02107 pg G20
Interactions between Magnetic and Non-magnetic Materials for Plasmonics Applications
Iftikhar AHMED, Erping LI, Eng Huat KHOO

17:30 G-S10.12(O) A00210-00498 pg G9
Surface Plasmon Resonance Sensing of Two-dimensional Metallic Nanoparticle Arrays
Guangyuan SI, Jinghua TENG, Aaron DANNER, Ah Bian CHEW, Soo Seng ANG

17:45 G-S10.13(O) A01535-02684 pg G27
Study of Metal Deposition Techniques: Influence on Grain Size and Surface Roughness
Doris Keh Ting NG, Bipin BHOLA, Reuben Michael BAKKER, Seng Tiong HO

G-S12: Plasmonics and Applications

Friday, 3 July 2009
11:00-12:30
Level 3, Room 307
Chairs: Hongxing Xu (Institute of Physics, Chinese Academy of Sciences, China) and Andrei Rode (Australian National University, Canberra, Australia)

11:00 G-S12.1-2(IN) A00237-00436 pg G10
Plasma for Plasmonics
Kostya (Ken) OSTRIKOV, Yuri AKIMOV, Shuyan XU, Er Ping LI

11:30 G-S12.3(O) A02893-04956 pg G38
Study Electromagnetic Near Field Around Metallic Nano Particles for Fluorescence Enhancement
J. B. ZHANG, B. S. LUKYANCHUK, S. L. ZHU, M. R. MAN, Z. J. XU

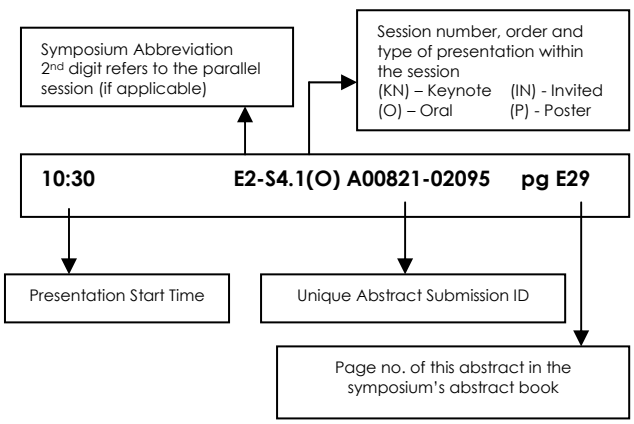
11:45 G-S12.4(O) A01357-02390 pg G22
Plasmon Behavior of Au-based and Ga-based Bimetallic Nanoparticles Supported on Si, GaN and ZnO Surfaces and Nanowires
Maria LOSURDO, Pae C WU, Maria GIANGREGORIO, Giuseppe V BIANCO, Tong-Ho KIM, April BROWN, Giovanni BRUNO

12:00
Closure Remarks by Boris Luk`yanchuk (DSI, Singapore), Daniel Pickard (NUS, Singapore), M. Brongersma (Stanford University, USA), G. Blumberg (Bell Laboratories, Murray Hill, USA) and E. P. Li (IHPC, Singapore)

SYMPOSIUM H

Carbon Nanotubes: Synthesis, Characterisation and Applications

The programme codes you will see in the following pages are decoded using an example below:



Symposium H: Carbon Nanotubes: Synthesis, Characterisation and Applications

Level 3, Room 308

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session H-S4**	(10:30 - 12:30) **Session H-S6**	(10:30 - 12:30) **Session H-S9**	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session H-S1**				
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:30) **Session H-S2**	(14:00 - 16:30) **Session H-S5** **POSTER SESSION**	(14:00 - 15:30) **Session H-S7**	(14:30 - 16:00) **Session H-S10**	
(16:30 - 18:00) **Session H-S3**		(15:30 - 17:30) **Session H-S8**		
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

H-S1

Monday, 29 June 2009
11:00-12:30
Level 3, Room 308
Chair: TBA

11:00 H-S1.1-2(IN) A01885-03813 pg H29
Nanoelectronically Functional Carbon Nanotubes Created by Plasma Processing
R. HATAKEYAMA, T. KANEKO, T. KATO, Y. F. LI

11:30 H-S1.3-4(IN) A02699-04643 pg H38
Nanostructured Carbon Electrodes for Energy Storage
Gehan AMARATUNGA

12:00 H-S1.5(O) A01424-02466 pg H22
Assessment of (n,m) Selectively Enriched Small Diameter Single-Walled Carbon Nanotubes by Density Differentiation from Cobalt-Incorporated MCM-41 for Macroelectronics
Yuan CHEN, Li WEI, Chun Wei LEE, Lain-Jong LI

12:15 H-S1.6(O) A02379-04070 pg H35
Carbon Nanotubes as Reactors and Containers for Diverse Functional Nanomaterials
Ujjal K. GAUTAM, Yoshio BANDO, Xiaosheng FANG, Pedro M. F. J. COSTA, Dmitri GOLBERG

H-S2

Monday, 29 June 2009
14:00-16:30
Level 3, Room 308
Chair: Yuan CHEN

14:00 H-S2.1-2(IN) A02998-05120 pg H42
Carbon Electronics Based on Wafer-Scale Aligned Carbon Nanotubes and Graphene
Chongwu ZHOU

14:30 H-S2.3-4(IN) A01822-03173 pg H29
Quick and Easy Metal-Semiconductor Separation of SWCNTs
Hiromichi KATAURA, Takeshi TANAKA, Yasumitsu MIYATA, Shunjiro FUJII, Daisuke NISHIDE, Kazuhiro YANAGI, Ye FENG, Kiyoto MATSUISHI, Yutaka MANIWA

15:00 H-S2.5-6(IN) A01865-03223 pg H29
Strategy of Carrier Control of Carbon Nanotube Transistor
Young Hee LEE

15:30 H-S2.7(O) A01601-02785 pg H25
High Performance Hybrid CMOS Device Utilizing Zinc Oxide Nanowire and Single Walled Carbon Nanotube Networks
Yan ZHANG, Husnu Emrah UNALAN, Pritesh HIRALAL, Sharvari DALAL, Gehan AMARATUNGA, William I MILNE

15:45 H-S2.8(O) A01710-02984 pg H27
Possibility of SWNT Chirality Control by Free Electron Laser Irradiation during Alcohol Catalytic Chemical Vapor Deposition
Hiroshi YAMAMOTO, Daisuke ISHIZUKA, Nobuyuki IWATA, Keijiro SAKAI, Katsumi UCHIDA, Hirofumi YAJIMA

16:00 H-S2.9(O) A00083-00366 pg H8
Characteristics of Hot Extruded Composite Metals Dispersed with Un-bundled CNTs
Hisashi IMAI, Hiroyuki FUKUDA, Bunshi FUGETSU, Katsuyoshi KONDOH

16:15 H-S2.10(O) A00647-01162 pg H13
Synthesizing Carbon Nanotube on Nanostructure Porous Silicon Using Monometallic Catalyst from Palm Oil Precursor
Suriani ABU BAKAR, Mohamad Hanif MOHAMAD TAIB, Salina MOHAMAD, Isrihetty Siti Salmah SENAIN, Fakardellawarni MOHAMAD, Nik Farhana SHAMSUDIN, Nurul Fatahah Asyqin ZAINAL, Azira AZIZ, Saifollah ABDULLAH, Mohamad Rusop MAHMOOD

H-S3

Monday, 29 June 2009
16:30-18:00
Level 3, Room 308
Chair: TBA

16:30 H-S3.1(O) A02538-04347 pg H37
Production of High Quality Aligned Carbon Nanotubes by One Step Method
Ravi BHATIA, Prasad VISHNU BHOTLA, Reghu MENON

16:45 H-S3.2(O) A01556-02911 pg H25
One-Dimensional Carbon Nanomaterials from Flames: A Review
Chunxu PAN, Jun ZHANG, Xiang QI, Qiaoliang BAO

17:00 H-S3.3(O) A02220-03795 pg H34
Effect of Hydrogen Flowrate and Carbon Source on Production of Carbon Nanotubes by Chemical Vapor Deposition
Issam AMR, Muataz ATIEH, Khaled MEZGHANI, Adnan AL-AMER, Mamdouh AL-HARTHI

17:15 H-S3.4(O) A02846-04873 pg H39
Thermal Kinetics of Multiwall Carbon Nanotube Prepared by Floating Catalyst Chemical Vabor Deposition (FC-CVD)
Faraj ABUILAIWI, Muataz ATIEH

17:30 H-S3.5(O) A01692-02936 pg H27
Fabrication and Superplasticity of MWCNTs/Al Composites
Jinzhi LIAO, Ming Jen TAN, Sridhar IDAPALAPATI

17:45 H-S3.6(O) A01534-02928 pg H24
Effect of Silicon Nitride Interfacial Layer in Alignment of Multi Walled Carbon Nanotubes and their Field Emission Properties
Sangeeta HANDUJA, Sarab Preet SINGH, P. SRIVASTAVA, V. D. VANKAR

H-S4

Tuesday, 30 June 2009
10:30-12:30
Level 3, Room 308
Chair: TBA

10:30 H-S4.1-2(IN) A02899-04957 pg H40
Selective Growth of Well Aligned Semiconducting Single-walled Carbon Nanotubes
Lei DING, Alexander TSELEV, Dongning YUAN, Thomas P. MCNICHOLAS, Jie LIU

11:00 H-S4.3-4(IN) A02964-05072 pg H41
Carbon Nanotubes as Physical and Biological Platforms for Technology Applications
S. R. P. SILVA

11:30 H-S4.5(O) A00237-00481 pg H10
Plasma-synthesized Arrays of Carbon Nanotubes and Related Nanostructures: A Deterministic Approach
Kostya (Ken) OSTRIKOV

11:45 H-S4.6(O) A02143-03690 pg H32
Controllable Growth of Ultralong Single-Walled Carbon Nanotubes on Substrates
Yan LI, Weiwei ZHOU, Zhong JIN, Yan ZHANG, Yu LIU, Rongli CUI, Jinyong WANG

12:00 H-S4.7(O) A01314-02298 pg H20
The Effects of Catalyst Treatments on the Growth of Millimeter High Vertically-aligned Carbon Nanotube Arrays
Zhaoyao ZHAN, Gengzhi SUN, Menghui CHEW, Belvin Tong Deng KOH, Tao WU, Lianxi ZHENG

12:15 H-S4.8(O) A01319-02306 pg H20
Re-growth Aligned Carbon Nanotubes with Improved Field Emission
Xiaodai LIM, Chorng Haur SOW

H-S5: Poster Session

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Gallery

H-S5.01(P) A00047-01657 pg H8
Energetic Properties and Work Function of K Intercalated Carbon Nanotube Tip: Applications to Field-Emission
Anucha PRATUMMA

H-S5.02(P) A00203-00388 pg H9
Preparation of Thermoplastic Polyurethane / Functionalized Graphene Sheet Nanocomposites by In Situ Method and Their Properties
Duc Anh NGUYEN, Anjanapura V. RAGHU, Youn Bok CHO, Han Mo JEONG

H-S5.03(P) A00203-00432 pg H10
Preparation of Waterborne Polyurethane/ Functionalized Graphene Sheet Nanocomposites by In Situ Method and Their Properties
Yu Rok LEE, Anjanapura V. RAGHU, Han Mo JEONG

H-S5.04(P) A00403-01141 pg H11
Synthesis and Characterization of Amorphous Hollow Carbon Spheres
Guang Min YANG, Sean LI, Chun Cheng YANG, Wei Tao ZHENG

H-S5.05(P) A00423-00814 pg H11
Reinforcing Effects of MWNTs and Alcohol Steam on the Electrospun Silk Ffibroin/Polyamide 6-66 Nano-scale Fiber Nonowoven
Anchang XU, Zhijuan PAN

H-S5.06(P) A00526-00956 pg H12
Removal of Lead(II) and Cadmium(II) Ions from Aqueous Solutions by Adsorption on Activated Carbon Prepared from Cashew Nut Shells
Singhadet TANGJUANK, Natkritta INSUK, Jeerapong TONTRAKOON

H-S5.07(P) A00579-01284 pg H12
Preparation and Characterizations of Align Carbon Nanotubes on Porous Silicon Substrate
Saifollah ABDULLAH, Mohamad RUSOP, Mohamad HERIADI, Hartinie AHMAD RAFAIE, Suhaidah AMIZAM, Nurul Fatahah ZAINAL

H-S5.08(P) A00647-01164 pg H13
Temperature Effect on Carbon Nanotube Synthesized from Palm Oil Precursor
Suriani ABU BAKAR, Mohamad Hanif MOHAMAD TAIB, Salina MOHAMAD, Shamsul Faez MOHAMAD YUSOP, Fakardellawarni MOHAMAD, Nik Farhana SHAMSUDIN, Nurul Fatahah Asyqin ZAINAL, Azira ABD. AZIZ, Saifollah ABDULLAH, Mohamad Rusop MAHMOOD

H-S5.29(P) A02206-03772 **pg H34**
Effect of Reaction Temperature on the Production of Carbon Nanotubes on a Silicon Dioxide Wafer
Muataz HUSSIEN

H-S5.30(P) A02219-03794 **pg H34**
Properties of Copper Coated with Carbon Nanotubes
Tahar LAOUI

H-S5.31(P) A02356-04061 **pg H35**
Preparation of the Multifunctional Films Based on Carbon Nanotubes: Conductive, Transparent, Superhydrophobic, Photocatalytic Films
Long-Yue MENG, Soo-Jin PARK

H-S5.32(P) A02451-04184 **pg H36**
Laser-Induced Pyrolysis: In-Situ Modulation of Carbon Black Morphology
Ernest POPOVICI, Ion MORJAN, Lavinia GAVRILA FLORESCU, Iuliana SOARE, Mihaela PLOSCARU, Catalin LUCULESCU, Ion SANDU, Ion VOICU

H-S5.33(P) A02529-04330 **pg H37**
Development of Carbon Nanotube-Filled Lead Free Sac Alloy Solder Paste
Blessie BASILIA, Jessica CRUZ, Richard CLEMENTE, Glen AVENDANO, Eduardo MAGDALUYO, JR.

H-S5.34(P) A02731-04704 **pg H38**
Purification of Carbon Nanotubes by NaOH Leaching and Froth Flotation
Pisan CHUNGCHAMROENKIT, Boonyarach KITIYANAN, Sumaeth CHAVADEJ, Ummarawadee YANATATSANEEJIT

H-S5.35(P) A02777-04744 **pg H38**
Carbon Nanofibers
Yi SU

H-S5.36(P) A02809-04907 **pg H39**
Adsorption of $MgCl_2$ on Surface-Modified Multi-Walled Carbon Nanotubes
Wannida APISUK, Boonyarach KITIYANAN

H-S6

Wednesday, 1 July 2009
10:30-12:30
Level 3, Room 308
Chair: Lain Jong Li

10:30 **H-S6.1-2(IN) A02895-04948** **pg H40**
Optical Properties of Purified Carbon Nanotube-polymer Composites
Robin J. NICHOLAS, A. BAKER, K.-C. CHUANG, A. NISH, T. SCHUETTFORT

11:00 **H-S6.3-4(IN) A00180-00805** **pg H9**
Interfacial Properties of Single-Walled Carbon Nanotubes
Kirk ZIEGLER

11:30 **H-S6.5(O) A01224-02106** **pg H19**
P3HT as the Surfactant on the Dispersion Single-walled Carbon Nanotubes
Cheng-Kai CHANG, Jeong-Yuan HWANG, Li-Chyong CHEN, Kuei-Hsien CHEN

11:45 **H-S6.6(O) A02967-05075** **pg H42**
Stability and Dispersibility of Single-Walled Carbon Nanotube Dispersion using Polysaccharides and Surfactants
Liangyu YAN, Tina Yu Qian TAN, Mary B. CHAN-PARK

12:00 **H-S6.7(O) A02135-03684** **pg H32**
Novel Natural Polymer-Carbon Nanotube Hybrid Materials: Preparation and Properties Thereof
Gang KE, Wenchao GUAN, Jinyan FAN, Zili LIU, Xiaoguo LIU

12:15 **H-S6.8(O) A00758-01353** **pg H14**
Study of Electrical Properties of Single Walled Carbon Nanotubes and Conducting Polymer Composites as a Function of Nanotube Length
Pramod Kumar BHATNAGAR, Parmatma Chandra MATHUR, Inderpreet SINGH, Abhishek VERMA

H-S7

Wednesday, 1 July 2009
14:00-15:15
Level 3, Room 308
Chair: TBA

14:00 **H-S7.1-2(IN) A02397-04238** **pg H36**
Wafer-scale Synthesis and Electrochemical Properties of Few-layer Graphene for Energy Applications
Li-Chyong CHEN, Ming-Shien HU, Abhijit GANGULY, Ying-Ying HORNG, Kuei-Hsien CHEN

14:30 **H-S1.3-4(IN) A01930-03330** **pg H31**
Carbon Nano Test Tubes: Interactions of Nanotubes with Molecules and Colloidal Particles
Andrei KHLOBYSTOV

15:00 **H-S7.5-6(IN) A02415-04127** **pg H36**
Ink-jet Printing of Nano-carbon Materials
Taishi TAKENOBU

H-S8

Wednesday, 1 July 2009
15:30-17:30
Level 3, Room 308
Chair: TBA

15:30 H-S8.1(O) A02184-03745 pg H33
Chemically-Doped Carbon Nanotubes as Interpenetrating Electrodes for Performance Enhancement of Organic Solar Cells
Ching-Yuan SU, Ang-Yu LU, Yi-Ling CHEN, Ching-Yen WEI, Pen-Cheng WANG, Chuen-Horng TSAI

15:45 H-S8.2(O) A02234-03955 pg H35
Preparation and Properties of Carbon Nanotubes-TiO_2 Nanocomposites
Yucheng WU, Xinmin HUANG, Rong REN, Xiaolu LIU

16:00 H-S8.3(O) A01548-03019 pg H24
Solution Processed CNT-PEDOT:PSS Composite and its Application in Organic Electronics
Malti BANSAL, Ritu SRIVASTAVA, C. LAL, M. N. KAMALASANAN, L. S. TANWAR

16:15 H-S8.4(O) A00445-01530 pg H12
***p-n* Junctions Formed with Carbon Nanotubes Deposited onto Ga-Doped ZnO Thin Films**
Yong-Won SONG, Jae Sang LEE, Seung Hwan YOO, Amos MARTINEZ, Shinji YAMASHITA, Sang Yeol LEE

16:30 H-S8.5(O) A02965-05073 pg H41
Reactive Spinning of Thermoset Composite Fibers Reinforced with Aligned and Functionalized Single-walled Carbon Nanotubes
Wei YUAN, Jianfei CHE, Mary B. CHAN-PARK

16:45 H-S8.6(O) A02963-05071 pg H41
Reinforcement of Alginate Hydrogels using Carbon Nanotubes
Yin Fun POON, Koon Thye LIM, Liang Yu YAN, Suganya C. A., Mary B. CHAN-PARK

17:00 H-S8.7(O) A02799-04790 pg H39
Effect of Carbon Nanotube Fillers on the Electrical Conductivity of High Density Polyethylene - Carbon Black Composites
Dinesh PUTTARAJEGOWDA, N.M. RENUKAPPA, Siddaramaiah, T. JEEVANAND, Joong-Hee Lee

17:15 H-S8.8(O) A01031-02007 pg H16
Fabrication and Characterization of Carbon Nanotube Electrode in Anodized Alumina Templates for Electrochemical Sensing
Ditsayut PHOKHARATKUL, Anurat WISITSORAAT, Chanpen KARUWAN, Tanom LOMAS, Adisorn TUANTRANONT

H-S9

Thursday, 2 July 2009
10:30-12:30
Level 3, Room 308
Chair: Mary B. CHAN-PARK

10:30 H-S9.1-2(IN) A02924-04999 pg H40
Solution-processed Transparent and Conducting Single Walled Carbon Nanotube and Graphene Thin Films
Manish CHHOWALLA

11:00 H-S9.3-4(IN) A01948-03376 pg H31
Carbon Nanotube Solar Energy Conversion Devices
Dirk M. GULDI

11:30 H-S9.5-6(IN) A01652-02941 pg H26
Optical Study of Graphene: From Fundamental Studies to Applications
Ze Xiang SHEN, Zhen Hua NI, Ying Ying WANG, Yu Meng YOU, Da ZHAN, Zhi Qiang LUO, Lei LIU, Yun MA, Ting YU

12:00 H-S9.7(O) A01102-01903 pg H17
A Thermal Rectifier from Cone-shaped Carbon Nanotube
Nuo YANG, Gang ZHANG, Baowen LI

12:15 H-S9.8(O) A00317-00620 pg H10
Caculation of Young's Moduli of Graphene Sheets and Carbon Nanotubes using Analytical Solution and Numerical Simulation
Mahmood M. SHOKRIEH, Roham RAFIEE

H-S10

Thursday, 2 July 2009
14:30-16:00
Level 3, Room 308
Chair: TBA

14:30 H-S10.1(O) A01552-02705 pg H25
Effect of Biocompatible and Mesoporous Single Walled Carbon Nanotube Matrices on Osteoblastic Cell Cultures
Wojtek TUTAK, Jack SHAMIE, Gary MONTEIRO, Federico SESTI, Manish CHHOWALLA

14:45 H-S10.2(O) A01668-03084 pg H26
A Novel All-plastic Liquid-gated Single-walled Carbon Nanotube Field Effect Transistor for Biosensing Applications
I Putu Mahendra WIJAYA, Ju Nie TEY, Isabel RODRIGUEZ, Subodh MHAISALKAR

15:00 H-S10.3(O) A01276-03401 pg H19
Development of a Low Cost Carbon Nanotube Based Alcohol Sensor
Jitender KUMAR, Inderpreet SINGH, Jasmeet SINGH, Sukhbinder Singh RAIT, Chhavi BHATNAGAR, Vinod Kumar JAIN

15:15 H-S10.4(O) A01922-03308 pg H30
Influence of Nitrogen-doping on the Structure and Electrochemical Characteristics of Multi-wall Carbon Nanotubes
Lyubov BULUSHEVA, Alexander OKOTRUB, Alexander KURENYA, Igor ASANOV, Ekaterina FEDOROVSKAYA, Huaihe SONG

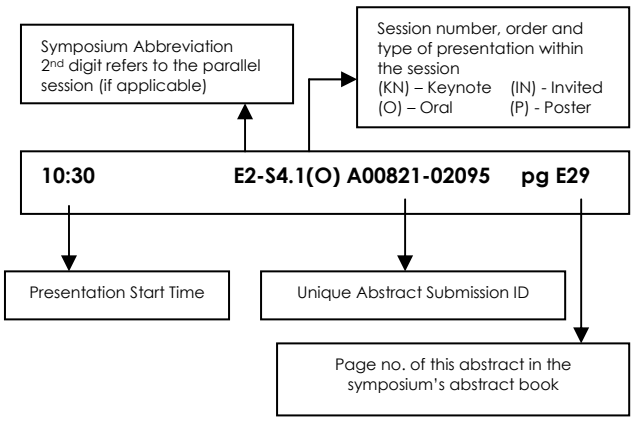
15:30 H-S10.5(O) A00086-00885 pg H8
Current-voltage Characteristics of Long Carbon Nanotubes Bundles
Laishram Tomba SINGH, Karuna Kar NANDA

15:45 H-S10.6(O) A00764-01346 pg H14
Charge Transport Properties of Multiwall Carbon Nanotubes
Ved Prakash ARYA, V PRASAD, PS ANIL KUMAR

SYMPOSIUM I

Carbon Rich Materials (CRMs) and Applications

The programme codes you will see in the following pages are decoded using an example below:



Symposium I: Carbon Rich Materials (CRMs) and Applications

Level 3, Room 312

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
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(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:15) **Session I-S4**	(10:30 - 12:15) **Session I-S6**	(10:30 - 12:15) **Session I-S9**	(10:30 - 11:00) Coffee Break
(11:00 - 12:15) **Session I-S1**				
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 15:45) **Session I-S2**	(14:00 - 15:45) **Session I-S5**	(14:00 - 15:30) **Session I-S7**	(14:30 - 15:45) **Session I-S10**	
(15:45 - 16:30) Break		(15:30 - 17:30) **Session I-S8** **POSTER SESSION**		
(16:30 - 17:30) **Session I-S3**	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

I-S1

Monday, 29 June 2009
11:00-12:15
Level 3, Room 312

11:00 I-S1.1-2(IN) A02900-04958 pg I35
Magnetic Properties of Nanographene and Their Chemical and Physical Modifications
T. ENOKI

11:30 I-S1.3(O) A00398-00755 pg I9
Bottom-up Growth of Epitaxial Graphene on 6H-SiC(0001)
Han HUANG, Wei CHEN, Shi CHEN,
Andrew Thye Shen WEE

11:45 I-S1.4(O) A00362-00667 pg I8
Direct Evaluation of the sp^3 Content in Tetrahedral Amorphous Carbon Films by XPS and Raman
Yuebin ZHANG, Sean LI

12:00 I-S1.5(O) A00409-03075 pg I9
Platinum Supported Nanoporous Carbon / Nitrogen Containing Carbon Molecular Sieves: Promising Electrocatalysts for Methanol Fuel Cell Application
Parasuraman SELVAM,
Balasubramanian VISWANATHAN, Balaiah KUPPAN

I-S2

Monday, 29 June 2009
14:00-15:45
Level 3, Room 312

14:00 I-S2.1-2(IN) A03007-05132 pg I37
Top Gated Single and Bilayer Graphene Transistors
A. K. SOOD

14:30 I-S2.3(O) A00467-01062 pg I10
Optical Limiter Using Chemically Processed Graphene and Its Functionalized Derivatives
Qiaoliang BAO, Shuai WANG, Han ZHANG,
Yong ZHOU, Ding Yuan TANG, Kian Ping LOH

14:45 I-S2.4(O) A00806-01414 pg I13
CO_2 Capture Capacity of Two Dimensional Carbon Nanostructure
Ashish Kumar MISHRA, T. Arockiya DOSS,
Sundara RAMAPRABHU

15:00 I-S2.5(O) A00964-01682 pg I14
Molecular Dynamics Studies of the pH Sensitivity of Solution-Gated Graphene
Daniel COLE, Kian Ping LOH

15:15 I-S2.6(O) A00841-01463 pg I13
Linear Plasmon Dispersion on Epitaxial Graphene
Jiong LU, Wei CHEN, Andrew T S WEE,
Kian Ping LOH

15:30 I-S2.7(O) A00893-01565 pg I14
Enhancing the Efficiency of Polymer Solar Cells by Cathode Modification Using Ionic-liquid-functionalized Nanostructured Carbon
Xiaohong CHEN, Jiaxiang YANG,
Kiran Kumar MANGA, Kian Ping LOH, Furong ZHU

I-S3

Monday, 29 June 2009
16:30-17:30
Level 3, Room 312

16:30 I-S3.1(O) A01180-02018 pg I16
Graphene Based NO_x Gas Sensor
Geunwoo GO, Hong-Yeol KIM, Jaehui AHN,
Young-Moo PARK, Kwan-Young LEE, Jihyun KIM

16:45 I-S3.2(O) A01249-02152 pg I17
Mechanical, Thermal and Electronic Properties of Carbon-related Nanomaterials Studied by ab initio TBMD and QMSMM
Kinichi MASUDA-JINDO, Vu Van HUNG,
Madou MENON

17:00 I-S3.3(O) A01262-02203 pg I17
Carbon Nanotubes as Inter-ply Strengtheners in Woven Carbon Fabric Prepreg Composites
Sunil C. JOSHI, Vishwesh DIKSHIT

17:15 I-S3.4(O) A01264-02188 pg I18
High Quality Graphene Growth on 6H-SiC(0001)
Chariya VIROJANADARA, Mikael SYVAJARVI,
Rositza YAKIMOVA, Leif JOHANSSON,
Alexei ZAKHAROV,
Thiagarajan BALASUBRAMANIAN

I-S4

Tuesday, 30 June 2009
10:30-12:15
Level 3, Room 312

10:30 I-S4.1-2(IN) A01342-03059 pg I18
Electrical Properties of Nanodiamonds and Their Use for Sensing Applications
Richard B. JACKMAN

11:00 I-S4.3-4(IN) A02229-03804 pg I29
Bio-inert Diamond Surfaces as Novel Candidates for Bio-electronics Interfaces
Philippe BERGONZO, M. BONNAURON,
J. C. ARNAULT, J. DE SANOIT, E. VAN HOVE,
E. SCORSONE, S. SAADA, C. AGNES, P. MAILLEY

11:30 I-S4.5(O) A01486-02581 pg I19
Cell Attachment and Proliferation on Undoped and Heavily Boron-Doped Polycrystalline Diamond
Charles AGNES, Fereshteh AZARI, Franck OMNES, Slimane GHODBANE, Pascal MAILLEY, Maryam TABRIZIAN, Philippe BERGONZO

11:45 I-S4.6(O) A01706-02970 pg I19
Surface Transfer Doping of Diamond by Organic Molecules
Dongchen QI, Wei CHEN, Xingyu GAO, Li WANG, Shi CHEN, Kian Ping LOH, Andrew T. S. WEE

12:00 I-S4.7(O) A01723-03005 pg I20
Hydrogenation and Dehydrogenation of Graphene Layers
Zhiqiang LUO, Ting YU, Zexiang SHEN

I-S5

Tuesday, 30 June 2009
14:00-15:45
Level 3, Room 312

14:00 I-S5.1-2(IN) A01826-03184 pg I22
Layer-by-Layer Construction of Hierarchic Carbon and Silica Nanostructures
Katsuhiko ARIGA

14:30 I-S5.3(O) A01921-03309 pg I22
Formation of Graphene on the Surface of Graphite Fluoride C2F
Alexander OKOTRUB, Lyubov BULUSHEVA, Igor ASANOV, Artem GUSELNIKOV, Konstantin BABIN, Paul GEVKO, Nikolay YUDANOV

14:45 I-S5.4(O) A01946-03514 pg I23
Electric Field Modulation of Graphene Channel
Kazuhito TSUKAGOSHI, Hisao MIYAZAKI, Akinobu KANDA

15:00 I-S5.5(O) A01749-03050 pg I21
Graphene Supercapacitors
Shuai WANG, Kwok Feng CHONG, Kian Ping LOH

15:15 I-S5.6(O) A00417-03460 pg I9
Two from One: Synthesis and Characterization of Micro and Nano Structured Carbon Materials and Amino Acid Derivatives from Proteinaceous Wastes
Thanikaivelan PALANISAMY, Thiruvilan AM, Ashokkumar M, Raghava Rao J, Chandrasekaran BANGARU

15:30 I-S5.7(O) A01001-01753 pg I15
CVD Synthesis of Few-layer Graphene and Graphene-based Flexible Transparent Conducting Thin Films
Zhen-Yu JUANG, Chih-Yu WU, Ang-You LU, Keh-Chyang LEOU, Fu-Rong CHEN, Chuen-Horng TSAI

I-S6

Wednesday, 1 July 2009
10:30-12:15
Level 3, Room 312

10:30 I-S6.1-2(IN) A02961-05068 pg I36
Microwave Synthesis of Graphene Sheets and Catalysis by Metal Nanocrystals Supported on Graphene
M. Samy EL-SHALL

11:00 I-S6.3-4(IN) A02616-04470 pg I34
Versatile Character of Carbon
Haibin SU

11:30 I-S6.5(O) A02155-03778 pg I26
Development of Single Diamond Crystal for Semiconductor Material
Yothin WONGPRASERT, Suchaya PONGSAI

11:45 I-S6.6(O) A02166-03729 pg I27
Fully Conjugated Oligo(perylene bisimides) : an Approach to the Construction of n-Type Graphene Nanoribbons
Zhaohui WANG

12:00 I-S6.7(O) A00782-01374 pg I12
Optical and Transport Properties of Substituted Perylene Diimide Derivatives
Sivamurugan VAJIRAVELU, Ramunas LYGAITIS, Grazulevicius JUOZAS VIDAS, Gaidelis VALENTAS, Jankauskas VYGINTAS, Suresh VALIYAVEETTIL

I-S7

Wednesday, 1 July 2009
14:00-15:30
Level 3, Room 312

14:00 I-S7.1-2(IN) A02894-04945 pg I35
Carbon Nanotubes as Nanosieve for the Selected Assembly of Quantum Dots
Chorng-Haur SOW, Xiaodai LIM, Suresh VALIYAVEETTIL

14:30 I-S7.3(O) A02170-03734 pg I27
Oligothieno[3,4-d]imidazoles for Electronic and Sensing Applications
Balaji GANAPATHY, Manoj PARAMESWARAN, Daisy SETYONO, Suresh VALIYAVEETTIL

14:45 I-S7.4(O) A02188-04055 pg I28
Carbon Rich Materials (CRMs) and Application - Oxidation Control through Study of SIC Nanocrystals with a BMI-Epoxy Blend Tried in a Carbon Carbon Composite
Kavapatti L. SUNDARKRISHNAA

15:00 I-S7.5(O) A02465-04217 pg I31
Fe Deposition on Epitaxial Graphene Layer: A Photoemission Study
Shi CHEN, Xingyu GAO, Dongchen QI, Yuzhan WANG, Andrew Thye Shen WEE, Xiaojiang YU, Herbert O MOSER

15:15 I-S7.6(O) A02468-04218 pg I32
Substrate Bias Effect on the Structure and Mechanical Properties of DLC Films by a Linear Ion Beam System
Wei DAI, Li-Li SUN, Ai-Ying WANG

I-S8: Poster Session

Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Gallery

I-S8.01(P) A00248-00466 pg I7
Magnetoresistance of $(Fe,Co)_x$-C_{1-x} /Si Nanostructure
Xiaozhong ZHANG, Caihua WAN, Xin ZHANG, Lihua WU, Xili GAO

I-S8.02(P) A00329-00606 pg I7
Physical Nature of Formation and Evolution of Gradient Nanostructure – Phase States on Plasma Strengthening of Cast-Iron Rolls and Servicing
Oleg EFIMOV, Yurii IVANOV, Alexey YURIEV, Victor GROMOV, Sergey KONOVALOV

I-S8.03(P) A00355-00730 pg I8
Dynamic Adsorption of Hg (II) Ions from Aqueous Solutons Using Activated Carbon Beds
Meenakshi GOYAL, Mamta BHAGAT, Rashmi DHAWAN

I-S8.04(P) A00366-01704 pg I8
Carbon Films Deposited on Copper Plate by Ethanol Chemical Vapor Deposition
Jin CHENG, Xiaoping ZOU

I-S8.05(P) A00486-00895 pg I10
Investigation on the Polymerization Mechanism of *N,N'*-Bismaleimide-4,4'-diphenylmethane and Barbituric Acid
Tai-Fong CHAO, Jia-Wei SHIU, Syang-Peng RWEIL, Leeyih WANG

I-S8.06(P) A00546-01001 pg I11
Development of Glucose Biosensor Based on Carbon Nanomaterials
Dhanasekaran MANIVANNAN, Challapalli SUBRAHMANYAM, Valsala Madhavan Nair BIJU

I-S8.07(P) A00658-01188 pg I11
Research of the Effect of Nano-Sizes Additives on the Fire Risk of Polymer Materials
Olga POTEMKINA

I-S8.08(P) A00680-01229 pg I12
Fullerene and Calixarene
Irene LING, Yatimah ALIAS, Mohamed MAKHA, Colin L. RASTON

I-S8.09(P) A00724-01289 pg I12
Synthesis of Processable Graphene Nanosheets from Exfoliation of CTAB Treated Graphite
Sajini VADUKUMPULLY, Jinu PAUL, Suresh VALIYAVEETTIL

I-S8.10(P) A00831-01473 pg I13
The Development of Polymeric Nanocomposites with Increased Thermal and Radiative Stability and Simulation of Their Behavior in Fire
Kira ZHOGOVA, Ivan DAVYDOV, Tat'yana MOROZOVA, Yulia BELOVA, Valery KRAVCHENKO, Oksana LAKEEVA

I-S8.11(P) A00917-04051 pg I14
Emulsion Polymerization of Polyacrylonitrile as a Precursor of Carbon Fibers
Sung-Won CHAE, Soo-Jin PARK

I-S8.12(P) A01001-03111 pg I15
Comparison of CNT-based and Graphene-based Transparent Conducting Thin Films
Zhen-Yu JUANG, Chih-Yu WU, Ang-You LU, Keh-Chyang LEOU, Fu-Rong CHEN, Chuen-Horng TSAI

I-S8.13(P) A01122-01932 pg I16
The Effects of Hydrogen Dilution on the Photoluminescence and Optical Energy Gap of Hydrogenated Amorphous Carbon Films
Rozidawati AWANG, Saadah ABDUL RAHMAN

I-S8.14(P) A01163-01982 pg I16
Anomalous Magnetic and Electrical Transport Behavior in Nano-crystalline Graphite
Guruprasad MANDAL, V. SRINIVAS, V. V. RAO

I-S8.15(P) A01308-04385 pg I18
Investigation on the Non-covalent Interaction of Single Walled Carbon Nanotubes with Polyurethane Ionomers
S. N. JAISANKAR, Donna NELSON J., N. G. NATCHIMUTHU, Asit B. MANDAL, Christopher N. BRAMMER, Heather RHOADS

I-S8.33(P) A02433-04150 **pg I31**
Synthesis of Centimeter-scaled Few-layer Graphene using Chemical Vapor Deposition Method
Sung-Yen WEI, Zhen-Yu JUANG, Chih-Yu WU, Ang-You LU, Keh-Chyang LEOU, Fu-Rong CHEN, Chuen-Horng TSAI

I-S8.34(P) A02468-04246 **pg I32**
Structure and Mechanical Properties of Cr-C:H Nanocomposite Films Deposited by a Hybrid Linear Ion Beam System
Wei DAI, Guo-Song WU, Ai-Ying WANG

I-S8.35(P) A02570-04392 **pg I32**
Control of Porous Properties of Resorcinol and Formaldehyde Carbon Xerogels by Solvent Exchange
Kriangsak KRAIWATTANAWONG, Sureeporn TUNTITANYAKUN, Prakob KITCHAIYA, Piyasan PRASERTHDAM

I-S8.36(P) A02570-04410 **pg I33**
Enhancement of the Mesoporous Properties of Carbon Xerogels by Chemical Treatment
Kriangsak KRAIWATTANAWONG, Prakob KITCHAIYA, Piyasan PRASERTHDAM

I-S8.37(P) A02847-04875 **pg I35**
Effective Doping of Single-Layer Graphene from Underlying SiO_2 Substrates
Lain-Jong LI, Yumeng SHI, Wenjing FANG

I-S9

Thursday, 2 July 2009
10:30-12:15
Level 3, Room 312

10:30 I-S9.1-2(IN) A02367-04379 **pg I30**
Drug Delivery for the Treatment of Cancer, Inflammation, and Wound Healing Enabled by Nanodiamond-Based Devices and Materials
Dean HO

11:00 I-S9.3-4(IN) A03008-05133 **pg I37**
Nano-scale Organic Semiconductors for Highly Stable Light-emitting Diodes and Lasers
Ling-Hai XIE, Wen-Yong LAI, Wei HUANG

11:30 I-S9.5(O) A02599-04439 **pg I33**
Nitrogen Incorporated Nanodiamond Electrode for Selective Detection of Bio-analyte
Supil RAINA, Weng Poo KANG, J. L. DAVIDSON

11:45 I-S9.6(O) A02847-04874 **pg I34**
Phonon Symmetry Breaking in Graphene Monolayers by Molecular Decoration
Lain-Jong LI, Dong XIAOCHEN, Peng CHEN, Zhao YANG

12:00 I-S9.7(O) A02061-03541 **pg I24**
Atomic Pathways towards the Synthesis of Fullerenes and Triazafullerenes from Polycyclic Aromatic Hydrocarbons
Giulio BIDDAU, Pablo POU, Gonzalo OTERO, Jose Angel MARTIN GAGO, Berta GOMEZ-LOR, Antonio ECHAVARREN, Ruben PEREZ

I-S10

Thursday, 2 July 2009
14:30-15:45
Level 3, Room 312

14:30 I-S10.1-2(IN) A02599-04440 **pg I34**
Carbon-Derived Field Emission Micro- and Nano-Electronic Devices
Weng Poo KANG, J. L. DAVIDSON, K. SUBRAMANIAN, Y. M. WONG

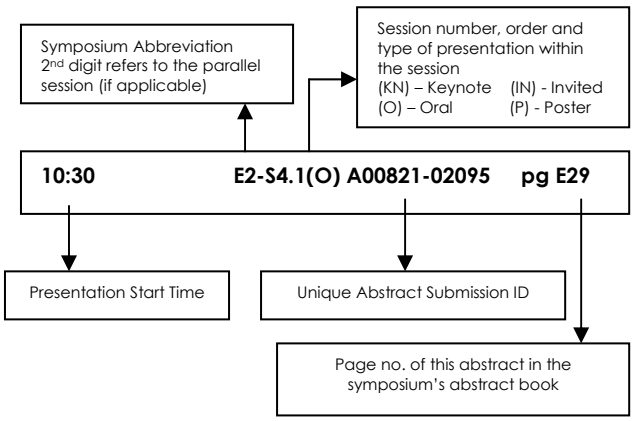
15:00 I-S10.3-4(IN) A02971-05081 **pg I36**
IR Excited Photo Luminescence (PL) of Natural Diamonds Containing Nickel: Electron-Vibration Interaction of NE8 Centre at 800nm
M. D. SASTRY, Sandesh MANE, Mahesh GAONKAR, K. V. R. MURTHY, Shripalkumar DESAI, Hemlata BAGLA, K. T. RAMCHANDRAN

15:30 I-S10.5(O) A01081-01880 **pg I15**
Edge Chirality Determination of Graphene by Raman Spectroscopy
YuMeng YOU, ZhenHua NI, Ting YU, ZeXiang SHEN

SYMPOSIUM J

Nanodevices and Nanofabrication

The programme codes you will see in the following pages are decoded using an example below:



Symposium J: Nanodevices and Nanofabrication

Level 3, Room 325

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session J-S1** **Nanodevices & Fabrication**	(10:30 - 12:30) **Session J-S4** **Nanotubes**	(10:30 - 12:30) **Session J-S6** **Nanodevices**	(10:30 - 12:30) **Session J1-S9** **Nano-optoelectronics**	(11:00 - 13:00) **Session J1-S12** **Nano-oxides**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session J-S2** **Nanostructures**	(14:00 - 16:15) **Session J-S5** **Nanopatterns**	(14:00 - 15:15) **Session J-S7** **Nanofabrication**	(14:30 - 16:00) **Session J1-S10** **Nano-solar Cells**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session J-S8** **Nanofabrication**	(16:00 - 18:00) **Session J-S11** **POSTER SESSION**	
(16:30 - 18:15) **Session J-S3** **Nano-modelling**	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

Symposium J(2): Nanodevices and Nanofabrication

Level 3, Room 323

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break			(10:30 - 12:30) **Session J2-S9** **Nano-characterization**	(10:30 - 11:00) Coffee Break
				(11:00 - 12:45) **Session J2-S12** **Nano-silicon Electronics**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
			(14:30 - 16:00) **Session J2-S10** **Nano-sensors**	
(16:15 - 16:30) Break			(16:00 - 18:00) **Session J-S11** **POSTER SESSION**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

J-S1: Nanodevices & Fabrication

Monday, 29 June 2009
11:00-12:15
Level 3, Room 325
Chair: Qing Zhang

11:00 J-S1.1-2(IN) A01597-02777 pg J47
Double Walled Carbon Nanotubes: Structure and Optical Property
Morinobu ENDO, Takuya HAYASHI, Yoong Ahm KIM, Hiroyuki MURAMATSU

11:30 J-S1.3-4(IN) A02969-05079 pg J68
Nanofuel Cells and Experimental Nanomechanics
Jing ZHU, Caofeng PAN, Morigen HE

12:00 J-S1.5-6(IN) A01764-03091 pg J52
Solid-State Dewetting of Films as a Route to Ordered Micro- and Nanostructures
C.V. THOMPSON, A.L. GIERMANN, D. KIM, W.K. CHOI, T.H. LIEW, Y. WANG, Y.J. OH, C.A. ROSS

J-S2: Nanostructures

Monday, 29 June 2009
14:00-16:15
Level 3, Room 325
Chair: William Milne

14:00 J-S2.1-2(IN) A02970-05080 pg J69
Chemically Active Plasma-aided Fabrication of Nanoscaled Materials
Shuyan XU, K. OSTRIKOV

14:30 J-S2.3(O) A01104-01909 pg J35
Synthesis and Characterization of Nanoscale Inverted Structures of Cobalt and Nickel Silicides
Tom WU, Huatao WANG

14:45 J-S2.4(O) A00947-02621 pg J31
Formation of Amorphous 1D CuPc Nanostructures and Their Crystallization and Transformation by Heat Treatment
Chia-Yu WANG, Chun-Pei CHO, Tsong-Pyng PERNG

15:00 J-S2.5(O) A01556-02870 pg J46
From Metal Nanocrystalline Film to 1-D Metal Oxide Nanoneedles: Synthesis, Growth Mechanism and Properties
Chunxu PAN, Jun ZHANG, Xiang QI, Yueli LIU, Qiaoliang BAO

15:15 J-S2.6(O) A01976-03429 pg J55
Fabrication and Characterization of Novel Organic Thin Film Transistors with CdSe/ZnS Quantum Dots Embedded in Bilayer Gate Dielectric
Ying-Chih CHEN, Tsung-Syun HUANG, Chun-Yuan HUANG, Yan-Kuin SU

15:30 J-S2.7(O) A01381-02982 pg J41
Synthesis and Characterization of Zn_2SnO_4 Nanowires and the Electrical Properties of Zn_2SnO_4 Nanowire Field Effect Transistor
Christina PANG, Lei LIAO, Bin YAN, Ting YU

15:45 J-S2.8(O) A01482-02570 pg J44
Template-free Growth of NiO Nanowire Array by Metal-etching-oxidation Method
Zhipeng WEI, Haiyang PENG, Zhou ZHANG, Donglai GUO, Lai Mun WONG, Shi Jie WANG, Tom WU

16:00 J-S2.9(O) A00344-00640 pg J16
Atomic Layer Deposition of Al_2O_3 to Bond Free-Standing Nanoporous Alumina Templates onto Substrates
Lee Kheng TAN, Kumar MANIPPADY KRISHNA, Han GAO

J-S3: Nano-modelling

Monday, 29 June 2009
16:30-18:15
Level 3, Room 325
Chair: Jing Zhu

16:30 J-S3.1-2(IN) A02445-04172 pg J62
Carbon Nanotubes for Field Emission Applications
William MILNE, Mark MANN

17:00 J-S3.3(O) A01670-02888 pg J48
Morphology-Dependent Stimulated Emission and Field Emission of Ordered CdS Nanostructure Arrays
Tianyou ZHAI, Xiaosheng FANG, Yoshio BANDO, Qing LIAO, Xijin XU, Ying MA, Jiannian YAO, Dmitri GOLBERG

17:15 J-S3.4(O) A01254-02172 pg J38
Numerical Analysis of Carrier Statistics in Low-Dimensional Nanostructure Devices
Razak M. A LEE, Ismail SAAD, M. Taghi AHMADI, Razali ISMAIL, Vijay. K ARORA

17:30 J-S3.5(O) A02241-04011 pg J59
Simulation of Si Quantum Dot with Ge Core Memory
Yudi DARMA, Rizal KURNIADI, Rena WIDITA

17:45 J-S3.6(O) A01387-02497 pg J41
The Model of Circuit of Single Electron Transistor and Simulation of Its Circuits
Gang LU, Fenfen WEI, Shengchun MAO

18:00 J-S3.7(O) A00748-01324 pg J25
Nonequilibrium Green's Function Based Quantum Transport Simulation for Strained-Engineered Nanoscale Transistors in Presence of Electron-phonon Interactions
T K MAITI, C K MAITI

J-S4: Nanotubes

Tuesday, 30 June 2009
10:30-12:30
Level 3, Room 325
Chair: Ting Yu

10:30 J-S4.1-2(IN) A02697-04637 pg J66
Separating Carbon Nanotubes: Connecting Single Molecule Electrical Measurements to Ensemble Spectroscopic Properties
Michael STRANO, Woo Jae KIM, Chang Young LEE, Richa SHARMA, Nitish NAIR

11:00 J-S4.3(O) A00078-02559 pg J12
Modulation of Electron Transport in SWCNTs by Biological Macromolecules Conjugation
Toshiaki HIGASHI, Yoshikata NAKAJIMA, Mio KOJIMA, Koji ISHII, Tatsuro HANAJIRI, Akira INOUE, Toru MAEKAWA

11:15 J-S4.4(O) A01805-03153 pg J53
Illumination-Enhanced Hysteresis of Transistors Based on Carbon Nanotube Networks
Chun Wei LEE, Jun WEI

11:30 J-S4.5(O) A01160-01979 pg J36
Fabrication of Carbon Nanotube Field Effect Transistors with OCMC Dispersed Single Wall Carbon Nanotubes
Raj KUMAR, Zhang QING, Yan LIYANGYU, Mary B. Chan PARK

11:45 J-S4.6(O) A01904-03388 pg J54
Conductivity Enhancement of Single Walled Carbon Nanotube Thin Films by means of Oxidation
Hosea TANTANG, Jun WEI

12:00 J-S4.7(O) A00761-01911 pg J26
Nanomechanical Properties of a SnAgCu Solder Reinforced with Ni-coated Carbon Nanotubes
Yongdian HAN, Hongyang JING, Sharon Mui Ling NAI, Yuchan LIU, Cher Ming TAN, Jun WEI, Lianyong XU

12:15 J-S4.8(O) A00665-01208 pg J23
Deposition and Functionalization of Thin Films of Carbon Nanotubes Using Corona Based Electrostatic Charge Technique and Their Applications for Gas Detection
Vasuda BHATIA, Vikesh GAUR, Vinod JAIN

J-S5: Nanopatterns

Tuesday, 30 June 2009
14:00-16:30
Level 3, Room 325
Chair: Carl V Thompson

14:00 J-S5.1-2(IN) A01867-03226 pg J54
Creation of Nano Structures with Interference Lithography
WK CHOI, TH LIEW, Y JIA, MK DAWOOD, CV THOMPSON, Y WANG, HI SMITH, MH HONG

14:30 J-S5.3(O) A00994-01749 pg J33
Femtosecond Laser Induced Microexplosion: A New Strategy to Synthesise Super-dense Nanomaterials in Highly Nonequilibrium Conditions
Saulius JUODKAZIS, Hiroaki MISAWA, Eugene GAMALY, Andrei RODE

14:45 J-S5.4(O) A01714-02990 pg J50
Superhydrophobic Flexible Aerogels and Applications
A. Venkateswara RAO, Digambar Y. NADARGI

15:00 J-S5.5(O) A00210-00401 pg J14
Plasma Etching of Proton Exchanged Lithium Niobate
Guangyuan SI, Aaron DANNER, Jinghua TENG, Soo Seng ANG, Ah Bian CHEW

15:15 J-S5.6(O) A00515-02688 pg J19
Optimization of Plasmonic Crystal Profiles in Fabrication by Interference Lithography
Husen Kartasasmita KANG, Xin Rong CHUA, Chee Cheong WONG, Filippo ROMANATO

15:30 J-S5.7(O) A00509-00989 pg J19
Influence of Room Humidity on the Formation of Silicon Oxide Nanopatterns by Using Atomic Force Microscopy (AFM)
Ahmad Makarimi ABDULLAH, Sabar Derita HUTAGALUNG, Zainovia LOCKMAN

15:45 J-S5.8(O) A02128-03660 pg J57
Oriented Crystal Growth of Flower-like Structured InN on Sapphire Substrate by Halide Chemical Vapor Deposition
Naonori SAKAMOTO, Haruka SUGIURA, Naoki WAKIYA, Hisao SUZUKI

16:00 J-S5.9(O) A01109-01910 pg J36
Nano-indentation Patterns for Surface Enhanced Raman Scattering
Ying-Yi LIN, Li-Kai LIN, Jiunn-Der LIAO

16:15 J-S5.10(O) A02480-04240 pg J63
Investigation of the Performance of Pair and Sandwich Superlattice-like Structures
Yew Hua CHUA, Luping SHI, Rong ZHAO, Yee Chia YEO

J-S6: Nanodevices

Wednesday, 1 July 2009
10:30-12:30
Level 3, Room 325
Chair: Michael Strano

10:30 J-S6.1-2(IN) A01117-01920 pg J36
High Performance Carbon Nanotube Based Doping Free CMOS and Optoelectronics Devices
Lian-Mao PENG, Zhiyong ZHANG, Sheng WANG, Xuelei LIANG, Qing CHEN

11:00 J-S6.3-4(IN) A02137-03680 pg J57
Carbon Nanotube Alignment and Its Applications
Qingwen LI, Hui YANG

11:30 J-S6.5(O) A02021-03478 pg J56
Langmuir-Blodgett Asesmbly of 4-methylbenzenethiol-Functionalized Au Nanoparticles for Non-volatile Memory Applications
R K GUPTA, D Y KUSUMA, P S LEE, D RAJARATHNAM, M P SRINIVASAN

11:45 J-S6.6(O) A00447-00837 pg J17
Silicon Nanowires Transistor Fabricated by AFM Nanolithography Followed by Chemical Etching Process
Kam Chung LEW, Sabar D. HUTAGALUNG

12:00 J-S6.7(O) A00943-01684 pg J31
Electrostatic Effects in Schottky Contact Modification at the Nano-scale
Justin SONG, Johnson GOH, Natarajan CHANDRASEKHAR, Cedric TROADEC

12:15 J-S6.8(O) A01078-01870 pg J35
Schottky Contacts Formed on Silicon Nanowires
Yongshun SUN, RUSLI, Kai Lin FOO, Wen XU

J-S7: Nanofabrication

Wednesday, 1 July 2009
14:00-15:15
Level 3, Room 325
Chair: Wee Kiong Choi & Shuyan Xu

14:00 J-S7.1-2(IN) A03012-05141 pg J69
Global NanoTech: The Equalizer Effect of NanoTech
Mohamed ABDEL-MOTTALEB

14:30 J-S7.3-4(IN) A02936-05016 pg J67
"Zero Stitching Error" Nanofabrication Strategies for Nanodevice Performance Improvements
Frank NOUVERTNE, Axel RUDZINSKI, Guido PIASZENSKI

15:00 J-S7.5-6(IN) A02938-05021 pg J68
Exploring Materials Heterogeneities with Kelvin Force Microscopy
S. MAGONOV, Xiu-Qiang TONG

J-S8: Nanofabrication

Wednesday, 1 July 2009
15:30-17:30
Level 3, Room 325
Chairs: Wee Kiong Choi & Shuyan Xu

15:30 J-S8.1(O) A00832-01454 pg J27
Fabrication of a 3D Micro-valve by Two-photon Absorption
Charalampos SCHIZAS, Vassiliki MELISSINAKI, Arune GAIDUKEVICIUTE, Carsten REINHARDT, Christoph OHRT, Maria FARSARI, Dimitris KARALEKAS, Boris CHICHKOV, Vassilis DEDOUSSIS, Costas FOTAKIS

15:45 J-S8.2(O) A02508-04298 pg J64
High-Purity Separation of Gold Nanoparticle Dimers and Trimers
Gang CHEN, Yong WANG, Li Huey TAN, Miaoxin YANG, Lee Siew TAN, Yuan CHEN, Hongyu CHEN

16:00 J-S8.3(O) A00914-01618 pg J29
Integration of High-k Dielectric with Epitaxial GaAs on Ge Substrate
Goutam Kumar DALAPATI, Ching Kean CHIA, Stephanie Yi Peng PANG, Ghim Wei HO, Han GAO, Krishna Kumar MANIPPADY, Andrew See Weng WONG, Dongzhi CHI

16:15 J-S8.4(O) A02308-03943 pg J60
Fabrication of Polythiophene Hybrid Structures on Silicon Surfaces by Covalent Molecular Assembly
Sundaramurthy JAYARAMAN, Rajarathnam D., Srinivasan M. P.

16:30 J-S8.5(O) A02189-03959 pg J58
Fabrication of Distributed Feedback Grating from Polymer Hybrid which Showing Photo-pumped Lasing Action
Rahmat HIDAYAT, Sahrul HIDAYAT, Fitrilawati, Herman, Masayoshi OJIMA, Akihiko FUJII, Masanori OZAKI

16:45 J-S8.6(O) A02298-04013 pg J60
Development of Transient Phase Change Analysis Method in Phase Change Devices
Eng Guan YEO, Rong ZHAO, Luping SHI, Tow Chong CHONG, Adesida ILESANMI

17:00 J-S8.7(O) A02883-04931 pg J66
Ion Assisted Deposition of HfO_2 for CMOS Gate Dielectric Applications
J. BUJJAMMA, K. L. GANAPATHI, S. MOHAN

17:15 J-S8.8(O) A02641-04537 pg J65
Electrical Properties of AlGaN/GaN Heterostructure Field Effect Transistors (HFETs) with and without Mg-doped Carrier Confinement Layer
Asaad HUSSEIN, Z. HASSAN, H. ABU HASSAN, S. THAHAB

J1-S9: Nano-optoelectronics

Thursday, 2 July 2009
10:30-12:30
Level 3, Room 325
Chair: Mohamed Abdel-Mottaleb

10:30 J1-S9.1-2(IN) A00778-01368 pg J27
Dilute Nitride-antimonide Semiconductor Alloys for High Speed Micro and Nanosystems: A Review of Recent Progress
Soon YOON

11:00 J1-S9.3-4(IN) A02328-03983 pg J61
In-situ Study on Intrinsic Photoconductivity Properties for Individual CdS Nanobelts
Jin AN, Jian-Bin XU, Kun XUE

11:30 J1-S9.5(O) A01721-03001 pg J50
Towards Photosynthetic Nanoparticles
Hongyu CHEN, Shuangxi XING, Tao CHEN, Miaoxin YANG

11:45 J1-S9.6(O) A02215-03790 pg J59
New Design for Optical Filters Based on Photonic Crystals
Abderrahmane BREZINI, Zou QIN, Peter FULDE

12:00 J1-S9.7(O) A02510-04305 pg J64
Performance on Indium Nitride Nanorods / Polymer Photodiode
Wei-Jung LAI

12:15 J1-S9.8(O) A00053-00767 pg J11
Photovoltaic Application of Sub-band Absorption in Quantum Wells
Partha GOSWAMI

J2-S9: Nano-characterization

Thursday, 2 July 2009
10:30-12:30
Level 3, Room 323
Chair: Lianmao Peng

10:30 J2-S9.1-2(IN) A01470-02550 pg J43
Symmetric Effect of Spin Transport in a Magnetic Superlattic
Hui YAN, RuZhi WANG

11:00 J2-S9.3-4(IN) A03026-05156 pg J70
Conductive AFM for Photosensitive (Solar) Materials
David BECK

11:30 J2-S9.5(O) A00914-01603 pg J29
Characterization of Alloy Gate Dielectrics on p-GaAs
Goutam Kumar DALAPATI, Nguyen Viet TRUNG, Ghim Wei HO, Hoon-Jung OH, Sungjoo LEE, Aadi SRIDHARA, Andrew See Weng WONG, Ching Kean CHIA, Dongzhi CHI

11:45 J2-S9.6(O) A01000-01752 pg J33
A Study of the Cobalt Phthalocyanine-Ag-Si(111) Interface
Fei SONG, Justin WELLS, Zheshen LI, Karsten HANDRUP, Shining BAO, Edward PERKINS, Karina SCHULTE, Marja AHOLA-TUOM, Lauge GAMMELGAARD, Philip HOFMANN

12:00 J2-S9.7(O) A00891-01552 pg J28
Raman Studies of Electrostatic Doping of a Thin Single-walled Carbon Nanotube Bundle
Pingqi GAO, Qing ZHANG, Shaoning YUAN, Ning PENG, Deyan HE

12:15 J2-S9.8(O) A00925-01629 pg J30
Optical Properties and Visible Room Temperature Photoluminescence of Amorphous Silicon Rich Silicon Nitride in SiO_2/SiN_x Quantum Well Structures
Lobna KAMYAB, RUSLI, Mingbin YU, Lining HE, Manik DUA

J1-S10: Nano-solar Cells

Thursday, 2 July 2009
14:30-16:00
Level 3, Room 325
Chair: Soon Fatt Yoon

14:30 J1-S10.1(O) A00456-00845 pg J18
Thermal Stability Enhancement of P3HT/PCBM Solar Cells by Controlling the Polymer Regioregularity
Hung-Wei LIU, Kuen-Jang HUANG, Ming-Dao WANG, Tzu-Yu HUANG, Syang-Peng RWEI, Leeyih WANG

14:45 J1-S10.2(O) A00267-00775 pg J16
Quasi-solid-state Dye-sensitized Solar Sells Based on Thermosetting Polymer Gel Electrolyte
Xiaodong LI, Xi Jiang YIN, Dingwen ZHANG, Zhengan WANG, Zhuo SUN, Sumei HUANG

15:00 J1-S10.3(O) A01864-03236 pg J53
Enhancing InGaP/GaAs/Ge Multi-junction Solar Cell Efficiency by Using Quantum Dots Excitation
H. C. LEE, Y. K. SU, C. Y. HUANG, T. C. LI, Y. C. CHEN, W. J. LIN, J. C. LIN, K. J. CHAN

15:15 J1-S10.4(O) A00770-01355 pg J26
Destination of Excitons at Interfaces in Organic Solar Cells
Song QUNLIANG, Li CHANGMING

15:30 J1-S10.5(O) A00932-01647 pg J31
Optically and Electrically Excited Light Emission from Silicon Nitride Films Implanted with Si Ions
Zhanhong CEN, Tupei CHEN, Liang DING, Yang LIU, Ming YANG, Jen It WONG, Zhen LIU

15:45 J1-S10.6(O) A01586-02768 pg J47
Photoluminescence Model for Silicon Nanoclusters
Mekuriaw ASHAGRIE, Sib Krishna GHOSHAL

J2-S10: Nano-sensors

Thursday, 2 July 2009
14:30-16:00
Level 3, Room 323
Chair: Hui Yan

14:30 J2-S10.1(O) A00983-01989 pg J32
Ultra-long Indium Oxide (In_2O_3) Layered Nanorods for NO_x Sensing Application
Nandan SINGH, Pooi See LEE

14:45 J2-S10.2(O) A00336-00625 pg J16
DNA Sensing Using Nanogaps Fabricated by Shadow Evaporation
Huijuan ZHANG, Francesco STELLACCI, John THONG, Xiaogang LIU, Manyin LEUNG

15:00 J2-S10.3(O) A01171-02446 pg J37
DNA Sensing and Sensitivity Enhancement by Carbon Nanotube Based Devices
Dongliang FU, Xiaochen DONG, Jun WEI

15:15 J2-S10.4(O) A01732-03013 pg J51
Oligopeptide-Modified Silicon Nanowire Arrays as Multichannel Metal Ion Sensors
Xinyan BI, Agarwal AJAY, Kun-Lin YANG

15:30 J2-S10.5(O) A02375-04063 pg J62
Functionalized Polymer Single Nanowires as Fast-Response High-Selectivity Optical Sensors
Fuxing GU, Lei ZHANG, Xuefeng YIN, Limin TONG

15:45 J2-S10.6(O) A03013-05142 pg J69
Novel Nanoelectronic Switching Devices with Three Terminal Semiconductor Nanowire Based T-shaped Hetero-junctions
Lingchao CAO, Yunqi LIU, Dacheng WEI, Lei FU, Liping HUANG, Gui YU

J-S11: Poster Session

Thursday, 2 July 2009
16:00 - 18:00
Level 3, Gallery

J-S11.01(P) A00090-00387 pg J12
Comparative Study of Humidity Sensing Properties of n-type ZnO Nanomaterial Synthesized through Oxalate and Hydroxide Route
Richa SRIVASTAVA, Balchandra YADAV

J-S11.02(P) A00122-01021 pg J12
Fully Analytical Surface Potential Based Drain Current Model of Short Channel MOSFETs Including Quantum Mechanical Effects
Jayadeva GOWRAPURA SRIKANTAIAH, Amitava DASGUPTA

J-S11.03(P) A00267-00770 pg J15
TiO_2 Nanotubes as Additive to TiO_2 Film for Improving Performance of Dye-sensitized Solar Cells
Xiaodong LI, Sumei HUANG, Dingwen ZHANG, Zhengan WANG, Zhuo SUN, Xi Jiang YIN

J-S11.04(P) A00402-00773 pg J17
Quasi-solid-state Dye Sensitized Solar Cells with a High Molecular Polymer Electrolyte Based on PEO/P(VDF-HFP) and MPII
Dingwen ZHANG, Sumei HUANG, Xiaodong LI, Zheng'an WANG, Jianhua SHI, Zhuo SUN, Xi Jiang YIN

J-S11.05(P) A00532-00969 pg J20
Effect of Lateral Charge Diffusion on the Memory Characteristics of Device Embedded with Si Nanocrystals
Jen It WONG, Tu Pei CHEN, Ming YANG, Yang LIU

J-S11.06(P) A00585-01787 pg J22
Effects of Implantation Energy and Dose on Non-volatile Memory Behaviors of Low-energy Ion-implantation-synthesized Ge Nanocrystals
Ming YANG, Tupei CHEN, Yang LIU, Jen It WONG

J-S11.07(P) A01351-02359 pg J40
The Effect of Operating Temperatures on H_2 Gas Sensing Properties of Spin-coated Films of Flame-spray-made Ru/SnO_2 Nanoparticles
Chaikarn LIEWHIRAN, Anurat WISITSORAAT, Sukon PHANICHPHANT

J-S11.08(P) A01490-02589 pg J44
Effect of Anchoring Groups on Electron Transport in Single Molecular Junctions
Aruna Priya P, Preferencial Kala C, John Thiruvadigal D

J-S11.09(P) A01548-03023 pg J45
Carbon Nanotube Based Devices in the Realm of Macro & Nanoelectronics
Malti BANSAL, Ritu SRIVASTAVA, C. LAL, M. N. KAMALASANAN, L. S. TANWAR

J-S11.10(P) A01569-02738 pg J46
Fluorescent Detection and Quantification of Total Proteins in Urine
Bee Jin Michelle LOW, Enyi YE, Ming Yong HAN

J

J1-S12: Nano-oxides

Friday, 3 July 2009
11:00-13:00
Level 3, Room 325
Chair: Qingwen Li

11:00 J1-S12.1(O) A01717-02997 pg J50
Fabrication and Optical Waveguide Property of Single-crystalline V_2O_5 Nanofibers
Ting YU, Bin YAN, Zexiang SHEN

11:15 J1-S12.2(O) A00422-00806 pg J17
Local Structural and Optical Properties of Ion-Implanted ZnO Nanorods
Sang-Wook HAN, Byung-Hyuk KIM, Chang-In PARK, Changha KWAK, Soo-Young SEO, Sun-Hyo KIM, Sun-Hong PARK

11:30 J1-S12.3(O) A01513-02634 pg J45
Compare the Hydrothermal and VPT Grown ZnO Nanowire Field Effect Transistor
Ye WANG, Xiao Wei SUN, Jun Liang ZHAO, Gregory GOH, Lan Lan CHEN, Laura-Lynn LIEW, Ji Jun QIU

11:45 J1-S12.4(O) A01735-03017 pg J52
UV Light-emitting Diodes Based on ZnO Nanorod Homojunction
Bo LING, Xiao Wei SUN, Jun Liang ZHAO, Yi YANG, Swee Tiam TAN, Xiao Cheng LI

12:00 J1-S12.5(O) A00224-01840 pg J14
Preparation and Optical Properties of 30 and 60 nm Pure Co_3O_4 Nanowires
Yu-Cheng CHEN, Jen-Bin SHI, Chih-Jung CHEN, Ya-Ting LIN, Po-Feng WU

12:15 J1-S12.6(O) A00438-00822 pg J17
Effect of Microstructure of Ti Films on the Formation of TiO_2 Nanotubes by Anodization
Yuxin TANG, Jie TAO, Dangguo GONG, Zhong CHEN

12:30 J1-S12.7(O) A01973-04483 pg J55
Direct Growth of ZnO Nanocrystals onto the Pores of Porous TiO_2 Nanotube Array Films for the Fabrication of Highly Efficient and Recyclable Photocatalyst
Huiying YANG, Siu Fung YU, Xiwang ZHANG

12:45 J1-S12.8(O) A01996-03440 pg J56
Influence of Post O_2 Annealing on the Resistive Switching Behavior of HfO_2 Dielectric
Raymond SIM, Mei Yin CHAN, Pooi See LEE

J2-S12: Nano-silicon Electronics

Friday, 3 July 2009
11:00-12:45
Level 3, Room 323
Chair: Jian-Bin Xu

11:00 J2-S12.1(O) A00151-03970 pg J13
Confirmation of Distribution of High-density Trap States in SOI Layer of SIMOX Wafers by Tunneling Current
Yoshikata NAKAJIMA, Takahiro TODA, Tatsuro HANAJIRI, Toru TOYABE, Takuo SUGANO

11:15 J2-S12.2(O) A00707-01265 pg J24
Drain Induces Barrier Lowering (DIBL) in Short-Channel NMOSFETs at Elevated Temperature
Nopphon PHONGPHANCHANTHRA, Anucha RUANGPHANIT, Nipapan KLUNNGIEN, Wittawat YAMWONG, Surasak NIEMCHAROEN, Sanya KHUNKHAO

11:30 J2-S12.3(O) A01181-02027 pg J37
Characterization of the Electronic Properties of Hydrogen-Terminated Silicon Surface
Yong Kiat YEO, Hiroyo KAWAI, Mark SAEYS, Christian JOACHIM

11:45 J2-S12.4(O) A01252-03207 pg J38
Equation based Method to Model Double-Gate MOSFET Drain Current
Ali FATTAH HESARI, Saeed KHATAMI

12:00 J2-S12.5(O) A01473-02554 pg J43
Advanced Drain-Source-On-Insulator MOSFETs for Suppression of Thermal Effect
Tatsuya YAMADA, Yoshiyasu MIYAZAWA, Yoshikata NAKAJIMA, Tatsuro HANAJIRI, Toru TOYABE, Takuo SUGANO

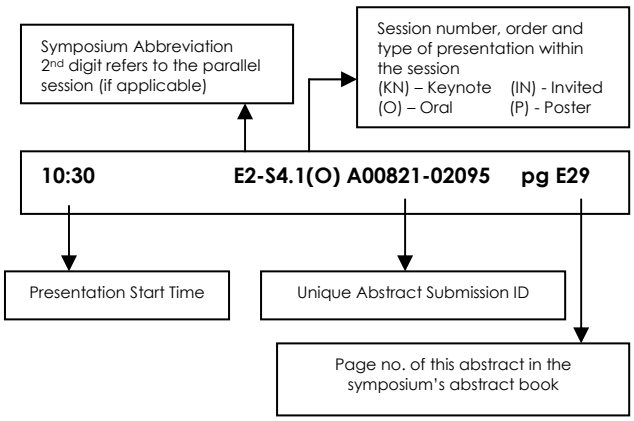
12:15 J2-S12.6(O) A02481-04241 pg J63
Material Study for Line-type Phase Change Random Access Memory (PCRAM)
Leong Tat LAW, Rong ZHAO, Luping SHI, Yee Chia YEO

12:30 J2-S12.7(O) A01256-02163 pg J39
Near-field Raman Analysis of Sub-100 nm Strained MOSFETs
Choun Pei WONG, Johnson KASIM, Jinping LIU, Alex SEE, Zexiang SHEN

SYMPOSIUM K

Nano Patterning & Surface Characterization

The programme codes you will see in the following pages are decoded using an example below:



Symposium K: Nano Patterning & Surface Characterization

Level 3, Room 326

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session K-S1** **Nano Patterning**	(10:30 - 12:30) **Session K-S4** **Nano Patterning**	(10:30 - 12:30) **Session K-S6** **Templated Growth**	(10:30 - 12:30) **Session K-S9** **Dip Pen Lithography**	(11:00 - 13:00) **Session K-S12** **Surface Characterization**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session K-S2** **Bio-Patterning**	(14:00 - 16:30) **Session K-S5** **Scanning Probe Technologies**	(14:00 - 15:30) **Session K-S7** **Self-assembly**	(14:30 - 16:00) **Session K-S10** **Nanosphere Lithography**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session K-S8** **Self-assembly-2**		
(16:30 - 18:00) **Session K-S3** **Energy**			(16:00 - 18:00) **Session K-S11** **POSTER SESSION**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

Symposium K(2): Nano Patterning & Surface Characterization

Level 3, Room 323

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session K2-S4** **Nano Patterning**			(10:30 - 11:00) Coffee Break
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(15:00 - 16:15) **Session K2-S2** **Thin Films**	(14:00 - 16:30) **Session K2-S5** **Nanoimprint Lithography**			
(16:15 - 16:30) Break				
(16:30 - 17:45) **Session K2-S3** **Nanoscale Characterization**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

K-S1: Nano Patterning

Monday, 29 June 2009
11:00 - 13:00
Level 3, Room 326
Chair: Jim DE YOREO

11:00 K-S1.1-2(KN) A00698-01255 pg K14
Hybrid Nanopattern Supramolecular Architecture Investigated by Scanning Tunneling Microscopy
Li-Jun WAN

11:30 K-S1.3-4(IN) A02691-04628 pg K45
Electrochemical Anodization and Interfacial Reaction Growth of Porous Functional Nanomaterials
Kai WU

12:00 K-S1.5-6(IN) A01041-01814 pg K20
Lithographically Controlled Growth of Al_2O_3 Membranes: Development of a Tool-box for 1D Nanostructures
Kornelius NIELSCH

K-S2: Bio-Patterning

Monday, 29 June 2009
14:00 - 16:15
Level 3, Room 326
Chair: Yong CHEN

14:00 K-S2.1-2(IN) A02681-04611 pg K45
A Biomimetic Approach to Template-driven Fabrication of Nanostructures
Jim DE YOREO

14:30 K-S2.3-4(IN) A01841-03195 pg K35
Interfacing Living Cells with Nanostructured Materials
Peng CHEN

15:00 K-S2.5-6(IN) A02562-04378 pg K42
Tailored Nanostructure-Based Optical Biosensing Strategies
Jwa-Min NAM

15:30 K-S2.7(O) A00117-00380 pg K9
2D Bicomponent Supramolecular Patterns on Solid Surfaces: Flexibility and Functionality
Yuli HUANG, Wei CHEN, Han HUANG, Andrew WEE

15:45 K-S2.8(O) A01886-03281 pg K36
Protein Immobilization and Specific Protein-Protein Binding Events Drive Orientational Transitions of Liquid Crystals
Deny HARTONO, Chang-Ying XUE, Kun-Lin YANG, Lin-Yue Lanry YUNG

16:00 K-S2.9(O) A02580-04407 pg K42
Highly Ordered Chemical Patterns for Controlling Proteins at Interfaces using Binary Colloid Crystals as Templates
Gurvinder SINGH, Saju PILLAI, Ayyoob ARPANAEI, Morten FOSS, Peter KINGSHOTT

K2-S2: -Thin Films

Monday, 29 June 2009
15:00 - 16:15
Level 3, Room 323
Chair: Wanxin SUN

15:00 K2-S2.5(O) A01376-04412 pg K28
A Surface Analytical Approach for Optimization of Process Parameters to Get Stoichiometric Nanostructured Titanium Nitride Thin Film through Reactive Pulsed Laser Deposition
Krishnan RAMASWAMY

15:15 K2-S2.6(O) A00395-00740 pg K11
Fabrication of Nanotip Array Template in Anodized Aluminum Oxide (AAO)
Kwang Hong LEE, Xin Yuan LIM, Kah Wing WAI, Filippo ROMANATO, Chee Cheong WONG

15:30 K2-S2.7(O) A01894-03264 pg K37
Study of the Desorption Behavior of Self Assembled Monolayer on GaAs and Au by TOF-SIMS
Luan XI, Silas HUNG, Heng Yong NIE, Oscar GRIZZI, Woon-Ming LAU

15:45 K2-S2.8(O) A01643-03079 pg K30
Interaction of PTCDA with Au Nanostructures on MoS_2
Xinjun CHU, Yuzhan WANG, Xingyu GAO, Xuesen WANG

16:00 K2-S2.9(O) A01261-02239 pg K24
Influence of Some Effective Parameters on Corrosion Behaviour, Texture and Morphology of Zinc-Manganese Coatings
Somayeh KHANI, Zohreh SOLTANI, Keivan RAEISSI, M. Ali GOLOZAR

K-S3: Energy

Monday, 29 June 2009
16:30 - 18:00
Level 3, Room 326
Chair: Kai WU

16:30 K-S3.1-2(IN) A01738-03024 pg K32
The Impact of Intramolecular Polar Bonds on the Ionization Energy of Organic Semiconductor Films
Norbert KOCH

17:00 K-S3.3-4(IN) A02605-04449 pg K43
Surface-Templated Assembly for Organic Solar Cells and Nanophotonics
Ginger DAVID

17:30 K-S3.5(O) A02582-04411 pg K43
Improvement on the Performance of Flexible CNT-OLED with a Nano Layer of CFx Layer
Kian Soo ONG, Eric OU

17:45 K-S3.6(O) A01453-02556 pg K29
Superhydrophili-superhydrophobic Patterning: A New Approach to Micro- and Nanochemical Patterning of TiO_2 Nano Structured Films
Yue-Kun LAI, Yong-Xia HUANG, Ze-Quan LIN, Chang-Jian LIN

K2-S3: Nanoscale Characterization

Monday, 29 June 2009
16:30 - 18:00
Level 3, Room 323
Chair: Rongkun ZHENG

16:30 K2-S3.1(O) A01049-02379 pg K21
Structural Characterization and Regulation of Organodithiol Self-Assembled Monolayers on Gold: An AFM Study
Jing-jiang YU

16:45 K2-S3.2(O) A02175-03740 pg K39
Influences of the Ligand on Photoelectron Behaviors in Core-shell Structure of CdTe Nanoparticles
Kuiying LI, Hao ZHANG, Tong LIU, Bingjing ZHOU, Weiyong YANG, Sailing WEI

17:00 K2-S3.3(O) A02654-04551 pg K44
Development and Characterization of Functional Cubic Silsesquioxane-Urethane Hybrid Nanostructured Materials
Khine Yi MYA, Yinxia WANG, Lu SHEN, Xuehong LU, Chaobin HE

17:15 K2-S3.4(O) A02739-04883 pg K46
Temperature Dependent Modifications of Ag/SiO_2/*p*-Si Schottky Contacts Formed at 20 K
Awais ALI, Muhammad YASAR, Faisal NASIM, Arshad Saleem BHATTI

17:30 K2-S3.5(O) A01196-02042 pg K23
Surface Morphology and Oleophilicity of Surface Modified Polypropylene
Joybel BUGNA, Lou Serafin LOZADA

K-S4: Nano Patterning

Tuesday, 30 June 2009
10:30 - 12:15
Level 3, Room 326
Chair: Harry HEINZELMANN

10:30 K-S4.1-2(IN) A00388-00710 pg K11
The Preparation and Properties of Conical Surface Nanostructures Based on Maskless Plasma Etching
Changzhi GU

11:00 K-S4.3-4(IN) A01844-03199 pg K36
Hosting Molecules on a 3 nm Grid on sp2 Single Layers on Transition Metals
Thomas GREBER

11:30 K-S4.5(O) A00706-01264 pg K15
New Strategies for Improving Dip-Pen Nanolithography
Chien-Ching WU, Huaping XU, Cees OTTO, David N. REINHOUDT, Jurriaan HUSKENS, Vinod SUBRAMANIAM, Aldrik H. VELDERS

11:45 K-S4.6(O) A01332-02328 pg K26
Long-range Alignment of Single Fullerene Molecules Using Guest-host Molecular Networks
Fabien SILLY, Denis FICHOU

12:00 K-S4.7-8(IN) A01800-03145 pg K34
Massively Parallel Multiplexed Dip-Pen Nanolithography
YuHuang WANG

K2-S4: Nano Patterning

Tuesday, 30 June 2009
10:30 - 12:30
Level 3, Room 323
Chair: Thomas GREBER

10:30 K2-S4.1-2(IN) A02829-04847 pg K47
Micro-aspiration Lithography and Demonstrations
Mael LE BERRE, Chunxiong LUO, Li LIU, Li WANG, Cécile CROZATIER, Jian SHI, Yong CHEN

11:00 K2-S4.3(O) A02993-05114 pg K50
Energy Filtered PhotoElectron Microscopy
K. WINKLER, M. ESCHER, B. KRÖMKER, D. FUNNEMANN

11:15 K2-S4.4(O) A00646-01161 pg K13
Hybrid and Metallic Nanostructures Fabricated by Direct Laser Writing
Konstantina TERZAKI, Arune GAIDUKEVICIUTE, Carsten REINHARDT, Anastasia GIAKOUMAKI, Costas FOTAKIS, Boris CHICHKOV, Maria FARSARI, Maria VAMVAKAKI

11:30 K2-S4.5(O) A01008-01764 pg K20
Laser Projection Direct Patterning in Passivation Layer of Thin-film Transistors
Chao-Nan CHEN, Gene SHEU, Shao-Ming YANG, Gwo-Mei WU

11:45 K2-S4.6(O) A01105-02024 pg K21
Surface Studies of Micro/nano Structures Fabricated Using Multiphoton Lithography
Yuanjun YAN, Chammika UDALAGAMA, Andrew BETTIOL

12:00 K2-S4.7(O) A02564-04381 pg K42
Single Exposure Grating Based Dual Beams Interference Lithography for Printing of Nanoscale Features
Jeun Kee CHUA, Vadakke Matham MURUKESHAN

12:15 K2-S4.8(O) A02740-04812 pg K47
Patterned Growth of Si Nanowires: A Comparative Study of VLS and SLS
Muhammad Fakhar ZIA, Junaid ALI, Ahmer NAWEED, Arshad Saleem BHATTI, Shahid NASEEM

K-S5: Scanning Probe technologies

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Room 326
Chair: Andrew T. S. WEE

14:00 K-S5.1-2(IN) A02923-04996 pg K48
Multimodal Scanning Probe Lithography
Chang LIU

14:30 K-S5.3-4(IN) A02143-03689 pg K38
Preparation of Inorganic Nanostructures by Dip-Pen Nanolithography
Yan LI, Haibin CHU, Lei DING, Sun HAO

15:00 K-S5.5(O) A00118-01056 pg K9
Nonlocal Chemical Reaction of Adsorbed Molecules Induced by Hot-elelctron Transport in Interface States
Lan CHEN, Hui LI, Andrew WEE

15:15 K-S5.6(O) A00777-01363 pg K17
Substrate Dependent Self-Assembled Epitaxial Growth of Nanoscale Cu_3Si on Si Wafers Assisted by Au Nanoparticles
Zhou ZHANG, Tom WU, Lai Mun WONG, Shi jie WANG

15:30 K-S5.7(O) A00905-01623 pg K18
Crystalline Structure of Solvation Layers at the Liquid-Solid Interface by AFM
Wulf HOFBAUER, Rongjian HO, Nitya Nand GOSVAMI, Sean J. O'SHEA

15:45 K-S5.8(O) A02199-03764 pg K39
Electroactive Behaviour of Coordinated Ferrocene Moieties Observed by Molecular Resolution Scanning Tunneling Microscopy
Lloyd AH QUNE, Kaoru TAMADA, Hara MASAHIKO, Andrew WEE

16:00 K-S5.9(O) A01686-02915 pg K31
ZnO-based Spinel Nanostructures via Controlled Interface Reaction
Hongjin FAN, Yang YANG

16:15 K-S5.10(O) A02413-04115 pg K41
In-line Centroid Detection and Surface Measurement with Digital Shack-Hartmann Wavefront Sensor
Xiaoming YIN

K2-S5: Nanoimprint Lithography

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Room 323
Chair: LOW Hong Yee

14:00 K2-S5.1-2(IN) A00697-01253 pg K14
Simulation and Experimental Study on De-molding Process in Nanoimprint Lithography
Yoshihiko HIRAI, Hiroaki KAWATA, Zygmunt RYMUZA

14:30 K2-S5.3(O) A01938-03446 pg K37
High-Resolution Contact Printing with Chemically Patterned Flat Stamps Fabricated by Nanoimprint Lithography
Xuexin DUAN, Yiping ZHAO, Andras PERL, Erwin BERENSCHOT, David N. REINHOUDT, Jurriaan HUSKENS

14:45 K2-S5.4(O) A02609-04457 pg K43
Synthetic Nano-pillared Gecko Tapes Fabricated with Porous Alumina Templates with Tuned Geometrical Parameters
Audrey Yoke Yee HO, Isabel RODRIGUEZ, Yee Cheong LAM

15:00 K2-S5.5(O) A00230-04268 pg K10
Photolithography on Cylindrically Curved Surface for Fabricating Seamless Roller Mold and Roller Imprinting of Micro-Structures
Yung-Chun LEE, Chang Hsiang LEE, Shou-Chi CHO

15:15 K2-S5.6(O) A01243-02134 pg K24
Residual Layer Self-removal in Imprint Lithography
Jarrett DUMOND, Hong Yee LOW

15:30 K2-S5.7(O) A01487-04391 pg K30
A Method for Patterning Conducting Polymers with Nanoimprint Lithography and Isotropic Plasma Etching
Chunyu HUANG, Bin DONG, Nan LU, Bingjie YANG, Liguo GAO, Lu TIAN, Dianpeng QI, Qiong WU, Lifeng CHI

15:45 K2-S5.8(O) A01740-03034 pg K32
Fabrication of Butterfly-mimetic Photonic Nanostructures Using Nanoimprint Lithography and Shear Patterning Technique
Tanu Suryadi KUSTANDI, Hong Yee LOW, Jing Hua TENG, Isabel RODRIGUEZ

16:00 K2-S5.9(O) A01824-03174 pg K34
Nanoimprint Mold Fabrication and Duplication for Discrete Track Recording Media
Ei-Leen TAN, Rachid SBIAA, Kyaw Oo AUNG, Seidikkurippu Nellainayagam PIRAMANAYAGAM, Seng Kai WONG, Hang Khume TAN, Wei Choong Allen POH, Naganivetha THIYAGARAJAH

16:15 K2-S5.10(O) A01859-03214 pg K36
3D Nanoimprint Templates with Ultra-high Vertical Precision
Martin BARTELS, Xiaolin WANG, Thomas KUSSEROW, Florestan KOEHLER, Stefan WITTZACK, Hartmut HILLMER

K-S6: Templated growth

Wednesday, 1 July 2009
10:30 - 12:30
Level 3, Room 326
Chair: Seunghun HONG

10:30 K-S6.1-2(KN) A02411-04113 pg K40
Functional Surfaces Based on Ordered Alumina Nanohole Arrays
Hideki MASUDA

11:00 K-S6.3-4(IN) A00700-04353 pg K15
Dynamic Stencil Lithography - An In-situ Free-motion Nanopatterning Technique
Veronica SAVU, Guillermo VILLANUEVA, Oscar VAZQUEZ-MENA, Katrin SIDLER, Kristopher PATAKY, Juergen BRUGGER

11:30 K-S6.5-6(IN) A01654-02860 pg K31
Formation of Large Scale Silver Nanowire Membranes with Oriented Nanowire Structures
Xiaogang LIU

12:00 K-S6.7(O) A02295-04026 pg K39
Highly Ordered, Free Standing Silver Nanowire-Fabrication and Optical Properties
Jinghua FANG, Lin LING, Paul SPIZZIRI, Ann ROBERTS, Steven PRAWER

12:15 K-S6.8(O) A02519-04472 pg K41
Formation of Surface Nanoparticle Patterns with Directed Self-Assembly and Nanolithography
Deying XIA, Steven BRUECK, Yet-Ming CHIANG, Chee Cheong WONG

K-S7: Self-assembly

Wednesday, 1 July 2009
14:00 - 15:30
Level 3, Room 326
Chair: David GINGER

14:00 K-S7.1-2(IN) A01826-03178 pg K35
Supramolecular Functional Materials with Patterned and Regular Structures
Katsuhiko ARIGA

14:30 K-S7.3-4(IN) A02618-04474 pg K43
Self-Assembled Polymeric Nanostructures
Harry HEINZELMANN

15:00 K-S7.5-6(IN) A01712-02987 pg K31
Molecular Self-Assembly on Surfaces and Surface Nanotemplates
Wei CHEN, Andrew Thye Shen WEE

K-S8: Self-assembly-2

Wednesday, 1 July 2009
15:30 - 17:15
Level 3, Room 326
Chair: Katsuhiko ARIGA

15:30 K-S8.1(O) A02820-04831 pg K47
Self-Assembly Derived High-density Nanopatterns to Control Nanoparticle Formation and Organization on Surfaces
Fung Ling YAP, Sivashankar KRISHNAMOORTHY

15:45 K-S8.2(O) A01154-01998 pg K22
Porous Polymer Films by Breath Figure Array Method
Anantha P, Yik Ling FONG, Chee Cheong WONG

16:00 K-S8.3(O) A01015-02470 pg K20
Formation of Self Organized Patterns in Polystyrene Thin-film by Solvent Condensation
Ankur VERMA, Ashutosh SHARMA

16:15 K-S8.4-5(IN) A00499-01827 pg K12
Exploring Molecular Assembly at Surfaces
Federico ROSEI

16:45 K-S8.6(O) A00194-00371 pg K9
Photochemical surface patterning by the thiol-ene reaction
Pascal JONKHEIJM, Herbert WALDMANN, Dirk WEINRICH

17:00 K-S8.7(O) A00830-01443 pg K17
Tuning the 2D Supramolecular Self-Assembly of Binary Organic Layers
Esther BARRENA, Dimas DE OTEYZA, Tobias KRAUSS, Enrique ORTEGA, Helmut DOSCH, Yutaka WAKAYAMA

K-S9: Dip Pen Lithography

Thursday, 2 July 2009
10:30 - 12:30
Level 3, Room 326
Chair: Ling HUANG

10:30 K-S9.1-2(IN) A00354-00658 pg K10
Dip Pen Nanolithography on Tissue Surfaces
Albena IVANISEVIC

11:00 K-S9.3-4(IN) A02330-04006 pg K40
Matrix-Assisted Dip-Pen Nanolithography
Ling HUANG, Chad MIRKIN

11:30 K-S9.5-6(IN) A01644-02847 pg K31
AFM Nanooxidation of Semiconductors
X. N. XIE, H. J. CHUNG, C. H. SOW, A. T. S. WEE

12:00 K-S9.7(O) A01312-02299 pg K25
Controlled Growth of Peptide and Carbon Nanotube Arrays on Dip-Pen Nanolithography Generated Templates
Xiaozhu ZHOU, Bing LI, Gang LU, Xiehong CAO, Freddy Y. C. BOEY, Hua ZHANG

12:15 KS9.8(IN)
On the Role of Surface Structure on Interfacial Energy
Francesco STELLACI

K-S10: Nanosphere lithography

Thursday, 2 July 2009
14:30 - 16:00
Level 3, Room 326
Chair: Federico ROSEI

14:30 K-S10.1-2(IN) A01356-02368 pg K27
Large-Area Nano-array Patterns by Nanosphere lithography
Nianqiang Nick WU

15:00 K-S10.3-4(IN) A01745-03032 pg K33
Templated-assembly Strategy for Large-scale Integration of Nanostructure-based Devices
Seunghun HONG

15:30 K-S10.5(O) A01325-02319 pg K26
Self-Assembly of Crystalline Organic 1D Nanostructures Directed by Gold Nanoparticle Templates
Tobias N. KRAUSS, Esther BARRENA, Theobald LOHMÜLLER, Marion KELSCH, Yun JIN-PHILLIPP, Peter A. VAN AKEN, Joachim P. SPATZ, Helmut DOSCH

15:45 K-S10.6(O) A00515-01542 pg K12
Real Time Visualization of Template Directed Colloidal Self Assembly
Qin ZHAO, Maria Regina HARTONO, Husen Kartasasmita KANG, Chan Hoe YIP, Chee Cheong WONG

K-S11: Poster Session

Thursday, 2 July 2009
16:00 - 18:00
Level 3, Gallery

K-S11.01(P) A00430-00810 pg K11
A Non-Transferring Dry-Adhesive with Hierarchical Polymer Nanohairs
Hoon Eui JEONG, Jin-Kwan LEE, Hong Nam KIM, Sang Heup MOON, Kahp Y. SUH

K-S11.02(P) A00462-00965 pg K12
The Effect of Surface Bond Reconstruction of Thermal Contact Surfaces on Phonon Transport in Atomic Wires
Jing LI, Tin Cheung AU YEUNG, Xuean ZHAO, Chan Hin KAM, Qinghu CHEN

K-S11.03(P) A00558-01242 pg K13
Nanostructure Formation on Polymer Films by Electron Beam Irradiation
Vaibhav KULSHRESTHA, Garima AGARWAL, Balram TRIPATHI, Kamlendra AWASTHI, Rashi NATHAWAT, Indra Prabh JAIN, Yogesh Kumar VIJAY

K-S11.04(P) A00598-04236 pg K13
Stresses Relaxation Mechanism in the Si-SiO_2 System and its Influence on the Interface Properties
Daniel KROPMAN, Enn MELLIKOV, Tiit KARNER, Tonu LAAS, Artur MEDVID

K-S11.05(P) A00717-01282 pg K16
Enhaced the Extraction Efficiency of AlGaInP LEDs with n-side nano-roughened surface using Inductively Coupled Cl_2/BCl_3/Ar Plasma
Jee-Hue JOO, Hwa-Sub OH, Sang-Hern LEE, Sung-Hoon JUNG, Jong-Hyeob BAEK, June-Key LEE

K-S11.27(P) A02107-03632 pg K38
Electrochemical Nanostructuring of Materials by Capillary-Force Assisted Method
Victor TIMOSHENKO, Natalia MASLOVA, Kirill GONCHAR, Yerzhan TAURBAEV

K-S11.28(P) A02372-04056 pg K40
Lattice Dynamics of Co/Pt(111) Interfaces from First Principles
Wai Leung YIM, Thorsten KLUENER

K-S11.29(P) A02629-04511 pg K44
Synthesis and Oxidation of Cu-Au Alloyed and Cu/Au Core-Shell Nanoparticles
Chun-Hua CHEN, Chih-Ping WANG

K-S11.30(P) A02712-04856 pg K46
In-situ Synthesis of Silver Nanoparticles in Organic Medium
Ajit PHULE, Shanker RAM, Avesh Kumar TYAGI

K-S11.32(P) A02983-05099 pg K49
Reduced Pore Diameters in Nanopore Anodic Alumina Films
I. MÍNGUEZ-BACHO, A. ASENJO, M. JAAFAR, M. VÁZQUEZ, M. HERNÁNDEZ-VÉLEZ

K-S11.33(P) A02983-05100 pg K49
Nanoporous Alumina Films Prepared By Nanoindentation and Anodic Oxidation
M. JAAFAR, D. NAVAS,M. HERNÁNDEZ-VÉLEZ, J. Luis BALDONEDO, M. VÁZQUEZ, A. ASENJO

K-S11.34(P) A03002-05125 pg K51
Layer-by-Layer-Assembled Polyelectrolyte Platform-Based Nanoenvironments for Quantitative Disease Diagnostic Cell Assays
Hyo-Jin LEE, Jinhwa SEO, Youngsun JANG, Kookheon CHAR, Jwa-Min NAM

K-S11.35(P) A01268-02195 pg K25
Dip-Pen Lithography as Tool for Fabrication & Patterning for Molecular Electronics
Darren ROWLANDS, Aled WILLIAMS, Justin R. LAWRENCE, Geoffrey J. ASHWELL

K-S12: Surface Characterization

Friday, 3 July 2009
11:00 - 13:00
Level 3, Room 326
Chair: Albena IVANISEVIC

11:00 K-S12.1-2(IN) A02898-04955 pg K48
Heteroepitaxial Self-assembled Nanostructures and Surface-phase Characterization
S. M. SHIVAPRASAD

11:30 K-S12.3-4(IN) A01456-02530 pg K29
Structural and Mechanical Properties Characterization of Biomaterials in Fluid with True Atomic Resolution
Wanxin SUN, Chanmin SU

12:00 K-S12.5-6(IN) A00744-03665 pg K16
Atom Probe Tomography of Self-Assembled Monolayers
Rongkun ZHENG, Wenrong YANG, Baptiste GAULT, Kyle RATINAC, Filip BRAET, Simon RINGER

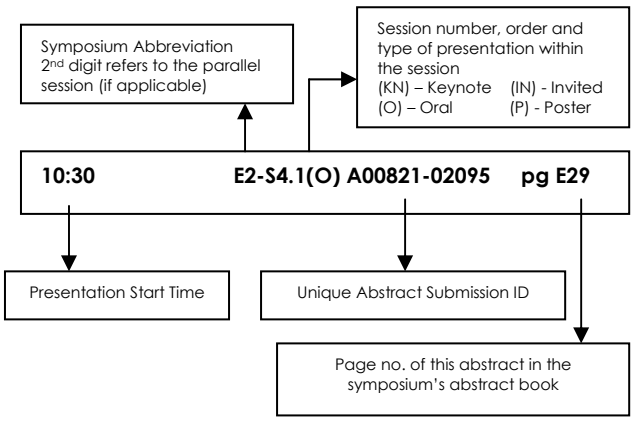
12:30 K-S12.7(O) A02992-05113 pg K50
QPlus AFM with Small Oscillation Amplitudes and High Frequencies at 5 K
A. BETTAC, J. KOEBLE, M. MAIER, K. WINKLER, B. UDER, A. FELTZ

12:45 K-S12.8(O) A01233-02114 pg K23
High Resolution, High Speed Confocal Raman AFM Imaging of Heterogeneous Materials
Matthias KRESS, Thomas DIEING, Ute SCHMIDT, Olaf HOLLRICHER

SYMPOSIUM L

NEMS/MEMS Technology and Devices

The programme codes you will see in the following pages are decoded using an example below:



Symposium L: NEMS/MEMS Technology and Devices

Level 2, Room 208

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session L-S4** **BioMEMS (I)**	(10:30 - 12:30) **Session L-S6** **Microfluid**	(10:30 - 12:30) **Session L-S9** **BioMEMS (II)**	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session L-S1** **Nanofabrication & Devices (I)**				(11:00 - 13:00) **Session L-S12** **MEMS Modeling**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Lunch Closing & Poster Ceremony
(14:00 - 16:15) **Session L-S2** **Nanofabrication & Devices (II)**	(14:00 - 16:30) **Session L-S5** **POSTER SESSION**	(14:00 - 15:30) **Session L-S7** **Biosensor & Bioapplication**	(14:30 - 16:00) **Session L-S10** **MEMS**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session L-S8** **Biosensor & Bioapplication**		
(16:30 - 18:00) **Session L-S3** **Photonic MEMS**			(16:00 - 18:00) **Session L-S11** **MEMS**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

L-S1: Nanofabrication & Devices (I)

Monday, 29 June 2009
11:00-12:30
Level 2, Room 208
Chairs: WU Jiuhui and WU Jian

11:00 L-S1.1-2(IN) A02892-04941 pg L55
S^3 Micromachine as Multi-scale Interface for BME
Satoshi KONISHI

11:30 L-S1.3-4(IN) A02247-03832 pg L37
Micro and Nano Patterning on Phase Change Materials
Luping SHI, Tow Chong CHONG, Eng Keong CHUA, Rong ZHAO, Ming Hui HONG, Gaoqiang YUAN, Jia Yin SZE

12:00 L-S1.5(O) A01932-03336 pg L34
Fabrication of Mass Loaded MRFM Cantilever with Integrated Tip and Ultra-Low Spring Constant
Xiaosong TANG, Simon RAST, Ernst MEYER, Sujeet K. SINHA, Sean O'SHEA

12:15 L-S1.6(O) A00017-00538 pg L9
Supernatant Decanting on a Centrifugal Platform
Chih-Hsin SHIH, Wei-Ling CHIANG

L-S2: Nanofabrication & Devices (II)

Monday, 29 June 2009
14:00-16:15
Level 2, Room 208
Chairs: SHI LuPing and Vincent LEE

14:00 L-S2.1-2(IN) A02613-04466 pg L40
Micro/Nano Science Uncovering the Mysteries of Silicon Wet Etching for the Fabrication of MEMS Structures
Kazuo SATO, Mitsuhiro SHIKIDA, Miguel A. GOSALVEZ, Prem PAL

14:30 L-S2.3-4(IN) A00170-02217 pg L12
Nano-photonic & Electronic Structures Pattern and Fabrication
Selin H. G. TEO, Guo Qiang LO, Navab SINGH, Mingbin YU, Ai Qun LIU

15:00 L-S2.5(O) A01768-03147 pg L32
Manufacturing Issues and Considerations in the Thermal Bonding of Polymer Based Lab-on-a-chip
Sum Huan NG, Yuxin KOH, Zhiping WANG

15:15 L-S2.6(O) A01939-03346 pg L35
Design and Fabrication of Novel Compliant Electrostatically Actuated Microvalves
Qing ZHANG, Nikola PEKAS, David JUNCKER

15:30 L-S2.7(O) A02460-04197 pg L38
Fabrication of a Microfluidic Device with Locally Insulated Electrodes on both Top and Bottom Sides of the Channel
Lujun ZHANG, Andre BOSSCHE

15:45 L-S2.8(O) A01975-03414 pg L35
Flexible Micro-structured Mold for UV Micro-casting of Polymeric Microdevices
Lip Pin YEO, Lu WANG, Zhiping WANG, Yee Cheong LAM

16:00 L-S2.9(O) A00186-00475 pg L13
Use of Micro Synthetic Jet Actuators for Boundary Layer Flow Control
Jing-Chuen LIN, An-Shik YANG, Li-Yu TSENG

L-S3: Photonic MEMS

Monday, 29 June 2009
16:30-18:00
Level 2, Room 208
Chairs: Xiaohong TANG and TEO Selin H. G.

16:30 L-S3.1-2(IN) A00041-00064 pg L9
Fiber-top Micromachined Devices: Ideas on theTip of Fiber
Davide IANNUZZI

17:00 L-S3.3-4(IN) A01231-04699 pg L26
NanoPlasmonic Sensor
Eng Huat KHOO, Erping LI

17:30 L-S3.5(O) A02886-04934 pg L55
Photothermal Imaging (PTI) System for the Imaging of Gold Nano-particles and Cellular Organelles
Chi Lok WONG, George C. K. CHEN, Teu Choon KIAT, Srivathsan VASUDEVAN, Pham Thuy ANH, Puhan Niladri BIHARI, Marta ANDIKA, Shu CHI, Lin ZHIPING, Peng CHEN

17:45 L-S3.6(O) A00079-02927 pg L10
Erectrophoretic Coulter Method for Analyzing Surface Properties of Particles Using a Micro-fluidic Device
Naohiro TAKAHASHI, Atushi AKI, Tomofumi UKAI, Yoshikata NAKAJIMA, Tatsuro HANAJIRI, Toru MAEKAWA

L-S4: BioMEMS (I)

Tuesday, 30 June 2009
10:30-12:30
Level 2, Room 208
Chairs: Kazuo SATO and George CHEN

10:30 L-S4.1-2(IN) A02623-04490 pg L41
Bioelectronics – The Next Wave
Levent YOBAS

11:00 L-S4.3-4(IN) A02750-04751 pg L49
The Design and Fabrication of Poly(dimethylsiloxane) Single Mode Rib Waveguides for Lab-on-a-chip Applications
Jack Sheng KEE, Daniel Puiu POENAR, Levent YOBAS

11:30 L-S4.5(O) A01863-03221 pg L34
Analysis of Novel Building Blocks for Photonic MEMS Using Deep 1D Photonic Crystals
Maurine MALAK, François DUPORT, Hong CAI, Bassam SAADANY, Pierre NICOLE, Jean-Luc POLLEUX, Frédéric MARTY, Stéphane FORMONT, Ai Qun LIU, Tarik BOUROUINA

11:45 L-S4.6(O) A02780-04753 pg L51
Bandstop Filters with Comb-like Electromagnetic Bandgap Structures on CPW Stubs
Zhongliang DENG, Jianming HUANG, Binghui DING

12:00 L-S4.7(O) A01598-02779 pg L31
Lab-On-A-Chip Technology for Single Molecule Detection Using Quantum Dots, Embedded Optical Fibres & Microchannels
Sook Fun CHAN, Chammika UDALAGAMA, Sureerat HOMHUAN, Andrew Anthony BETTIOL, Frank WATT, Thorsten WOHLAND

12:15 L-S4.8(O) A02825-04840 pg L53
A Micro-Fluidic Cell Culture Array for On-Chip Virus Infection
Jingjing GU, Ai-Qun LIU

L-S5: Poster Session

Tuesday, 30 June 2009
Level 3, Gallery
14:00 - 16:30
Chairs: LIU Ai Qun and YANG Yi

L-S5.01(P) A00017-00479 pg L9
Design and Analysis of Micromixers on a Centrifugal Platform
Chih-Hsin SHIH, Chia-Hui LIN, Hou-Jin WU

L-S5.02(P) A00045-01976 pg L10
A MEMS Pendulum-like Structure for Design of Oscillators
Venkatesh CHENNIAPPAN, Reza MOHEIMANI, Mehmet YUCE

L-S5.03(P) A00123-00735 pg L11
Design and Characterization of a Fourier Transform Micro-spectrometer
Shouhua WANG, Hongbin YU, Fook Siong CHAU, Xiaosong TANG

L-S5.04(P) A00131-00287 pg L11
Microstructure and Magnetic Properties of Rapidly Solidified Ni_2(Mn,Fe)Ga Heusler Alloys
Venkata Satya Prasad RAGHUPATRUNI, Raja MANIVEL, Phanikumar GANDHAM

L-S5.05(P) A00182-01985 pg L12
Separation and Manipulation of Particles using Traveling Wave Dielectrophoretic Force
Thitima MATUROS, Kata JARUWONGRANGSEE, Assawapong SAPPAT, Anurat WISITSORAAT, Tanom LOMAS, Pikul WANICHAPICHART, Adisorn TUANTRANONT

L-S5.06(P) A00185-00382 pg L12
Performance Characterization of a Piezoelectric Micro SJA
An-Shik YANG, Jeng-Jong RO, Wei-Han CHANG

L-S5.07(P) A00186-00544 pg L14
A Novel Piezoelectric Valveless Micropump with an Integrated Diffuser/Nozzle Bulge Piece Design
Tsung-Hsing CHAN, Chiang-Ho CHENG, An-Shik YANG, Li-Yu TSENG

L-S5.08(P) A00306-00573 pg L16
Characterization and Optimization of Seal-Off for Very Low Pressure Sensors (VLPS) Fabricated by CMOS MEMS Process
Muhamad Ramdzan BUYONG, Norazreen ABD AZIZ

L-S5.09(P) A00378-00696 pg L16
High Temperature Reliability Study of MEMS Capacitive Accelerometers
Nazman ZAIYADI

L-S5.10(P) A00387-00715 pg L17
Evolutionary Algorithm Based Feedforward Control for Contouring of a Biaxial Piezo-actuated Stage
Chih-Jer LIN, Shu-Yin CHEN

L-S5.11(P) A00602-01100 pg L18
Novel Design and Fabrication of High Sensitivity MEMS Capacitive Sensor Array for Fingerprint Imaging
Mitra DAMGHANIAN, Burhanuddin YEOP MAJLIS

L-S5.12(P) A00602-02142 pg L19
Design and Analysis of Low-Power MEMS Speaker using Magnrtic Actuation Technology
Fatima Lina AYATOLLAHI, Burhanuddin YEOP MAJLIS

L-S6: Microfluid

Wednesday, 1 July 2009
10:30-12:30
Level 2, Room 208
Chairs: Eric YAP and ZHANG Jingbo

10:30 L-S6.1-2(IN) A02838-04860 pg L53
Flows in Micro-Channels and Cavities - Visco-Elastic, Faradaic Charging and Surface Roughness Effects
Yee Cheong LAM

11:00 L-S6.3(O) A00185-00384 pg L13
Mixing Enhancement of a Passive Micromixer by Applying Boundary Protrusion Structures
Chang-Yu HSIEH, An-Shik YANG

11:15 L-S6.4(O) A00214-01808 pg L15
Design and Characterization of a MEMS-microfluidic Sensor for Rheological Applications
Helene BERTHET, Howard STONE, Frederic MARTY, Bruno MERCIER, Jacques JUNDT, Dan ANGELESCU

11:30 L-S6.5(O) A00446-00836 pg L18
Microfluidic Sorting System Based on Optical Force Switching
Siew Kit HOI, Chammika UDALAGAMA, Chorng Haur SOW, Andrew A. BETTIOL

11:45 L-S6.6(O) A02707-04655 pg L44
Development of Liquid Tunable Diffractive/Refractive Hybrid Lens Based on Combination of Diamond Turning and Soft Lithography
Hui Min LEUNG, Hongbin YU, Guangya ZHOU, A. SENTHIL KUMAR, Fook Siong CHAU

12:00 L-S6.7(O) A02744-04716 pg L47
A Phase Shift Refractometer Based on Transmission Phase Grating Using Microfluidic Chip
Zhenguo LI, Bing LIU, Jingbo ZHANG, Ai-Qun LIU

12:15 L-S6.8(O) A02746-04787 pg L48
Liquid Prism with Tunable Transmission/Reflection
Sha XIONG, Yi YANG, Ai-Qun LIU

L-S7: Biosensor & Bioapplication

Wednesday, 1 July 2009
14:00-15:30
Level 2, Room 208
Chairs: CHEN Yu and POENAR Daniel Puiu

14:00 L-S7.1-2(IN) A02946-05035 pg L57
In/Ex-situ Detection of HBV DNA Using Dynamic Microcantilever
Tae Song KIM

14:30 L-S7.3-4(IN) A02781-04750 pg L52
Photothermal Technique for Materials Characterization and Live Cells Monitoring
George Chung Kit Chen CHEN, Srivathsan VASUDEVAN, Choon Kiat, Andass TEU, Balpreet Singh AHLUWALIA, Marta ANDIKA

15:00 L-S7.5(O) A00201-02560 pg L14
Kelvin Force Microscope Immunoassay for Electrical Label-free Characterization
Shinkichi NUMATA, Shigeru YAMASITA, Atsushi AKI, Atsumu SHOJI, Toru MIZUKI, Yoshikata NAKAJIMA, Toru MAEKAWA, Tatsuro HANAJIRI

15:15 L-S7.6(O) A01059-01839 pg L23
A Chip-level Disposable Optofluidic Device For Biosensing
Hong LIU, Nan ZHANG, Zi Chao SHIAH, Donna Xiao Dong ZHOU

L-S8: Biosensor & Bioapplication

Wednesday, 1 July 2009
15:30-17:30
Level 2, Room 208
Chairs: CHEN Yu and POENAR Daniel Puiu

15:30 L-S8.1(O) A01298-02263 pg L29
Single-cell Electroporation using Proton Beam Fabricated Biochips
Sureerat HOMHUAN, Hui Fang CUI, Binbin ZHANG, Fwu-Shan SHEU, Andrew A. BETTIOL, Frank WATT

15:45 L-S8.2(O) A02687-04621 pg L43
Label-free Protein Detection via Gold Nanoparticles and Localized Surface Plasmon Resonance
Shaoli ZHU, Jingbo ZHANG, Lanry Yung Lin YUE, Dany HARTONO, Aiqun LIU

16:00 L-S8.3(O) A00297-00734 pg L15
Gas Bubble Sizes Formed in Liquids at Different Resonant Frequencies
Chiang-Ho CHENG, Li-Yu TSENG, Tsung-Hsing CHIANG

16:15 L-S8.4(O) A02749-04719 pg L48
An Integrated Fabry-Pérot Resonator using Liquid Tunable Microlenses
Lip Ket CHIN, Ai-Qun LIU

16:30 L-S8.5(O) A01665-02952 pg L32
DC-biased AC-electrokinetic Mixing: A Mechanistic Investigation
Wee Yang NG, Isabel RODRIGUEZ, Yee Cheong LAM

16:45 L-S8.6(O) A02646-04541 pg L41
Gas Permeation in PDMS(polydimethylsiloxane) *in situ* Monitored by Silicon Pressure Sensors
Lung-Jieh YANG, Yu-Cheng OU

17:00 L-S8.7(O) A02988-05107 pg L58
Capacitively Coupled Contactless Conductivity Detection with Dual Top-Bottom Cell Configuration for Microchip Electrophoresis
Kambiz Ansari MAHABADI, Isabel RODRIGUEZ, Liu HONG, Peter C. HAUSER, Nico F. DE ROOIJ

17:15 L-S8.8(O) A02775-04742 pg L50
Dynamic Liquid Optical Splitters and Interferometers Integrated into Micro-Fluidic-Systems
Yi YANG, Sha XIONG, Ai Qun LIU

L-S9: BioMEMS (II)

Thursday, 2 July 2009
10:30-12:30
Level 2, Room 208
Chairs: ZHANG Xuming and TANG Min

10:30 L-S9.1-2(IN) A02621-04479 pg L40
Building a Lensless, High-resolution On-chip Microscope for $10
Changhuei YANG

11:00 L-S9.3(IN) A02893-05065 pg L56
Metallic Nano Particles and Nano Structures for Bio-applications
Jingbo ZHANG, L. Y. L. YUNG, S. S. CHUA, J. Y. SZE, S. L. ZHU, T. C. AYI, R. JEEVANSWARAN

11:15 L-S9.4(O) A02783-04789 pg L52
An On-Chip Micro-Droplet Optical Filter Using Evanescent Wave Coupling
Ye Feng YU, Tarik BOUROUINA, Ai Qun LIU

11:30 L-S9.5(O) A00335-00623 pg L16
Analysis of Ionic Transport Interaction between Soft Smart Hydrogel and Solution in BioMEMS Channels
Rongmo LUO, Hua LI, Teng Yong NG, Khin Yong LAM

11:45 L-S9.6(O) A02738-04783 pg L46
Transport of Water and Biofluids in High Aspect Ratio Microfluidics Devices Lithographically Fabricated Using Proton Beam Writing (PBW)
Harry WHITLOW, Liping WANG, Leona GILBERT

12:00 L-S9.7(O) A01520-02651 pg L31
Enabling Low Temperature Copper Bonding With an Organic Monolayer
Xiao Fang ANG, Jun WEI, Zhong CHEN, Chee Cheong WONG

12:15 L-S9.8(O) A02776-04748 pg L51
Droplet-based Lattice as Diffraction Gratings for Cell Analysis
Jiaqing YU, Lip Ket CHIN, Ai-Qun LIU

L-S10: MEMS

Thursday, 2 July 2009
14:30-16:00
Level 2, Room 208
Chairs: Tarik BOUROUINA and YU Ai Bin

14:30 L-S10.1-2(IN) A02577-04710 pg L40
All-Optical Signal Processing Based on Nonlinear Effects in Semiconductor Optical Amplifiers
Jian WU, Minxue WANG, Bingbing WU

15:00 L-S10.3-4(IN) A02850-04879 pg L54
Micromachining Pressure Sensors on Optical Fiber tip
Xuming ZHANG, Miao YU, Hyungdae BAE, Christian ALTMEYER, Ai Qun LIU

15:30 L-S10.5(O) A02832-04853 pg L53
A Micromachined Thermooptic Tunable Laser
Hong CAI, Weiming ZHU, Jifang TAO, Wu ZHANG, Qing Xin ZHANG, Ai Qun LIU

15:45 L-S10.6(O) A02708-04675 pg L45
High Accuracy Pressure Sensor Based on Optical MEMS Technology
Wu ZHANG, Jifang TAO, Weiming ZHU, Aiqun LIU

L-S11: MEMS

Thursday, 2 July 2009
16:00-18:00
Level 2, Room 208
Chairs: Tarik BOUROUINA and YU Ai Bin

16:00 L-S11.1(O) A02687-04633 pg L43
A THz-wave Photonic MEMS Generator
Ji Fang TAO, Bing LIU, Wei Ming ZHU, Hong CAI, Jonathan TAMIL, Jian WU, Kun XU, Jin Tong LIN, Ai Qun LIU

16:15 L-S11.2(O) A02704-04682 pg L43
A Photonic Mems Polarization Switch
Weiming ZHU, Wu ZHANG, Tarik BOUROUINA, Aiqun LIU

16:30 L-S11.3(O) A00392-00731 pg L17
Modeling of Cell Motion in Micro-scale Hydrodynamic-electrical Field
Ting YE, Hua LI, Khin Yong LAM

16:45 L-S11.4(O) A00918-01611 pg L23
Modeling of Performance of Single Elastic Capsule in Time-dependent two-dimensional Micro Channel Flow
Gang MA, Hua LI, Teng Yong NG, Khin Yong LAM

17:00 L-S11.5(O) A01248-02148 pg L28
Characterization of Heavily Doped Polysilicon Films for SiMEMS based Thermoelectric Power Generator
Jin XIE, Chengkuo LEE

17:15 L-S11.6(O) A01386-02415 pg L30
A Wideband Electromagnetic Energy Harvester for Random Vibration Sources
Bin YANG, Chengkuo LEE

17:30 L-S11.7(O) A01414-02452 pg L31
Designing High Frequency Microelectromechanical Resonators under Fabrication Uncertainty Using Methamodeling
Amir HEIDARI, Haejin CHOI, Jianmin MIAO

17:45 L-S11.8(O) A02948-05038 pg L57
Non-Negative Input Design Control Scheme to Solve "Pull-In" Instability of MEMS Parallel Plate Actuators
M. H. NIKPANAH, Youyi WANG, F. L. LEWIS, A. Q. LIU

L-S12: MEMS Modeling

Friday, 3 July 2009
11:00-13:00
Level 2, Room 208
Chairs: LI Hua and Faeyz Karim MUHAMMAD

11:00 L-S12.1-2(IN) A02069-03587 pg L36
Transmission Properties of Physical Waves in Photonic/Phonon Crystals
Jiu Hui WU, H. L. CHEN, Boris LUK'YANCHUK, A.Q. LIU

11:30 L-S12.3(O) A00405-00788 pg L17
A Continuum Theory for Simulation of Ionic-strength-sensitive Hydrogel for BioMEMS Application
Fukun LAI, Hua LI, Khin Yong LAM

11:45 L-S12.4(O) A00507-00931 pg L18
A Transient Simulation for Analysis of Volume Transition of pH-sensitive Hydrogel in Micro-channel
Hua ZOU, Hua LI, Khin Yong LAM

12:00 L-S12.5(O) A00732-01296 pg L20
Analysis of Microelectromechanical Systems Using the Meshless Random Differential Quadrature Method
Shantanu MULAY, Hua LI, Khin Yong LAM

12:15 L-S12.6(O) A01120-01995 pg L24
Mathematical Modeling of Hydrogels for Microfluidic Flow Control
Jundika Candra KURNIA, Erik BIRGERSSON, Arun Sadashiv MUJUMDAR, Lee Ching QUAH

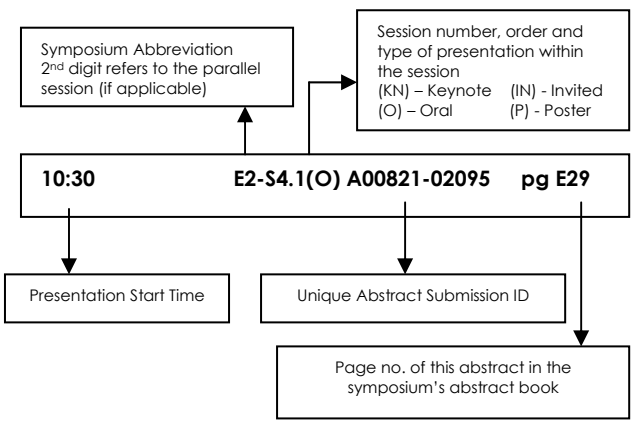
12:30 L-S12.7(O) A02000-03451 pg L36
Numerical Simulation of Stretchable and Foldable Silicon Integrated Circuits
Zhuangjian LIU, YongWei ZHUANG, Yonggang HUANG

12:45 L-S12.8(O) A01354-02363 pg L29
Computational Study of Nanoelectromechanical Device Using Bilayer Graphene Nanoribbon
Kai-Tak LAM, Vincent Chengkuo LEE, Gengchiau LIANG

SYMPOSIUM M

DNA Nanoscience and Biophysics

The programme codes you will see in the following pages are decoded using an example below:



Symposium M: DNA Nanoscience and Biophysics

Level 3, Room 309

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:15) **Session M-S4**	(10:30 - 12:30) **Session M-S6**	(10:30 - 12:30) **Session M-S9**	(10:30 - 11:00) Coffee Break
(11:00 - 12:15) **Session M-S1**				(11:00 - 13:30) **Session M-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session M-S2**	(14:00 - 16:30) **Session M-S5** **POSTER SESSION**	(14:00 - 15:30) **Session M-S7**	(14:30 - 16:00) **Session M-S10**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session M-S8**	(16:00 - 18:00) **Session M-S11**	
(16:30 - 18:30) **Session M-S3**	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

M-S1
Monday, 29 June 2009
11:00-12:15
Level 3, Room 309

11:00 M-S1.1-2(KN) A01804-03220 pg M22
Electrostatic Interactions in Chromatin
Lars NORDENSKIÖLD

11:30 M-S1.3-4(IN) A02939-05022 pg M40
The Shape of Motile Cells: Understanding How Cytoskeletal Dynamics, Membrane Tension and Adhesion Determine Global Cell Morphology
Kinneret KEREN

12:00 M-S1.5-6(IN) A02978-05092 pg M41
Non-equilibrium Phase Transitions in Tubulation by Molecular Motors
Yariv KAFRI

M-S2
Monday, 29 June 2009
14:00-16:15
Level 3, Room 309

14:00 M-S2.1-2(KN) A01058-01837 pg M9
Emergence of Nano-Order through Discrete Transition on a Single Giant DNA and a Reconstituted Chromatin
Kenichi YOSHIKAWA

14:30 M-S2.3-4(IN) A01573-03326 pg M11
Diffusion and Segmental Dynamics of Double-Stranded DNA
Roland G. WINKLER

15:00 M-S2.5-6(IN) A02918-04988 pg M39
DNA-Nanoparticle System: Self-assembly, Patterning, Real-time Probing, and a General Model
Dan LUO

15:30 M-S2.7(IN) A01993-03442 pg M28
Microcapsules as Diffusion Controlled Reaction Compartments for High Throughput PCR
Wing Cheung MAK, Yee Cheung KWAN, Reinhard RENNEBERG, Dieter TRAU

15:45 M-S2.8(O) A01625-02815 pg M16
Viscoelasticity of Entangled λ-phage DNA Solutions
Xiaoying ZHU, Binu KUNDUKAD, Johan R. C. van der MAAREL

16:00 M-S2.9(O) A01614-02803 pg M14
DNA Viscoelasticity; Relaxation of Entanglements with a Topology Controlling Enzyme
Binu KUNDUKAD, Johan R. C. VAN DER MAAREL

M-S3
Monday, 29 June 2009
16:30-18:30
Level 3, Room 309

16:30 M-S3.1-2(IN) A01689-03045 pg M19
New Motifs for DNA Nanostructures
Satoshi MURATA, Satoshi NISHIMOTO, Hamada SHOGO

17:00 M-S3.3-4(IN) A02994-05115 pg M41
DNA Assembly within Living Cells: New Puzzles
G. V. SHIVASHANKAR

17:30 M-S3.5(O) A01609-02798 pg M12
Temperature Dependence of Circular DNA Topological States
Hu CHEN, Yan JIE

17:45 M-S3.6(O) A01624-02813 pg M16
AFM Imaging Studies of Chromatins in Xenopus Egg Extract
Hongxia FU, Benjamin FREEDMAN, Rebecca HEALD, Chwee Teck LIM, Jie YAN

18:00 M-S3.7(O) A00529-00962 pg M9
Molecular Mechanics Basis for Autonomous Coordination in Bipedal Biomolecular Motors
Zhisong WANG

18:15 M-S3.8(IN) A02127-03669 pg M32
Fine-tuning of DNA-polyelectrolyte Interactions and DNA Transfection via Chemically Coded Core-shell Macroions
Tanja WEIL, Radu GROPEANU, Klaus EISELE

M-S4
Tuesday, 30 June 2009
10:30-12:15
Level 3, Room 309

10:30 M-S4.1-2(KN) A01542-02691 pg M10
The Nature and Characterization of Order in High Density DNA Mesophases
Rudolf PODGORNIK

11:00 M-S4.3-4(KN) A01679-02901 pg M18
Mechanisms of Renaturation and Hybridization of Nucleic Acids: Universality and Specificity in Molecular Biology
Jean-Louis SIKORAV

11:30 M-S4.5-6(KN) A02537-04341 pg M37
A Brownian Dynamics Model for Cross-linked Actin Gels under High Prestrain
Taeyoon KIM, Wonmuk HWANG, Roger D. KAMM

12:00 M-S4.7-8(IN) A02816-04822 pg M38
Nanotechnology: The Exploitation of Biology for Nanostructure Engineering
Alexander Giles DAVIES

M-S5: Poster Session

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Gallery

M-S5.01(P) A01524-02921 pg M10
Purification of PHSG298 Supercoiled Plasmid DNA Using Anion-exchange Chromatography at Lab Scale
Amar Nath GUPTA, Xiaoying ZHU, Bow HO, Johan R. C. VAN DER MAAREL

M-S5.02(P) A01551-02702 pg M11
Ensemble Inequivalence in Single Molecule Experiments
Marcello SEGA, Mehmet SUZEN, Christian HOLM

M-S5.03(P) A01573-03328 pg M12
Hydrodynamic Interactions in Polyelectrolyte Electrophoresis
Roland G. WINKLER, Sandra FRANK

M-S5.04(P) A01588-02765 pg M12
Disruption of Regular Structure in DNA Minicircles
Quan DU, Xiaozhong ZHANG, Alexander KOTLYAR, Alexander VOLOGODSKII

M-S5.05(P) A01609-02883 pg M13
Effects of Kink and Flexible Hinge Defects on Mechanical Responses of Short Double-stranded DNA Molecules
Hu CHEN, Jie YAN

M-S5.06(P) A01610-02799 pg M13
A Synthetic DNA Motor
Yvonne KLAPPER, Daniel LUBRICH

M-S5.07(P) A01611-02800 pg M13
Excitation of Defects in Sharp Unwound DNA
Peiwen CONG, Jie YAN

M-S5.08(P) A01612-03677 pg M13
Conformational Response of Linear DNA to Confinement in a Nanochannel
Siow Yee NG, Johan R. C. VAN DER MAAREL

M-S5.09(P) A01614-02875 pg M14
Effect of Salt on the Viscoelasticity of Entangled Lambda Phage DNA Solution
Jin Yi LIM, Binu KUNDUKAD, Johan R. C. VAN DER MAAREL

M-S5.10(P) A01617-02806 pg M15
Compaction of DNA in White Spot Syndrome Virus
Yingjie LIU, Jinlu WU, Choy Leong HEW, Jie YAN

M-S5.11(P) A01618-02808 pg M15
Simulations of the Interactions of Confined DNA and Nanoparticles
Andrej GRIMM, Johan VAN DER MAAREL

M-S5.12(P) A01620-02810 pg M15
Effects of Flexible Defect Excitation on Various DNA Mechanical Responses
Zhen ZHOU, Hu CHEN, Liang DAI, Johan R. C. VAN DER MAAREL, Jie YAN

M-S5.13(P) A01621-02811 pg M15
DNA Confined in Membranic Surface Bound Enclosures
Laiyi LIN, Daniel LUBRICH

M-S5.14(P) A01624-02834 pg M16
Effects of Magnesium Salt Concentrations on B-DNA Overstretching Transition
Hongxia FU, Hu CHEN, C.G. KOH, C.T. LIM

M-S5.15(P) A01636-02837 pg M16
On the Conformation of DNA Confined in a Nanochannel or Absorbed at an Interface
Ce ZHANG, Van der Maarel JOHAN

M-S5.16(P) A01640-02969 pg M17
Chromatin Packing and Transport in the Cell Nucleus Modeled on a Three-dimensional Lattice
Annika WEDEMEIER, Christian FRITSCH, Jorg LANGOWSKI

M-S5.17(P) A01666-02884 pg M18
Non-harmonic DNA Bending Elasticity is Revealed by Statistics of DNA Minicircle Shapes
Hu CHEN, Hongxia FU, Zhen ZHOU, Jie YAN

M-S5.18(P) A01679-02902 pg M18
Symmetries and Asymmetries of the Genetic Material
Jean-Louis SIKORAV, Arach GOLDAR, Alan BRASLAU

M-S5.19(P) A01707-03248 pg M20
FRET-Based Analysis of Force-Dependent Molecular Extension of the Cell Mechano-Sensor Protein p130Cas: Live Cell Imaging vs. Single Molecule Study
Hiroaki MACHIYAMA, Lu ZHANG, Keiko KAWAUCHI, Christopher W. HOGUE, Yan JIE, Yasuhiro SAWADA

M-S5.20(P) A01713-02989 pg M21
DNA Condensation and Extension by Nanoparticles
Johan R. C. VAN DER MAAREL, Ce ZHANG

M-S5.40(P) A02302-03934 pg M35
Mineral-solution Interfacial Structures and Its Chemical Implications in Biomineralization
Pan HAIHUA, Tang RUIKANG, Liu XIANGYANG

M-S5.41(P) A02385-04074 pg M35
Electric Field Induced,Superhydrophobic to Superhydrophilic Switching in ά-MnO_2 Nanotubes
Xiaodan ZHAO, Xiangyang LIU, Haiming FAN

M-S5.42(P) A02534-04674 pg M36
Assembly and Patterning of DNA-capped Nanoparticle Superlattices via Controlled Dewetting
Wenlong CHENG, Junhao Shawn TAN, Michael CAMPOLONGO, Mark HARTMAN, Nokyoung PARK, Dan LUO

M-S6

Wednesday, 1 July 2009
10:30-12:30
Level 3, Room 309

10:30 M-S6.1-2(KN) A02009-03471 pg M29
Synthetic Reaction Circuits based on DNA and RNA
Friedrich SIMMEL

11:00 M-S6.3-4(IN) A01551-02701 pg M10
Mobilities, Effective Friction, and the Dynamical Effective Charge of Polyelectrolytes
Kai GRASS, Christian HOLM

11:30 M-S6.5(IN) A01707-03039 pg M19
Exploration of Cell Mechanotransduction: Identification of p130Cas as an Ion Channel-Independent Cytoskeletal Mechano-Sensor and Possible Mechanical Roles for "Flexible" Protein Domains
Yasuhiro SAWADA, Wee Wee TAN, Julio M. FERNANDEZ, Michael P. SHEETZ, Christopher W. HOGUE

11:45 M-S6.6(IN) A01639-02839 pg M17
Single Molecule Studies of BAF-DNA Interactions Show How Retroviral DNA Can Avoid Suicidal Autointegration
Dunja SKOKO, Min LI, Huang YING, Michiyo MIZUUCHI, Robert CRAIGIE, Kiyoshi MIZUUCHI

12:00 M-S6.7(IN) A02005-03498 pg M29
Photo-driven DNA Nanomachine with New Duplex Motif Composed of Threoninol
Hiroyuki ASANUMA, Mochizuki TOSHIO, Nobutaka TAKENAKA, Hidenori NISHIOKA, Xingguo LIANG

12:15 M-S6.8(IN) A02858-04888 pg M39
Demystify *de novo* Gene Assembly with One-step Real-time Gene Synthesis
Mo-Huang LI, Wai Chye CHEONG, Mo Chao HUANG, Marcus BODE, Hongye YE, Jackie Y. YING

M-S7

Wednesday, 1 July 2009
14:00-15:30
Level 3, Room 309

14:00 M-S7.1-2(KN) A01588-02766 pg M12
DNA Bending
Alexander VOLOGODSKII

14:30 M-S7.3-4(IN) A00015-00017 pg M8
Modeling the DNA Molecule Using Equivalent Circuit
Harry KWOK

15:00 M-S7.5(O) A01613-02802 pg M14
Kinetics of Single DNA Compaction by Hexaammine Cobalt Chloride
Wenbo FU, Ming LI, Jie YAN

15:15 M-S7.6(IN) A02197-03763 pg M33
Structures of DNA and RNA G-quadruplexes
Anh Tuan PHAN

M-S8

Wednesday, 1 July 2009
15:30-17:30
Level 3, Room 309

15:30 M-S8.1(IN) A01830-03185 pg M24
Amyloidogenesis Abolished by Proline Substitutions but Enhanced by Lipid Binding: A Molecular Dynamics Study on the Aggregation of Rat/Human Islet Amyloid Polypeptide Segments
Ping JIANG, Weixin XU, Yuguang MU

15:45 M-S8.2(O) A02047-03522 pg M30
A Universal Description of DNA Condensation by Cationic Ligands
Nikolay KOROLEV, Nikolay V. BEREZHNOY, Lars NORDENSKIÖLD

16:00 M-S8.3(O) A01612-02801 pg M13
Conformational Response of Supercoiled DNA to Confinement in a Nanochannel
Siow Yee NG, Wilber LIM, Chinchai LIM, Yuan Ping FENG, Johan R. C. VAN DER MAAREL

16:15 M-S8.4(IN) A00024-00025 pg M8
Single Molecule Study on the Mechanism of UvrD-Med
Ming LI, Bo SUN, Xu-Guang XI

16:30 M-S8.5(IN) A01808-03157 pg M23
Mechanical Insights into the Physiological Functions of Intercellular Adhesion Molecules at Tight Junctions
Sri Ram Krishna VEDULA, Tong Seng LIM, Walter HUNZIKER, Chwee Teck LIM

16:45 M-S8.6(O) A01618-03723 pg M15
New Approach for Ratchet-Based Particle Separation
Andrej GRIMM

17:00 M-S8.7(O) A01834-03188 pg M24
Why is Spider Silk Stronger than Insect Silk?
Ning DU, Xiang Yang LIU, Gangqin XU, Xiang WU, Hu ZHOU

17:15 M-S8.8(O) A02075-03670 pg M30
Molecular Nanospring: Mystery of Ultra-functional Spider and Silkworm Silk
Xiang WU, Xiangyang LIU, Ning DU, Gangqin XU, Baowen LI

M-S9

Thursday, 2 July 2009
10:30-12:30
Level 3, Room 309

10:30 M-S9.1-2(KN) A02857-04887 pg M39
Force Transduction at Adhesion Sites by Stretching Single Talin Rod Molecules: A Molecular Mechanism for Vinculin Recruitment
Amando DEL RIO, Raul PEREZ JIMENEZ, Ruchuan LIU, Pere ROCA-CUSACHS, Julio M. FERNANDEZ, Michael P. SHEETZ

11:00 M-S9.3-4(IN) A02935-05015 pg M40
DNA Condensation Induced by Poly-cationic Molecules: From Polyamines to Protamines
Eric RASPAUD

11:30 M-S9.5(IN) A02519-04475 pg M36
Fabrication of Porous Nanochannels using Nanoparticles for Applications in Transport of DNA Molecules
Deying XIA, Steven BRUECK

11:45 M-S9.6(IN) A01944-03593 pg M26
Distinct Stabilization of DNA Duplex by Introducing Cationic Dye Cluster
Hiromu KASHIDA, Hidehiro ITO, Taiga FUJII, Hiroyuki ASANUMA

12:00 M-S9.7(O) A01633-02830 pg M16
Kinetically Controlled Self-Assembly of DNA Oligomers
Daniel LUBRICH, Simon J. GREEN, Andrew TURBERFIELD

12:15 M-S9.8(IN) A01766-03094 pg M21
Cationic Comb-type Copolymers as DNA Chaperones
Atsushi MARUYAMA, Longliang WU, Rui MORIYAMA, Arihiro KANO, Naohiko SHIMADA

M-S10

Thursday, 2 July 2009
14:30-16:00
Level 3, Room 309

14:30 M-S10.1-2(KN) A01640-02841 pg M17
Nucleosome Dynamics Studied by Single Molecule Fluorescence and Computer Simulations
Jorg LANGOWSKI

15:00 M-S10.3-4(IN) A01928-03725 pg M25
Fabrication of DNA Nanostructures for NanoBio Devices
Sung Ha PARK

15:30 M-S10.5(IN)
Wires, Reporters and Information Capsules: Cellular Journalism with DNA
Yamuna KRISHNAN

15:45 M-S10.6(IN) A02448-04179 pg M36
DNA Nucleobase Identification with STM
Bo SONG, Marcus ELSTNER, Wenpeng QI, Haiping FANG

M-S11

Thursday, 2 July 2009
16:00-18:00
Level 3, Room 309

16:00 M-S11.1(IN) A02042-03516 pg M29
Cells on Chips
Danny VAN NOORT

16:15 M-S11.2(IN) A02158-03713 pg M32
Conjugated Polymers as Light Harvesting Materials for DNA Studies
Ning TIAN, Xinsheng REN, Qing-Hua XU

16:30 M-S11.3(O) A01524-02663 pg M9
Study of Salt Effect on Supercoiled Plasmid DNA by Light and Neutron Scattering
Amar Nath GUPTA, Xiaoying ZHU, Johan R. C. VAN DER MAAREL

16:45 M-S11.4(O) A02109-03636 pg M32
Mechanical Characterization of Protein L in the Low-force Regime by Electromagnetic Tweezers/ Evanescent Nanometry
Ruchuan LIU, Sergi GARCIA-MANYES, Atom SARKAR, Carmen L. BADILLA, Julio M. FERNANDEZ

17:00 M-S11.5(IN) A02242-03823 pg M34
Silk: from Structure to Performance
Xiang-Yang LIU

17:15 M-S11.6(O) A01622-02812 pg M15
A Contractile DNA Molecular Machine
Jie LIN, Daniel LUBRICH, Jie YAN

17:30 M-S11.7(O) A02266-03864 pg M34
Superior Strength of Silkworm Silk and Its Relation to Structure
Gangqin XU, Xiangyang LIU, Ning DU, Yang LI

17:45 M-S11.8(O) A02738-04712 pg M37
Nanofluidic Channel System: A Promising Approach for Detecting Single Molecule Behaviors through Fluorescence Correlation Spectroscopy (FCS)
Liping WANG, Xiaotao PAN, Thorsten WOHLAND, Peige SHAO, Frank WATT

M-S12

Friday, 3 July 2009
11:00-13:30
Level 3, Room 309

11:00 M-S12.1-2(KN) A01846-03202 pg M24
The Physics of Genome Management
Rob PHILLIPS

11:30 M-S12.3-4(IN) A02932-05012 pg M40
The Many-body Nature of Gene Interaction
Erez BRAUN

12:00 M-S12.5-6 (IN)
Fidelity and Target Location During RecA-Catalyzed Homologous Recombination
Joel STAVANS

12:30 M-S12.7-8 (IN)
The Role of SsrB and H-NS in Transcription Activation and Silencing/Anti-silencing During Salmonella Pathogenesis
Don WALTHERS, Lingjie LIU, Hu CHEN, Jie YAN, Linda J. KENNEY

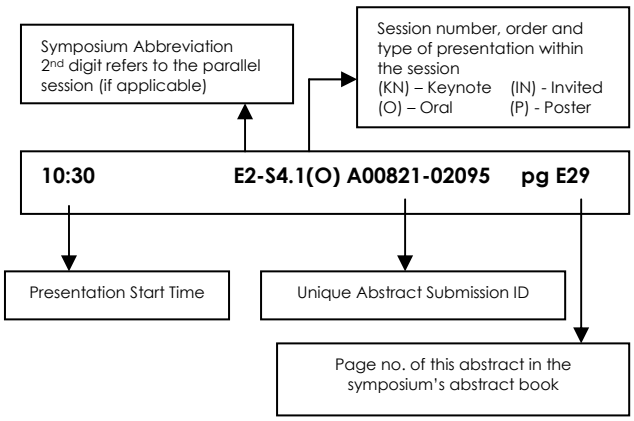
13:00 M-S12.9(O) A01666-02882 pg M18
Switching H-NS between Two Modes of Binding to DNA
Yingjie LIU, Hu CHEN, Linda KENNEY, Jie YAN

13:15 M-S12.10(O) A01713-02988 pg M20
A Nanochannel Platform for Single-DNA Studies
Johan R. C. VAN DER MAAREL, Ce ZHANG, Peige SHAO, Jeroen A. VAN KAN

SYMPOSIUM N

Plastic Electronics

The programme codes you will see in the following pages are decoded using an example below:



Symposium N: Plastic Electronics

Level 3, Room 320

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session N-S4**	(10:30 - 12:30) **Session N-S6**	(10:30 - 12:30) **Session N-S9**	(10:30 - 11:00) Coffee Break
(11:00 - 12:15) **Session N-S1**				
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session N-S2**	(14:00 - 16:30) **Session N-S5**	(14:00 - 15:30) **Session N-S7**	(14:30 - 16:15) **Session N-S10**	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session N-S8** **POSTER SESSION**	(16:15 - 16:30) Break	
(16:30 - 18:00) **Session N-S3**			(16:30 - 18:00) **Session N-S11**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

N-S1

Monday, 29 June 2009
11:00-12:15
Level 3, Room 320
Chair: Paul BLOM

11:00 N-S1.1-2(OS) N90001 pg N50
Excitons at Organic Semiconductor Heterojunctions
Richard H. FRIEND

11:30 N-S1.3-4(KN) N90002 pg N50
Not available at press time
Jeremy H. BURROUGHES

12:00 N-S1.5-6(KN) A02833-04855 pg N48
Polymer White-Emitting Materials and Devices
Yong CAO

N-S2

Monday, 29 June 2009
14:00-16:15
Level 3, Room 320
Chair: Yong CAO

14:00 N-S2.1-2(KN) N90003 pg N50
Thiophene-containing Copolymers for Organic Photovoltaics
Marc C. HILLMYER

14:30 N-S2.3-4(KN) N90021 pg N57
Dendrimers for Photon Harvesting in Dye-sensitised Solar Cells
Paul BURN, Byeong-Kwan AN, Paul MEREDITH

15:00 N-S2.5-6(IN) N90024 pg N58
Low Band Gap and Solution Processable Diketopyrrolopyrrole-based Materials for Applications in Bulk Heterojunction Solar Cells
Thuc-Quyen NGUYEN

15:30 N-S2.7(O) A01357-02375 pg N28
Interplay between Supramolecular-organization and Optical Properties of Blue-emitting PPVs with Fluorinated Vinylene Units
Maria LOSURDO, Maria GIANGREGORIO, Pio CAPEZZUTO, Antonio CARDONE, Gianluca FARINOLA, Francesco BABUDRI, Giovanni BRUNO, Francesco NASO

15:45 N-S2.8(O) N90026 pg N59
Quantifying Loss Currents in Organic Bulk Heterojunction Solar Cells
Zi-En OOI, Alan SELLINGER, John C. DEMELLO

16:00 N-S2.9(O) A00921-01677 pg N22
Structural, Optical and Morphological Properties of Poly(*p*-phenylene vinylene) based Polymer/Oligomer Blends for Organic Photovoltaic Applications
Zaw Oo THAN, Teck Lip TAM, Lydia Helena WONG, Nripan MATHEWS, Subodh MHAISALKAR, Alan SELLINGER

N-S3

Monday, 29 June 2009
16:30-18:00
Level 3, Room 320
Chair: Marc HILLMYER

16:30 N-S3.1-2(KN) N90027 pg N59
Not available at press time
Christoph J. BRABEC

17:00 N-S3.3-4(IN) N90004 pg N50
Mesostructures and Metal Oxides in Solid-State Dye-Sensitized Solar Cells
Henry J. SNAITH

17:30 N-S3.5(O) A02140-03712 pg N38
Electrochemistry for Dye-sensitized Solar Cells
Qing WANG, Michael GRAETZEL

17:45 N-S3.6(O) A01017-01772 pg N24
Relative Interdependence of Processing Parameters on the Ordering and Performance of P3HT:PCBM Solar Cells
Ayse TURAK, Jonas HANISCH, Esther BARRENA, Udo WELZEL, Franziska WIDMAIER, Erik AHLSWEDE, Helmut DOSCH

N-S4

Tuesday, 30 June 2009
10:30-12:30
Level 3, Room 320
Chair: Karl LEO

10:30 N-S4.1-2(KN) N90005 pg N50
Insight into the Synthesis, Design and Processing of Narrow Band Gap Organic Semiconducting Polymers for Solar Cell Fabrication
Guillermo C. BAZAN, Jeff PEET, James ROGERS, Thuc-Quyen NGUYEN, Ed KRAMER, Alan HEEGER

11:00 N-S4.3-4(IN) A02880-04927 pg N49
Solution Processed Organic Semiconductors for High Performance OPVs and OLEDs
Zhi-Kuan CHEN

11:30 N-S4.5-6(IN) A02789-04764 pg N45
Optimization of Bridged Phenylene Materials for Optoelectronics Applications
Andrew GRIMSDALE

12:00 N-S4.7(O) A00241-00732 pg N11
Donor-Acceptor Conjugated Polymers for Photovoltaic Applications
Wenjing TIAN, Yaowen LI, Shanpeng WEN, Jianing PEI, Lili XUE, Hui LI

12:15 N-S4.8(O) A02317-03963 pg N40
Relation between Optical Properties and Film Morphology of Polymer/TiO_2 Nanorods Hybrid Bulkheterojunction Solar Cells
Chia-Hao CHUANG, Tsung-Hung CHU, Wei-Fang SU, Chun-Wei CHEN

N-S5

Tuesday, 30 June 2009
14:00-16:30
Level 3, Room 320
Chair: Guillermo BAZAN

14:00 N-S5.1-2(KN) N90006 pg N51
Highly Efficient Organic Devices
Karl LEO

14:30 N-S5.3-4(KN) N90007 pg N51
Doping of Organic Molecular Films: New Dopants and Direct Visualization via STM
Antoine KAHN, Sieu HA, Yabing OI, Michael KRÖGER, Calvin K. CHAN

15:00 N-S5.5-6(KN) N90028 pg N59
Charge Transport in Doped Poly(p-phenylene vinylene)
Paul W.M. BLOM

15:30 N-S5.7(O) N90008 pg N52
Direct Evidence for the Role of the Madelung Potential in Determining The Work Function of Doped Organic Semiconductors
Perq-Jon CHIA, Sivaramakrishnan SANKARAN, Mi ZHOU, Rui-Qi PNG, Lay-Lay CHUA, Richard H. FRIEND, Peter K.-H. HO

15:45 N-S5.8-9(IN) A00171-00841 pg N11
A Rare Solution-Processable Molecular Host Material for Blue Phosphorescence Dopants in Organic Light-Emitting Diodes
Chin-Ti CHEN, Shun-Wei LIU, Min-Fei WU, Jwo-Huei JOU, Wei-Ben WANG, Mao-Feng HSU

16:15 N-S5.10(O) A02483-04247 pg N43
Light Emitting Organic p-i-n Homo Diodes Based on Chemically Doped Wide Band Gap Materials
Sami HAMWI, Jens MEYER, Stephan SCHMALE, Thomas WINKLER, Hans-Hermann JOHANNES, Thomas RIEDL, Wolfgang KOWALSKY

N-S6

Wednesday, 1 July 2009
10:30-12:30
Level 3, Room 320
Chair: Jiishan WU

10:30 N-S6.1-2(KN) A00860-01492 pg N21
Organic and Hybrid Electron-Transporting Solution-Processed Semiconductor Devices
Howard E. KATZ, Qingdong ZHENG, Byung Jun JUNG, Bhola Nath PAL, Bal Mukund DHAR

11:00 N-S6.3-4(KN) N90009 pg N52
Engineering Approach to Materials and Devices Development
Nir TESSLER, Ariel BEN-SASSON, Nir YAACOBI, Eran AVNON, Michal SORENI, Yang-Yu YU, Olga SOLOMESHSCH

11:30 N-S6.5(O) A00468-00866 pg N16
Organic Memory Devices Based on Thin Films of Pentacene and Polymethylmethacrylate
Mohammed F. MABROOK, Youngjun YUN, Christopher PEARSON, Dagou A. ZEZE, Martin TAYLOR, Michael C. PETTY

11:45 N-S6.6(O) A01277-03527 pg N27
Three-dimensional Anisotropic Density of States (DOS) and Carrier Mobilities in Solution Grown Organic Single Crystals Measured by Space-Charge Limited Current (SCLC)
Alessandro FRALEONI-MORGERA, Beatrice FRABONI, Anna CAVALLINI

12:00 N-S6.7(O) A01209-02103 pg N26
High-Performance OTFTs from Solution-Processable Dithieno[3,2-b;2',3'-d]thiophene-based Polymer Semiconductors
Jun LI, Chang Ming LI, Wei ZHANG, Jingui QIN, Zhikuan CHEN, Beng S. ONG

12:15 N-S6.8(O) A00200-04491 pg N11
Filed-effect in Organic Thin Film with Wet Gate Dielectrics
Takashima WATARU, Andersson MATTIAS, Kaneto KEIICHI, Inganas OLLE

N-S7

Wednesday, 1 July 2009
14:00-15:30
Level 3, Room 320
Chair: Howard KATZ

14:00 N-S7.1-2(KN) N90025 pg N58
Synthesis, Characterization and Device Properties of Solution-Processable Graphitic Materials
Wallace W.H. WONG

14:30 N-S7.3-4(IN) N90023 pg N57
Soluble and Stable Near Infrared Dyes
Jishan WU, Junhong YAO, Chongjun JIAO, Jinling LI, Kian-Ping LOH

15:00 N-S7.5(O) A00304-00565 pg N12
Non-traditional Aromatic Systems Employed in the Design of New Organic Electronic Materials
John D. TOVAR

15:15 N-S7.6(O) A01989-03438 pg N36
A Meaningful Analogue of Pentacene: Understanding Charge Transport, Polymorphs and Electronic Structures of Dihydrodiazapentacene
Qin TANG, Dieqing ZHANG, Ning KE, Jianbin XU, Jimmy C. YU, Qian MIAO

N-S8: Poster Session

Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Gallery

N-S8.01(P) A00084-03662 pg N10
Microwave Plasma Surface Modification of Polyimide for Improving Adhesion to Electroless Copper Metallization
Trieu NGUYEN, In-Seob BAE, Sang-Jin CHO, Jin-Hyo BOO

N-S8.02(P) A00102-00345 pg N10
Adsorption Structure of Organic Molecules Based on Coverage
Dandan GUAN, Fei SONG, Weidong DOU, Han HUANG, Bin LV, Hanjie ZHANG, Haiyang LI, Pimo HE, Shining BAO

N-S8.03(P) A00149-01140 pg N10
Tandem Polymer Solar Cells Processed from Solution
Ari Handono RAMELAN, Harjana HARJANA, Yung Hsu FU

N-S8.04(P) A00279-02758 pg N12
Highly Optical Transparency and Low Dielectric Constant of Fluorinated poly(ether ketone imide) s Derived from a Novel Unsymmetrical Diamine Containing Trifluoromethyl and Methyl Pendant Groups
Chenyi WANG, Guang LI, Jianming JIANG

N-S8.05(P) A00309-00636 pg N12
Synthesis, Characterization and Optical Properties of Light-Emitting Polyfluorene Derivatives
Philaiwan AIAMSEN, David L. CARROLL, Sukon PHANICHPHANT

N-S8.06(P) A00407-00790 pg N14
Aggregation-induced Photoluminescence Enhancement of Small Organic Molecule and Polymer
Yijie XIA, Jianyong OUYANG

N-S8.07(P) A00427-01382 pg N14
Dynamic Model for Magnetoresistance Effect in Organic Light Emitting Diode(OLED) based on Singlet-Triplet Exciton Conversion Enhancement in Magnetic Field
Chavis SRICHAN, Tanom LOMAS, Adisorn TUANTRANONT

N-S8.08(P) A00443-01796 pg N14
Selectied-area in-situ Generation of Highly Fluorescent Organic Nanowire Embedded in Polymer Film: Solvent-vapor-induced Self Assembly Process
Jong Won CHUNG, Byeng-Kwan AN, Fumio HIRATO, Hiroshi JINNAI, Soo Young PARK

N-S8.09(P) A00460-00957 pg N14
Polymeric Piezoelectric Cantilever and Tubular Actuators
Sisi NI, Tao LI, Jan MA

N-S8.10(P) A00460-00961 pg N15
Polymeric Piezoelectric Actuators with Helical Configuration
Sisi NI, Tao LI, Jan MA

N-S8.11(P) A00484-00892 pg N16
High Mobility and Low Hysteresis Pentacene Thin-film Transistors with Surface-modified High-k Oxide Gate Dielectrics
Aifang YU, Qiong QI, Chao JIANG

N-S8.12(P) A00589-01073 pg N17
Synthesis and Characterization of Electroactive Starburst Block Copolymers
Che-Jung HSU, Leeyih WANG

N-S8.13(P) A00610-01110 pg N17
Effect of MoO3 as an Interface Layer in High Performance Organic Photovoltaic Cells
Jegadesan SUBBIAH, Do Young KIM, Franky SO

N-S8.14(P) A00649-01174 pg N18
Growth of Functional Molecular Wires on Solid Supports
Susan BARNES, Aled WILLIAMS, Ben ROBINSON, Geoff ASHWELL

N-S8.15(P) A00691-01246 pg N19
Time-Resolved Electroluminescence Studies of $Ir(PPY)_3$-based Organic Light Emitting Devices
Faxin ZANG, Michael KURNIAWAN, Tze Chien SUM, Alfred HUAN

N-S9

Thursday, 2 July 2009
10:30-12:15
Level 3, Room 320
Chair: George MALLIARAS

10:30 N-S9.1-2(KN) A02888-04936 pg N49
Organic Semiconductors Nanostructures via Scanning Probes Patterning
Franco CACIALLI

11:00 N-S9.3-4(IN) A00386-00919 pg N13
NIR Direct Thermal Lithography of π-Conjugated Polymers (πCPs)
Terry J. GORDON, Han XU, Steven HOLDCROFT

11:30 N-S9.5(O) A02801-04792 pg N45
Electrochemical Deposited Organic Luminescent Films: A New Approach for Fabricating Low-cost, High Performance OLEDs
Yuguang MA

11:45 N-S9.6(O) A00859-01493 pg N21
Inkjet Printing of Copper and Nickel Conductors for Flexible Electronics
Paul CALVERT

12:00 N-S9.7-8(IN) N90010 pg N52
Micron order Direct Patterning Technology, Super Ink Jet (SIJ)
Kazuhiro MURATA

N-S10

Thursday, 2 July 2009
14:30-16:00
Level 3, Room 320
Chair: Franco CACIALLI

14:30 N-S10.1-2(KN) N90022 pg N57
Organic Bioelectronics
George G. MALLIARAS

15:00 N-S10.3(O) A00649-01165 pg N18
Molecular Diodes and Functional Molecular Wires
Geoff ASHWELL

15:15 N-S10.4(O) A00572-01047 pg N17
Charge Balance in High Efficiency Blue Phosphorescent Organic Light Emitting Diodes
Neetu CHOPRA, Jaewon LEE, Franky SO

15:30 N-S10.5(O) A01644-02849 pg N31
Metallic Nanoparticle Network for Photocurrent Generation and Photodetection
X. N. XIE, Y. XIE, X. GAO, C. H. SOW, A. T. S. WEE

15:45 N-S10.6-7(IN) A02605-04450 pg N44
Scanning Probe Microscopy on Active Organic Electronic Devices: Solar Cells
David GINGER

N-S11

Thursday, 2 July 2009
16:30-18:00
Level 3, Room 320
Chair: Wallace WONG

16:30 N-S11.1-2(IN) A01040-02315 pg N25
Small-signal Admittance Measurements: A Diagnostic Tool for Organic Electronic Devices
David Martin TAYLOR

17:00 N-S11.3(O) A00357-01177 pg N13
Characterization of Polymer Light-Emitting Diodes Interlayers using AFM and CS-AFM
Quirina FERREIRA, Ana CHARAS, Gabriel BERNARDO, Luis ALCACER, Jorge MORGADO

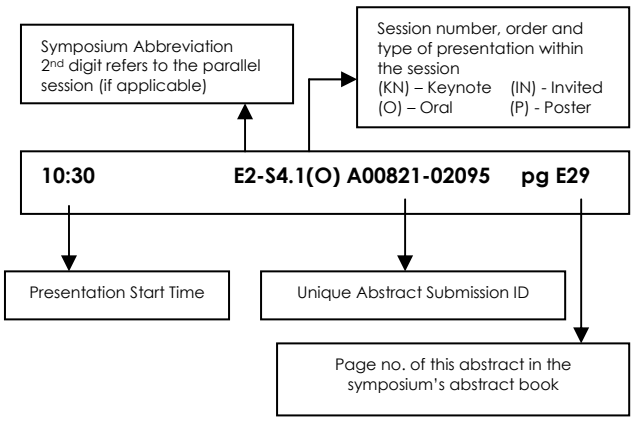
17:15 N-S11.4(O) N90011 pg N53
Raman spectroscopy and imaging from organic conducting polymers and photovoltaic devices
Ken P.J. WILLIAMS

17:30 N-S11.6(O) A02329-03987 pg N40
Enhanced Performance of Organic Field Effect Transistor Based on High Quality Copper Phthalocyanine Thin Film
Pramod KUMAR, Subhasis GHOSH

SYMPOSIUM O

Compound Semiconductor Photonics: Materials, Devices and Integration

The programme codes you will see in the following pages are decoded using an example below:



Symposium O(1): Compound Semiconductor Photonics: Materials, Devices and Integration

Level 3, Room 304

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:45) **Session O1-S4** III-As/ P Epitaxy & QD/ Wires – I	(10:30 - 12:45) **Session O1-S6** III-Nitride – II	(10:30 - 12:45) **Session O1-S9** III-As/ P Epitaxy & QD/ Wires - II	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session O1-S1** Optoelectronic Devices & Integration - I				(11:00 - 13:00) **Session O1-S12** ZnO – III
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session O1-S2** Photonic Crystals & Metamaterials - I	(14:00 - 16:30) **Session O1-S5** Optoelectronic Devices & Integration - II	(14:00 - 15:30) **Session O1-S7** ZnO – I	(14:30 - 16:15) **Session O1-S10** Optoelectronic Devices & Integration - IV	
(16:15 - 16:30) Break		(15:30 - 18:00) **Session O1-S8** Photonic Crystals & Metamaterials – II		
(16:30 - 18:00) **Session O1-S3** III-Nitride - I			(16:00 - 18:00) **Session O-S11** **POSTER SESSION**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

Symposium O(2): Compound Semiconductor Photonics: Materials, Devices and Integration

Level 3, Room 323 (Wed); Level 3, Room 313 (Thu - Fri)

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break		Room 323 (10:30 - 12:45) **Session O2-S6** Optoelectronic Devices & Integration – III	(10:30 - 12:45) **Session O2-S9** Chalcogenide & Oxide – III	(10:30 - 11:00) Coffee Break
				(11:00 - 13:00) **Session O2-S12** Optoelectronic Devices & Integration – V
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
		Room 323 (14:00 - 15:30) **Sessions O2-S7** Chalcogenide & Oxide – I	(14:30 - 16:15) **Session O2-S10** ZnO – II	
(16:15 - 16:30) Break		Room 323 (14:00 - 17:00) **Sessions O2-S8** Chalcogenide & Oxide – II	(16:00 - 18:00) **Session O-S11** **POSTER SESSION**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

O

O1-S1: Optoelectronic Devices & Integration - I

Monday, 29 June 2009
11:00 - 12:30
Level 3, Room 304
Chair: Federico Capasso, Teng Jinghua

11:00 O1-S1.1-2(KN) A01858-03321 pg O60
Recent Progress of Terahertz Wave Sensing and Applications
Xi-Cheng ZHANG

11:30 O1-S1.3-4(IN) A02816-04828 pg O81
Terahertz Frequency Quantum Cascade Lasers
Alexander Giles DAVIES

12:00 O1-S1.5-6(IN) A01860-03216 pg O61
Optical Phonon Mediated Photodetector
H. C. LIU

O1-S2: Photonic Crystals & Metamaterials - I

Monday, 29 June 2009
14:00 - 16:15
Level 3, Room 304
Chair: Giles Davis, Zhi-Yuan Li

14:00 O1-S2.1-2(KN) A02546-04355 pg O76
Plasmonic Semiconductor Lasers: A New Class of Light Sources with Engineered Far-field and Near Field
Federico CAPASSO

14:30 O1-S2.3-4(KN) A02239-03820 pg O69
New Trends in Photonic Crystals
Susumu NODA, Takashi ASANO

15:00 O1-S2.5-6(IN) A02904-04963 pg O83
Invisibility Devices
Ulf LEONHARDT, Tomas TYC

15:30 O1-S2.7(O) A00148-00306 pg O16
1D Photonic Crystal with Properties of Multiple Channel Filtering and Huge Optical Amplification
Gao YINGJUN

15:45 O1-S2.8(O) A00298-00545 pg O22
Preparation of Metal Nanoparticle Films through a Chemical Reduction Process at Low Temperature and their Application
Kuan SUN, Benhu FAN, Hui Jing ORE, Jianyong OUYANG

16:00 O1-S2.9(O) A01085-01876 pg O39
High Aspect Ratio Metamaterials for Enhanced Tunability and Sensitivity
Sher-Yi CHIAM, Mohammed BAHOU, Herbert O. MOSER, Ranjan SINGH, Jianqiang GU, Weili ZHANG, Andrew A. BETTIOL

O1-S3: III-Nitride - I

Monday, 29 June 2009
16:30 - 18:00
Level 3, Room 304
Chair: Chua Soo Jin, Liu Wei

16:30 O1-S3.1-2(KN) A02226-04504 pg O68
Progress in the Growth, Characterization and Device Performance for Nonpolar and Semipolar GaN-based Materials
James SPECK

17:00 O1-S3.3(O) A00496-00911 pg O26
Nature of Surface States and Dislocations on Non-Polar GaN(1-100) Surfaces Investigated by Scanning Tunneling Microscopy
Philip EBERT, Holger EISELE, Lena IVANOVA, Svetlana BORISOVA, Mario DÄHNE

17:15 O1-S3.4(O) A01282-02281 pg O45
ZnO Nanorod Reflectors for Enhancing the Light Extraction from GaN Blue LEDs
Chew Beng SOH, Hong Quang LE, Norman Soo Seng ANG, Soo Jin CHUA, Mona SURYANA, Rayson Jen Ngee TAN, Jinghua TENG

17:30 O1-S3.5(O) A00107-00561 pg O14
Complexities in the Interpretation of the Optical Measurements on InGaN/GaN Quantum Wells of High Indium Content
Sanjib KABI, Tapas DAS, Dipankar BISWAS

17:45 O1-S3.6(O) A01215-02070 pg O43
Integration of III-nitride Optoelectronics by Nanoepitaxial Liftoff and Transfer Printing
Keyan ZANG, Jinghua TENG, Hong LIU, Soo Jin CHUA

O1-S4: III-As/P Epitaxy & QD/Wires – I

Tuesday, 30 June 2009
10:30 - 12:45
Level 3, Room 304
Chair: Wang Shu Min, Chia Chin Kean

10:30 O1-S4.1-2(IN) A02881-04929 pg O82
III-V Compound Semiconductor Nanowires Grown by MOCVD
Chennupati JAGADISH

11:00 O1-S4.3-4(IN) A02193-03765 pg O67
Photonic Signal Processing Devices Based on InAs Quantum Dot Materials
Osamu WADA

11:30 O1-S4.5-6(IN) A02778-04747 pg O80
Update on Semiconductor-laser Gain: From Quantum Well to Quantum Dots
Weng CHOW

12:00 O1-S4.7(O) A00107-00560 pg O13
Striking Information from the Photoluminescence of Annealed and Non Annealed III-V Nanostructures
Sanjib KABI, Siddhartha PANDA, Subindu KUMAR, Dipankar BISWAS

12:15 O1-S4.8(O) A00175-02706 pg O18
Methodology for Submicron Study of Effective Lateral Resolution of Quantum Well Intermixing
Chee Wei LEE, Yicheng LAI, Yingyan HUANG, Seng Tiong HO

12:30 O1-S4.9(O) A00081-02146 pg O13
Effects of Interdiffusion on the Band Profiles of InGaAs/ InP Quantum Wells
Tapas DAS, Dipankar BISWAS

O1-S5: Optoelectronic Devices & Integration - II

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Room 304
Chair: Yoshimasa Sugimoto, Aaron Danner

14:00 O1-S5.1-2(IN) A02997-05119 pg O84
New Functions of VCSEL-related Photonic Devices
Fumio KOYAMA

14:30 O1-S5.3-4(IN) A02272-03879 pg O70
Novel Aberration-Free Broadband High-Resolution Grating for InP/Si Microphotonic DWDM Chip Applications
Seng-Tiong HO, Yingyan HUANG, Qian ZHAO, Yongming TU

15:00 O1-S5.5(O) A00321-00668 pg O23
Solitons Emission from a Semiconductor Circular Ring Resonator
Wei Chun SU, Ming Chang SHIH

15:15 O1-S5.6(O) A01182-02028 pg O42
Thickness Dependence of Optical Properties in Nanostructured Si/SiO_2 Superlattice
Lihong SHI, Gang ZHANG, Baowen LI

15:30 O1-S5.7(O) A01328-02323 pg O48
Temperature-dependent Dynamic Characteristics of Quantum-dash Lasers
Cheng CHEN, Yang WANG, Hery S. DJIE, Boon S. OOI, James C. M. HWANG

15:45 O1-S5.8(O) A01568-03661 pg O54
Development and Fabrication of P-I-N Junction Silicon Nanowires Thin Film Solar Cell and Its Characteristic Study
Chien-Wei LIU, Yen-Hsi LEE, Bau-Tong DAI

16:00 O1-S5.9(O) A01660-02871 pg O55
Electrical and Optical Properties of GaAs/Ge Photodiodes
Ching Kean CHIA, M. SURYANA, G. K. DALAPATI

16:15 O1-S5.10(O) A01174-02512 pg O41
A Novel Triplexer Comprising a Ring Resonator and Directional Couplers
S. C. MAO, S. H. TAO, G. LU, Y. L. XU, X. W. SUN, M. B. YU, G. Q. LO, D. L. KWONG

O1-S6: III-Nitride – II

Wednesday, 1 July 2009
10:30 - 12:45
Level 3, Room 304
Chair: Chua Soo Jin, Zhang Xinhai

10:30 O1-S6.1-2(IN) A02603-04442 pg O77
GaN-on-Si: Present and Future
Alois KROST

11:00 O1-S6.3(O) A01512-02665 pg O52
MOCVD Growth of GaN on Patterned Sapphire Substrates
Wei LIU, Chew Beng SOH, Soo Jin CHUA

11:15 O1-S6.4 (O) A01512-03049 pg O53
Analysis of Novel Phenomenon in Reverse Leakage Current of GaN Blue LEDs
Wei LIU, Jiaxiu YE, Soo Jin CHUA

11:30 O1-S6.5(O) A01782-03125 pg O59
Room Temperature Cathodoluminescence of Aluminum Nitride Nanorods
Yeung Yu HUI, S. P. LAU, X. H. JI

11:45 O1-S6.6(O) A01791-03138 pg O59
Microscopic Correlation of Structural and Optical Properties of Spontaneously Developing Non-polar and Semi-polar GaN Growth Domains on r-plane Sapphire
Barbara BASTEK, Olga AUGUST, Juergen CHRISTEN, Thomas HEMPEL, Peter VEIT, Matthias WIENEKE, Armin DADGAR, Juergen BLÄSING, Alois KROST, Ulrich WENDT

12:00 O1-S6.7(O) A02178-03741 pg O67
First-principles Study of In, Ga, and N Adsorption on $In_xGa_{1-x}N$ (0001) and (000 1-bar) Surfaces
Chee-Kwan GAN, David J. SROLOVITZ

12:15 O1-S6.8(O) A02530-04331 pg O76
Complete Optical Characterization of Multilayered $In_xGa_{1-x}N$/GaN Structures Grown by MOCVD on Sapphire Substrates
A. GOKARNA, A. STOLZ, E. DOGHECHE, D. DECOSTER, J. TENG, W. LIU, S. J. CHUA, E. DUMONT

12:30 O1-S6.9(O) A00866-01503 pg O35
Lab to fab: Towards Process Control of Nitride LED Structures by X-ray Scattering Methods
Joachim WOITOK

O2-S6: Optoelectronic Devices & Integration – III

Wednesday, 1 July 2009
10:30 - 12:45
Level 3, Room 323
Chair: C.Jagadish, D. Decoster

10:30 O2-S6.1-2(IN) O-00002 pg O85
Epitaxial Growth on Nanoscale Patterned Surface
S. R. J. BRUECK, S. C. LEE

11:00 O2-S6.3-4(IN) O-00001 pg O85
Recent Development of Nanophotonic Integrated Devices and Materials
Yoshimasa SUGIMOTO

11:30 O2-S6.5(O) A00715-01274 pg O30
Investigation of White LED Performance with Multi-Layer Phosphors
Yiting ZHU, Nadarajah NARENDRAN

11:45 O2-S6.6(O) A01336-03873 pg O49
Integrated Waveguide Photodetector for DWDM Fiberoptic Communications
Guanghai DING, Cheng CHEN, Boon OOI, James HWANG, Guoyang XU, Seng-Tiong HO

12:00 O2-S6.7(O) A00496-05042 pg O26
The Role of Strain on the 2D→3D and Quantum Dot→Quantum Ring Phase Transitions during Growth of InAs/GaAs and GaSb/GaAs Nanostructures
Holger EISELE, Rainer TIMM, Andrea LENZ, Lena IVANOVA, Mario DÄHNE

12:15 O2-S6.8(O) A01934-03496 pg O63
Luminescence Study of Photonic Crystal GaN LED Structure on SOI Substrates
A. FRANKE, J. KRIMMLING, J. CHRISTEN, A. DADGAR, A. KROST, V. K. X. LIN, S. L. TEO, S. J. CHUA, S. TRIPATHY

12:30 O2-S6.9(O) A02814-04819 pg O80
Optical and Charged Particle Microscopy in Materials Science and Semiconductor Technology
Giuseppe PAVIA, Jörg STODOLKA, Heiko STEGMANN, Xiong LIU, Shue Yin CHOW

O1-S7: ZnO – I

Wednesday, 1 July 2009
14:00 - 15:30
Level 3, Room 304
Chair: Kailash Tripathi, S. Tripathi

14:00 O1-S7.1-2(IN) A02941-05036 pg O83
Epitaxial Growth and Optoelectronic Properties of ZnO Thin Films on (111) Si Substrates
Wei GUO, Michael B. KATZ, Christopher T. NELSON, Tassilo HEEG, Darrell G. SCHLOM, Bing LIU, Yong CHE, Fei ZHUGE, Xiaoqing PAN

14:30 O1-S7.3(O) A00007-00289 pg O12
The Deposition of ZnO Thin Film on Poly (propylene carbonate) (PPC) Substrate by DC-Sputtering
Nidhal JANDOW, Kamarulazizi IBRAHIM

14:45 O1-S7.4(O) A01076-03488 pg O39
Effects of O_2 Gas Plasma Pretreatment on ZnO Thin Film Grown by Atomic Layer Deposition
Chang-Mi SHIN, Jaeyeop LEE, Joohoi HEO, Joohyun PARK, Chorong KIM, Hyukhyun RYU, Ji-Ho CHANG, Won-Jae LEE

15:00 O1-S7.5(O) A00173-01166 pg O17
Structural and Optical Properties of Well-Aligned ZnO Nanowires Grown on Buffer Layer for Photonic Applications
Wei Li ONG, Andrew See Weng WONG, Ghim Wei HO

15:15 O1-S7.6(O) A00330-00610 pg O23
Growth of p-type Zinc Oxide Film in Aqueous Solution
Chuan Beng TAY, Soo Jin CHUA

O2-S7: Chalcogenide & Oxide – I

Wednesday, 1 July 2009
14:00 - 15:30
Level 3, Room 323
Chair: Osamu Wada, A. Ramam

14:00 O2-S7.1(O) A00523-00954 pg O27
Synthesis of New Methanofullerenes and Their Use in Poly(3-hexylthiophene)-based Solar Cells
Kuen-Jang HUANG, Hung-Wei LIU, Ming-Dao WANG, Tzu-Yu HUANG, Syang-Peng RWEI, Leeyih WANG

14:15 O2-S7.2(O) A01752-03060 pg O59
Study of Third Order Nonlinear Properties of Rhodamine6G Doped in Silica
Sunita SHARMA, Devendra MOHAN, Vandana NASA, S.K. GHOSHAL, Umesh GUPTA

14:30 O2-S7.3(O) A01327-04339 pg O48
Controllable Nanoparticle Size, Optical Properties and Growth Mechanism of ZnS Synthesized by Sonochemical Method
Raghvendra YADAV, Priya MISHRA, Avinash PANDEY, Rupali MISHRA

14:45 O2-S7.4(O) A01288-02246 pg O45
Electron Transport in Highly Ordered Anatase Nanotube Arrays for Dye Sensitized Solar Cells
Kangle LI, Zhibin XIE, Stefan ADAMS

15:00 O2-S7.5(O) A02382-04083 pg O72
Correlation between Band Structure and Magneto-transport Properties in Medium-infrared Detector II-VI Modulated Nanostructure Superlattice
Abdelhakim NAFIDI

15:15 O2-S7.6(O) A01651-03607 pg O54
A Raman Study of Er_2O_3-doping Effect on the Structure of $[(80-x)TeO_2+xPbCl_x+10MoO+10Zr_2O_3]$, with $0 \leq x \leq 15$ mol% Glasses
Ibrahim SHALTOUT, Shaaban SALEM, Yehiea BADR, Elbialy SHAISHA, Alaa BAHGAT

O1-S8: Photonic Crystals & Metamaterials – II

Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Room 304
Chair: Kent Choquette, Zhang Dao Hua

15:30 O1-S8.1-2(IN) A02839-04859 pg O81
Plane-Wave Transfer-Matrix Method and Its Application to Photonic Crystals
Zhi-Yuan LI

16:00 O1-S8.3-4(IN) A02130-03666 pg O65
Photonic Crystal Nanolaser and Its Applications
Toshihiko BABA, Shota KITA, Kengo NOZAKI

16:30 O1-S8.5(O) A01138-01974 pg O41
Sub-50nm Ultra-thin-wall Honeycomb Photonic Crystal for Epitaxial Necking
Zhang LIANG, Jinghua TENG, Soojin CHUA, Eugene A. FITZGERALD

16:45 O1-S8.6(O) A01557-02727 pg O54
Proton Beam Writing of Microstructures for Applications in Microphotonics
Andrew BETTIOL, Ee Jin TEO, Sher-Yi CHIAM, Siew-Kit HOI, Chammika UDALAGAMA, Mark BREESE, Frank WATT

17:00 O1-S8.7(O) A00669-02150 pg O29
Compact Silicon Electro-optic Modulator Based on a Cross Waveguide Resonator
Maoqing XIN, Aaron DANNER, Ching Eng PNG, Soon Thor LIM

17:15 O1-S8.8(O) A01859-03213 pg O61
Photonic Crystal Polarizer Element on InP/Air Membranes for Optical MEMS Applications
Thomas KUSSEROW, Matthias WULF, Ricardo ZAMORA, Balasubramanian VENGATESAN, Bernd WITZIGMANN, Hartmut HILLMER

O2-S8: Chalcogenide & Oxide – II

Wednesday, 1 July 2009
15:30 - 17:00
Level 3, Room 323
Chair: Osamu Wada, A. Ramam

15:30 O2-S8.1(O) A01724-03006 pg O56
Effect of Organic Acid on Synthesis of Conductive Poly(N-ethyl)aniline and its Application as Ammonia Sensor
Vasant CHABUKSWAR, Sanjay BHAVSAR, Vishwas GAIKWAD

15:45 O2-S8.2(O) A02349-04079 pg O71
Effect of UV Exposure on Chalcogenide Thin Films for Microlithography Applications
Prabhat DWIVEDI, Satinder SHARMA, Ashutosh SHARMA

16:00 O2-S8.3(O) A01907-03290 pg O62
Titanium Dioxide Synthesized Using Titanium Chloride: Size Effect Study Using Raman and Photoluminescence
Sanjeev K. GUPTA, Rucha DESAI, Prafulla K. JHA

16:15 O2-S8.4(O) A02742-04775 pg O79
Synthesis of ZnS (II-VI) Nanostructures for Gas Sensors and Effect of Growth Conditions
M HAFEEZ, U MANZOOR, A. S BHATTI

16:30 O2-S8.5(O) A01441-02502 pg O52
Optical Properties of Methylene Blue Encapsulated in Nano Matrix
Umesh GUPTA, Devendra Mohan NASA, Sib Krishna GHOSHAL, Vandana NASA, Sunita SHARMA

16:45 O2-S8.6(O) A02758-04928 pg O80
Electrical, Optical and Structural Properties of Pure and Gold-coated VO_2 Thin Films on Quartz Substrate
Francis DEJENE

O

O1-S9: III-As/P Epitaxy & QD/Wires - II

Thursday, 2 July 2009
10:30 - 12:45
Level 3, Room 304
Chair: Ci-Ling Pan, Xiang Ning

O2-S9: Chalcogenide & Oxide – III

Thursday, 2 July 2009
10:30 - 12:30
Level 3, Room 313
Chair: Elhadj Dogheche, Han Ming Yong

O1-S10: Optoelectronic Devices & Integration - IV

Thursday, 2 July 2009
14:30 - 16:15
Level 3, Room 304
Chair: Boon S. Ooi, Mei Ting

14:30 O1-S10.1-2(IN) A02484-04248 pg O74
Metamorphic InGaAs Materials and Telecom Lasers
Shumin WANG, Yuxin SONG, Ivar TÅNGRING, Zonghe LAI, Mahdad SADEGHI, Anders LARSSON, Donghai WU, Zhichuan NIU

15:00 O1-S10.3-4(IN) A02879-04926 pg O82
Carrier and Thermal Induced Index Variations in InP Waveguide Diodes
Didier DECOSTER, M. ZEGAOUI, N. SAADSAOUD, E. DOGHECHE, J. CHAZELAS

15:30 O1-S10.5(O) A00319-03280 pg O23
A Si-Based Al/AlN/Si MIS Device and its Photo Responsivity
Ming Chang SHIH, Sheng Tsung CHEN, Su WEI CHUN

15:45 O1-S10.6(O) A00760-01340 pg O31
Silicon Waveguide Fabrication Using Direct Proton Beam Writing
Ee Jin TEO, Andrew BETTIOL, Mark BREESE, Boqian XIONG, Pengyuan YANG, Goran MASHANOVICH, William HEADLEY, Graham REED

16:00 O1-S10.7(O) A02505-04302 pg O74
New Heterostructure Based Silicon and TCOs
Sadia MAIFI, Mohamed Said BELKAID

O2-S10: ZnO – II

Thursday, 2 July 2009
14:30 - 16:15
Level 3, Room 313
Chair: S. T. Ho, Wang Shijie

14:30 O2-S10.1(O) A01430-03037 pg O51
Highly Crystalline and Monodisperse CdSe-ZnO Nanocrystals
Tich-Lam NGUYEN, Margaret MICHAEL, Paul MULVANEY

14:45 O2-S10.2(O) A02025-04514 pg O64
Optical Properties of ZnO with One-Photon and Two-Photon Excitations
Xinhai ZHANG, Anna Marie YONG, Shijie XU

15:00 O2-S10.3(O) A02442-04164 pg O73
ZnO Ternary Alloys; ZnMgO and ZnCdO
S. PANNIRSELVAM, J.D. YE, S.T. TAN, Y. YANG, X.W. SUN, G.Q. LO, K.L. TEO

15:15 O2-S10.4(O) A02209-03784 pg O68
Quantum Confinement and Morphology of Nano ZnO at Various Preparatory Conditions
Rita JOHN, Sasi Florence S, Blessie S, Rajakumari R

15:30 O2-S10.5(O) A02436-04152 pg O72
High-quality Layer-by-layer Growth Of ZnO Heteroepilayers by Metal-organic Chemical-vapor Deposition
S. T. TAN, J. D. YE, S. PANNIRSELVAM, Y. YANG, X. W. SUN, G. Q. LO, K. L. TEO

15:45 O2-S10.6(O) A02150-03731 pg O66
Energetics of Various Intrinsic Defects Formation in ZnO from Density Functional Calculations
Vidya RAVINDRAN, Ponniah RAVINDRAN, Helmer FJELLVÅG, Bengt SVENSSON

16:00 O2-S10.7(O) A02607-04453 pg O78
Synthesis and Modifications of ZnO-porous Silicon Nanocomposites for White Light Applications
Ram Gopal SINGH, Fouran SINGH, Vivechana AGARWAL, Dinakar KANJILAL, Ram Mohan MEHRA

O-S11: Poster Session

Thursday, 2 July 2009
16:00 -18:00
Level 3, Gallery

O-S11.01(P) A00111-00286 pg O15
Study of Strain Effects in Multi-Quantum Well Structures of AlGaInP-based Light Emitting Diodes
Hwa-Sub OH, Jee-Hue JOO, Jin-Hong LEE, Joon-Seop KWAK, Jong-Hyeob BAEK

O-S11.02(P) A00127-00416 pg O15
A Ridge Waveguide Quantum Well AlGaAs/GaAs Laser Design
Marziyeh NAZARI

O-S11.03(P) A00137-03802 pg O16
Exciton Wavefunction Coupled Surface Plasmon Resonance for Indium-doped p-ZnO Nanowires with Perforated Aluminum Circle Hole Arrays on Si Substrate
Chung-Yuan TSAI, Yi-Ping WANG, Jen-Cheng WANG, Tzer-En NEE

O-S11.04(P) A00152-00634 pg O17
A Si-doped GaAs/AlGaAs Solar Cell on (311) A GaAs Substrate
Ong-arj TANGMETAJITAKUL, Supachok THAINOI, Somsak PANYAKEOW, Somchai RATANATHAMMAPHAN

O1-S12: ZnO – III

Friday, 3 July 2009
11:00 - 13:00
Level 3, Room 304
Chair: Juergen Christen, Yao Kui

11:30 O1-S12.3(O) A00369-00678 pg O24
Ultrafast Optical Studies in Transition-Metal-Doped ZnO Nanowires
Guo Zhong XING, Ali Sucipto TAN, Michael KURNIAWAN, Edbert Jarvis SIE, Dan Dan WANG, Fa Xin ZANG, Zhi Peng WEI, Cheng Hon Alfred HUAN, Tom WU, Tze Chien SUM

11:45 O1-S12.4(O) A00607-01105 pg O28
Effect of Annealing on Structural and Optical Properties of ZnO Crystals Grown on InP/c-sapphire Substrate by RF-magnetron Sputtering
Hongfei LIU, Soojin CHUA, Guangxia HU, Hao GONG

12:00 O1-S12.5(O) A00791-01385 pg O32
Atomic and Electronic Structures at ZnO and ZrO_2 Interface for Transparent Thin-film Transistors
Shijie WANG

12:15 O1-S12.6(O) A01282-02233 pg O45
Hydrothermal Synthesis of ZnO Nanorod on p-GaN
Yong Xing XU, Chew Beng SOH, Chuan Beng TAY, Soo Jin CHUA

12:30 O1-S12.7(O) A00923-01619 pg O35
Growth and Chemical Surface Modification of SnO_2-based Nanorod Arrays
Hui HUANG, Chiew Keat LIM, Hua GONG, Ooi Kiang TAN

12:45 O1-S12.8(O) A02470-04220 pg O74
Growth Modes Transition in ZnO Heteroepitaxy on Sapphire
Jiandong YE, Swee Tiam TAN, Somasuntharam PANNIRSELVAM, Yi YANG, Xiaowei SUN, Guoqiang LO, Kie Leong TEO

O2-S12: Optoelectronic Devices & Integration – V

Friday, 3 July 2009
11:00 - 13:00
Level 3, Room 313
Chair: Steve Brueck, Tang Xiaohong

11:00 O2-S12.1-2(IN) A02549-04359 pg O77
New Approaches for Modulation of Vertical Cavity Lasers
Kent CHOQUETTE, Chen CHEN

11:30 O2-S12.3-4(IN) A03028-05161 pg O84
A Comparative Study of High-Power Sub-THz Photonic-Transmitters Based on GaAs/AlGaAs Uni-Traveling Carrier and Separated-Transport-Recombination Photodiodes
Ci-Ling PAN

12:00 O2-S12.5(O) A01527-02668 pg O53
Determination of Effective Index Variation and Insertion Loss Introduced by Quantum Well Intermixing in InP/InGaAsP based Quantum Well
Yicheng LAI, Chee-Wei LEE, Yingyan HUANG, Seng-Tiong HO

12:15 O2-S12.6(O) A02672-04589 pg O78
Novel Photonic Crystal Based Nanocavity Resonator
Fu Li HSIAO, Chengkuo LEE

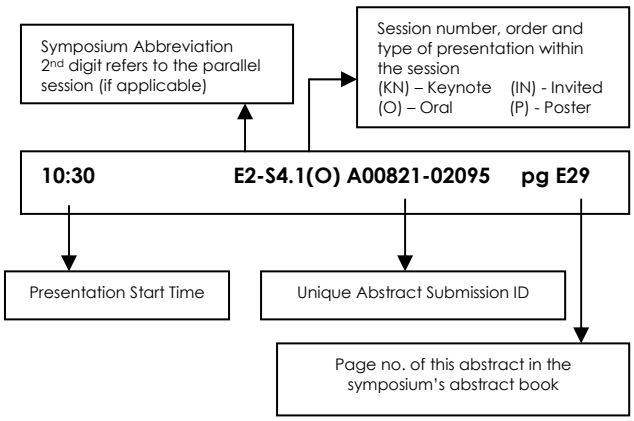
12:30 O2-S12.7(O) A00031-02797 pg O12
Synthesis and Characterization of TiO_2 Inverse Opals for Solar Cell Applications
Siva KARUTURI, Lijun LIU, L. T. SU, A. I. Y. TOK

12:45 O2-S12.8(O) A00793-03041 pg O32
InGaAsP Superluminescent Device Based on Plasma Exposure Enhanced Quantum Well Intermixing
Yicen LI, Shuh Ying LEE, Ting MEI, Jing Hua TENG

SYMPOSIUM P

Optical Fiber Devices and Applications

The programme codes you will see in the following pages are decoded using an example below:



Symposium P: Optical Fiber Devices and Applications

Level 3, Room 314

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session P-S1**	(10:30 - 12:30) **Session P-S4**	(10:30 - 12:30) **Session P-S6**	(10:30 - 12:30) **Session P-S9**	(11:00 - 13:45) **Session P-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Lunch Closing & Poster Ceremony
(13:30 - 16:15) **Session P-S2**	(14:00 - 16:30) **Session P-S5** **POSTER SESSION**	(13:30 - 15:30) **Session P-S7**	(13:30 - 16:45) **Session P-S10**	
(16:15 - 16:30) Break		(15:30 - 18:00) **Session P-S8**		
(16:30 - 18:30) **Session P-S3**			(16:45 - 19:00) **Session P-S11** **Panel Discussion**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

P-S1

Monday, 29 June 2009
10:00-12:30
Level 3, Room 314
Chair: Perry SHUM

11:00 P-S1.1-2(IN) A01637-03002 pg P22
Small Fibers - Big Physics
John DUDLEY

11:30 P-S1.3-4(IN) A01538-02687 pg P21
Recent Progress on Ultrafast/ultrashort/frequency-stabilized Erbium-doped Fiber Lasers and their Applications
Masataka NAKAZAWA

12:00 P-S1.5-6(IN) A02597-04436 pg P39
Linear and Non-linear Applications of Periodic Structures in Optical Fibres
M. IBSEN, A. CANAGASABEY, C. CORBARI, P.G. KAZANSKY, Z. ZHANG, W.A. CLARKSON, J.K. SAHU

P-S2

Monday, 29 June 2009
13:30-16:15
Level 3, Room 314
Chair: LIN Chinlon

13:30 P-S2.1-2(IN) A02218-03791 pg P30
Recent Progress in Micro/Nanofiber Photonics
Misha SUMETSKY

14:00 P-S2.3-4(IN) A02113-03639 pg P30
Functionalization of Optical Microfibers and Nanofibers
Limin TONG

14:30 P-S2.5-6(IN) A01364-02378 pg P19
Optical Fibre Nanowires and Microwires Manufactured by the Modified Flame Brushing Technique: Extraordinary Properties and Applications
Gilberto BRAMBILLA

15:00 P-S2.7(O) A01225-02094 pg P17
Performance of Microfiber Ring Resonators
Guillaume VIENNE, Aurelien COILLET, XuFeng KOU, Philippe GRELU, Limin TONG

15:15 P-S2.8(O) A01446-02528 pg P20
Polymer Single-Nanowires for Optical Sensing
Fuxing GU, Limin TONG

15:30 P-S2.9(O) A01361-02374 pg P18
Ultra Compact SOI Tapered MMI
Shuh-Ying LEE, Landobasa Y. M. TOBING, Stevanus DARMAWAN, Yichen LI, Ting MEI

15:45 P-S2.10(O) A02311-03962 pg P34
Novel Fiber Optic Engine for Micro Projection Display
Hesam Edin ARABI, Sohee AN, Kyunghwan OH

16:00 P-S2.11(O) A02261-03861 pg P32
Fabrication of Nonlinear Optical Silk
Naibo LIN

P-S3

Monday, 29 June 2009
16:30-18:30
Level 3, Room 314
Chair: Misha SUMETSKY

16:30 P-S3.1-2(IN) A02257-03851 pg P32
Photonic Applications of Carbon Nanotubes
Shinji YAMASHITA

17:00 P-S3.3-4(IN) A01825-03177 pg P26
Passively Mode-Locked Fiber Ring Lasers Using Saturable Absorber Incorporating Carbon Nanotubes
Wood-Hi CHENG, Jin-Chen CHIU, Chao-Yung YEH, Gong-Ru LIN, Jiang-Jen LIN

17:30 P-S3.5-6(IN) A00482-00890 pg P10
Nanowire Drawing and Nanodevice Assembly
Baojun LI

18:00 P-S3.7(O) A01634-02832 pg P22
Tip-induced Change in Polarized Raman Properties of Nanoribbons
Bin YAN, Chaoling DU, Yumeng YOU, Lei LIAO, Zhe ZHENG, Zexiang SHEN, Ting YU

18:15 P-S3.8(O) A02269-03875 pg P32
Enhanced All Optical Switching by Using Microfiber and Nanofiber Ring Resonators
Guanghui WANG, Liming TONG, Ping SHUM, Juanjuan HU, Chinlon LIN, Guillaume VIENNE

P-S4

Tuesday, 30 June 2009
10:30-12:30
Level 3, Room 314
Chair: HO Aaron Ho-Pui

10:30 P-S4.1-2(IN) A00489-02931 pg P10
Physical and Bio-chemical Sensor Research at The University of Québec Using Conventional and Microstructured Optical Fibers
Wojtek J. BOCK

11:00 P-S4.3-4(IN) A01034-01803 pg P15
Brillouin Distributed Fibre Sensing: State of the Art and Perspectives
Luc THEVENAZ

11:30 P-S4.5-6(IN) A00816-03642 pg P14
Recent Advances in Fibre Grating Devices and their Sensing Applications
Lin ZHANG

12:00 P-S4.7-8(IN) A01425-02467 pg P19
Ultrafast Nonlinear Optics on a Chip: Enabling Signal Processing at Terabits per Second
Benjamin EGGLETON

P-S5: Poster Session

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Gallery

P-S5.01(P) A00066-04952 pg P7
Silicon Raman Laser using Bi-directionally Pumped Mach-Zehnder Interferometer (MZI) cavity
Ying HUANG, Ming TANG, Ping SHUM, Chinlon LIN

P-S5.02(P) A00158-00325 pg P7
A Novel Design of Highly Nonlinear, Polarization-maintaining Photonic Crystal Fiber with Near-zero Flattened Dispersion
Huai Yu MENG, Dora Juan Juan HU, Ping SHUM

P-S5.03(P) A00338-00754 pg P9
Multi-channel 80-GHz RZ Pulse Train Generation Based on XPM and FWM in a Nonlinear Optical Loop Mirror
Jing YANG, Junhao HU, Changyuan YU, Yong Kee YEO, Yixin WANG

P-S5.04(P) A00525-01059 pg P12
Surface Plasmonic Resonance Sensor Using Side Polished Fibers
Tianyuan XIAO, Xia YU, Ping SHUM, Yehuda LEVIATAN

P-S5.05(P) A00644-01158 pg P13
Fiber-Optic Interferometer Formed by a Section of Small-Core Fiber Spliced between Standard Fibers
Sergey NIKITOV, Oleg IVANOV

P-S5.06(P) A00988-01734 pg P15
Synergistic Integration of Microring Resonator with Mach-Zehnder Interferometer and Its Applications: Two-ring Mach-Zehnder Interferometer
Stevanus DARMAWAN, Landobasa Y. M. TOBING, Ting MEI

P-S5.07(P) A01089-01883 pg P16
Theoretical Investigation of Surface Plasmonic Resonance Sensor Based on Spectral Detection Technique
Lei YANG, Xia YU, Ping SHUM, Ying ZHANG, Yehuda LEVIATAN

P-S5.08(P) A01361-02372 pg P18
Relaxation of Critical Coupling Condition in Two-ring Resonator Systems
Landobasa Y. M. TOBING, Stevanus DARMAWAN, Ting MEI

P-S5.09(P) A01445-02509 pg P20
A Novel Bragg-like Chirped Clad Fiber: Design Issues
Somnath GHOSH, Ravendra Kumar VARSHNEY, Bishnu Pada PAL

P-S5.10(P) A01446-02523 pg P20
Modeling Endface Effects of Optical Micro/nanofibers
Shanshan WANG, Limin TONG

P-S5.11(P) A01888-03258 pg P26
Side-hole Fiber based Bragg Grating for Simultaneous Measurement of Strain and Temperature
Xinyong DONG, Ping SHUM, Pierre-Yves FONJALLAZ, Carola STERNER, Myriam KABA, Georges HUMBERT, Frederic GEROME, Jean-Marc BLONDY

P-S5.12(P) A02019-03503 pg P28
Metallic and Metal Oxide High Temperature Coatings for Optical Fibers by Sputtering
Jörg BIERLICH, Jens KOBELKE, Kai SCHUSTER, Jens KUPIS, Konstantin KIRSCH, Claudia AICHELE, Anka SCHWUCHOW, Ines LATKA, Eric LINDNER, Johannes KIRCHHOF

P-S5.13(P) A02240-04376 pg P31
Prediction of the Corrosion of Steel Bar Embedded in Concrete with Circled FBG
Wen CHEN, Xiaopeng DONG, Xianfang ZHU

P-S5.14(P) A02269-04824 pg P33
Polymer Optical Fiber Index Sensor Based on Localized Surface Plasmon Resonance
Guanghui WANG, Kotaro KAJIKAWA, Ping SHUM, Xia YU, Juanjuan HU, Chinlon LIN

P-S5.15(P) A02306-03935 pg P34
Proposal for Quasi-phase-matching Conditions for Nonlinear Frequency Conversion in Coaxial Multi-layer Fiber
Xianglong ZENG, Hairun GUO, Na CHEN, Fufei PANG, Tingyun WANG

P-S5.16(P) A02319-03967 pg P34
LITT Dynamic Temperature Detection Utilizing Fully Distributed FBG Sensor and Spectra Inverse Algorithm
Na CHEN, Chenglin LI, Fufei PANG, Xianglong ZENG, Zhenyi CHEN, Tingyun WANG

P-S5.17(P) A02341-04015 **pg P35**
Bessel Beam Generator with Single Mode Fiber, Coreless Silica Fiber and Polymer Lens
Jongki KIM, Sungrae LEE, Sejin LEE, Jung YONGMIN, Kyunghwan OH

P-S5.18(P) A02370-04054 **pg P36**
Enhancement of Evanescent Field in Photonic Crystal Fiber with Novel Core Structure and its Application as Chemical Sensor
Jiyoung PARK, Jongki KIM, Sejin LEE, Yong Gon SEO, Jens KOBELKE, Soan KIM, Kyungwhan OH

P-S5.19(P) A02478-04231 **pg P37**
Theoretical Design of Highly Birefringent Hybrid Photonic Crystal Fiber
Yongchao BAI, Juanjuan HU, Ping SHUM

P-S5.20(P) A02497-04277 **pg P38**
Single-mode Hetero-core Fiber Optic Bending Sensor Dipped the Liquid with the High Refractive Index
Michiko NISHIYAMA, Kazuhiro WATANABE

P-S5.21(P) A02863-04898 **pg P42**
Observation of Mode Conversion Based on Adabatically Tapered Photonic Crystal Fiber With Two Layered Deffect
Boram RYU, Yoonseop JUNG, Mingyu PARK, Seongil IM, Kyunghwan OH

P-S6

Wednesday, 1 July 2009
10:30-12:30
Level 3, Room 314
Chair: Simon FLEMING

10:30 P-S6.1-2(IN) A01737-03022 **pg P24**
Plasmonics in the Context of Optical Fiber Sensing Devices
Aaron Ho-Pui HO

11:00 P-S6.3-4(IN) A02999-05121 **pg P44**
Scanning Near-field Optical Microscopy (SNOM) and Its Application for Failure Analysis of Semiconductor Devices
Ying ZHANG

11:30 P-S6.5(O) A00244-00563 **pg P7**
Shape- and Size-Dependent Refractive Index Sensitivities of Gold Nanostructures and Their Optical Fiber-Based Sensing
Huanjun CHEN, Weihai NI, Zhi YANG, Jianfang WANG

11:45 P-S6.6(O) A00295-01926 **pg P8**
Surface Plasmon Resonance in Slotted Microstructured Polymer Optical Fibres
Anna WANG, Maryanne LARGE, Boris KUHLMEY, Felicity COX

12:00 P-S6.7(O) A00787-01381 **pg P14**
Surface Plasmonic Resonance Sensor Using Microstructured Optical Fibers
Shanshan PAN, Xia YU, Ping SHUM, Ying ZHANG, Yehuda LEVIATAN

12:15 P-S6.8(O) A01091-03822 **pg P16**
Large Area Anodized Aluminium Templates for Nano-Imprinted Optical Fibre Probes
Gorgi KOSTOVSKI, Udayakuma CHINNASAMY, Sasani JAYAWARDHANA, Paul STODDART, Arnan MITCHELL

P-S7

Wednesday, 1 July 2009
13:30-15:30
Level 3, Room 314
Chair: Gilberto BRAMBILLA

13:30 P-S7.1-2(IN) A01728-03011 **pg P23**
The Impact of Polymer Material Properties on Microstructured Optical Fibres
Maryanne LARGE

14:00 P-S7.3-4(IN) A02887-04935 **pg P43**
Photonic Crystal Fibers and Their Applications
Kwanil LEE, Sang Bae LEE

14:30 P-S7.5-6(IN) A02885-04933 **pg P42**
Design of Photosensitive Microstructured Polymer Optical Fibres
Hwayaw TAM

15:00 P-S7.7-8(IN) A01756-03071 **pg P24**
Hollow Optical Fibers and Their Applications in Photonic Devices
Kyunghwan OH

P-S8

Wednesday, 1 July 2009
15:30-18:00
Level 3, Room 314
Chair: Gilberto BRAMBILLA

15:30 P-S8.1-2(IN) A01960-03391 **pg P27**
Spun and Chiral Microstructured Fibres
Alexander ARGYROS, ZiYi GE, Andrew DOCHERTY, Mark STRATON, Leon POLADIAN, Francois LADOUCEUR

16:00 P-S8.3-4(IN) A02826-04844 **pg P41**
Slow Light via Stimulated Brillouin Scattering in an Optical Fiber: Physical Nature and Prejudices
Valeri KOVALEV, Nadezhda KOTOVA, Robert HARRISON

16:30 P-S8.5(O) A02240-04327 pg P31
Analysis of the Novel Tunable Phase-shifted Fiber Bragg Gratings and Its Response to Refractive Index Change in Phase Shift Region
Xiaopeng DONG, Jinlong ZHOU, Xufeng LIN

16:45 P-S8.6(O) A02482-04244 pg P37
Fabrication of the Long-period Fiber Gratings with Polymer Core and Silica Cladding
Hojoong JUNG, Yong Gon SEO, Woosung HA, Dae-kyu KIM, Seung Han PARK, Kyunghwan OH

17:00 P-S8.7(O) A02916-04984 pg P44
Coupling Characteristics of Hybrid Photonic Crystal Fiber Coupler
Dora Juan JUAN HU

17:15 P-S8.8(O) A02604-04565 pg P40
Modeling of Doped Snom Probe
Zhao Gang DONG, Dmitry ISAKOV, Ying ZHANG, Yeng Chai SOH

17:30 P-S8.9(O) A01632-02828 pg P22
Properties of Photonic Band-gap Mode due to a Topological Defect within a Photonic Crystal Fiber Cladding
Georges HUMBERT, Fetah BENABID, Peter ROBERTS, Frederic GEROME, Yingying WANG, Phil LIGHT, Jean-Marc BLONDY

17:45 P-S8.10(O) A01200-02047 pg P17
Ultra Low Power Silicon Photonic Crystal-based Chromatic Dispersion Compensator
Ching Eng PNG, Soon Thor LIM, Er Ping LI, Danner AARON J., Ogawa KENSUKE, Yong Tsong TAN

P-S9

Thursday, 2 July 2009
10:30-12:30
Level 3, Room 314
Chair: Morten IBSEN

10:30 P-S9.1-2(IN) A00508-00933 pg P11
Stable Operation of Multiwavelength Fiber Lasers Based on Versatile Gain Media
Young-Geun HAN

11:00 P-S9.3-4(IN) A01331-02327 pg P17
Fibre-integrated, High Average Spectral Power Density Supercontinuum Sources
John TRAVERS, Sergei POPOV, James Roy TAYLOR

11:30 P-S9.5-6(IN) A00533-01833 pg P12
Cr Doped Crystal Fibers for Laser, Optical Amplifier, and Biophotonic Applications
Kuang-Yu HSU, Chien-Chih LA, Yu-Ta WANG, Chien-Chung TSAI, Yen-Sheng LIN, Kuang-Yao HUANG, Ping-Hui YEH, Sheng-Lung HUANG

12:00 P-S9.7(O) A00322-00760 pg P8
The Q-switch Mode-locking of an Erbium Doped Fiber Ring Laser Using Acousto-optic Modulation
Kai Rong HUANG, Ming Chang SHIH

12:15 P-S9.8(O) A02072-03561 pg P29
Multiwavelength Brillouin-erbium Photonic Crystal Fiber Laser Utilizing a Partially Reflective Fiber Bragg Grating in a Ring Cavity
Nurul Shahrizan SHAHABUDDIN, Azin ADAMIAT, Zulfadzli YUSOFF, Mohd Narizee MOHD NASIR, Mohammed Haydar AL-MANSOORI, Hairul Azhar ABDUL RASHID, Mohd Ridzuan MOKHTAR, Pankaj Kumar CHOUDHURY

P-S10

Thursday, 2 July 2009
13:30-16:45
Level 3, Room 314
Chair: James Roy TAYLOR

13:30 P-S10.1-2(IN) A01672-02890 pg P23
DWDM Channelized Pulsed Carrier Generated from Optical Injection Mode-Locked Weak-Resonant Laser Diode Based Fiber Ring Laser System
Gong-Ru LIN, Yu-Chieh CHI, Guo-Hsuan PENG

14:00 P-S10.3-4(IN) A01761-03085 pg P25
Novel Performance of Fiber Lasers: Tunable Operation in Visible Range
Sergey BABIN

14:30 P-S10.5-6(IN) A02023-03531 pg P29
High Brightness Diode Laser Design to Pump kW Fiber Laser
Jens BIESENBACH

15:00 P-S10.7-8(IN) A01497-02604 pg P21
Progress in Creating Second-order Optical Nonlinearity in Silicate Glasses and Optical Fibres through Thermal Poling
Simon FLEMING, Honglin AN

15:30 P-S10.9(O) A00816-04414 pg P14
Fiber Bragg Grating Structures Inscribed Using 800nm Femtosecond Laser in Single- and Multi-core Mid-IR Glass Fibers with Their Spectral, Thermal and Strain Properties
Rui SUO, Joris LOUSTEAU, Hongxia LI, Xin JIANG, Kaiming ZHOU, Lin ZHANG, Henry BOOKEY, William MACPHERSON, James BARTON, Ajoy KAR

15:45 P-S10.10(O) A01807-03158 pg P26
Design and Fabrication of Multi-channel and Identical-dual-bandpass Fiber Bragg Gratings and their Applications to Filters
Xueming LIU

16:00 P-S10.11(O) A02852-04895 pg P42
Development and Characterization of Novel Yb-Er Phosphate Laser Glass for High Repetition Rate Flashlamp Pumping
Yongzheng FANG, Jiayue XU, Xiaorong LIU, Zhanyong WANG, Lili HU

16:15 P-S10.12(O) A00338-03557 pg P9
Polarization Insensitivity Optic Distributed Strain Sensing System Based on Stimulated Brillouin Scattering
Jing YANG, Changyuan YU, Zhihao CHEN, Junhong NG, Xiufeng YANG

16:30 P-S10.13(O) A00644-01157 pg P12
Microstructured Optical Fibers for the Fiber Optics Sensors
Sergey NIKITOV, Yury CHAMOROVSKIY, Nikolay STAROSTIN, Maksim RYABKO, Sergey MORSHNEV, Vladimir MORSHNEV, Igor' VOROB'EV

P-S11: Panel Discussion

Thursday, 2 July 2009
16:45 - 19:00
Level 3, Room 314
Chair: Perry SHUM

P-S12

Friday, 3 July 2009
11:00-13:45
Level 3, Room 314
Chair: YU Changyuan

11:00 P-S12.1-2(IN) A01950-03377 pg P27
Realization of Thermo-Optic Polymer Waveguide Devices by an Imprinting Technique and a Bottom Heating Approach
Kin Seng CHIANG, Kar Pong LOR, Qing LIU, Hau Ping CHAN

11:30 P-S12.3-4(IN) A02504-04288 pg P38
High Power, All-Fiber based, Tunable, Dual Wavelengths Yb Fiber Amplifier for LIDAR Application
Ruifen WU

12:00 P-S12.5-6(IN) A02198-04016 pg P30
High-speed Processing of Optical Signals with 40-GHz Time- and Wavelength-Interleaved Short Pulses
Chester SHU, Gordon K. P. LEI, Mable P. FOK

12:30 P-S12.7(O) A02795-04773 pg P40
Stokes and Anti-Stokes Raman Fiber Laser
LayKeng LIM, JunHao TSE, Ping SHUM

12:45 P-S12.8(O) A01758-03078 pg P24
Interferometer Based Fiber Sensor for Refractive Index Measurement
Wenting WEI, Ping SHUM, Li XIA, Junqiang ZHOU, Xinyong DONG

13:00 P-S12.9(O) A02384-04693 pg P36
A Smart Multi-functional Fiber Bragg Grating Sensor System for Healthcare Applications
Jianzhong HAO, Siang Fook FOO, Jayachandran MANIYERI, Poh Leong KNG, Phyo Wai AUNG AUNG

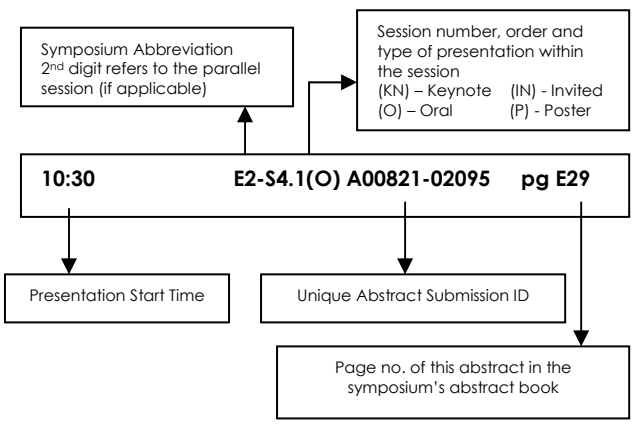
13:15 P-S12.10(O) A00357-01179 pg P10
Plastic Optical Fibers Doped with Luminescent Polymers to Achieve Gain and Ultrafast Optical Switching
Ana MENDONÇA, Ana CHARAS, Jenny CLARK, Guglielmo LANZANI, Luca BAZZANA, Alessandro NOCIVELLI, Jorge MORGADO

13:30 P-S12.11(O) A02844-04871 pg P41
10Gbit/s Wavelength Transferable Stimulated Brillion Scattering Slow Light
Jianguo LIU, Tee Hiang CHENG, Yong Kee YEO, Yixin WANG, Zhaowen XU

SYMPOSIUM Q

Computational Materials Design at All Scales: From Theory to Application

The programme codes you will see in the following pages are decoded using an example below:



Symposium Q: Computational Materials Design at All Scales: From Theory to Application

Level 2, Room 201

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session Q-S4** Atomic Clusters and Nanostructures	(10:30 - 12:30) **Session Q-S6** Magnetic Materials - I	(10:30 - 12:30) **Session Q-S9** Thin Films	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session Q-S1** Photonic Materials				(11:00 - 12:45) **Session Q-S12** Crystal Structures - II
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session Q-S2** Carbon Materials	(14:00 - 16:30) **Session Q-S5** **POSTER SESSION**	(14:00 - 15:30) **Session Q-S7** Light Materials	(14:30 - 16:00) **Session Q-S10** Semiconductor Material: Quantum Heterostructures	
(16:15 - 16:30) Break		(15:30 - 17:30) **Session Q-S8** Nanostructured and Bulk Materials for Electrochemical Power Sources	(16:00 - 18:00) **Session Q-S11** Materials Modeling at Continuum and Macroscopic Levels	
(16:30 - 18:00) **Session Q-S3** Biomaterial Properties and Applications				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

Symposium Q2: Computational Materials Design at All Scales: From Theory to Application

Level 2, Room 206

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break			(10:30 - 12:30) **Session Q2-S9** Crystal Structures - I	(10:30 - 11:00) Coffee Break
				(11:00 - 13:00) **Session Q2-S12** Magnetic Materials - II
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
			(14:30 - 16:00) **Session Q2-S10** Surface Characterization of Materials	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(16:00 - 17:45) **Session Q2-S11** Nanodevices	
			(19:00 - 22:00) Conference Banquet @ Suntec	

Q-S1: Photonic Materials

11:00-12:30
Monday, 29 June 2009
Level 2, Room 201

11:00 Q-S1.1-2(IN) A02181-03742 pg Q57
Towards Molecular Scale Logic Circuits
Shammai SPEISER

11:30 Q-S1.3(O) A00009-00010 pg Q10
Study on Vibration Band Gap Characteristics of Photonic Crystals
Yanlin WANG

11:45 Q-S1.4(O) A01026-02564 pg Q30
Computational Studies of Some DNA-based Photonic Multilayered Structures
Satish K. RAMCHURN, Mahen MAKHAN

12:00 Q-S1.5(O) A00154-03387 pg Q14
Application and Optimization of Dual-material Approach in Graded Refractive Index Optics
Qian WANG, SengTiong HO, TerHoe LOH, KehTing NG

12:15 Q-S1.6(O) A02209-04820 pg Q58
Binary Semiconductors - A Theoretical Investigation
Rita JOHN, Pushpalatha S., Sathya G. S., Hannah Catherin D.

Q-S2: Carbon Materials

Monday, 29 June 2009
14:00-16:15
Level 2, Room 201

14:00 Q-S2.1-2(IN) A00581-01055 pg Q21
Hydrogen-storage Media Based on Metal-decorated MOFs and Low-dimensional Materials
Jisoon IHM

14:30 Q-S2.3-4(IN) A00021-00023 pg Q10
Atomistic computer simulations on large ensembles
Rita KHANNA, Aaron WATERS, Veena SAHAJWALLA

15:00 Q-S2.5-6(IN) A03001-05124 pg Q65
Modeling Guided Catalyst Design: From Molecules to Processes
Mark SAEYS

15:30 Q-S2.7(O) A02205-03782 pg Q57
GPU-accelerated Quantum Molecular Dynamics Simulation of 3-dimensional C60 Polymers
Toshiaki IITAKA

15:45 Q-S2.8(O) A01114-03834 pg Q32
First Principles Study of the Physisorption of Hydrogen Molecule on Graphene and Carbon Nanotube Surfaces Adhered by Pt Atom
Tien Lam PHAM, Viet Dung PHAN, Dinh Duc NGUYEN, Ayumu SUGIYAMA, Akihiko FUJIWARA, Hieu Chi DAM

16:00 Q-S2.9(O) A00463-00865 pg Q20
Theoretical Study of the Structural Stability of Cage-like Alloy Clusters: A Case of C_{12} B_6N_6
Xiaofeng FAN, Zexuan ZHU, Hongyu WU, Zexiang SHEN, Jer-Lai KUO

Q-S3: Biomaterial Properties and Applications

Monday, 29 June 2009
16:30-18:00
Level 2, Room 201

16:30 Q-S3.1(O) A01120-02010 pg Q33
A Reduced Model for pH-Sensitive Hydrogels
Jundika Candra KURNIA, Erik BIRGERSSON, Arun Sadashiv MUJUMDAR

16:45 Q-S3.2(O) A02060-03536 pg Q54
QM/MM Simulations of the Immobilization of Isolated Proteins on Graphite Surfaces via Gold Atomic Clusters
Carlos F. SANZ-NAVARRO, Pablo ORDEJON, Richard E. PALMER

17:00 Q-S3.3(O) A01986-03426 pg Q51
Molecular Dynamics Simulation of Gating Behaviour of Bio-inspired Artificial Nuclear Pore Complex
Wun Chet Davy CHEONG

17:15 Q-S3.4(O) A01106-01906 pg Q32
Molecular Dynamics Study of ssDNA Interaction With Transmembrane Functionalized Carbon Nanotube (*f*-CNT)
Yunxia REN, Teng Yong NG, Khin Yong LAM, Hua LI

17:30 Q-S3.5(O) A00335-00624 pg Q18
On Responsive Mechanical Characteristics of Soft Smart Hydrogel to Solution pH and Electric Voltage Coupled Stimuli
Rongmo LUO, Teng Yong NG, Hua LI, Khin Yong LAM

17:45 Q-S3.6(O) A01832-03254 pg Q46
Modelling the Interactions between Drug Molecules and a New Nanocarrier Based on Porous Iron Carboxylates
Guillaume MAURIN, Naseem RAMSAHYE, Pascal YOT, Patricia HORCAJADA, Christian SERRE, Gerard FEREY

Q-S4: Atomic Clusters and Nanostructures

Tuesday, 30 June 2009
10:30-12:30
Level 2, Room 201

10:30 Q-S4.1-2(IN) A01837-03190 pg Q47
Understanding Electronic Properties at Molecule/ Inorganic-solid Interfaces from First Principles
Leeor KRONIK

11:00 Q-S4.3-4(IN) A01857-03212 pg Q48
Structure Prediction from First-Principles
John S TSE, Yansun YAO, Yunfeng LIANG, Dennis KLUG

11:30 Q-S4.5(O) A01506-03890 pg Q40
Theoretical Study of the CO Electrocatalytic Oxidation over Pt Clusters Supported by Carbon Nanotube
Hieu Chi DAM, Thanh Cuong NGUYEN, Ayumu SUGIYAMA, Akihiko FUJIWARA, Tadaoki MITANI

11:45 Q-S4.6(O) A00834-01481 pg Q27
Exploring Low-energy Fully-coordinated $(SiO_2)_N$ Nano-clusters with Graph-based Sampling
Edwin FLIKKEMA, Stefan BROMLEY

12:00 Q-S4.7(O) A01840-03324 pg Q47
The Thermodynamics of and Strengthening due to Co-clusters: General Theory for Application in Modelling Software
Marco STARINK

12:15 Q-S4.8(O) A02031-03497 pg Q54
Challenges of Finite-size Effect in Nano-scale Interface Simulations
P. P. RUTKEVYCH, R. HARIHARAPUTRAN, D. WU

Q-S5: Poster Session

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Gallery

Q-S5.01(P) A00027-00026 pg Q10
Atomic Diffusion Behaviour of BF_2^+ and Boron Implants
Ajay SRIVASTAVA

Q-S5.02(P) A00116-00329 pg Q12
Proton Switch Correlated With the Morphological Development of the Hydrogen Bond Network in Protonated Methanol-Water Mixed Clusters: Theory and Experiment
Dan BING, Jer-lai KUO, Ken-ichiro SUHARA, Asuka FUJII, Naohiko MIKAMI

Q-S5.03(P) A00124-00320 pg Q12
Electronic Structure and Optical Gain of InAs/GaAs Pyramid Quantum Dot
Xiuwen ZHANG, Qiang XU, Jian CHEN, Weijun FAN, Junwei LUO, Shushen LI, Jianbai XIA

Q-S5.04(P) A00124-01961 pg Q13
Electronic Structure and Optical Gain of InAsSbN/ InAs Quantum Dots
Jian CHEN, Weijun FAN, Qiang XU, Xiuwen ZHANG

Q-S5.05(P) A00125-01319 pg Q13
The Band Offset of $GaAs_{1-x}N_x$/GaAs: The First-principles Approach
Qiang XU, Weijun FAN, Jer-Lai KUO

Q-S5.06(P) A00225-02524 pg Q15
Pressure Induced Phase Transition In BaS under High Pressure
Purvee BHARDWAJ

Q-S5.07(P) A00264-01045 pg Q16
Intercalation of Ruthenium(II) tris (1,10-phenanthroline) Complex in α- and γ-Zirconium Dihydrogen Phosphate. Synthesis, Thermal Behaviour and X-Ray Characterization.
Carla FERRAGINA, Romolo DI ROCCO, Potenzo GIANNOCCARO, Lucantonio PETRILLI, Mauro ROTATORI

Q-S5.08(P) A00313-00600 pg Q16
Analysis of Ice XIII Structures by First-principles Methods
Jingyun ZHANG, Quoc Chinh NGUYEN, Xiao-Feng FAN, Jer-Lai KUO

Q-S5.09(P) A00375-00694 pg Q18
Dehydrogenation Kinetics of Pure MgH_2 Investigated by DFT and Experiment
Guangxin WU, Jieyu ZHANG, Yongquan WU, Qian LI, Kouchih CHOU, Xinhua BAO

Q-S5.10(P) A00453-00842 pg Q20
Ab initio Calculation of Electric Field Gradients in Hf_3Al_2 and Zr_3Al_2 Compounds
Jelena BELOSEVIC-CAVOR, Vasil KOTESKI, Jana RADAKOVIC, Bozidar CEKIC

Q-S5.11(P) A00463-00857 pg Q20
Structural Stabilities and Electronic Properties of ZnO-based Semiconductor Alloys: The First-principle Study
Xiaofeng FAN, Zexiang SHEN, Lei LIU, Jer-Lai KUO

Q-S5.12(P) A00469-00867 pg Q20
Direct Enumeration of Wurtzite BC_2N Configurations for Structural Stability and Hardness Evaluation
Hongyu WU, Xiaofeng FAN, Jer-Lai KUO

Q-S5.32(P) A01935-03345 pg Q50
Itinerant Flat-Band Magnetism in Hydrogenated Carbon Nanotubes
Xiaoping YANG, Gang WU

Q-S5.33(P) A01954-03378 pg Q50
Analytical and Numerical Study on The Excitonic Ground States of Spherical Quantum Dots in Colloidal CdTe Nanocrystal: A Multiband Approach
Moh. Adhib ULIL ABSOR, Muh. Darwis UMAR, Kamsul ABRAHA

Q-S5.34(P) A01964-03396 pg Q50
Modeling of Pressure-Composition-Temperature Curves for Hydrogen Storage Materials
Vasileios TSEROLAS, Masahiko KATAGIRI

Q-S5.35(P) A01972-03404 pg Q51
Polar Confinement Modulates Solvation Behavior of Methane Molecules
Weixin XU, Yuguang MU

Q-S5.36(P) A01980-03418 pg Q51
Large Magnetic Moments in Double-exchange Molecular Ferromagnets
Lei SHEN, Shuo-Wang YANG, Yuanping FENG

Q-S5.37(P) A02017-03474 pg Q53
Structural Stability in Hydrogen-Storage Materials - Role of Atomic Relaxation in Hydrogen-Induced Amorphization -
Masahiko KATAGIRI, Hidehiro ONODERA, Hiroshi OGAWA

Q-S5.38(P) A02017-03546 pg Q54
First Principles Calculation of Phonon and Thermodynamic Properties of $LaNi_5$-H
Masahiko KATAGIRI, Shigeki SAITO

Q-S5.39(P) A02111-03638 pg Q55
Doping Effect on V-H System
Yoshinori TANAKA, Vasileios TSEROLAS, Hidehiro ONODERA, Masahiko KATAGIRI, Hiroshi OGAWA

Q-S5.40(P) A02115-03649 pg Q56
Evolution of Void and Constitutive Descriptions of Casting Magnesium Alloy
Bin CHEN, Xianghe PENG, Shitao SUN, Jianguo WANG

Q-S5.41(P) A02115-03650 pg Q56
Investigation on the Hierarchical and Helical Microstructures of Amadis Cone Shell
Bin CHEN, Xianghe PENG, Shitao SUN, Jianguo WANG

Q-S5.42(P) A02145-03695 pg Q57
Half-metallic Silicon Carbide Nanoribbons
Weifeng LI, Yuguang MU, Mingwen ZHAO

Q-S5.43(P) A02323-03979 pg Q59
Design and Fabrication of Quasi-multilayer Arrays for the Flat-band Pass Filters on UV-Vis Wavelength Region
Jong-Bin YEO, Hyun-Yong LEE

Q-S5.44(P) A02323-04003 pg Q59
Normalized Characteristics of the Photonic Bandgaps in Two-dimensional Photonic Quasicrystals with a Hexagonal Lattice by FDTD Simulation
Jong-Bin YEO, Hyun-Yong LEE

Q-S5.45(P) A02344-04034 pg Q60
First-Principles Structural and Lattice Dynamical Study of SnO_2
Bipul RAKSHIT, Amit KHARE, Sankar P SANYAL, Massimo CELINNO

Q-S5.46(P) A02635-04520 pg Q63
Applications of Polycrystalline Model to Surface Roughening Simulations
C.-L. CHEN, K.-C. LIAO

Q-S5.47(P) A02817-04890 pg Q64
Micromagnetic Investigation of Spin Distribution and Magnetic Reversal of Hard/soft Multilayers with Perpendicular Easy Axes
Guoping ZHAO, Chengwei XIAN, Chun YANG

Q-S6: Magnetic Materials - I

Wednesday, 1 July 2009
10:30-12:30
Level 2, Room 201

10:30 Q-S6.1-2(IN) A00630-01133 pg Q22
Magnetism and Superconductivity in Layered Iron-Compounds: Mechanisms and Implications for the Discovery of New Materials
David J. SINGH

11:00 Q-S6.3-4(IN) A02897-04953 pg Q64
Magnetism and Transport in Functionalised Carbon Nanostructures
Risto M. NIEMINEN

11:30 Q-S6.5-6(IN) A01272-03720 pg Q35
Multifunctional Oxides from Density Functional Calculations
Ponniah RAVINDRAN, Ravindran VIDYA, Helmer FJELLVÅG

12:00 Q-S6.7-8(IN) A02110-03637 pg Q55
Cohesive and Magnetic Properties of Clean and Doped Grain Boundaries in Iron and Chromium
Adam KIEJNA, Tomasz OSSOWSKI, Elwira WACHOWICZ

Q-S7: Light Materials

Wednesday, 1 July 2009
14:00-15:30
Level 2, Room 201

14:00 Q-S7.1-2(IN) A02002-04498 pg Q52
Computational Investigation of Unusual Material Properties of Metal Oxides
Su-Huai WEI

14:30 Q-S7.3(O) A00655-01178 pg Q22
The First-principles Calculations of Elastic Constants and Thermo-physical Properties for Al-Sr System
Yifang OUYANG, Fenglian LIU, Hongmei CHEN, Xiaoma TAO, Yuanping FENG, Yong DU, Yuehui HE, Yong LIU

14:45 Q-S7.4(O) A02520-04317 pg Q62
Modelling the Correlation between Composition, Processing Parameters and Mechanical Properties in Aluminium Alloys Using Artificial Neural Network
Savko MALINOV

15:00 Q-S7.5(O) A00655-01181 pg Q23
First-principles Calculation for Structural Characteristic and Magnetic Properties of Al_{13} and Doped $Al_{13-n}Fe_n$ (n=1, 2) Clusters
Hongmei CHEN, Hailong XU, Yifang OUYANG, Yuanping FENG, Yong DU, Yuehui HE

15:15 Q-S7.6(O) A00228-00430 pg Q15
Numerical Study on Magnetoresistance Anomaly in AB Rings subjected to Microwave Radiation
Tsuyoshi UETA, Mitsuyoshi TOMIYA, Shoichi SAKAMOTO

Q-S8: Nanostructured and Bulk Materials for Electrochemical Power Sources

Wednesday, 1 July 2009
15:30-17:30
Level 2, Room 201

15:30 Q-S8.1-2(IN) A01014-01768 pg Q30
First-Principles Modeling of Point Defects in Irradiated Materials for Fusion-Power-Plant Applications
Duc NGUYEN-MANH

16:00 Q-S8.3-4(IN) A01890-03260 pg Q49
Modelling Room Temperature Ionic Liquids
Balasubramanian SUNDARAM

16:30 Q-S8.5(O) A00690-01449 pg Q23
Pair Interactions in Pure Transition Metals at Different Atomic Densities
Nikolay DUBININ

16:45 Q-S8.6(O) A01102-01922 pg Q31
The Size Effect on the Thermal Conductivity of Silicon Nanowires
Nuo YANG, Gang ZHANG, Baowen LI

17:00 Q-S8.7(O) A01571-02740 pg Q43
Effect of Transition Metal Substitution on Vacancy formation in Li_3N
Shunnian WU, Zhili DONG, Freddy BOEY, Ping WU

17:15 Q-S8.8(O) A03003-05126 pg Q65
Modeling of Grain Coalescence in Solid-state Sintering for Nanostructured Materials
Poh Ching YU, Qingfa LI, Jerry Ying Hsih FUH, Tao LI, Li LU

Q-S9: Thin Films

Thursday, 2 July 2009
10:30-12:30
Level 2, Room 201

10:30 Q-S9.1-2(IN) A01525-03582 pg Q41
Modeling and Simulation of Buckling of Polymeric Membrane Thin Film Gel
Zishun LIU, Somsak SWADDIWUDHIPONG, Wei HONG, Zhigang SUO, Yongwei ZHANG

11:00 Q-S9.3(O) A02443-04167 pg Q60
Computer Simulation of Quantum Dots Formation on Nano-Wire Surfaces
Yong-Wei ZHANG, Junyan GUO

11:15 Q-S9.4(O) A01198-02141 pg Q34
Lateral Size & Thickness Dependence in Ferroelectric Nanostructures Formed by Localized Domain Switching
Nathaniel NG, Rajeev AHLUWALIA, David SROLOVITZ

11:30 Q-S9.5(O) A01210-02065 pg Q35
A Molecular Simulation Study on Small Molecular Gas Transportation in Ploy(chloro-para-xylene) Membrane
Chunhai LU, Shijun NI, Wenkai CHEN, Junsheng LIAO, Chengjiang ZHANG

11:45 Q-S9.6(O) A02112-03775 pg Q56
X-Ray Absorption Spectroscopy of Indium Nitride, Indium Oxide, and Their Alloys
Jiraroj T-THIENPRASERT, Jiti NUKEAW, A SUNGTHONG, Supanit PORNTHEERAPHAT, Saroj RUJIRAWAT, Sukit LIMPIJUMNONG

12:00 Q-S9.7(O) A00296-00741 pg Q16
First-Principles Study of Schottyky-barrier Heights at $NiSi_2/HfO_2$ Interfaces
Ten It WONG, Ming YANG, Yuan Ping FENG, Dongzhi CHI, Shijie WANG

12:15 Q-S9.8(O) A00550-01007 pg Q21
Multi-Scale Modeling of Metallic Glass Formation in the Equilibrium Miscible and Immiscible Binary Metal Systems
Baixin LIU

Q2-S9: Crystal Structures - I

Thursday, 2 July 2009
10:30-12:30
Level 2, Room 206

10:30 Q2-S9.1-2(IN) A02498-04283 pg Q61
Stability of Crystal Phases under Different Loading Conditions
Sukit LIMPIJUMNONG

11:00 Q2-S9.3(O) A01881-03244 pg Q48
A Local Quasi-continuum for 3D Multi-lattice Materials: Application to Shape-Memory Alloys
Viacheslav SORKIN, Ryan ELLIOTT, Ellad TADMOR

11:15 Q2-S9.4(O) A01606-02794 pg Q44
Microstructure Engineering Via Throttled Nucleation
Siu Sin QUEK, Kevin CHU, Jiawei CHIU, David WU

11:30 Q2-S9.5(O) A00343-00637 pg Q18
Ab initio Prediction of Ultra-incompressible Phases of Tungsten Dinitride
Yanming MA, Hui WANG

11:45 Q2-S9.6(O) A00073-03027 pg Q11
A Grid-ready Multi-scale Method to Study Order/Disorder Transitions in Ice Physics and Semiconductor Alloys
Jer-Lai KUO

12:00 Q2-S9.7(O) A00428-00818 pg Q19
On the Holstein Molecular Crystal Model
Yang ZHAO, Qingmei LIU

12:15 Q2-S9.8(O) A00943-01652 pg Q29
Grain Size Dependence in the Phase Separation of Elastically Coupled Binary Alloys
Justin SONG, Rajeev AHLUWALIA

Q-S10: Semiconductor Material: Quantum Heterostructures

Thursday, 2 July 2009
14:30-16:00
Level 2, Room 201

14:30 Q-S10.1(O) A01409-02493 pg Q38
Thermal Conductivity of $Si_{1-x}Ge_x$ Nanowires: Molecular Dynamics Calculations
Jie CHEN, Gang ZHANG, Baowen LI

14:45 Q-S10.2(O) A00490-00951 pg Q21
Energetics and Band Offset at High-*K* Oxide/Ge Interfaces from First-principles Study
Ming YANG, Yuanping FENG, Shijie WANG

15:00 Q-S10.3(O) A00940-01643 pg Q29
Electronic Confinement in Strained Self-Assembled Quantum Dots (SAQD) with Interfacial Capping Layer and Wetting Layer
Ah Wah LAM, Teng Yong NG

15:15 Q-S10.4(O) A01935-03339 pg Q49
Orbital Engineering in Nickelate Heterostructures
Xiaoping YANG, Ole Krogh ANDERSEN, G. KHALIULLIN, P. HANSMANN, A. TOSCHI, K. HELD

15:30 Q-S10.5(O) A02254-03840 pg Q58
First-principles Study of Non-linear Dielectric Response for $LaAlO_3/SrTiO_3$ Superlattices
Shoji ISHIBASHI, Kiyoyuki TERAKURA

15:45 Q-S10.6(O) A02309-04137 pg Q58
Direct Enumeration Studies of Band-Gap Properties of $Al_xGa_yIn_{1-x-y}P$ Alloys
Sirichok JUNGTHAWAN, Kwiseon KIM, Peter GRAF, Sukit LIMPIJUMNONG

Q2-S10: Surface Characterization of Materials

Thursday, 2 July 2009
14:30-16:00
Level 2, Room 206

14:30 Q2-S10.1(O) A01559-02730 pg Q42
Dominant Subgroups of the Full Non-rigid Group of 1,3,5-triamino-2,4,6-trinitronebzene
Abdolreza TEHRANCHI, Ali MOGHANI

14:45 Q2-S10.2(O) A01576-02748 pg Q43
Modeling of Diffusion of Ag^+ Ions in 2- phase Nanocomposite Electrolyte Prepared by a Novel Technique
Mohan L. VERMA, B. Keshav RAO

15:00 Q2-S10.3(O) A01818-03166 pg Q46
Resolving Vibrational Spectra of Si_xH_y on Silicon Surface
Sheau Wei ONG, Zhiqiang Nicholas CHEN, Hway Chuan KANG

15:15 Q2-S10.4(O) A02521-04314 pg Q62
From Theory to Application: Computation of Surface Effects and its Influence to the Critical Magnetic Field in Materials
Fahrudin NUGROHO, Pekik NURWANTORO, Dian ARTHA K., Agung BAMBANG S. U.

15:30 Q2-S10.5(O) A01559-02716 pg Q42
Study on Symmetries of Some Nanotoruses
Ali MOGHANI, Abdolreza TEHRANCHI

15:45 Q2-S10.6(O) A02331-03990 pg Q59
3 Dimensional Printing of Pollution Absorbing Lamination Composites for Architectural Materials
Ginger DOSIER

Q-S11: Materials Modeling at Continuum and Macroscopic Levels

Thursday, 2 July 2009
16:00-18:00
Level 2, Room 201

16:00 Q-S11.1(O) A00659-01190 pg Q23
An Application of Viscoelastic Materials on the Attenuation of Vibrating Waves
Pi-Wen WANG

16:15 Q-S11.2(O) A01704-02977 pg Q45
Finite Element Simulation of the Luminescence Spectra in Thermal Barrier Coatings
Andre M. G. LUZ, Daniel BALINT, Kamran NIKBIN

16:30 Q-S11.3(O) A00064-00313 pg Q11
Computational Modelling to Predict the Performance of Green Packaging Structures
Namasivayam NAVARANJAN, Celia KUEH, Sinniah ILANKO, Mike DUKE, Ken WONG

16:45 Q-S11.4(O) A00918-01636 pg Q28
Analysis of the Interactive Characteristics between Elastic Capsules in Micro Flow
Gang MA, Teng Yong NG, Hua LI, Khin Yong LAM

17:00 Q-S11.5(O) A00957-01679 pg Q29
Development of a Novel Multiscale Numerical Technique
Venkataraman PANDURANGAN, Hua LI, Teng Yong NG

17:15 Q-S11.6(O) A01833-03186 pg Q47
A Useful Method Based on the Exhaustion of Internal Energy to Predict Failure Lifetimes of Mechanical Components Operating within Creep Regime
Lawrence Kiam Yam NG

17:30 Q-S11.7(O) A02012-03469 pg Q52
Computational Modeling of Superhard Materials Synthesis
Oleksandr LYESHCHUK

17:45 Q-S11.8(O) A01204-02053 pg Q35
Sensitivity Analysis of a Supported Single-Walled Carbon Nanotube to Actual Non-Ideal Boundary Conditions with Consideration for Small Size Effects via a Nonlocal Numerical Formulation
Amir SHAKOURI, Rongming LIN, Teng Yong NG

Q2-S11: Nanodevices

Thursday, 2 July 2009
16:00-17:45
Level 2, Room 206

16:00 Q2-S11.1(O) A02803-04793 pg Q63
Origin of the Different Conductive Behavior in Ta (Nb)-Doped Anatase and Rutile TiO_2
Kesong YANG, Ying DAI, Baibiao HUANG, Yuanping FENG

16:15 Q2-S11.2(O) A00331-00618 pg Q18
Gap Engineering in Epitaxial Graphene on Ru(0001): First-Principles Calculations
Jiatao SUN, Shixuan DU, Hao HU, Yuyang ZHANG, Hongjun GAO

16:30 Q2-S11.3(O) A01114-03849 pg Q33
First Principles Study of the Polymerization of Cyclopentasilane
Viet Dung PHAN, Tien Lam PHAM, Dinh Duc NGUYEN, Ayumu SUGIYAMA, Akihiko FUJIWARA, Hieu Chi DAM

16:45 Q2-S11.4(O) A01388-02418 pg Q37
Investigation of Dimer Ordering in One-dimensional Atomic Wires Grown by Co-deposition of In and Sn on Si(100)-2x1 surface: A Kinetic Monte Carlo Simulation Study
Darwin Barayang PUTUNGAN, Marvin ALBAO, Henry RAMOS

17:00 Q2-S11.5(O) A01440-02499 pg Q39
A Universal Band Gap Expression for Silicon Nanowires
Donglai YAO, Gang ZHANG, Baowen LI

17:15 Q2-S11.6(O) A00895-01560 pg Q28
Conformational Dependence of Tag Induced STM Contrast in Hexaphenyl Benzene Molecules
Abir DE SARKAR, We-Hyo SOE, Carlos MANZANO, Christian JOACHIM

17:30 Q2-S11.7(O) A01182-02046 pg Q34
Effects of Carrier Concentration, Diameter, and Isotopic Doping on Thermoelectric Property of Silicon Nanowires
Lihong SHI, Donglai YAO, Gang ZHANG, Baowen LI

Q-S12: Crystal Structures - II

Friday, 3 July 2009
11:00-12:45
Level 2, Room 201

11:00 Q-S12.1(O) A00865-01502 pg Q28
Structure and Ion Dynamics in Alkali Silicates Studied with Virtual Reality Techniques
Neville GREAVES, Florian KARGL, Greg CHASS, Odile MAJERUS

11:15 Q-S12.2(O) A00393-00737 pg Q19
Simulation of Solidification Microstructure in Twin-roll Casting Strip
Bo WANG, Jieyu ZHANG, Xiangmei LI

11:30 Q-S12.3(O) A01523-02659 pg Q41
Monte Carlo Simulation of Monodisperse Colloidal Crystallization
Cong Hoan HO, Kwan Wee TAN

11:45 Q-S12.4(O) A02014-03465 pg Q53
Kinetic Monte Carlo Simulations of Diffusion-Limited Nucleation
Yang Hao LAU, Ramanarayan HARIHARAPUTRAN, David WU

12:00 Q-S12.5(O) A02447-04245 pg Q61
First Principles Study of Gallium-Frenkel Pairs in Gallium Nitride
Pakpoom REUNCHAN, Sukit LIMPIJUMNONG

12:15 Q-S12.6(O) A02501-04281 pg Q61
Macro and Micro Modeling of Unidirectionally Solidified Turbine Balde Casting
Dong PAN, Qingyan XU, Jing YU, Baicheng LIU

12:30 Q-S12.7(O) A02509-04297 pg Q62
First Principles Study of Elastic Constants and Sound Velocities in Wurtzite Phase of SiC, GaN, InN, ZnO and CdSe and Their Relation to the High Pressure Phase Transition
Kanoknan SARASAMAK, Sukit LIMPIJUMNONG, Walter R. L. LAMBRECHT

Q2-S12: Magnetic Materials - II

Friday, 3 July 2009
11:00-13:00
Level 2, Room 206

11:00 Q2-S12.1(O) A02817-04827 pg Q64
Nucleation-pinning Duality in Permanent and Composite Magnetic Nanosystems
Guoping ZHAO, Huaiwu ZHANG, Yuanping FENG

11:15 Q2-S12.2(O) A00704-01261 pg Q24
Atomic Ordering in Nano-layered FePt: Multiscale Monte Carlo Simulation
Rafal KOZUBSKI, Miroslaw KOZLOWSKI, Jan WROBEL, Tomasz WEJRZANOWSKI, Krzysztof J. KURZYDLOWSKI, Christine GOYHENEX, Veronique PIERRON-BOHNES, Marcus RENNHOFER, Savko MALINOV

11:30 Q2-S12.3(O) A00328-00611 pg Q17
The Electronic Structure of the Ti_4O_7 Magneli Phase
Leandro LIBORIO, Giuseppe MALLIA, Nicholas HARRISON

11:45 Q2-S12.4(O) A01447-04064 pg Q39
Computational Design of Single-Molecule Magnets with Strong Intramolecular Exchange Coupling: A Way to Develop Single-Molecule Magnets
Anh Tuan NGUYEN, Katayama SHIN-ICHI, Hieu Chi DAM

12:00 Q2-S12.5(O) A01720-03000 pg Q45
Specific Heat of Cd-doped Manganites
Renu CHOITHRANI, N. K. GAUR

12:15 Q2-S12.6(O) A00711-01271 pg Q24
Theoretical Study of the Adsorption of Carbon Monoxide and Oxygen Molecules on Small Gold Clusters
Martin AMFT, Natalia SKORODUMOVA

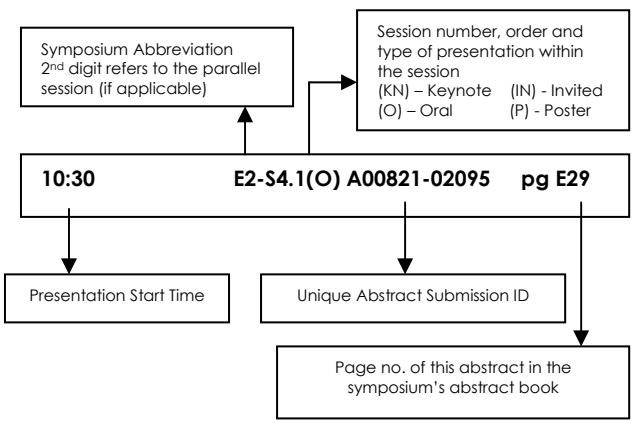
12:30 Q2-S12.7(O) A01780-03120 pg Q46
The Ground State Structure of $BaZrO_3$: A Comparative First-principles Study
Ante BILIC, Julian GALE

12:45 Q2-S12.8(O) A00226-00443 pg Q15
Thermodynamic Modeling of Ti-Cr-Mn Ternary System
Le Yi CHEN, Chong He LI, Kun WANG, He Quan DONG, Xiong Gang LU, Wei Zhong DING

SYMPOSIUM R

Single Crystals; Growth and Applications for Research and Industry

The programme codes you will see in the following pages are decoded using an example below:



Symposium R: Single Crystals: Growth and Applications for Research and Industry

Level 3, Room 311

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session R-S4**	(10:30 - 12:30) **Session R-S6**	(10:30 - 12:15) **Session R-S9**	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session R-S1**				
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session R-S2**	(14:00 - 16:30) **Session R-S5**	(14:00 - 15:30) **Session R-S7**		
(16:15 - 16:30) Break		(15:30 - 17:30) **Session R-S8**		
(16:30 - 18:00) **Session R-S3**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

R-S1

Monday, 29 June 2009
11:00-12:30
Level 3, Room 311

11:00 R-S1.1-2(IN) A02951-05050 pg R38
Crystal Growth of Compounds with Volatile Elements Like As, Eu and Li
Günter BEHR, Wolfgang LÖSER,
Andreea Claudia BUDEA, Chongde D. CAO,
Igor MOROZOV, Claudia NACKE, Nadja WIZENT,
Bernd BÜCHNER

11:30 R-S1.3(O) A01053-01830 pg R20
Nucleation Mechanism of Polytype Transformation in 6H-SiC Polytype Inclusions Inside 15R-SiC Crystals
Yu ZHANG, Hui CHEN, Ning ZHANG,
Michael DUDLEY, James H. EDGAR, K. GRASZA,
Emil TYMICKI, Yimei ZHU

11:45 R-S1.4(O) A00065-00578 pg R7
Micro Hardness, Thermo Gravimetric and Structural Studies of Grown NaCl, NaF and NaCl +NaF Mixed Crystals
Ishverbhai B. PATEL, Ketki A. MISTRY

12:00 R-S1.5(O) A00289-00527 pg R11
Simulation of Stray Grain Formation During the Unidirectional Solidification
Xiangmei LI, Jieyu ZHANG, Bo WANG

12:15 R-S1.6(O) A00291-02002 pg R11
Growth of Single Phase $MnSi_{1.7}$ Silicide Layers on Si Substrates by Using $MnCl_2$ Source
Junhua HU, Takanori KUROKAWA,
Hirokazu TATSUOKA

R-S2

Monday, 29 June 2009
14:00-16:15
Level 3, Room 311

14:00 R-S2.1-2(IN) A02157-03708 pg R31
Crystal Growth and Abnormal Physical Properties of Iron Arsenic High-Tc Superconductor
Xianhui CHEN

14:30 R-S2.3(O) A01152-01971 pg R22
Iron Arsenide for Superconducting Materials
Bryan TAN, Minglin TOH,
Stevin SNELLIUS PRAMANA, Martin SCHREYER,
Christian KLOC

14:45 R-S2.4(O) A00303-00557 pg R12
Reactivity at Defects in Single Crystals of Bismuth with Weak Bases
Heli DESAI, Kishor PORIA

15:00 R-S2.5(O) A01407-02443 pg R24
Photoelectron Yield Spectroscopy as a Tool to Probe the Electronic Structures of Insulating Single Crystals
Hisao ISHII, Shinichi MACHIDA,
Akihiro FUNAKOSHI, Naoki OGAWA,
Yutaka NOGUCHI, Yasuo NAKAYAMA

15:15 R-S2.6(O) A02089-03691 pg R29
Directional Compton Profile Study of β-phase of Cu-Zn Alloys
Vimal VYAS, Babu Lal AHUJA, BalKrishan SHARMA

15:30 R-S2.7(O) A00973-03428 pg R19
Activation Energy Diagnostics of Implantation-induced Defects
Weera PENGCHAN, Toempong PHETCHAKUL,
Amporn POYAI, Anucha RUANGPHANIT,
Nopphon PHONGPHANCHANTRA

15:45 R-S2.8(O) A02870-04910 pg R37
Single Crystal Growth of $InBi_{1-x}$ Sb_x by Syringe Pulling Method
Dimple SHAH, Girish PANDYA, Sandeep VYAS,
Bhakti JARIWALA

16:00 R-S2.9(O) A00756-02208 pg R16
A Combinatorial Library of Primaryammonium Dicarboxylate Based Liquid Crystal Gelators: A Crystal Engineering Approach
Pathik SAHOO, N. N. ADARSH, George E. CHACKO,
Srinivasa R. RAGHAVAN, Vedavati G. PURANIK,
Parthasarathi DASTIDAR

R-S3

Monday, 29 June 2009
16:30-18:00
Level 3, Room 311

16:30 R-S3.1-2(IN) A02163-03724 pg R32
Single Crystals of $LnFeAsO_{1-x}F_x$ (Ln=La, Pr, Nd, Sm, Gd) and $Ba_{1-x}Rb_xFe_2As_2$: Growth, Structure and Superconducting Properties
Janusz KARPINSKI, Nikolai ZHIGADLO,
Sergui KATRYCH, Zbigniew BUKOWSKI,
Philip MOLL, Bertram BATLOGG,
Stephen WEYENETH, Roman PUZNIAK,
Mauro TORTELLO

17:00 R-S3.3(O) A00755-02641 pg R15
Investigation of Crystal Growth and Phase Equilibria in the BaB_2O_4-NaF System
Tatyana BEKKER, Alexander KOKH,
Nadezhda KONONOVA, Pavel FEDOROV,
Sergej KUSNETSOV, Katerina NIGMATULINA

17:15 R-S3.4(O) A00540-01969 pg R13
Study of Rutile TiO_2 in situ Supported on Crude Sepiolite by Liquid Phase Method
Xiaoyan WANG

17:30 R-S3.5(O) A00165-02122 pg R9
Study on Ag Doping in Congruent Lithium Niobate Crystal
Minghua LI, Xinan LIANG, Xuewu XU, Sanjeev SOLANKI, Tow Chong CHONG

17:45 R-S3.6(O) A01152-01963 pg R22
Single Crystal Growth of Transition Metal Dichalcogenides
Minglin TOH, Christian KLOC

R-S4

Tuesday, 30 June 2009
10:30-12:30
Level 3, Room 311

10:30 R-S4.1-2(IN) A02855-04882 pg R37
Electric Field Induced Superconductivity on Single Crystal Surfaces
Yoshi IWASA

11:00 R-S4.3(O) A01277-03530 pg R23
Solution Growth of Organic Single Crystals of 4-hydroxycyanobenzene (4HCB) Suitable for Investigations on the Three-dimensional Transport Anisotropy in Organic Semiconducting Single Crystals
Alessandro FRALEONI-MORGERA, Beatrice FRABONI, Anna CAVALLINI

11:15 R-S4.4(O) A00240-00450 pg R10
Studies on Crystal Growth, Morphology and Polymorphic Phase Transformations of Glycine Polymorphs
Karuppannan SRINIVASAN

11:30 R-S4.5(O) A00332-00617 pg R12
Effects of Mg Incoparation on the Structure and Optical Properties of the ZnO Thin Films Prepared by Sol-Gel Method
Rui DING, Chun Xiang XU, Bao Xiang GU

11:45 R-S4.6(O) A02469-04219 pg R34
Single Crystals of Organic Charge Transfer Compounds based on Perylene and 7, 7, 8, 8-Tetracyanoquinodimethane (TCNQ)
Hui JIANG, Ke Jie TAN, Keke ZHANG, Minglin TOH, Jinbo ZHOU, Christian KLOC

12:00 R-S4.7(O) A00101-00191 pg R7
Effect of Swift Heavy Ion Irradiation In Dyes Doped L-Arginine Phosphate Single Crystals for Laser Applications
Kumaresan PARASURAMAN

12:15 R-S4.8(O) A00975-02125 pg R19
Vickers Micro-hardness Study of Urinary Type Struvite Crystals
Chetan CHAUHAN, Mihir JOSHI

R-S5

Tuesday, 30 June 2009
14:00-16:30
Level 3, Gallery

14:00 R-S5.1-2(IN) A02652-04548 pg R36
Nano- and Micro-Scale Organic Single-Crystal Transistors
Alejandro L. BRISENO

14:30 R-S5.3-4(IN) A02084-03590 pg R28
Charge Transport in Field-Effect Transistors of Organic Semiconductor Single Crystals
Jun TAKEYA

15:00 R-S5.5(O) A00708-01869 pg R15
Single Crystal Growth of Organic Semiconductors from Solutions and Gas Phase
Ke Jie TAN, Hui JIANG, Jinbo ZHOU, Keke ZHANG, Christian KLOC

15:15 R-S5.6(O) A02559-04373 pg R35
Micro and Nanometer Sized Organic Single Crystalline Devices
Wenping HU

15:30 R-S5.7(O) A00733-01306 pg R15
The Effect of Ru(III)- Doping on the Structure and Properties of Technologically Important Potassium Hydrogen Phthalate (KHP) Crystals
Shanmugasundaram PARTHIBAN, Subbiah MEENAKHSISUNDARAM

15:45 R-S5.8(O) A01410-04136 pg R24
Electron Irradiation Effects on SHG of a New NLO Organic Crystal: 4-Amino-5-Mercapto-3-[1-(4-Isobutylphenyl) Ethyl]-1, 2, 4-Triazole
Naseema K., Vijayalakshmi RAO

16:00 R-S5.9(O) A02393-04161 pg R34
Charge Carrier Mobility Control in Rubrene Single Crystal
Keke ZHANG, Ke Jie TAN, Minglin TOH, Hui JIANG, Lain-Jong LI, Subodh MHAISALKAR, Christian KLOC

16:15 R-S5.10(O) A00969-01702 pg R18
Growth Morphology of Alpha lpha Glycine Crystals in Aqueous Solutions: A Computational Study
Sivashangari GNANASAMBANDAM, Jianwen JIANG, Raj Rajagopalan

R-S6
Wednesday, 1 July 2009
10:30-12:30
Level 3, Room 311

10:30 R-S6.1-2(IN) A00245-01345 pg R10
Change of a Heat Field Symmetry and its Rotation as a Way of the Technologies Development by Different Crystal Growth Methods
Aleksandr KOKH

11:00 R-S6.3(O) A01100-01919 pg R21
Growth of Lanthanum Calcium Borate (LCB) Single Crystals and its Characterization for Laser Applications
Senthilkumar MUTHUSAMY, Arun Kumar R, Dhanasekaran R

11:15 R-S6.4(O) A01101-02243 pg R21
Growth and Characterization of Semi-organic Single Crystals for NLO Applications
Sathyalakshmi R, Ramasamy P

11:30 R-S6.5(O) A00790-01384 pg R17
Growth and Characterization of Borate Based Single Crystals for Laser Applications
Arun Kumar RAMAN, Dhanasekaran RAMASAMY

11:45 R-S6.6(O) A00070-00307 pg R7
Detachment Influences Improvement in Crystal Quality of InSb Bulk Single Crystal Growth by Vertical Directional Solidification Technique
Dattatray GADKARI, Brijmohan ARORA

12:00 R-S6.7(O) A02168-03732 pg R33
Characterization of InSbBi Bulk Single Crystal Grown by VDS Technique
Dilip MASKE, Pravin MORE, Danial CARVOLHO, Dattatray GADKARI

12:15 R-S6.8(O) A01543-02693 pg R26
Crystal Growth of Organic and Inorganic Compound from the Melt
Huamin HONG, Christian KLOC

R-S7
Wednesday, 1 July 2009
14:00-15:15
Level 3, Room 311

14:00 R-S7.1-2(IN) A01326-04289 pg R23
Doping Effects on Growth, Domain Structure and Optical Properties of $LiNbO_3$ Crystals
Xuewu XU, Xinan LIANG, Minghua LI, Sanjeev SOLANKI, Tow-Chong CHONG

14:30 R-S7.3-4(IN) A02336-04007 pg R34
Crystal Growth of Rare-earth Orthovanadates
A. A. NUGROHO, T. T. M. PALSTRA

15:00 R-S7.5-6(IN) A02756-04725 pg R36
Multiferroic $BiFeO_3$
Sang-Wook CHEONG

R-S8: Poster Session
Wednesday, 1 July 2009
15:30 - 17:30
Level 3, Gallery

R-S8.01(P) A00121-01221 pg R8
Growth and Characterization of L- Alaninium Fumarate - A New Organic Optical Material
C. Ramachandra RAJA, A. Antony JOSEPH

R-S8.02(P) A00121-01232 pg R8
Growth and Characterization of L- Valinium Fumarate - A New Organic Optical Material
C. Ramachandra RAJA

R-S8.03(P) A00232-01688 pg R9
Production and Thermionic Properties Anisotropy of LuB_{12} Single-crystals
Anatoliy TARAN, Daniel VORONOVICH, Natalya SHITSEVALOVA, Anatoliy DUKHNENKO, Volodymyr FILIPOV

R-S8.04(P) A00415-02407 pg R12
Enhancement of Optoelectronic Properties from Ti-doped ZnO Nanowires by Ion Implantation
Li-Wei CHANG, Yung-Chiao SUNG, Han-Chang SHIH, Jien-Wei YEH

R-S8.05(P) A00418-01202 pg R12
Synthesis and Catalytic Activity of Transition Metal Incorporated Vanadium Phosphates - A Posteriori Approach
Monika AGARWAL, Arunachalam RAMANAN

R-S8.24(P) A02144-03694 pg R31
Current Transport Mechanisms Studied by I-V-T Measurement on Cu-*n*$MoSe_2$ Schottky Diode
C. K. SUMESH, K. D. PATEL, V. M. PATHAK, R. SRIVASTAVA

R-S8.25(P) A02303-03996 pg R33
Crystal Growth and Characterization of Non Linear Optical 1,3-Diphenylprop-2-en-1-one
Dharmaprakash SAMPYADY, Ravindra H.

R-S8.26(P) A02474-04835 pg R35
PEC Behaviour of Tin Monosulphide Single Crystals Grown Using Different Transporting Agents
G. K. SOLANKI, Sudeep GOYAL, Dipika B. PATEL, Sandip UNADKAT, M. K. AGARWAL

R-S8.27(P) A02573-04398 pg R35
The Growth of Tungsten Single Crystals of High Structural Quality by the Electron-beam Floating Zone Technique
Vadim GLEBOVSKY, Sergey BOZHKO

R-S8.28(P) A02627-04500 pg R36
Protein Crystal Growth by New Techniques
Kazufumi TAKANO

R-S8.29(P) A02870-04915 pg R38
Electrical, Mechanical and Structural Characterization of Bi_2Te_3 Single Crystals
Dimple SHAH, Bhakti JARIWALA, Girish PANDYA, Sandeep VYAS

R-S9

Thursday, 2 July 2009
10:30-12:15
Level 3, Room 311

10:30 R-S9.1(O) A02286-03904 pg R33
Single Crystal, Organic Semiconductor, Rubrene
Christian KLOC, Ke Jie TAN, Keke ZHANG, Minglin TOH

10:45 R-S9.2(O) A02114-03644 pg R30
Monodispersed Nickel Nanoparticles by Thermal Decomposition
Nurul Hiqmah NORDIN, Boon Hoong ONG, Mitsunori MATSUMOTO, Teck Yong TOU

11:00 R-S9.3(O) A01816-03164 pg R27
Temperature-Dependent Single-Crystal to Single-Crystal Phase Transformation Based on Polyoxometalates
Li-Zhi ZHANG, Xin LIU, Zhili DONG

11:15 R-S9.4(O) A01469-02549 pg R25
Spectroscopical and Base Catalysis of High Surface Area Nano MgO Prepared by Hydration-dehydration Method
Abd. Rahim YACOB, Mohd. Khairul Asyraf AMAT MUSTAJAB, Nur Syazeila SAMADI

11:30 R-S9.5(O) A02476-04658 pg R35
Thermo-luminescence Glow Curves and Photoluminescence of Ion Irradiated Al_2O_3
K.S. JHEETA, D.C. JAIN

11:45 R-S9.6(O) A02813-04817 pg R36
Growth and Characterization of GaInSb Bulk Semiconductors Crystal: Growth by VDS Technique
Pravin MORE, Dilip MASKE, Dattatray GADKARI

12:00 R-S9.7(O) A02154-03706 pg R31
Nitrogen Plasma-Minimized Abundant Defects and -Enhanced UV Photoresponse on ZnO Nanotubes
Naratip CHANTARAT

SYMPOSIUM S

Novel Routes of Solution Processing

Symposium S(1): Novel Routes of Solution Processing

Level 3, Room 305 (Mon - Wed), Level 3, Room 311 (Thu-Fri)

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:45) **Session S1-S1**	(10:30 - 12:45) **Session S1-S4**	(10:30 - 12:45) **Session S1-S6**		(11:00 - 12:15) **Session S1-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session S1-S2**	(14:00 - 16:30) **Session S-S5** **POSTER SESSION**	(14:00 - 15:30) **Session S1-S7**	(14:30 - 16:00) **Session S1-S10**	
(16:15 - 16:30) Break		(15:30 - 18:00) **Session S1-S8**	(16:00 - 19:00) **Session S1-S11**	
(16:30 - 18:00) **Session S1-S3**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

Symposium S(2): Novel Routes of Solution Processing

Level 3, Room 313

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:45 - 12:30) **Session S2-S1**	(11:15 - 12:45) **Session S2-S4**	(11:15 - 12:45) **Session S2-S6**		
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session S2-S2**	(14:00 - 16:30) **Session S-S5** **POSTER SESSION**	(14:00 - 15:30) **Session S2-S7**		
(16:15 - 16:30) Break		(15:30 - 18:00) **Session S2-S8**		
(16:30 - 18:00) **Session S2-S3**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

S1-S1
Monday, 29 June 2009
11:00-12:45
Level 3, Room 305

11:00 KN-01
Title not available at time of print
Anthony CHEETHAM

11:45 IN-01 A00980-01838 pg S25
Development of the Next Generation of Si, Ti, Nb and Ta Precursors for Environmentally Benign Synthesis of Nanophotoceramic Materials
Masato KAKIHANA, Makoto KOBAYASHI, Yoshihito SUZUKI, Valery PETRYKIN, Koji TOMITA

12:15 ORAL-01 A02729-04700 pg S58
Supercritical Hydrothermal Synthesis of Organic-Inorganic Hybrid Nanoparticles -Mechanistic Studty-
Tadafumi ADSCHIRI

12:30 ORAL-02 A00080-00322 pg S11
Magnetic Properties and Magnetoelectric Effect Measurement at Room Temperature in (x) $Ni_{0.5}$ $Zn_{0.5}$ Fe_2O_4 + (1-x)PZT Composites
Lalasing R. NAIK, Bantesh K. BAMMANNAVAR, Geeta N. CHAVAN, Baburao K. CHOUGULE

S2-S1
Monday, 29 June 2009
11:45-12:45
Level 3, Room 313

11:45 IN-05 A01069-01860 pg S26
Solution Processing of Functional Oxides: Nanowires, Nanotubes, and Thin Films
Nitin PADTURE

12:15 ORAL-12 A00576-01050 pg S20
Silica Nanocoating of Particles by Sonogel Process
Quan CHEN, Chris BOOTHROYD, Gim Hong TAN, Nelvi SUTANTO, Andrew Mcintosh SOUTAR, Xian Ting ZENG

12:30 ORAL-13 A00619-02021 pg S21
Effect of Chemical Bath Deposition Techniques on Size and Morphology of PbS Nanoparticles
Tapas CHAUDHURI, Jayesh PATEL, Chaturbhai PATEL

S1-S2
Monday, 29 June 2009
14:00-16:15
Level 3, Room 305

14:00 IN-02 A01247-02300 pg S30
Solution Driven Kinetics of 1.13 nm Tobermorite: An In-situ Neutron-diffraction Study under Hydrothermal Conditions
Thomas FEHR, Saskia BERNSTEIN

14:30 ORAL-03 A00085-00326 pg S11
Electrical Properties and Magnetoelectric Effect in $Ni_{0.2}Co_{0.8}Fe_2O_4$ + $PbZr_{0.8}Ti_{0.2}O_3$ Particulate Composites
Bantesh K. BAMMANNAVAR, Lalasing R. NAIK, Rangappa B. PUJAR, Baburao K. CHOUGULE

14:45 ORAL-04 A00233-00540 pg S13
Morphological Changes in Mesoporous Titanium Dioxide with Variation in the Annealing Temperature
Shweta AGARWALA, G. W. HO

15:00 ORAL-05 A00302-00782 pg S14
A Single-Step Route Towards Au/TiO_2 Composite Thin Films by Spray Deposition
Weiliang WANG, Kevin CASSAR, Steve SHEARD, Peter DOBSON, Peter BISHOP, Ivan PARKIN, Simon HURST

15:15 IN-03 A00863-01500 pg S24
Bioinspired Synthesis of Nanocomposites Using Self-assembling Block Copolymers
Yusuf YUSUFOGLU, Yanyan HU, Mathumai KANAPATHIPILLAI, Matthew KRAMER, Eren KALAY, Klaus SCHMIDT-ROHR, Surya MALLAPRAGADA, Mufit AKINC

15:45 IN-04 A03015-05144 pg S68
Nanostructured Functional Perovskite Oxides
Saluru Babu KRUPANIDHI

S2-S2
Monday, 29 June 2009
14:00-16:15
Level 3, Room 313

14:00 IN-06 A01581-02756 pg S35
Self-organized TiO_2 Nanostructures (Nanotubes, Nanobamboo, Nanolace): Formation, Properties, Applications
Patrik SCHMUKI

14:30 ORAL-14 A00635-01143 pg S22
Effect of Titanium on the As-cast Microstructure of Hypereutectic High Chromium Cast Iron
Zhifu HUANG, Jiandong XING, Yimi GAO

14:45 ORAL-15 A00733-01297 pg S23
Synthesis, Crystal Structure and NLO Properties of a Mixed Crystal K1-x(NH4)xH2PO4 (x = 0.5)
Shanmugasundaram PARTHIBAN, Subbiah MEENAKHSISUNDARAM

15:00 IN-07 A01852-04375 pg S39
A Window into Hydrocarbon Synthesis Pathways at High Pressures and Temperatures
Anurag SHARMA

15:30 ORAL-16 A00792-01386 pg S23
Silver Nanoplates: Synthesis, Growth Mechanism and Functionality
Xuchuan JIANG

15:45 ORAL-17 A00967-01708 pg S25
Bi-layer Ceramic Composite Components of Different Porosity by PIM
Su Xia ZHANG, Zi Yan ONG, Tao LI, Qing Fa LI, Siew Fei POOK

16:00 ORAL-18 A01055-01831 pg S26
Controlling the Fabrication of Nano-particles Using Continuous Flow Spinning Disc Processing
Suk Fun CHIN, Karel HARTLIEB, Swaminathan IYER, Martin SAUNDERS, Colin RASTON

S1-S3

Monday, 29 June 2009
16:30-18:00
Level 3, Room 305

16:30 ORAL-06 A00342-00635 pg S14
Chemical Epitaxy of PbSe and PbS – From Nanocrystalline to Monocrystalline Thin Films
Yuval GOLAN

16:45 ORAL-07 A00363-00664 pg S15
Ultrathin Gold Nanowires Formed in Solution
Xianmao LU, Younan XIA

17:00 ORAL-08 A00391-01901 pg S15
Growth and High Ultraviolet Photosensitivity of ZnO Nanowires Grown by Aqueous Solution Method: Role of Surface States and Defects in Photocarrier Relaxation
Mrinal DUTTA, Ashoke BERA, Durga BASAK

17:15 ORAL-09 A00419-01373 pg S15
Intracrystalline Oxidation of Inorganic Anions Intercalated in Layered Double Hydroxides
Nygil THOMAS, Michael RAJAMATHI

17:30 ORAL-10 A00472-01710 pg S16
Hydrothermal Synthesis of TiO_2(B), Anatase and Rutile Photocatalysts using a Novel Water-Soluble Titanium Complex
Makoto KOBAYASHI, Valery PETRYKIN, Masato KAKIHANA, Koji TOMITA

17:45 ORAL-11 A00514-00939 pg S18
Alkalinity, Sample Height and Annealing Effects on the Structure and Electrical Properties of $BiFeO_3$ Films on $SrTiO_3$ Substrate by a Hydrothermal Method
Alicia HUANG, Santiranjan SHANNIGRAHI, Chee King TAN, Pallathadka Kumari PRAMODA, Gregory Kia Liang GOH

S2-S3

Monday, 29 June 2009
16:30-18:00
Level 3, Room 313

16:30 ORAL-19 A01131-01939 pg S27
Phosphonated Calixarene Tailoring of Very Small Silver Nanoparticles
Karel HARTLIEB, Martin SAUNDERS, Colin RASTON

16:45 ORAL-20 A01155-01988 pg S28
Hydrothermal Growth of Well-aligned ZnO Nanorod Arrays on Spinel ($MgAl_2O_4$) by using Nanopattern Template
Hong Quang LE, Kia Liang Gregory GOH, Soo Jin CHUA, Jing Hua TENG, Ah Bian CHEW, Swee Kuan LIM

17:00 ORAL-21 A01159-01978 pg S28
Rational Hydrothermal Route to Functional Metal Oxide Nanoparticles
Takaaki TANIGUCHI, Tomoaki WATANABE, Masahiro YOSHIMURA, Nobuhiro MATSUSHITA

17:15 ORAL-22 A01176-02012 pg S30
Effects of Post Growth Treatments on the Hydrothermally Epitaxied KNbO3 Thin Films
Albertus Denny HANDOKO, Gregory K. L. GOH

17:30 ORAL-23 A01426-02468 pg S32
Synthesis and Characterization of Visible Light Active Nano-sized Fe-doped TiO_2 Photocatalysts
Sukon PHANICHPHANT, Natda WETCHAKUN

17:45 ORAL-24 A01426-02608 pg S32
Synthesis of WO_3/ ZnO Nanocomposites by Flame Spray Pyrolysis for Use as Photocatalyst
Sukon PHANICHPHANT, Natda WETCHAKUN, Chawarat SIRIWONG

S1-S4

Tuesday, 30 June 2009
10:30-12:45
Level 3, Room 305

10:30 KN-02 A01831-03512 pg S39
Soft Processing for Cermics: Single-step Fabrication of Nano-Structured Ceramics (Films, Integrated Layers and Patterns) from Solution without Firing
Masahiro YOSHIMURA, Ruwan GALLAGE, Tomoaki WATANABE, Nobuhiro MATSUSHITA

11:15 IN-08 A00810-03776 pg S24
Polyscale Processing and Technology for Development of NIR Bioimaging System
Kohei SOGA, K. BYRAPPA

11:45 IN-09 A02540-04356 pg S54
Hydrothermal Synthesis of Complex Transition-Metal Oxides: Control of Crystal Chemistry for Advanced Materials Applications
Richard WALTON

12:15 ORAL-25 A01438-02498 pg S33
Microbial Synthesis of Gold Nanoparticles and Nanoplates Using the Metal -reducing Bacterium *Shewanella* Species
Takashi OGI, Norizoh SAITOH, Yasuhiro KONISHI

12:30 ORAL-26 A01477-02592 pg S33
Bonding of Gold Nanoparticles on ZnO Nanostructures
P. M. ANEESH, K. A. VANAJA, M. K. JAYARAJ

S2-S4

Tuesday, 30 June 2009
11:15-12:45
Level 3, Room 313

11:15 IN-10 A03029-05162 pg S70
Open Chiral Coordination Polymers and Oligomers using Tartrate Building Blocks
Ian D. WILLIAMS, Herman H-Y. SUNG, Pokka P-K PANG, Chun-Lung CHOI, Alex S-F. AU YEUNG, Samadara THUSHARI

11:45 IN-11 A03017-05147 pg S69
Chemically Designed Nanoparticles and Nanowires: Controlled Growth, Applications and Devices
Sanjay MATHUR

12:15 ORAL-27 A01499-03848 pg S34
Nanocoating Fe_2O_3 Powders with a Homogeneous Thin ZrO_2 Shell
Yanfeng GAO, Feng ZHAO, Hongjie LUO

12:30 ORAL-28 A01509-02631 pg S34
Fabrication of Crystallized ZnO Film with Dense Columnar Structure at 90°C by Spin-spray Technique
Hajime WAGATA, Nobuhiro MATSUSHITA

S1-S5: Poster Session

Tuesday, 30 June 2009
14:00-16:30
Level 3, Gallery

S-S5.01(P) A00069-01400 pg S11
Formation of Titania Nano-Layer on Upconversion Emissive Ceramic Particles
Tomohiro AIBARA, Kohei SOGA

S-S5.02(P) A00223-00420 pg S12
Precipitation Process Improvement of Ultrafine $CaCO_3$ Powders
Irinela CHILIBON, Carmencita MATEESCU, Raluca ISOPESCU

S-S5.03(P) A00231-00548 pg S12
Synthesis of Ceramic Nanophosphors for Upconversion Bioimaging
Venkatachalam NALLUSAMY, Yoshihito OKUMURA, Kohei SOGA

S-S5.04(P) A00290-00529 pg S13
Novel Hydrothermal Synthesizing Process and Characteristics Analysis of Nanosized Pt Particles
Jeng-Shin MA, Chung-Hsin LU

S-S5.05(P) A00300-00546 pg S14
Synthesis and Luminescence Characteristics of Tin Oxide Phosphors
Fu-Shan CHEN, Cheng-Tao LEE, Chung-Hsin LU, Nai-Yun LIANG, Yeu-Jye CHIEN

S-S5.06(P) A00476-01986 pg S16
Low-Temperature Wet Chemical Precipitation of YVO_4:Bi^{3+},Eu^{3+} Nanophosphors via Citrate Precursors
Satoru TAKESHITA, Tetsuhiko ISOBE, Tomohiro SAWAYAMA, Seiji NIIKURA

S-S5.07(P) A00481-01894 pg S18
Continuous Measurement of Carbon Dioxide Concentration in Aqueous Solution as Decomposition Products on Titanium Dioxide Photocatalyst by Total Organic Carbon Analyzer
Hiroko HASE, Norihisa KAWAMURA, Toru NONAMI

S-S5.08(P) A00556-02331 pg S19
Microwave Assisted Synthesis of ZnS Nanoparticles and its Characterization
Milind DESHPANDE, Nilesh PANDYA, Manoj PARMAR

S

S1-S6

Wednesday, 1 July 2009
10:30-12:45
Level 3, Room 305

11:45 IN-13 A02407-04183 pg S52
Amino Acids- Precursor for Synthesizing Nonlinear Optical Materials
Tanusree KAR

12:15 ORAL-29 A01718-02998 pg S36
Thermodynamical Properties of Half Doped OrthoManganites
R. K. SINGH

12:30 ORAL-30 A01719-02999 pg S37
Transport Properties of Colossal Magnetoresistant Material
Renu CHOITHRANI, N. K. GAUR

S2-S6

Wednesday, 1 July 2009
11:15-12:45
Level 3, Room 313

11:15 IN-16 A02394-04201 pg S50
Fabrication of Titanate Thin Films, Nanotube Arrays, and Fibers throuth Electrochemical and Hydrothermal Reactions
Koji KAJIYOSHI

11:45 IN-17 A02550-04360 pg S54
Colloidal Cu(InGa)Se_2 Nanocrystals: A Precursor Route to Printed Photovoltaics
Matthew PANTHANI, Brian GOODFELLOW, Vahid AKHAVAN, Bonil KOO, Brian KORGEL

12:15 IN-18 A03018-05148 pg S69
Commercial Production of Nano-Particle of Metal Oxides by Continuous Hydrothermal Synthesis during Supercritical Water Oxidation
Youn-Woo LEE

S1-S7

Wednesday, 1 July 2009
14:00-15:30
Level 3, Room 305

14:00 IN-14 A02196-05146 pg S47
Understanding of Mechanism and Properties of Technological Materials
R. K. SINGH

14:30 IN-15 A02692-04627 pg S56
Biomediated, Biomimetic and Bio-inspired Approaches to Metal Oxide Nanostructures
Mandeep KULAR, Elizabeth HORSTMAN, Doug DUCHON, Neha DHIMAN, Gabriela CUEVAS, James WEAVER, David KISAILUS

15:00 ORAL-31 A01889-03259 pg S40
Synthesis and Properties of Lanthanum Silicate based Materials by a Molten NaOH/KOH System
Ge HU, Tianshu ZHANG, Gregory K. L. GOH

15:15 ORAL-32 A01959-03390 pg S41
Synthesis and Electron-Phonon Interactions of Ce^{3+}-doped YAG Nanoparticles
Liap Tat SU, Alfred I. Y. TOK, Zhao YANG, Nathaniel NG, Freddy Y. C. BOEY

S2-S7

Wednesday, 1 July 2009
14:00-15:30
Level 3, Room 313

14:00 IN-19 A02675-04593 pg S56
Chemical Reaction Induced by Pulse Discharge Plasma in Sub- and Subcritical Fluids
Motonobu GOTO, Mitsuru SASAKI, Masafumi MITSUGI, Akihiro YOSHIDA, Hiroshi WATANABE, Tsuyoshi KIYAN, Takao NAMIHIRA, Hidenori AKIYAMA

14:30 ORAL-43 A02735-04902 pg S59
Chemical Bath Deposition for Metal Oxide Thin Films
Haiyan XU, Hao WANG, Masahiro YOSHIMURA

14:45 ORAL-44 A02752-04864 pg S59
Synthesis and Characterization of the Nanocrystalline Nickel Ferrites by a Mechano Sol-Gel Auto-Combustion Method
M. SHAHMIRZAIE, S. A. SEYYED EBRAHIMI

15:00 ORAL-45 A02752-04866 pg S60
Comparison of Self Propagating High Temperature and Mechano Sol-Gel Auto-Combustion Processes as Two Synthesis Routes for Nanocrystalline Mn-Zn Ferrite Powders
H. AMIRI, S. A. SEYYED EBRAHIMI, M. YOUSEFZADEH

15:15 ORAL-46 A02760-04727 pg S60
Uniformly-Sized Bismuth Sulfide Nanorods through Solvothermal Process
Amita PATHAK

S1-S8

Wednesday, 1 July 2009
15:30-18:00
Level 3, Room 305

15:30 ORAL-33 A01966-03417 pg S41
Halides, Counter Ions and Temperature Induced Tailoring of *Piper Betle* Extract Biosynthesized Gold Nanoparticles
Sneha KRISHNAMURTHY, Sathishkumar MUTHUSWAMY, Yeoung-Sang YUN

15:45 ORAL-34 A01985-03425 pg S42
Fabrication of $BaTiO_3$ Layers by Novel Solution Process Using High-frequency Induction Heating
Satoshi TATEMICHI, Naota SUGIYAMA, Shizuma KUDO, Takaaki TANIGUCHI, Masahiro YOSHIMURA, Nobuhiro MATSUSHITA

16:00 ORAL-35 A02121-03675 pg S46
Near Infrared-Emitting Rare Earth Doped CeF_3 Nanoparticles
Mei Chee TAN, G. A. KUMAR, Richard RIMAN

16:15 ORAL-36 A02232-03811 pg S47
Unique Structure of ZnO Films Deposited by Chemical Bath Deposition
Dewei CHU, Yoshitake MASUDA, Kazumi KATO

16:30 ORAL-37 A02278-03966 pg S48
Effects of Polyethylenimine on Morphology and Property of ZnO Films Grown in Aqueous Solutions
Xiulan HU, Yoshitake MASUDA, Tatsuki OHJI, Kazumi KATO

16:45 ORAL-38 A02305-03938 pg S49
Fabrication and Characterization of Ink-jet Printed Thick Film Containing AlN Powders
Hyo Tae KIM, Jongwoo LIM, Young Joon YOON, Jihoon KIM, Jong-hee KIM, Ho Gyu YOON

17:00 ORAL-39 A02326-03985 pg S50
A Facile, "Green" Synthetic Route to High Quality, Monodispersed Water Soluble Cadmium Selenide Nanoparticles
Oluwatobi Samuel OLUWAFEMI, Opeoluwa, Oyehan OYEDEJI, Neerish REVAPRASADU, Reinhardt BOTHA

17:15 ORAL-40 A02362-04038 pg S50
Chemical and Nanoparticle Solution Spray Deposition of $CuInS_2$ Thin Films
Jeong Dae SUH, Ki Bong SONG, Kyung Hoon YOON, Jae Ho YOON, Se Jin AHN, Joon Ho KIM

17:30 ORAL-41 A02572-04396 pg S55
Synthesis and Characterization of Nanorods, Nanoneedles and Flower-like PbTe Nanocrystals by a Low Temperature Aqueous Chemical Route
Kungumadevi LAKSHMANAN, Sathyamoorthy RAMAKRISHNAN

17:45 ORAL-42 A02578-04403 pg S55
Hydrothermal Synthesis, Characterization and Application of *in-situ* Modified Mn:TiO_2 Nanopartricles for Treatment of Textile Effluents
Behzad SHAHMORADI, Guru Raw T.N., K. BYRAPPA

S2-S8

Wednesday, 1 July 2009
15:30-18:00
Level 3, Room 313

15:30 ORAL-47 A02864-04899 pg S62
Hydrothermal Conversions of Polycarbonate and Polyethylene Naphthalate into Monomers in the Presence of Ammonia
Toshitaka FUNAZUKURI, Kohei HATAKEYAMA, Risa ARAI

15:45 ORAL-48 A02913-04981 pg S66
The Degradation of Pesticide in Waste Water Using Hydrothermally Prepared TiO_2
S. SRIKANTASWAMY, S. A. MUNIRAJU, R. MADHUKAR, Puttaswamy

16:00 IN-20 A01862-03218 pg S40
Three Routes to Nanostructured Metal Oxide Films for Alternative Energy Applications
Eunyoung YOU, Nicholas HENDRICKS, Christos KARANIKAS, Yu-Ying TANG, David HESS, Adam O'NEIL, Kenneth CARTER, James WATKINS

16:30 IN-21 A02270-03877 pg S47
Growth of Metal Oxides Nanostructures in Solution and Their Applications for High Sensitive Cholesterol and Glucose Biosensors
Yoon-Bong HAHN

17:00 ORAL-49 A02914-04982 pg S66
Photocatalytic Degradation of Phenol Using Hydrothermally Prepared ZnO Impregnated Onto the Activated Carbon
S. SRIKANTASWAMY, Puttaswamy, S. A. MUNIRAJU, Madhukumar

17:15 ORAL-50 A02974-05084 pg S66
Electrical Properties of Nanographite Filled Immiscible Polymer Hybrid Composites
Shailesh B. S., Siddaramaiah, R. D. SUDHAKAR SAMUEL

17:30 ORAL-51 A02975-05086 pg S67
Feasibility of Xanthan Gum - Sodium Alginate as a Transdermal Drug Delivery System for Domperidone
N. RAJESH, Siddaramaiah

17:45 ORAL-52 A02975-05087 pg S67
Investigation on Electrical Properties of Behaviour of High Density Polyethylene/Ultra High Molecular Weight Polyethylene/Carbon Black Composites
B. S. SHAILESH, Siddaramaiah , R. D. SUDHAKER SAMUEL, G. M. SHASHIDHARA, Raji GEORGE

S1-S10

Thursday, 2 July 2009
14:30-16:00
Level 3, Room 311

14:30 IN-22 A02065-03550 pg S45
Application of Synchrotron X-ray Topography to the Development of Solution-based Bulk Crystal Growth of Technologically Important Materials
Michael DUDLEY, Balaji RAGHOTHAMACHAR, Yu ZHANG, Francesc DIAZ, Magdalena AGUILO, Joan CARVAJAL, Govindhan DHANARAJ

15:00 IN-23 A02300-03927 pg S48
Functional ZnO Films and Single Crystals
Dirk EHRENTRAUT

15:30 IN-24 A03016-05145 pg S68
Modeling on Ammonothermal Growth of GaN Semiconductor Crystals
Qi-Sheng CHEN, Jun-Yi YAN, Yan-Ni JIANG, Wei LI

S1-S11

Thursday, 2 July 2009
16:00-19:00
Level 3, Room 311

16:00 IN-25 A02849-04878 pg S61
Green Routes for the Synthesis of Nanomaterials
Zhimin LIU

16:30 IN-26 A02034-03584 pg S43
Positron Annihilation Spectroscopy As a Novel Tool to Study Polymer Based Composites and Nanocomposites
Chikkakuntappa RANGANATHAIAH

17:00 IN-27 A02912-04980 pg S65
Thermo-chemical Modelling of Non-Equilibrium Solution Processing
S. RANGANATHAN

17:30 IN-28 A00641-01153 pg S22
High Performance Visible Light Responsive Photocatalysts for Environmental Clean-up via Solution Processing
Tsugio SATO, Peilin ZHANG, Shu YIN

18:00 IN-29 A02458-04196 pg S53
Polyacrlamide/Laponite Clay Nanocomposite Hydrogels - Super Absorbent, Dye Adsorption and pH Sensitive Behaviors
Siddaramaiah

18:30 IN-30 A00479-00980 pg S17
Controllable Synthesis of Ferric Oxide Nanostructural Materials via Hydrothermal Method
Dan WANG, Ranbo YU, Zhenmin LI, Dan MAO, Jun LI

S1-S12

Friday, 3 July 2009
11:00-12:15
Level 3, Room 311

11:00 IN-31 A02907-04969 pg S64
Insight through In Situ Studies of Hydrothermal Processing of Heterogeneous Catalyst
Gopinathan SANKAR

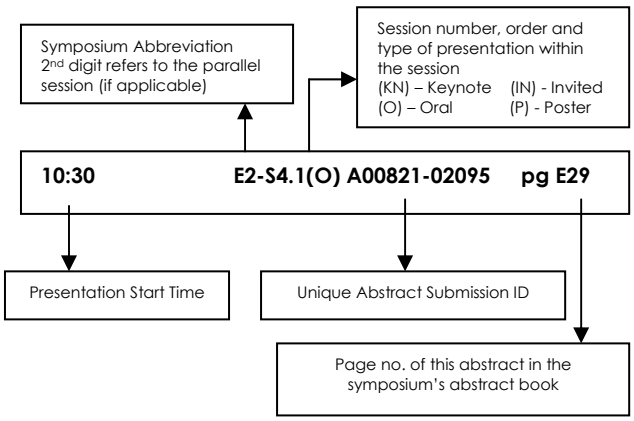
11:30 IN-32 A00516-02909 pg S19
Self-assembly of Metal Oxides -Liquid Phase Patterning and Morphology Control-
Yoshitake MASUDA

12:00 ORAL-53 A03019-05159 pg S70
Gold NP's and CNT's Anchored WO_3 Thin Films Synthesized by Pulsed Spray Pyrolysis Technique for Enhanced Electro-Optic Properties
P. M. KADAM, N. L. TARWAL, P. S. SHINDE, H. P. DESHMUKH, R. S. PATIL, P. S. PATIL

SYMPOSIUM T

Advanced Component Manufacture from Light Materials

The programme codes you will see in the following pages are decoded using an example below:



Symposium T: Advanced Component Manufacture from Light Materials

Level 2, Room 204

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
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(10:30 - 11:00) Coffee Break		(10:30 - 12:15) **Session T-S6**	(10:30 - 12:00) **Session T-S9**	(10:30 - 11:00) Coffee Break
				(11:00 - 13:00) **Session T-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
		(14:00 - 15:30) **Session T-S7**	(14:30 - 16:00) **Session T-S10**	
(16:15 - 16:30) Break		(15:30 - 17:00) **Session T-S8**	(16:00 - 18:00) **Session T-S11** **POSTER SESSION**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

Symposium T(2): Advanced Component Manufacture from Light Materials

Level 2, Room 207

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break			(10:30 - 12:15) **Session T2-S9**	(10:30 - 11:00) Coffee Break
				(11:00 - 12:45) **Session T2-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
			(14:30 - 16:00) **Session T2-S10**	
(16:15 - 16:30) Break			(16:00 - 18:00) **Session T-S11** **POSTER SESSION**	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

T-S6

Wednesday, 1 July 2009
10:30 - 12:15
Level 2, Room 204
Chair: Anders Jafors, SIMTech

10:30 T-S6.1-2(KN) A00464-00861 pg T10
Advances in Manufacturing Processes for Magnesium Wrought Alloys
Karl KAINER, Jan BOHLEN, Dietmar LETZIG

11:00 T-S6.3(IN) A02784-04756 pg T31
Laser Assisted Self-pierce Riveting of AZ31 Magnesium Alloy Strips
Yvonne DURANDET, Rowan DEAM, Aiden BEER, Wei SONG, Stuart BLACKET

11:15 T-S6.4(O) A00258-00489 pg T8
Laser Welding of Dissimilar Aluminum Alloys 2024 and 7075
Ming QIAN, Dayou PAN, Kim Ming TEH

11:30 T-S6.5(O) A00544-00995 pg T11
Use of Carbon Nanotubes Reinforced Epoxy as Adhesives to Join Aluminum Plates
Suzhu YU, Min Nah TONG, Gary CRITCHLOW

11:45 T-S6.6(O) A01352-02360 pg T19
Microstructure, Residual Strain, and Eigenstrain Analysis of Dissimilar Friction Welding Joints
Tea-Sung JUN, Kalin DRAGNEVSKI, Alexander KORSUNSKY

12:00 T-S6.7(O) A01352-02574 pg T20
Residual Strains in Al-SiC Composite Linear Friction Welds
Tea-Sung JUN, Fabio ROTUNDO, Lorella CESCHINI, Alexander KORSUNSKY

T-S7

Wednesday, 1 July 2009
14:00 - 15:30
Level 2, Room 204
Chair: John Yong, SIMTech

14:00 T-S7.1-2(KN) A01037-02259 pg T17
Prediction of Mechanical Properties of Cast Aluminium Components at Various Iron Contents
Salem SEIFEDDINE

14:30 T-S7.3(IN) A01555-02708 pg T21
New Developments in Predicting Hot Tearing in Magnesium Alloy Castings
L. BICHLER, C. RAVINDRAN

14:45 T-S7.4(O) A00067-00615 pg T7
Effect of Liquid Forging Parameters on the Mechanical Properties of AZ91-Ca Mg Alloys
Chwee Sim GOH, Kiat Seng SOH, Peng Hooi OON, Beng Wah CHUA

15:00 T-S7.5(O) A00324-00597
Expanded Polystyrene (EPS) Pattern Application in Investment Casting and Chemical Removing
Zeynep TASLICUKUR, Gokhan OZER, Kerem Altug GULER

15:15 T-S7.6(O) A00435-00826 pg T9
Effects of Ca-additions on the Mechanical Properties of AZ91, AM60 and AZ31
Peng Hooi OON, Chwee Sim GOH, Beng Wah CHUA, Xiaohui Cindy HUANG, Ming Jen TAN

T-S8

Wednesday, 1 July 2009
15:30 - 16:30
Level 2, Room 204
Chair: Salem Seifeddine, Jonkoping University

15:30 T-S8.1(O) A00811-01423 pg T13
Production of Al-Ti-C Grain Refiners with the Addition of Elemental Carbon
Berke Turgay GEZER, Fatih TOPTAN, Sibel DAGLILAR, Isil KERTI

15:45 T-S8.2(O) A01028-01791 pg T17
Optimisation of Solution Heat Treatment of Cast Al-Si-Cu Alloys
Emma SJöLANDER

16:00 T-S8.3(O) A01070-01863 pg T17
Hign Pressure Die Casting Process Optimization In Automotive Parts Production
Pongsak DULYAPRAPHANT, Prarop KRITBOONYARIT

16:15 T-S8.4(O) A01526-02671 pg T20
Grain Refinement of AA333 Aluminium Cast Alloys by Al-Ti Flux
Bondan SOFYAN, Daniel KHARISTAL, Lukfawan TRIJATI, Ragil SUSANTO

T-S8 (cont'd)

Wednesday, 1 July 2009
16:30 - 17:00
Level 2, Room 204
Chair: Sridhar Idapalapati, NTU

16:30 T-S8.5(O) A00580-01085 pg T12
Fabrication and Mechanical Properties of TiAl-based Intermetallics by Reactive PM Processing
Mok-Soon KIM

16:45 T-S8.6(O) A01870-03229 pg T24
Processing of Ti Aluminide for High Technology Sectors
R.K. GUPTA, Vijaya AGARWALA, Bhanu PANT, P.P. SINHA

T-S9

Thursday, 2 July 2009
10:30 - 12:00
Level 2, Room 204
Chair: Ravi Ravindran, Ryerson University

10:30 T-S9.1(IN) A02207-03777 pg T27
Energy Absorption during Dynamic Compression of Closed-Cell Aluminium Foam
Brainerd DANIEL, Pramod KUMAR, Venkitanarayanan PARAMESWARAN

10:45 T-S9.2(O) A02398-04102 pg T28
Development of a Foaming Test Rig for Comparative Study of Foaming Water and Molten Aluminium
Yoke NUSOM, Nattawoot DEPAIWA, Tadaharu ADACHI, Sompong SRIMANOSAOWAPAK

11:00 T-S9.3(O) A02598-04646 pg T30
Comparison of Zinc and Aluminum Foam Behavior
Mohsen SEIFI, Arash HEYDARIAN, Ali ANSARI

11:15 T-S9.4(O) A02598-04650 pg T30
Compressive Behavior and Damping Properties of Zn/Al Composite Foams
Mohsen SEIFI, Ali ANSARI, Arash HEYDARIAN

11:30 T-S9.5(O) A02721-04678 pg T31
Fabrication of Magnesium Alloy Foam using Calcium Carbonate
Bo-Young HUR, Sang-Youl KIM, Byeong-Goo KIM, Min-Jae JEONG, Seung-Ryong JEONG, Byeong-Soo TAK

11:45 T-S9.6(O) A02032-03563 pg T26
Interaction of Three Interfacial Griffith Cracks between Bonded Dissimilar Orthotropic Strips
Subir DAS, Sudipta CHAKRABORTY, Manoj GUPTA

T2-S9

Thursday, 2 July 2009
10:30 - 11:15
Level 2, Room 207
Chair: Steven Tong, SIMTech

10:30 T2-S9.1(O) A01220-02082 pg T18
Study into the Flow Forming of Aluminum (A6061) & Carbon Steel (EC80) Cylindrical Tubes by Experimental and Finite Element Simulation
Kai Soon FONG, Xiao Hui HUANG, Chow Cher WONG, Yingyot AUE-U-LAN, Danno ATSUSHI

10:45 T2-S9.2(O) A01920-03305 pg T25
The Optimal Forging Process Parameter Determination of Ti-6.5Al-3.5Mo-1.5Zr-0.3Si Alloy with Thick Llamellar Microstructure in Two Phase Field Based on P-map
X. LI, SQ LU, M.W. FU, KL WANG, XJ DONG

11:00 T2-S9.3(O) A02321-03978 pg T28
Flow Behavior and Microstructure of Al-Zn-Mg-Cu-Zr Alloy during Hot Deformation
Liangming YAN, Jian SHEN, Bingles LEE, Junpeng LI, XiaoDong YAN, BaiPing MAO

T2-S9 (cont'd)

Thursday, 2 July 2009
11:15 - 12:15
Level 2, Room 207
Chair: BH. S. S. Daniel, IIT Rookee

11:15 T2-S9.4(IN) A00739-01321 pg T12
Tailoring The Properties of Magnesium Using Reinforcement(s) at Nanolength Scale
Manoj GUPTA

11:30 T2-S9.5(O) A02903-04962 pg T31
A Calorimetric Study of 7075 Al / SiC_p Composites
B. KARTHIKEYAN, S. RAMANATHAN, V. RAMAKRISHNAN

11:45 T2-S9.6(O) A02903-04964 pg T32
Thermo Physical Property Measurement of Metal Matrix Composites
B. KARTHIKEYAN, S. RAMANATHAN, V. RAMAKRISHNAN

12:00 T2-S9.7(O) A00004-00005 pg T7
Fabrication of in-situ Mg_2Si/Al Composite by Partition
Hong-Min GUO, Xiang-Jie YANG, Xue-Quan LUO

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T-S10

Thursday, 2 July 2009
14:30 - 11:45
Level 2, Room 204
Chair: Yvonne Durandet, Swinburne University of Technology

14:30 T-S10.1(O) A00314-00586 pg T8
Shaped Metal Deposition of Ti: Microstructure and Mechanical Properties
Bernd BAUFELD, Omer VAN DER BIEST, Rosemary GAULT

14:45 T-S10.2(O) A01926-04299 pg T26
Microstructure and Properties of AM60 Magnesium Alloy Processed by Plasma Beam Surface Melting
Hongzhi CUI

15:00 T-S10.3(O) A01967-03398 pg T26
Printing of Titanium Implant Prototype
Florencia Edith WIRIA, Ming Shyan, John YONG, Poon Nian LIM, Chung Wen, Francis GOH, Jin Fei YEO, Tong CAO

15:15 T-S10.4(O) A02352-04030 pg T28
Feasibility Study on the Laser Aided Additive Manufacturing of Die Inserts for Liquid Forging
Guijun BI, Ka Lai NG, Kim Ming TEH, Anders E. W. JARFORS

15:30 T-S10.5(O) A00999-01751 pg T16
Properties of Aluminium-scandium Alloy Thin Sheets Produced by Physical Vapour Deposition
Heinz-Rolf STOCK, Imke EISBRECHER, Bernd KOEHLER, Hubert BOMAS, Hans-Werner ZOCH

15:45 T-S10.6(O) A00873-01523 pg T14
In Vitro and In Vivo Biocompatibility of Surface Modified Magnesium by Heat Self Assembled Monolayer
Jiacheng GAO, Liying QIAO, Yong WANG

T2-S10

Thursday, 2 July 2009
14:30 - 16:00
Level 2, Room 207
Chair: Karl Urlich Kainer, GKSS

14:30 T2-S10.1(O) A02333-04005 pg T28
Microstructure Evolution during Multi-pass Hot Rolling of 7050 Aluminum Alloy
Junpeng LI, Jian SHEN

14:45 T2-S10.2(O) A00093-00361 pg T8
Mechanical Properties of Roll Compaction Processed Pure Ti
Tomohiro YOSHIMURA, Hisashi IMAI, Katsuyoshi KONDOH

15:00 T2-S10.3(O) A00536-01398 pg T10
Numerical Modelling of Multi Stage Micro Wire Drawing Process
R. Narayanana KARTHIC, Sridhar IDAPALAPATI, Sathyan SUBBIAH

15:15 T2-S10.4(O) A00542-01912 pg T11
Mechanical Behavior with Microstructural Change of Commercially Pure Titanium in Enhanced Multi-Pass Equal Channel Angular Pressing and Cold Extrusion Processes
Dong-Hwan KANG, Tae-Won KIM

15:30 T2-S10.5(O) A00989-01731 pg T16
Effect of Cold Severe Deformation by Multi Directional Forging on Elastic Modulus of Multi-Functional Ti + 25mol% (Ta,Nb,V) + (Zr,Hr,O) Alloy
Atsushi DANNO, Chow Cher WONG, Steven TONG, Anders JARFORS, Kazuaki NISHINO, Tadahiko FURUTA

15:45 T2-S10.6(O) A01722-03004 pg T21
Influence of Grain Size and Artificially Aged Treatment on Corrosion of an Extruded Magnesium Alloy ZK60 Component
Rongchang ZENG, Karl Ulrich KAINER, Blawert CARSTEN, Wolfgang DIETZEL, Norbert HORT

T-S11: Poster Session

Thursday, 2 July 2009
16:00 - 18:00
Level 3, Gallery

T-S11.01(P) A00003-01120 pg T7
Investigation in RheoCasting-rolling for Semi-solid Magnesium Alloy Used by Slope
Ying ZHANG, Shuisheng XIE, Maopeng GENG, Hongmin GUO, Haibo ZHAO, Jinhua XU

T-S11.02(P) A00512-01836 pg T10
High Temperature Formability in AA5083 and AA6061 Alloys for Light Weight Applications
Jun LIU, Ming Jen TAN, Anders Eric Wollmar JARFORS, Sylvie CASTAGNE

T-S11.03(P) A00651-04188 pg T12
Effects of Friction Sitr Processing and Following T6 Artificially Aging Hardening on the Improving of Erosion Resistance of Casting A384 Aluminum Alloy
Yun-Han CHANG, Chung-Wei YANG, Truan-Sheng LUI, Li-Hui CHEN

T-S11.04(P) A00754-01331 pg T13
Effects of RE Additions on Grain Refinement and Intermetallic Compounds in Mg-Al-Ca Based Alloys
Hyeon-Taek SON, Jae-Seol LEE, Dae-Guen KIM

T-S11.05(P) A00873-01534 pg T14
Study of Self-assembled Monolayers of Stearic Acid on Pure Magnesium Surface
Liying QIAO, Jiacheng GAO, Yong WANG

T-S11.06(P) A00879-01527 pg T15
A Study of Strain States and Texture Evaluation on Cross-roll rolled AZ31 Alloy
Dae Guen KIM, Hyeon Taek SON, Jae Seol LEE, Moo Young HUH

T-S11.07(P) A01113-01915 pg T18
Annealing of Flexible Rolled Al-5.5wt%Mg Alloy Sheets for Auto Body Applications
Hyoung-Wook KIM, Cha-Yong LIM, Beom Suck HAN, Yong Mun RYU

T-S11.08(P) A01309-02284 pg T19
The Study of Microstructure with Flow Stress of Aluminum Alloys during Hot Blow Forming Process
Beomsuck HAN, Dongok KIM, Yongmun RYU

T-S11.09(P) A01570-02739 pg T21
Effect of Zirconium Addition on Magnesium-Lithium-Zinc Alloy
Po-Cheng WANG, Hsin-Chih LIN, Kun-Ming LIN, Ming-Tang YEH

T-S11.10(P) A01751-03055 pg T22
Influence of Si Addition on the Properties of Mg-Li-Zn Alloy
Sheng-Yao CHOU, Po-Cheng WANG, Hsin-Chih LIN, Kun-Ming LIN, Ming-Tang YEH

T-S11.11(P) A01777-04073 pg T22
Microstructures and Mechanical Properties of Hot Extruded AM100A Mg Alloy
Daehwan KIM, Youngrock SUNG, Younghwa KIM, Sungyoung SHIM, Sugun LIM

T-S11.12(P) A01777-04134 pg T22
Characteristic of Reheated Al-Zn-Mg-(Sc) Alloy for Thixo-extrusion
Sungyoung SHIM, Hyungwon PARK, Insang JEONG, Daehwan KIM, Sugun LIM

T-S11.13(P) A01817-03165 pg T23
Friction Stir Welding of Dissimilar ADC12 Cast Aluminum Alloy to Pure Titanium
Yingchun CHEN, Kazuhiro NAKATA

T-S11.14(P) A01925-03320 pg T25
Evaluation of Mechanical Properties of Cast Al-Zn-Ce Alloy
Govindaraju HIREGANGOOR KRISHNAMURTHY SETTY

T-S11.15(P) A02455-04191 pg T29
Possibility of Using a Commercial Gas Degasser as a Foaming Generator for Manufacturing Aluminium Foam
Sompong SRIMANOSAOWAPAK

T-S12

Friday, 3 July 2009
11:00 - 13:00
Level 2, Room 204
Chair: Tan Ming Jen, NTU

11:00 T-S12.1-2(KN) A01840-03319 pg T24
Models for Predicting the Strength of Processed Al Alloys: SPD, Welded, Rolled, Age Hardened and Co-cluster Strengthened Alloys
Marco STARINK

11:30 T-S12.3(O) A02586-04419 pg T29
Tensile Properties and Microstructures of Blended Elemental Powder Metallurgy Ti-Fe-Mo-(Y) Alloy from Titanium Hydride
Yanbin LIU, Yong LIU, Bin LIU, Jingwen QIU, Bin WANG

11:45 T-S12.4(O) A02486-04252
Influence of Sr on Microstructure and Mechanical Properties of Mg-9Li-3Al Alloy
Yan YANG, Xiaodong PENG, Qunyi WEI, Weidong XIE, Zhonghua SU

12:00 T-S12.5(O) A00096-00375 pg T8
Prediction of Flow Stress in Isothermally Compressed Ti-6Al-4V Alloy Based on Fuzzy Neural Network
Jiao LUO, Miaoquan LI, Weixin YU

12:15 T-S12.6(O) A00434-01300 pg T9
Compressive Properties of AM50A and AM91D Alloys Using Split Hopkinson Pressure Bar (SHPB)
Dong Wei SHU, Iram Raza AHMAD

12:30 T-S12.7(O) A01087-01881 pg T18
The Study of Plasticity Behaviour of Materials for Cold Forging
Kin Kong Steven TONG, Danno ATSUSHI, Hongping LIU, Chow Cher WONG

12:45 T-S12.8(O) A02990-05110 pg T32
Flow Stress Behaviour of Pure Magnesium between 4.2K and 300K
B. BHATTACHARYA, M. NIEWCZAS

T2-S12

Friday, 3 July 2009
11:00 - 11:45
Level 2, Room 207
Chair: Karl Urlich Kainer, GKSS

11:00 T2-S12.1(O) A00979-01703 pg T15
Processing and Microstructural Charactarisation of AA 1070 and AA 6063 Matrix B_4C_p Reinforced Composites
Fatih TOPTAN, Ayfer KILICARSLAN, Ahmet KARAASLAN, Mustafa CIGDEM, Isil KERTI

11:15 T2-S12.2(O) A01792-03181 pg T23
The Torsion Property of the Porous Sintered Fiber Metals
Jichao QIAO, Zhengping XI, Huiping TANG

11:30 T2-S12.3(O) A01539-02686 pg T21
Analysis of Al Metal Matrix Nanocomposites Processed Using Ultrasonic Vibration
Fei HE

T2-S12 (cont'd)

Friday, 3 July 2009
12:00 - 12:45
Level 2, Room 207
Chair: Anders Jafors, SIMTech

12:00 T2-S12.5(O) A00799-01412 pg T13
Minimising Burr Formation in Micro-Milling of Aluminum Alloys Using Carbide Cutting Tools
Kushendarsyah SAPTAJI, Koh DONG YANG, Sathyan SUBBIAH

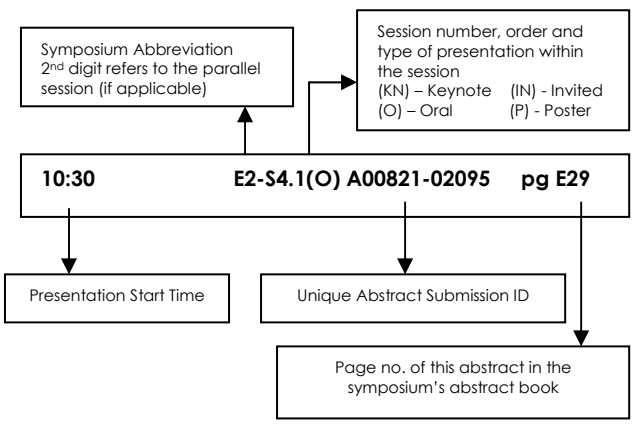
12:15 T2-S12.6(O) A00987-01721 pg T15
Surface Roughness Study on Material Removal Using Electrokinetic Phenomenon
Cheng Seng LEO, Wee Gin TEO, David Lee BUTLER, Sum Huan NG, Chun YANG, Steven DANYLUK

12:30 T2-S12.7(O) A02092-03603 pg T27
Tool Wear Studies during Machining of Metal Matrix Composites
Varadarajan YELLAMAPALLY SRINIVASACHAR

SYMPOSIUM U

Mechanical Behavior of Micro - and Nano-Scale Systems

The programme codes you will see in the following pages are decoded using an example below:



Symposium U: Mechanical Behavior of Micro- and Nano-Scale Systems

Level 2, Room 209

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session U-S4** **Mechanical Properties of Thin Films and Nanomaterials - I**	(10:30 - 12:30) **Session U-S6** **Mechanical Properties of Thin Films and Nanomaterials -** II	(10:30 - 12:30) **Session U-S9** **Characterization of Mechanical Properties of Advanced Materials** - II	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session U-S1** **Mechanical Behavior at Multiscales**				(11:00 - 13:00) **Session U-S12** **Mechanical Behavior of Electronic Materials**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session U-S2** **Mechanical Behavior of Advanced Materials/ Composites - I**	(14:00 - 16:30) **Session U-S5** **POSTER SESSION**	(14:00 - 15:30) **Session U-S7** **Characterization of Mechanical Properties of Advanced Materials - I**	(14:30 - 16:00) **Session U-S10** **Tribology, Friction and Wear I**	
(16:15 - 16:30) Break		(15:45 - 17:30) **Session U-S8** **Indentation, Analysis and Application –** II	(16:00 - 16:15) Break	
(16:30 - 18:00) **Session U-S3** **Indentation, Analysis and Applications - I**			(16:15 - 17:45) **Session U-S11** **Tribology, Friction and Wear** II	
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

Symposium U (2): Mechanical Behavior of Micro- and Nano-Scale Systems

Level 2, Room 205

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break			(10:30 - 12:30) **Session U2-S9** **Modeling of Mechanical Behavior of Advanced Materials – I**	(10:30 - 11:00) Coffee Break
				(11:00 - 13:00) **Session U2-S12** **Modeling of Mechanical Behavior of Advanced Materials –** II
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
	(14:00 - 16:30) **Session U-S5** **POSTER SESSION**		(14:30 - 16:30) **Session U2-S10** **Mechanical Behavior of Advanced Materials/ Composites** II	
(16:15 - 16:30) Break				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

U-S1: Mechanical Behavior at Multiscales

Monday, 29 June 2009
11:00-12:30
Level 2, Room 209
Chair: Kaiyang Zeng,
National University of Singapore, Singapore

11:00 U-S1.1-3(KN) A00421-00802 pg U18
Nature-Inspired Structural Materials Through Manipulation of Structure at Multiple Length-Scales
Robert RITCHIE

11:45 U-S1.4(O) A02663-04575 pg U52
Mechanics of Biomaterials at the Nanoscale
Ming DAO

12:00 U-S1.5-6(IN) A01974-03408 pg U43
A Surface Energy Model and Application to Mechanical Behavior Analysis of Single Crystals at Sub-micron Scale
Yueguang WEI

U-S2: Mechanical Behavior of Advanced Materials/Composites - I

Monday, 29 June 2009
14:00-16:15
Level 2, Room 209
Chair: Zhong Chen,
Nanyang Technological University, Singapore

14:00 U-S2.1-2(IN) A01631-02826 pg U40
Plasticity and Fracture in BMGs: Some Recent Experimental and FEA Results
Upadrasta RAMAMURTY

14:30 U-S2.3-4(IN) A01875-03232 pg U43
Mechanical Behaviour of Metallic Glasses
Yi LI

15:00 U-S2.5(O) A02315-03956 pg U49
Molecular Dynamics Study of Shear Localization in Amorphous Alloys
Murali PALLA, Huajian GAO, Yong-Wei ZHANG

15:15 U-S2.6(O) A00352-00654 pg U16
Creep Resistant Thermoplastic Nanocomposites Reinforced with MWNTs
Jinglei YANG

15:30 U-S2.7(O) A00436-00820 pg U18
Mechanical Behavior of Novel Transducers Based on Magnetic-Polymer Composites
Quang Vinh NGUYEN, Raju V. RAMANUJAN

15:45 U-S2.8(O) A01185-02032 pg U33
Effect of Maleated Polypropylene on the Intercalation and Mechanical Properties of Polypropylene/clay Nanocomposites
Songlin LIU, Szu Hui LIM, Jian Hong ZHAO, Halim TANI, Mei Qi LIM, Suzhu YU, Yang Kay JUAY, Soo Khim LAU, Fuei Yee LIEW, Xuehong LU

16:00 U-S2.9(O) A00327-00603 pg U13
The Dynamic Mechanical Behavior of Reinforced Thermoplastic Natural Rubber Nanocomposites with Carbon Nanotubes
Moua'd AL-TARAWNEH, Sahrim HJ. AHMAD, Syed Y. YAHYA, Rozaidi RASID

U-S3: Indentation, Analysis and Applications - I

Monday, 29 June 2009
16:30-18:00
Level 2, Room 209
Chair: Ming Dao,
Massachusetts Institute of Technology, USA

16:30 U-S3.1-2(IN) A00569-01036 pg U21
Nanoindentation and Microindentation Studies of Biological Tissues and Hydrogels
Michelle OYEN

17:00 U-S3.3(O) A02927-05003 pg U55
Characteristics of Instrumented Indentation
A. C. FISCHER-CRIPPS

17:15 U-S3.4(O) A00346-00646 pg U14
Nanoindentation Creep Modelling on Viscoelastic Materials
Ben BEAKE

17:30 U-S3.5(O) A02668-04606 pg U52
Determination of the Interfacial Adhesion Properties by wedge Indention: Finite Element Simulation and Experiment.
Lei Chen, and Kaiyang Zeng

17:45 U-S3.6(O) A00805-01409 pg U25
Measurement of Elastic and Viscoelastic Properties of Polymers through Instrumented Micro and Nano Indentation
R. Narayanana KARTHIC, Xinglun LOO, Sridhar IDAPALAPATI

U-S4: Mechanical Properties of Thin Films and Nanomaterials - I

Tuesday, 30 June 2009
10:30-12:30
Level 2, Room 209
Chair: Upadrasta Ramamurty,
Indian Institute of Science, India

10:30 U-S4.1-3(KN) A01547-02698 pg U39
Grain Boundary Induced Plastic Deformation in Thin Films and Nanocrystalline Materials
Huajian GAO, Tanmay BHANDAKKAR, Xiaoyan LI

11:15 U-S4.4(O) A00164-00719 pg U9
Strain Gradient Crystal Plasticity Modeling, Post-Processing and Synchrotron X-ray Diffraction Experiments: A Meso/Nanoscale Analysis
Xu SONG, Alexander KORSUNSKY

11:30 U-S4.5(O) A00252-01069 pg U11
Characterization and Properties of Nanocrystalline Surface Layer in Pure Zirconium
Lan ZHANG, Yong HAN, Wenting ZHANG, Jian LU

11:45 U-S4.6(O) A01051-01821 pg U32
Cross-sectional Transmission Electron Microscopy on Deformed Microstructures in Monolithic and Multilayer TiSiN/TiN Coatings
Pui Ching WO, Zonghan XIE, Paul MUNROE

12:00 U-S4.7(O) A02277-03887 pg U47
Texture, Electrical and Mechanical Properties of TiN/NiTi Heterostructures
Ashvani KUMAR, Devendra SINGH, Davinder KAUR

12:15 U-S4.8(O) A02566-04383 pg U50
Buckling of a Heteroepitaxial Film with Periodic Connections to a Substrate
Ping LIU, Zhuangjian LIU, Yongwei ZHANG, Frederick F. LANGE

U-S5: Poster Session

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Gallery
Chairs: Zhong Chen, Ming Dao,
Kaiyang Zeng and Yong-wei Zhang

U-S5.01(P) A00016-00020 pg U9
Influence of Modulation Period on the Structure and Mechanical Properties of Nanoscale ZrB_2/W Multilayered Coatings
Ming TAN, Guang Qing LIU, Lei DONG, Xiang Yun DENG, De Jun LI

U-S5.02(P) A00016-00021 pg U9
Synthesis of ZrB_2-based Multilayered Coatings Using Magnetron Sputtering Process
Hui WANG, Yuan Bin KANG, Jie GONG, Yan Dong SUN, Guang Qing LIU, Xiang Yun DENG, De Jun LI

U-S5.03(P) A00089-00569 pg U9
Grain-size Effects on the Hardness of Nanograin $BaTiO_3$ Ceramics
Xiang Yun DENG

U-S5.04(P) A00277-02294 pg U12
Inelastic Deformation of Glass beneath Sharp Diamond Indenters
Satoshi YOSHIDA, Hiroshi SAWASATO, Toru SUGAWARA, Yoshinari MIURA, Jun MATSUOKA

U-S5.05(P) A00301-02465 pg U12
Thermal Stability of Helium Bubble in Nanocrystalline Gold Prepared By Gas Deposition Method
Takashi INAMI, Mamoru KOBIYAMA, Hiroshi MAETA, Masato SASASE, Norito ISHIKAWA, Hiroyuki SUGAI, Teruo KATO

U-S5.06(P) A00329-00607 pg U13
Nanostructure Formation by Electroexplosive Alloying of Metals
Sergey KARPII, Evgenii BUDOVSKIKH, Victor GROMOV, Yurii IVANOV, Sergey KONOVALOV

U-S5.07(P) A00351-00684 pg U15
Effect of Nano Ni and Mo on Indentation Creep Behaviour of Lead Free Composite Solders
B. S. S. Chandra RAO, K. Mohan KUMAR, Vaithilingam L. NIRANJANI, Samir V. KAMAT, Vaidyanathan KRIPESH, Kaiyang ZENG

U-S5.08(P) A00414-04148 pg U17
Intrinsic Stress in Pulse Electro-deposited Ni-W Films
Zhong CHEN, Jianfeng ZHU

U-S5.09(P) A00553-02568 pg U20
Mechanical Properties of Polymers Used for Optical Data Storage Using AFM
Sandhya PAL, Sumit BARTHWAL, Dinesh DEVA

U-S5.10(P) A00560-01025 pg U20
Optical and Dynamic Mechanical Characterization of Thin Film Polymer Nanocomposites
Balram TRIPATHI, Kamlendra AWASTHI, Vaibhav KULSHRESHTHA, Anshu SHARMA, Shweta AGARWAL, Ram Kishan MANGAL, Sumit KUMAR, Shyam SHARMA, Mangej SINGH, Yogesh Kumar VIJAY

U-S6: Mechanical Properties of Thin Films and Nanomaterials - II

Wednesday, 1 July 2009
10:30-12:30
Level 2, Room 209
Chair: Yong-wei Zhang,
National University of Singapore, Singapore

U-S7: Characterization of Mechanical Properties of Advanced Materials - I

Wednesday, 1 July 2009
14:00-15:30
Level 2, Room 209
Chair: Kaiyang Zeng,
National University of Singapore, Singapore.

14:00 U-S7.1-2(IN) A01677-02899 pg U41
In-situ Nanomechanics in a Scanning Electron Microscopy
Johann MICHLER

14:30 U-S7.3(O) A00179-01235 pg U11
In-situ Detection of Mechanical Instabilities and Failure during the Growth of Thin Anodic Oxide Films
Quentin VAN OVERMEERE,
Jean-Francois VANHUMBEECK, Joris PROOST

14:45 U-S7.4(O) A00577-01051 pg U21
Mechanical Characterizations of Hydrogel-Based Contact Lens
Chuan LI, Mark AHEARNE, Kuo-Kang LIU

15:00 U-S7.5(O) A02102-03620 pg U46
Correlation between Structure and Mechanical Properties of CVD Grown CNT Using RAMAN and AFM
Pratima SINGH, Seema SHARMA, Barkha AWASTHI, Saloni SHARMA, R S YADAV

15:15 U-S7.6(O) A02049-04489 pg U44
Synthesis and Nanosoldering of Silver Nanowires on Atomic Force Microscopy (AFM) Cantilevers for Tip-Enhanced Raman Spectroscopy (TERS): A New Technique for Submicrometer Stress Analysis
Pierre BRODARD, Mikhael BECHELANY, Laetitia PHILIPPE, Johann MICHLER

U-S8: Indentation, Analysis and Application – II

Wednesday, 1 July 2009
15:45-17:30
Level 2, Room 209
Chairs: Michelle Oyen,
Cambridge University, UK.

15:45 U-S8.1-2(IN) A01496-02603 pg U37
Determination of the Elastic and Plastic Properties of Materials Through Nanoindentation: Dimensional Analysis, Computational Modeling and Issues of Uniqueness and Sensitivity
T. A. VENKATESH

16:15 U-S8.3(O) A02663-04573 pg U51
Pseudo-Steady Indentation Creep
Hidenari TAKAGI, Ming DAO, Masami FUJIWARA

16:30 U-S8.4(O) A02118-03651 pg U46
Simulation of Deformation Fields underneath Vickers Indenter Effects of Power-LAW Plasticity
Nuwong Chollacoop and Upadrasta Ramamurty

16:45 U-S8.5(O) A01529-02677 pg U38
Finite Element Simulation of Nanoindentation Tests on Cortical Bone Allowing for Tissue Anisotropic Elastic and Inelastic Behavior
Pasquale VENA, Dario GASTALDI, Valentina SASSI, Davide CARNELLI, Roberto CONTRO, Christine ORTIZ

17:00 U-S8.6(O) A01179-02016 pg U33
Observations of Anisotropic Plastic Behavior in Thin Films via Indentation Modulus Measurement
Salmon KALKHORAN, Nuwong CHOLLACOOP, Andrew GOULDSTONE

17:15 U-S8.7(O) A00348-00647 pg U14
Alternative Methods to Extract the Hardness and Elastic Modulus of Thin Films from Nanoindentation Load-displacement Data
Amit KUMAR, Kaiyang ZENG

U-S9: Characterization of Mechanical Properties of Advanced Materials - II

Thursday, 2 July 2009
10:30-12:30
Level 2, Room 209
Chair: Johann Michler,
Swiss Federal Laboratories for Materials Testing and Research, Switzerland

10:30 U-S9.1-2(IN) A00380-00702 pg U17
Crack Tip Domain Switching in Normal and Relaxor Ferroelectrics Subjected to Mechanical and Electric Loading
Ai Kah SOH, Xiaofang ZHAO, Yi Cheng SONG

11:30 U-S9.3(O) A00350-00652 pg U15
Mechanical Properties and Domain Structures of $Pb(Zn_{1/3}Nb_{2/3})O_3$-$PbTiO_3$ Single Crystals Using Nanoindentation and Piezoresponse Force Microscopy
Meng Fei WONG, Kaiyang ZENG

11:15 U-S9.4(O) A01476-02558
A Novel Scheme for Quantitative Measurement of the Elastic Modulus od Materials at Nanoscale Using Atomic Force Microscope
Bin TANG, A,H.W.NGAN

11:30 U-S9.5(O) A02682-04613 pg U52
Measurement of Fracture Toughness of Anode Used in Solid Oxide Fuel Cell
Kais HBAIEB

11:45 U-S9.6(O) A02511-04304 pg U50
Defectsin Strained Silicon Heterostructure
Tongda MA, Hailing Tu

12:00 U-S9.7.8(IN) A01649-02856 pg U40
Multifrequency Response and Dissipation Mapping in Active Materials
David BECH, Roger PROKSCH

U2-S9: Modeling of Mechanical Behavior of Advanced Materials – I

Thursday, 2 July 2009
10:30-12:30
Level 2, Room 205
Chair: Vincent Tan,
National University of Singapore, Singapore

10:30 U2-S9.1-2(IN) A01853-03235 pg U42
Numerical Simulations of VLS Heteroepitaxial Nanowire Growth
Vivek SHENOY, K. SCHWARZ, J. TERSOFF

11:00 U2-S9.3(O) A00868-02525 pg U27
Analysis of Dislocation Substructure and Reciprocal Space Maps During Deformation of Metallic Polycrystals
Felix HOFMANN, Xu SONG, Sophie EVE, Steve COLLINS, Alexander KORSUNSKY

11:15 U2-S9.4(O) A02637-04569 pg U51
Cross-Sectional Deformation of Multiwalled Carbon Nanotubes under Hydrostatic Pressure
Hiroyuki SHIMA, Motohiro SATO

11:30 U2-S9.5(O) A01050-03355 pg U31
Auxetic Nanostructured Materials Under Pressure
Joseph N. GRIMA, Ruben GATT, Richard N. CASSAR, Daphne ATTARD, Victor ZAMMIT

11:45 U2-S9.6(O) A01048-03351 pg U30
A Novel Chemo-mechanical Process for the Manufacture of Auxetic Foams and for Their Re-conversion to Conventional Form
Joseph N GRIMA, Daphne ATTARD, Ruben GATT, Brian ELLUL, Richard N CASSAR

12:00 U2-S9.7(O) A01275-02681 pg U34
Molecular Dynamics Simulation of Indentation on Thin Film of Ag/Cu Bi-crystalline Nanostructure
Amkee KIM, Long TRANDINH

12:15 U2-S9.8(O) A00865-01504 pg U26
Low Poisson Ratio Glasses from Super Strong Zeolite Amorphisation
Neville GREAVES, Florian KARGL, Peter HOLLIMAN

U-S10: Tribology, Friction and Wear I

Thursday, 2 July 2009
14:30-16:00
Level 2, Room 209
Chair: T.A.Venkatesh,
Stony Brook University, USA

14:30 U-S10.1-2(IN) A02227-03801 pg U46
Nanolubrication of Si and Polymers Using Self-assemled Monolayers (SAMs) and Polymeric Films for MEMS Applications
Sujeet K. SINHA

15:00 U-S10.3(O) A02307-04060 pg U48
Mechanical Behaviour and Wear Studies of Hyper Eutectic Al-Si Alloy/ Graphite Particulate Reinforced Composites
RAJARAM G., S. KUMARAN, T. Srinivasa RAO

15:15 U-S10.4(O) A02836-04858 pg U54
A Comparative Study of Two Surface Modification Processes for Better Adhesion and Tribological Properties of UHMWPE Film Deposited on a Si Substrate
Abdul Samad MOHAMMED, Satyanarayana NALAM, Sujeet Kumar SINHA

15:30 U-S10.5(O) A00636-01144 pg U22
Mechanical and Tribological Behavior of Nanostructured TiB_2 Coating on High Speed Steel
Nurot PANICH, Panyawat WANGYAO, Patama VISUTTIPITUKUL, Sukkaneste TUNGASMITA

15:45 U-S10.6(O) A02861-04892 pg U54
Nano-lubrication of Si Surface Using Dendrimer-mediated Perfluoropolyether Films for Micro-electro Mechanical Systems Applications
Satyanarayana NALAM, Minn MYO, Sujeet Kumar SINHA

U2-S10: Mechanical Behavior of Advanced Materials/Composites II

Thursday, 2 July 2009
14:30-16:30
Level 2, Room 205
Chair: A.K.Soh,
The University of Hong Kong, Hong Kong, China

14:30 U2-S10.1(O) A00747-01323 pg U24
Nanocoating and Preform Making of Short Carbon Fibers for Strengthening Metal Matrix Composites
Linda WU, Wee Yong CHUA, Beng Hwa CHUA, Yonghui BAI, Zhong CHEN

14:45 U2-S10.2(O) A01226-02104 pg U34
Preparation and Characterization of Bioactive Composites of PCL/bioactive Fillers
Ying LI, Chi Mun CHEAH, Hengky CHANG, Adeline KUM

15:00 U2-S10.3(O) A02689-04624 pg U52
Effect of Trace Addition of Scandium and Zirconium on the Fracture Toughness of Aluminium-Magnesium Alloy
Rituparna SEN, Manojit GHOSH, Malay BANERJEE

15:15 U2-S10.4(O) A00372-00688 pg U16
Mechanical Properties of Epoxy/Al_2O_3 Filler Nanocomposites
Sheau Hooi LIM, Kaiyang ZENG, Chao Bin HE

15:30 U2-S10.5(O) A01537-03462 pg U38
Preparation, Mechanical and Electrochemical Properties of Sputtered RuO_2 Anode Thin Film for Lithium Ion Batteries
Jing ZHU, Kaiyang ZENG, Li LU

15:45 U2-S10.6(O) A02502-04285 pg U49
The Application of Tapanuli Clay for High Performance Epoxy Layered Silicate Nanocomposites
Ariadne JUWONO, Riwandi SIHOMBING, S SUTARNO, Handoko SUBAWI, Nidya CHITRANINGRUM

16:00 U2-S10.7(O) A00734-01299 pg U23
Self Healing Composite for Aircraft's Structural Application
Cheak Khan Willy TAN, Seng Hong TEOH, Hui Yee CHIA, Min Suen LEE, Abdul Jalil NASYITAH, Muhammad Hakim Bin Senin LUQMAN, Salleh NURHIDAYAH

16:15 U2-S10.8(O) A00436-02920 pg U19
The Mechanical Behavior of Magneto-Elastic Soft Actuators Modeled as a Phase Transformation
Rebecca L. SNYDER, Quang Vinh NGUYEN, Raju V. RAMANUJAN

U-S11: Tribology, Friction and Wear II

Thursday, 2 July 2009
16:15-17:45
Level 2, Room 209
Chair: Sujeet K. Sinha,
National University of Singapore, Singapore

16:15 U-S11.1-2(IN) A00495-02352 pg U20
On the Negative Nanowear of Single Crystal Si-Based Materials
Hanshan DONG, Linmao QIAN, Zhongrong ZHOU

16:45 U-S11.3(O) A01779-03121 pg U42
Microfabricated Devices for Friction Measurements
Xiaosong TANG, Sujeet K. SINHA, Sean J. O'SHEA

17:00 U-S11.4(O) A01177-02034 pg U32
Operational Shock Response of A Small Form Factor Hard Disk Drive
Bin GU, Dong-Wei SHU, Bao-Jun SHI

17:15 U-S11.5(O) A02003-03457 pg U43
Reciprocating Sliding Wear Studies of Biomorphic Si/SiC Ceramic Composites
AMIRTHAN G, M. BALASUBRAMANIAN

17:30 U-S11.6(O) A02861-04896 pg U55
Tribology of Perfluoropolyether Films on Hydrogen-terminated Si Surface
Minn MYO, Satyanarayana NALAM, Sujeet Kumar SINHA

U-S12: Mechanical Behavior of Electronic Materials

Friday, 3 July 2009
11:00-13:00
Level 2, Room 209
Chair: Lei Lu,
Institute of Metal Research,
Chinese Academy of Science, China

11:00 U-S12.1-2(IN) A01657-02983 pg U40
Size and Strain Rate Effects on Mechanical Properties of Bulk Solder and Solder Joint Materials
John H. L. PANG, Kok Ee TAN

11:30 U-S12.3(O) A00414-04142 pg U17
Interface Fracture Toughness Assessment of Solder Joints Using Double Cantilever Beam Test
Zhong CHEN, Shane Zhi Yuan LOO, Puay Cheng LEE, Zan Xuan LIM, Natalia YANTARA, Tong Yan TEE, Cher Ming TAN

11:45 U-S12.4(O) A00349-00650 pg U14
Determination of Interfacial Mechanical and Time-dependent Properties of Low-k Films by Wedge Indentation Method
Kong Boon YEAP, Kaiyang ZENG, Dongzhi CHI

12:00 U-S12.5(O) A01281-02330 pg U35
Mechanical Stress Influence on Leakage Current of Low-k SiOC Dielectric with Damascene Structure
Ya-Lian YANG, Tai-Fa YOUNG, Ting-Chang CHANG, Jia-Haw TSU, Kaung-Chang CHANG, Chao-Yu CHEN

12:15 U-S12.6(O) A00351-00656 pg U15
Effect of Surface Finishes on Growth Kinetics and Mechanical Properties of Intermetallic Compounds (IMC) in Lead Free Solder Joints
B. S. S. Chandra RAO, Jin Quan WENG, Lu SHEN, Teck Kheng LEE, Kaiyang ZENG

12:30 U-S12.7(O) A00761-01664 pg U24
Indentation Size Effect on the Creep Behavior of a Sn-Ag-Cu Solder
Yongdian HAN, Hongyang JING, Sharon Mui Ling NAI, Yuchan LIU, Cher Ming TAN, Jun WEI, Lianyong XU

12:45 U-S12.8(O) A00840-01464 pg U26
Failure Analysis of a Semiconductor Packaging Copper Leadframe Using Signal Processing Approach
Shahrum ABDULLAH, Mohd Faizal ABDULLAH, Azman JALAR, Ahmad Kamal ARIFFIN, Che Ku Eddy NIZWAN

U2-S12: Modeling of Mechanical Behavior of Advanced Materials – II

Friday, 3 July 2009
11:00-13:00
Level 2, Room 205
Chair: Alexander Korsunsky, University of Oxford, UK

11:00 U2-S12.1-2(IN) A02093-03604 pg U45
Numerical Investigations into the Tensile Behaviour of TiO_2 Nanowires
VBC TAN, L DAI, WCD CHEONG, CT LIM, CH SOW

11:30 U2-S12.3(O) A02785-04757 pg U53
Coarse-grained Molecular Dynamics Modeling of the Deformation and Breakup Behavior of Single-layer Membrane Vesicles
Yong-Wei ZHANG, Chen ZHENG, Ping LIU

11:45 U2-S12.4(O) A00944-02063 pg U29
Void Growth and Interaction in a Hyperelastic Solid
Wei Hin WONG, Tian-Fu GUO, Li CHENG

12:00 U2-S12.5(O) A02423-04138 pg U49
Edge Ripples of Free Standing Finite Graphene Sheets
Chilla Damodara REDDY, Vivek SHENOY, Yong Wei ZHANG

12:15 U2-S12.6(O) A02250-03837 pg U47
Instability Pathway of Programmed Hydrogels under Inhomogeneous Swelling
Xiaoxin ZHANG, Yongwei ZHANG

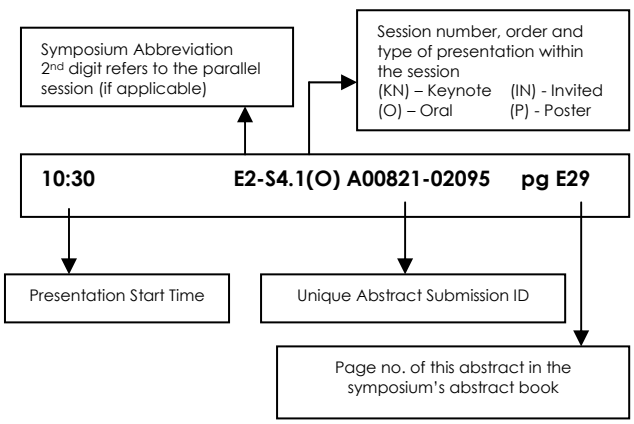
12:30 U2-S12.7(O) A00888-01615 pg U28
Mechanical Properties of Chemically Functionalized Graphene
Qing Xiang PEI, Yong Wei ZHANG, Vivek SHENOY

12:45 U2-S12.8(O) A02093-03608 pg U46
Molecular Mechanics Simulations of Nanoindentation of Crystalline and Amorphous Silicon
YK YEW, TE TAY, KM LIM, VBC TAN

SYMPOSIUM V

Materials Education: New Tools and Resources

The programme codes you will see in the following pages are decoded using an example below:



Symposium V: Materials Education: New Tools and Resources

Level 2, Room 206

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session V-S4** **"Big Picture" Issues for Education**	(10:30 - 12:30) **Session V-S5** **New Resources**		(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session V-S1** **New Curricula and Programs - I**				
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session V-S2** **New Curricula and Programs - II**	(14:00 - 16:30) **Session V-S5** **Materials Education** **POSTER Session**	(14:00 - 15:30) **Session V-S7** **Professional Development - I**		
(16:15 - 16:30) Break		(15:30 - 17:30) **Session V-S8** **Professional Development - II**		
(16:30 - 18:00) **Session V-S3** **International Opportunities**				
	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	19:00 - 22:00 hrs Conference Banquet @ Suntec	

V-S1: New Curricula and Programs - I

Monday, 29 June 2009
11:00-12:30
Level 2, Room 206
Chair: J. Baglin & L. Bartolo

11:00 V-S1.1-2(KN) A00163-00333 pg V5
The Changing Face of Materials Education
Peter GOODHEW, Tim BULLOUGH

11:30 V-S1.3-4(KN) A00411-00793 pg V6
Towards an Integrated Science Programme
Andrew T. S. WEE

12:00 V-S1.5-6(IN) A01501-02612 pg V10
Enabling Activities for Photovoltaics Industry Expansion for the Asia-Pacific Region
Richard CORKISH

V-S2: New Curricula and Programs - II

Monday, 29 June 2009
14:00-16:15
Level 2, Room 206
Chair: T. Bullough & D. McPhail

14:00 V-S2.1-2(IN) A02881-05039 pg V16
New Bachelor of Philosophy Degree at the Australian University: A New Way of Engaging High Performance Students in Science and Engineering
Chennupati JAGADISH

14:30 V-S2.3-4(IN) A00412-02398 pg V6
Lifelong Learning Resources in Materials Education for General and Professional Communities
John BAGLIN

15:00 V-S2.5-6(IN) A00719-03552 pg V8
Interdisciplinary Research and Education - UNM IGERT Program on Integrating Nanotechnology with Cell Biology and Neuroscience
Marek OSINSKI, Michael WILSON, Janet OLIVER,James THOMAS, Shannon McCAMPBELL,Linda BUGGE

15:30 V-S2.7 (O) A00172-00692 pg V5
Logistics of Nano-materials — New Training Course in Aerospace Department of Moscow Institute of Physics and Technology
Michael VASILIEV

15:45 - 16:00 BREAK

16:00 V-S2.8-9(IN) A00609-01109 pg V7
Development of a Multimedia Based Professional Science Master's Program in Materials and Chemical Synthesis
M. Ishaque KHAN

V-S3: International Opportunities

Monday, 29 June 2009
16:30-18:00
Level 2, Room 206
Chair: N. Rutter & F. Rosei

16:30 V-S3.1-2(IN) A02980-05095 pg V16
Some Aspects of International Collaboration in Materials Science
Anthony K. CHEETHAM

17:00 V-S3.3-4(IN) A02293-03911 pg V15
Italy-USA Joint Doctorate Program in Materials for Environment and Energy: Achievements and Hurdles
Enrico TRAVERSA

17:30 V-S3.5-6(IN) A00672-01212 pg V8
Materials Education "San Frontières' - The Development of Opportunities for International Exchanges and Joint Degree Programmes at Both Undergraduate and Postgraduate Level
David McPHAIL

V-S4: "Big Picture" Issues for Education

Tuesday, 30 June 2009
10:30-12:30
Level 2, Room 206
Chair: J. Baglin & C. Jagadish

10:30 V-S4.1-2(KN) A00492-00902 pg V7
Thinking Big: Science and Math Education on the Scale of Millions
Merrilea MAYO

11:00 V-S4.3-4(KN) A01450-03799 pg V10
Relations between Science Education, Research and Economic Prosperity
Hanns-Ulrich HABERMEIER

11:30 V-S4.5-6(IN) A01696-02951 pg V12
Developing a Strategy for Materials Science in Germany - Results of a Dephi-Study for a Materials Roadmap
Marion WEISSENBERGER-EIBL, Klemens JOACHIM

12:00 V-S4.7-8(IN) A01942-03349 pg V13
MATDL: The Materials Digital Library Pathway
Laura BARTOLO, James WARREN, Edwin GARCIA, Lan LI, Cathy LOWE

V-S5: Materials Education [Poster Session]

Tuesday, 30 June 2009
14:00 - 16:30
Level 3, Gallery

V-S5.01(P) A02322-03973 **pg V15**
ET-based Course Connecting Teachers in a Classroom to the Real World
Byung-Kwon MOON, Chulhee KIM, Kyu-Seong CHO, Woo-Hun RYANG, Byoung Joon AHN

V-S6: New Resources

Wednesday, 1 July 2009
10:30-12:30
Level 2, Room 206
Chair: M. Mayo & M. Murr

10:30 V-S6.1-2(IN) A02020-03479 **pg V13**
Development and Use of Online Teaching and Learning Resources - The DoITPoMS Project
Noel RUTTER, Zoe BARBER, Bill CLYNE

11:00 V-S6.3-4(IN) A01507-02619 **pg V11**
Status of Materials Education for Graduate Students and Young Scientists in National Institute
Naoki KISHIMOTO

11:30 V-S6.5-6(IN) A00860-04997 **pg V9**
Re-Inventing Electronic Materials Laboratory Classes through Paintable Devices: Transistors So Simple, a Child Can Do It
Howard E. KATZ

12:00 V-S6.7-8(IN) A02196-03762 **pg V14**
Information Communication Technology Enabled Model for Quality Distance Learning
R.K. SINGH

V-S7: Professional Development - I

Wednesday, 1 July 2009
14:00-15:30
Level 2, Room 206
Chair: N. Kishimoto & T. Bullough

14:00 V-S7.1-2(IN) A01550-02700 **pg V12**
Life-Long Professional Learning for Professional Viability and Growth
Robert TUCKER, Robert FREED, John BAGLIN

14:30 V-S7.3-4(IN) A02064-03549 **pg V14**
Designing Undergraduate Courses that Explore the Interplay of Science, Technology, and Societal Impacts
Meredith MURR, Fiona GOODCHILD, Patrick McCRAY, Evelyn HU

15:00 V-S7.5-6(IN) A00499-00915 **pg V7**
Mentoring Early Career Researchers: How to Survive in the Multi Faceted World of Modern Science
Federico ROSEI

V-S8: Professional Development - II

Wednesday, 1 July 2009
15:30-17:30
Level 2, Room 206
Chair: L. Bartolo & J. Baglin

15:30 V-S8.1-2(IN) A00863-01498 **pg V9**
Mentoring New Faculty: Important Yet Often Ignored
Mufit AKINC

16:00 V-S8.3-4(IN) A02552-04364 **pg V15**
Living and Learning Experience — Character Education
Haydn CHEN

16:30 V-S8.5-6(IN) A00422-00849 **pg V6**
Training Programs of Advanced Sciences and Technology for High-school Science Teachers
Sang-Wook HAN, Jong-Sul JEON, Byoung Joon AHN

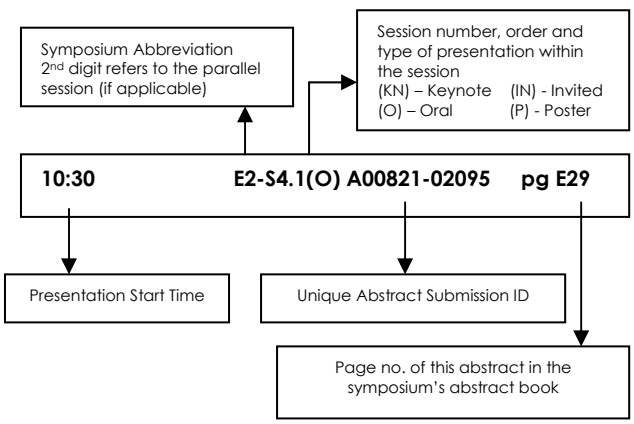
17:00 V-S8.7(O) A02245-03859 **pg V15**
Development of Lecture/Lab Materials for Nanotechnology and Chemistry Session of Advanced Science and Technology-oriented Education (ASTOE) Program in Korea
Wonghil CHANG, Kyukwan ZONG, Byoung Joon AHN

17:15 V-S8.8(O) A01054-01829 **pg V10**
Value Oriented Materials Science Education — The Need Of The Century
M.A. JOTHI RAJAN, Arockiam THADDEUS, S. VINCENT, T. MATHAVAN

SYMPOSIUM W

GEM4/SMART Symposium on Infections Diseases

The programme codes you will see in the following pages are decoded using an example below:



Symposium W: GEM4/SMART Symposium On Infectious Diseases

Level 2, Room 207 (Mon - Wed), Level 3, Room 305 (Thu-Fri)

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 Peter Doherty	(08:30 - 09:15) Plenary Lecture 4 John Pendry	(08:30 - 09:15) Plenary Lecture 6 Hartmut Michel	
(09:00 - 09:45) Opening Ceremony	(09:15 - 10:00) Plenary Lecture 3 Andrew Wee	(09:15 - 10:00) Plenary Lecture 5 Chad Mirkin	(09:15 - 10:00) Plenary Lecture 7 Akihisa Inoue	(09:00 - 09:45) Plenary Lecture 8 Jean-Marie Basset
(09:45 - 10:30) Plenary Lecture 1 Peter Gruenberg	(10:00 - 10:30) Coffee Break			(09:45 - 10:30) Plenary Lecture 9 Frederick Lange
(10:30 - 11:00) Coffee Break	(10:30 - 12:30) **Session W-S4**	(10:30 - 11:30) **Session W-S6**	**ROOM 305** (10:30 - 12:00) **Session W-S9**	(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Session W-S1**				**ROOM 305** (11:00 - 12:00) **Session W-S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture James L. Hedrick	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Martyn Poliakoff	(12:30 - 14:00) Lunch (13:00 - 13:45) Theme Lecture Karl U. Kainer	(12:30 - 14:00) Lunch (13:00 - 14:30) Panel Discussion	(13:00 - 14:30) Closing & Poster Award Ceremony Lunch
(14:00 - 16:15) **Session W-S2**	(14:00 - 16:15) **Session W-S5**	(14:00 - 15:30) **Session W-S7**	**ROOM 305** (14:30 - 16:00) **Session W-S10**	
(16:15 - 16:30) Break		(15:30 - 16:15) **Session W-S8**		
(16:30 - 17:15) **Session W-S3**	(18:00 - 20:00) Public Lectures @ UCC Peter Doherty Peter Gruenberg	(19:00 - 20:00) Public Lecture @ UCC Hartmut Michel	(19:00 - 22:00) Conference Banquet @ Suntec	

W-S1

Monday, 29 June 2009
11:00 - 12:30
Level 2, Room 207

11:00 W-S1.1-2(IN)
Title to be announced
Paul MATSUDAIRA

11:30 W-S1.3-4(IN) A02973-05083 pg W18
Structures of Portal Vertex Complexes in Double-Stranded-DNA Viruses
Wah CHIU

12:00 W-S1.5-6(IN) A02800-04791 pg W13
Envelope Capsid Interaction in Hepatitis B Virus is Mediated by Variable Contacts
Bettina BOETTCHER, Stefan SEITZ, Stephan URBAN

W-S2

Monday, 29 June 2009
14:00 - 16:15
Level 2, Room 207

14:00 W-S2.1-2(IN) A02882-04930 pg W15
Development of Immune based Therapeutic Approaches for HBV Chronic Infections: T Cell Receptor (TCR) - Redirected T Cells and TCR-like Antibodies
Antonio BERTOLETTI

14:30 W-S2.3-4(IN) A02807-04815 pg W13
Deciphering Immune Responses to Chikungunya to Guide Development of New Immune-based Control Strategies
Lisa F. P. NG

15:00 W-S2.5(O) A02968-05076 pg W17
Recent Advancement of Single Cell Assay as a Platform for the Infectious Disease Research
Jae Hyeok CHOI, Melvin Tan Lik CHERN, Mah Lee Mary NG, Gijsbert Marnix GROTENBREG, J. Christopher LOVE, Hidde PLOEGH

15:15 W-S2.6(O) A00087-00355 pg W5
Improvement of Sample Preparation with the Bead-Beating Technologies in Infectious Diseases Studies
Elina MACHEFER, Romain VEROLLET

15:30 W-S2.7(O) A02819-04830 pg W14
Magnetofection: *In Vitro* Studies of Magnetic Particle Assisted Gene Delivery
Derrick ANG, Peter PREISER, Raju RAMANUJAN

15:45 W-S2.8(O) A02905-04965 pg W16
***In vitro* Drug Interactions of Epicatechin Gallate and Ethyl Gallate with Non Beta-Lactam Antibiotics in Methicillin Resistant and Methicillin sensitive Staphylococcus aureus**
Win Mar SOE, Meena Kishore SAKHARKAR

16:00 W-S2.9(O) A02500-04280 pg W9
An Approach to Objective Function for Automatic Selection of Beam Directions in CT Image Reconstruction
Rena WIDITA, Yudi DARMA

W-S3

Monday, 29 June 2009
16:30 - 17:15
Level 2, Room 207

16:30 W-S3.1(O) A00974-01723 pg W6
Molecular Diagnosis of Visceral Leihmaniasis (VL) and Post Kala-azar Dermal Leishmaniasis (PKDL), and Assessment of Cure
Poonam SALOTRA, NS NEGI, V RAMESH, Rajesh KUMAR, Sandeep VERMA

16:45 W-S3.2(O) A03031-05165 pg W22
Crystallization and Structure Determination of a Truncated Form of the Nucleotide Binding Domain of the Reticulocyte Binding Protein Py235 of *Plasmodium Yoelii*
Ardina GRÜBER, M. S. S. MANIMEKALAI, A. M. BALAKRISHNA, P. PREISER, G. GRÜBER

17:00 W-S3.3(O) A03030-05164 pg W21
Human Respiratory Syncytial Virus Infection: Role of Viral Genomics
Rajni KUMARIA, Martin HIBBERD, Richard SUGRUE

W-S4

Tuesday, 30 June 2009
10:30 - 12:30
Level 2, Room 207

10:30 W-S4.1-2(IN) A02830-04850 pg W15
Single-cell Microtools for Profiling Human Immune Responses
J. Christopher LOVE

11:00 W-S4.3-4(IN) A02653-04549 pg W9
Humanized Mice: Recent Development
Jianzhu CHEN, Adam DRAKE, Maroun KHOURY, Ilya LESKOV, Maria FRAGOSO

11:30 W-S4.5-6(IN)
Rafting with Respiratory Syncytial Virus
Richard SUGRUE

12:00 W-S4.7-8(IN)
MCP-1 Antibody Treatment Enhances Damage and Hampers Regeneration of the Alveolar Epithelium in *Influenza Pneumonitis*
Vincent CHOW

W-S5

Tuesday, 30 June 2009
14:00 - 16:45
Level 2, Room 207

14:00 W-S5.1-2(IN) A02696-04636 pg W10
The Auto-digestion Hypothesis in Inflammation and Diseases
Geert W. SCHMID-SCHÖNBEIN, Frank A. DELANO, Alexander H. PENN, Edward D. TRAN

14:30 W-S5.3-4(IN) A02724-04687 pg W12
Nanomaterials for Drug Delivery, Immunotherapy and Vaccines
Darrell IRVINE

15:00 W-S5.5(O) A02022-04508 pg W8
Immune Responses Against the Leading Malaria Vaccine Play A Minor Role in Sterile Protection Sporozoite Infection
Marjorie MAUDUIT, Rita TEWARI, Nadya DEPINAY, Michele KAYIBANDA, Eliette LALLEMAND, Jean-Marc CHAVATTE, Georges SNOUNOU, Laurent RENIA, Anne Charlotte GRUNER

15:15 W-S5.6(O) A02723-04684 pg W11
Monoclonal Antibodies against PfRH1 Erythrocyte Binding Domain Disrupt Merozoite Invasion
Xiaohong GAO, Shu Lin Sally YAP, Karthigayan GUNALAN, Kim Pin YEO, Ximei HUANG, Peter Rainer PREISER

15:30 W-S5.7(O) A02705-04797 pg W11
Effects of Artemisinin on Var Gene Family Regulation and Chromatin Structure in *Plasmodium Falciparum*
Sachel MOK, Zbynek BOZDECH

15:45 W-S5.8(O) A02805-04796 pg W13
Calcium Ionophores Regulate Plastid Genome Transcription in *Plasmodium Falciparum*
Sabna CHEEMADAN, Zbynek BOZDECH

16:00 W-S5.9(O) A02726-04746 pg W12
Quantitative Protein Abundance Profiles throughout the Intraerythrocytic Developmental Cycle of the Malaria Parasite *Plasmodium Falciparum*
Bernardo J. FOTH, Neng ZHANG, Balbir K. CHAAL, Sachel MOK, Newman S.K. SZE, Peter R. PREISER, Zbynek BOZDECH

16:15 W-S5.10(O) A02981-05097 pg W18
Angiopoietin-like-5 Secreted by Mesenchymal Stem Cells Supports a Long Term Ex Vivo Expansion of Human Hematopoietic Stem Cells
Maroun KHOURY, Adam DRAKE, Ilya LESKOV, Maria FRAGOSO, Harvey LODISH, Jianzhu CHEN

16:30 W.S5.11(O) A02981-05103 pg W18
Generation of Adaptive and Innate Immunity in Humanized Mouse Model
Qingfeng CHEN, Maroun KHOURY, Yan LI, Adam DRAKE, Jianzhu CHEN

W-S6

Wednesday, 1 July 2009
10:30 - 12:30
Level 2, Room 207

10:30 W-S6.1-2(IN)
Biochemistry of Antigen Presentation in Infectious Models
Hidde PLOEGH

11:00 W-S6.3-4(IN) A02987-05106 pg W20
Effect of Antibodies and Antiviral Peptides on the Structure of Dengue Virus
Shee-Mei LOK

11:30 W-S6.5-6(IN) A03014-05143 pg W21
The Rheology of Malaria Infection
Brian M. COOKE

12:00 W-S6.7-8(IN) A02987-05106 pg W20
Imaging Motile Parasites during Transmission of Malaria
Freddy FRISCHKNECHT

W-S7

Wednesday, 1 July 2009
14:00 - 15:30
Level 2, Room 207

14:00 W-S7.1-2(IN) A02986-05104 pg W20
How Mechanical Features of Both Erythrocytes and Filtering Beds of the Spleen May Influence the Course of Malaria ?
Pierre BUFFET

14:30 W-S7.3-4(IN) A02982-05098 pg W19
Molecular-Level Biophysical Properties of Human Red Blood Cells and Connections to Pathological States
M. DIEZ, D. J. QUINN, M. DAO, Subra SURESH

15:00 W-S7.5(O) A02688-04630 pg W10
The Conserved Region of the *Plasmodium falciparum stevor* Multigene Family Binds to Erythrocytes and Potentially Inhibits Merozoite Invasion
Makhtar NIANG, Shaaretha PELLY, Kim Pin YEO, Peter Rainer PREISER

15:15 W-S7.6(O) A01884-03251 pg W8
Parasite and Leukocyte Sequestration during Experimental Cerebral Malaria
Carla CLASER, Laurent RENIA

W-S8

Wednesday, 1 July 2009
15:30 - 16:15
Level 2, Room 207

15:30 W-S8.1(O) A01130-01937 pg W6
The Effect of Biomechanical Stress on the Biology of the Malaria Parasite Plasmodium falciparum
Alvin CHONG, Kevin TAN

15:45 W-S8.2(O) A01292-02252 pg W7
Cell Deformability Sorter for Malaria Diagnostic Application
Han Wei HOU, Hansen BOW, Shyong Wei, Kevin TAN, Jongyoon HAN, Chwee Teck LIM

16:00 W-S8.3(O) A02822-04836 pg W15
Atomic Force Microscopy Imaging of Surface Ultrastructures of Human Malaria Infected Erythrocytes
Ang LI, Bruce RUSSELL, Lek-Uthai USA, Suwanarusk ROSSARIN, Tjitra EMILIANA, Nosten FRANCOIS, Nick ANSTEY, Shyong Wei TAN, Chwee Teck LIM

W-S9

Thursday, 2 July 2009
10:30 - 12:30
Level 3, Room 305

10:30 W-S9.1-2(IN) pg W15
Human Adaptation of Influenza A Virus Hemagglutinin: 2009 "Swine" H1N1 Virus
Ram SASISEKHARAN

11:00 W-S9.3-4(IN) A03033-05167 pg W22
Geographic and Temporal Patterns of Epidemic Dengue/Dengue Hemorrhagic Fever: What are the causes?
Duane J. GUBLER

11:30 W-S9.5-6(IN) A03032-05166
Title not available at time of print
Nick WHITE

12:00 W-S9.7-8(IN) A02966-05074 pg W17
Nanoscale Imaging Probes for Infectious Disease Studies
Gang BAO

W-S10

Thursday, 2 July 2009
14:30 - 16:00
Level 3, Room 305

14:30 W-S10.1-2(IN) A02680-04676 pg W9
Nanobiophotonics and BioASICs for Molecular Diagnostics
Megan DUECK

15:00 W-S10.3-4(IN) A02943-05032 pg W16
VereFlu™ - Detection, Differentiation and Identification of Human Influenza A and B in One Step
Rosemary TAN

15:30 W-S10.5(O) A00974-01714 pg W5
Functional Genomics for the Discovery of Virulence Genes in *Leishmania*
Poonam SALOTRA, Paresh SHARMA, Srividya GURUMURTHY, Robert DUNCAN, Hira L NAKHASI

15:45 W-S10.6(O) A01820-03169 pg W7
A Proteomic Characterization of a Golgi-associated Bi-lobed Structure in Trypanosoma Brucei
Qing ZHOU, Cynthia Y. HE

W-S12

Friday, 3 July 2009
11:00 - 12:30
Level 3, Room 305

11:00 W-S12.1-2(IN) A03010-05137 pg W21
Regulation of Mycobacterial Cell Wall Metabolism
Eric RUBIN

11:30 W-S12.3-4(IN) A02984-05101 pg W19
Imaging Tuberculosis and the Response to Chemotherapy
Clifton BARRY

12:00 W-S12.5-6(IN) A03035-05169
Memory CD8 T Cell Differentiation
Rafi AHMED

12:30 W-S12.7-8(IN) A03035-05169
Transcriptional Profiling of Growth Perturbations and a Functional Interactome Network of Human Malaria Parasites, *Plasmodium falciparum*
Zbynek BOZDECH

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ICMAT & IUMRS-ICA 2009 - Symposia Programme Overview

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A	Advanced Biomaterials and Regenerative Medicine	Room 303	A-S1 Advanced Biomaterials and Regenerative Medicine I	A-S2 Advanced Biomaterials and Regenerative Medicine I	A-S3 Advanced Biomaterials and Regenerative Medicine I	A-S4 Advanced Biomaterials for Cancer Treatment I	A-S5 Biofunctionalization of Metals I	A-S6 Advanced Biomaterials for Cancer Treatment I	A-S7 New Developments in Scaffolds for Tissue Regeneration	A-S8 POSTER SESSION	A-S9 Understanding Origins of Fracture and Composite Biomaterials	A-S10 Engineering the Cell-Biomaterial Interface	A-S11 Engineering the Cell-Biomaterial Interface	A-S12 New Development in Biomaterials Engineering
B	Nanomaterials for Bioimaging and Biosensing	Room 306	B-S1	B-S2	B-S3	B-S4	B-S5	B-S6	B-S7	B-S8 POSTER SESSION	B-S9	B-S10	B-S11	B-S12
C	Advanced Delivery of Therapeutics: New Challenges for Materials	Room 310	C-S1 Novel Carriers for Drug / Gene Delivery-I	Session C-S2 Novel Carriers for Drug/ Gene Delivery-II	C-S3 Novel Carriers for Drug/Gene Delivery-III	C-S4 Unique Material Design for Drug / Gene Delivery-I	C-S5 POSTER SESSION	C-S6 Unique Material Design for Drug / Gene Delivery-II	C-S7 Functional Materials for Tissue Engineering	C-S8 Drug/Gene Delivery	C-S9 Unique Material Design for Drug / Gene Delivery-III	C-S10 Functional Biomaterials and Cytotoxicity		
D	Functional Ceramic Materials, Oxide Thin Films and Heterostructures	Room 301	D1-S1	D1-S2	D1-S3	D1-S4	D1-S5	D1-S6	D1-S7	D1-S8	D1-S9	D1-S10	D-S11 POSTER SESSION	D1-S12
		Room 302	D2-S1	D2-S2	D2-S3	D2-S4	D2-S5	D2-S6	D2-S7	D2-S8	D2-S9			D2-S12
E	Nanostructured Magnetic Materials and Their Applications	Room 202	E1-S1	E1-S2	E1-S3	E1-S4	E1-S5 POSTER SESSION	E1-S6	E1-S7	E1-S8	E1-S9	E1-S10	E1-S11	E1-S12
		Room 205	E2-S1	E2-S2	E2-S3	E2-S4								
F	Nanostructured Materials for Electrochemical Energy Systems: Lithium Batteries, Supercapacitors and Fuel Cells	Room 203	F1-S1 Cathode Materials	F1-S2 Novel Approaches in Supercapacitors / Lithium Batteries	F1-S3 Electrolytes	F1-S4 Anode Materials	F1-S5 Cathode Materials: Olivine / Polyanion based Electrodes	F1-S6 Fundamentals	F1-S7 Anode Materials / Electrolytes	F-S8 POSTER SESSION	F1-S9 Novel Synthesis	F1-S10 Solid State Batteries / Electrodes	F1-S11 Synthesis and Characterization of Electrodes/ Electrolytes	F1-S12 Techniques / Miscellaneous
		Room 204 Room 205	F2-S1 SOFC	F2-S2 PEMFC/ DMFC	F2-S3 SPFC / H2-production & storage	F2-S4 SPFC / PEMFC	F2-S5 Fuel Cells / Lithium Batteries	F2-S6 Lithium Battery / Miscellaneous						
G	Plasmonics and Applications	Room 307	G-S1 Plasmonics Opening Session	G-S2 Photonic and Plasmonic Nanostructures and Devices	G-S3 Surface Enhanced Raman Spectroscopy & Emission Enhancement	G-S4 Plasmonic Nanostructures and Quantum Effects	G-S5 Plasmonic Waveguides	G-S6 Plasmonic Nanostructures and Devices	G-S7 Fabrication Technique for Plasmonic Structures	G-S8 POSTER SESSION	G-S9 Plasmonic Optics and Nanoimaging	G-S10 Plasmonic Particles and Nanoantennas, Cloaking		G-S12 Plasmonics and Applications
H	Carbon Nanotubes: Synthesis, Characterisation and Applications	Room 308	H-S1	H-S2	H-S3	H-S4	H-S5 POSTER SESSION	H-S6	H-S7	H-S8	H-S9	H-S10		
I	Carbon Rich Materials (CRMs) and Applications	Room 312	I-S1	I-S2	I-S3	I-S4	I-S5	I-S6	I-S7	I-S8 POSTER SESSION	I-S9	I-S10		
J	Nanodevices and Nanofabrication	Room 325	Session J-S1 Nanodevices & Fabrication	Session J-S2 Nanostructures	Session J-S3 Nano-modelling	Session J-S4 Nanotubes	Session J-S5 Nanopatterns	Session J-S6 Nanodevices	Session J-S7 Nanofabrication	Session J-S8 Nanofabrication	Session J1-S9 Nano-optoelectronics	Session J1-S10 Nano-solar Cells	Session J-S11 POSTER	Session J2-S12 Nano-silicon Electronics
		Room 323									Session J2-S9 Nano-characterization	Session J2-S10 Nano-sensors		Session J2-S12 Nano-silicon Electronics
K	Nano Patterning & Surface Characterization	Room 326	K-S1 Nano Patterning	K-S2 Bio-Patterning	K-S3 Energy	K-S4 Nano Patterning	K-S5 Scanning Probe Technologies	K-S6 Templated Growth	K-S7 Self-assembly	K-S8 Self-assembly-2	K-S9 Dip Pen Lithography	K-S10 Nanosphere Lithography	K-S11 POSTER SESSION	K-S12 Surface Characterization
		Room 323		K2-S2 Thin Films	K2-S3 Nanoscale Characterization	K2-S4 Nano Patterning	K2-S5 Nanoimprint Lithography							
L	NEMS/MEMS Technology and Devices	Room 208	L-S1 Nanofabrication & Devices (I)	L-S2 Nanofabrication & Devices (II)	L-S3 Photonic MEMS	L-S4 BioMEMS (I)	L-S5 POSTER SESSION	L-S6 Microfluid	L-S7 Biosensor & Bioapplication	L-S8 Biosensor & Bioapplication	L-S9 BioMEMS (II)	L-S10 MEMS	L-S11 MEMS	L-S12 MEMS Modeling
M	DNA Nanoscience and Biophysics	Room 309	M-S1	M-S2	M-S3	M-S4	M-S5 POSTER SESSION	M-S6	M-S7	M-S8	M-S9	M-S10	M-S11	M-S12

Note: Poster Sessions are held at Level 3, Gallery East

Codes: Eg, **E2-S3** refers to Sym E, Session 3 on Monday, 29 Jun 09 afternoon

* 1st letter refers to the symosium
* 2nd digit (if applicable) refers to the symposium's parallel session
* S"N" refers to the Session Number

ICMAT & IUMRS-ICA 2009 - Symposia Programme Overview

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N	Plastic Electronics	Room 320	N-S1	N-S2	N-S3	N-S4	N-S5	N-S6	N-S7	N-S8 POSTER SESSION	N-S9	N-S10	N-S11	
O	Compound Semiconductor Photonics: Materials, Devices and Integration	Room 304	O1-S1 Optoelectronic Devices & Integration - I	O1-S2 Photonic Crystals & Metamaterials - I	O1-S3 III-Nitride - I	O1-S4 III-As/ P Epitaxy & QD/ Wires – I	O1-S5 Optoelectronic Devices & Integration - II	O1-S6 III-Nitride – II	O1-S7 ZnO – I	O1-S8 Photonic Crystals & Metamaterials – II	O1-S9 III-As/ P Epitaxy & QD/ Wires - II	O1-S10 Optoelectronic Devices & Integration - IV	O-S11 POSTER SESSION	O1-S12 ZnO – III
		Room 313 Room 323						O2-S6 Optoelectronic Devices & Integration – III	O2-S7 Chalcogenide & Oxide – I	O2-S8 Chalcogenide & Oxide – I I	O2-S9 Chalcogenide & Oxide – III	O2-S10 ZnO – II		O2-S12 Optoelectronic Devices & Integration – V
P	Optical Fiber Devices and Applications	Room 314	P-S1	P-S2	P-S3	P-S4	P-S5 POSTER SESSION	P-S6	P-S7	P-S8	P-S9	P-S10	P-S11	P-S12
Q	Computational Materials Design at All Scales: From Theory to Application	Room 201	Session Q-S1 Photonic Materials	Q-S2 Carbon Materials	Q-S3 Biomaterial Properties and Applications	Q-S4 Atomic Clusters and Nanostructures	Q-S5 POSTER SESSION	Q-S6 Magnetic Materials - I	Q-S7 Light Materials	Q-S8 Nanostructured & Bulk Materials for Electrochemical Power Sources	Q-S9 Thin Films	Q-S10 Semiconductor Material: Quantum Heterostructures	Q-S11 Materials Modeling at Continuum and Macroscopic Levels	Q-S12 Crystal Structures - II
		Room 206									Q2-S9 Crystal Structures - I	Q2-S10 Surface Characterization of Materials	Q2-S11 Nanodevices	Q2-S12 Magnetic Materials - II
R	Single Crystals: Growth and Applications for Research and Industry	Room 311	R-S1	R-S2	R-S3	R-S4	R-S5	R-S6	R-S7	R-S8 POSTER SESSION	R-S9			
S	Novel Routes of Solution Processing	Room 305 Room 311	S1-S1	S1-S2	S1-S3	S1-S4	S-S5 POSTER SESSION	S1-S6	S1-S7	S1-S8		S1-S10	S1-S11	S1-S12
		Room 313	S2-S1	S2-S2	S2-S3	S2-S4		S2-S6	S2-S7	S2-S8				
T	Advanced Component Manufacture from Light Materials	Room 204						T-S6	T-S7	T-S8	T-S9	T-S10	T-S11 POSTER SESSION	T-S12
		Room 207									T2-S9	T2-S10		T2-S12
U	Mechanical Behavior of Micro- and Nano-Scale Systems	Room 209	U-S1 Mechanical Behavior at Multiscales	U-S2 Mechanical Behavior of Advanced Materials/ Composites - I	U-S3 Indentation, Analysis and Applications - I	U-S4 Mechanical Properties of Thin Films and Nanomaterials - I	U-S5 POSTER SESSION	U-S6 Mechanical Properties of Thin Films and Nanomaterials - II	U-S7 Characterization of Mechanical Properties of Advanced Materials - I	U-S8 Indentation, Analysis and Application – II	U-S9 Characterization of Mechanical Properties of Advanced Materials - II	U-S10 Tribology, Friction and Wear I	U-S11 Tribology, Friction and Wear II	U-S12 Mechanical Behavior of Electronic Materials
		Room 205										U2-S10 Mechanical Behavior of Advanced Materials/ Composites II		U2-S12 Modeling of Mechanical Behavior of Advanced Materials – II
V	Materials Education: New Tools and Resources	Room 206	V-S1 New Curricula and Programs - I	V-S2 New Curricula and Programs - II	V-S3 International Opportunities	V-S4 "Big Picture" Issues for Education	V-S5 POSTER SESSION	V-S6 New Resources	V-S7 Professional Development - I	V-S8 Professional Development - II				
W	GEM4/SMART Symposium on Infectious Diseases	Room 207 Room 305	W-S1	W-S2	W-S3	W-S4	W-S5	W-S6	W-S7	W-S8	W-S9	W-S10	W-S11	W-S12
Industrial Symposium 1: Nanoimprint Lithography		Room 302										Industrial Symposium 1: Nanoimprint Lithography		
Industrial Symposium 2: Microwave Processing of Materials		Room 310												Ind Symp 2: Microwave Processing of Materials
British Council INYS		Room 308												INYS

Note: Poster Sessions are held at Level 3, Gallery East

Codes: Eg, **E2-S3** refers to Sym E, Session 3 on Monday, 29 Jun 09 afternoon

* 1st letter refers to the symosium
* 2nd digit (if applicable) refers to the symposium's parallel session
* S"N" refers to the Session Number

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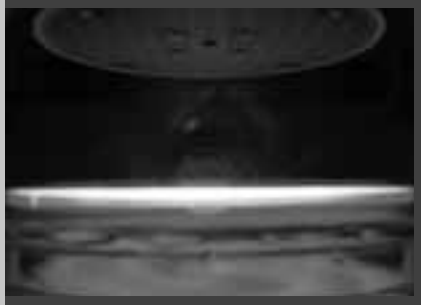

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Programme Overview

Mon, 29-Jun-09	Tue, 30-Jun-09	Wed, 1-Jul-09	Thu, 2-Jul-09	Fri, 3-Jul-09
	(08:30 - 09:15) Plenary Lecture 2 **Peter Doherty** **Nobel Laureate in Medicine** Chair: Subra Suresh, MIT, USA	(08:30 - 09:15) Plenary Lecture 4 **Sir John Pendry** Chair: Lim Hock, Temasek Lab, S'pore	(08:30 - 09:15) Plenary Lecture 6 **Hartmut Michel** **Nobel Laureate in Chemistry** Chair: Howard Katz, Johns Hopkins University, USA	
(09:00 - 09:45) **Opening Ceremony** Guest-of-Honor: **Dr. Ng Eng Hen** Minister for Education and Second Minister for Defence, S'pore				(09:00 - 09:45) Plenary Lecture 8 **Jean-Marie Basset** Chair: Tjin Swee Chuan, NTU, S'pore
(09:45 - 10:30) Plenary Lecture 1 **Peter Gruenberg** **Nobel Laureate in Physics** Chair: Tan Eng Chye, NUS, S'pore	(09:15 - 10:00) Plenary Lecture 3 **Andrew Wee** Chair: Richard Friend, Cambridge University, UK	(09:15 - 10:00) Plenary Lecture 5 **Chad Mirkin** Chair: Freddy Boey, NTU, S'pore	(09:15 - 10:00) Plenary Lecture 7 **Akihisa Inoue** Chair: Anthony Cheetam, Cambridge University, UK	(09:45 - 10:30) Plenary Lecture 9 **Frederick Lange** Chair: Feng Yuan Ping, NUS, S'pore
	(10:00 - 10:30) Coffee Break			
(10:30 - 11:00) Coffee Break				(10:30 - 11:00) Coffee Break
(11:00 - 12:30) **Symposium** **Presentation Sessions** **S1**	(10:30 - 12:30) **Symposium** **Presentation Sessions** **S4**	(10:30 - 12:30) **Symposium** **Presentation Sessions** **S6**	(10:30 - 12:30) **Symposium** **Presentation Sessions** **S9**	(11:00 - 13:00) **Symposium** **Presentation Sessions** **S12**
(12:30 - 14:00) Lunch (13:00 - 13:45) **Theme Lecture 1** **James L. Hedrick** Chair: Andy Hor, NUS, Singapore	(12:30 - 14:00) Lunch (13:00 - 13:45) **Theme Lecture 2** **Martyn Poliakoff** Chair: Seeram Ramakrishna, NUS, Singapore	(12:30 - 14:00) Lunch (13:00 - 13:45) **Theme Lecture 3** **Karl U. Kainer** Chair: Lim Seh Chun, NUS, Singapore	(12:30 - 14:00) Lunch (13:00 - 14:30) **Panel Discussion** Entrepreneurship in Materials Science and Engineering Panelists: Freddy Boey, S'pore; Yet-Ming Chiang, USA; Richard Friend, UK; Chad Mirkin, USA Moderator: Lim Khiang Wee, S'pore	(13:00 - 14:30) **Closing &** **Poster Award Ceremony** **Lunch** Guest-of-Honor: **Prof. Tan Chorh Chuan** President, NUS, Singapore
(14:00 - 18:00) **Symposium** **Presentation Sessions** **S2 & S3**	(14:00 - 16:30) **Symposium** **Presentation Sessions** **S5**	(14:00 - 17:30) **Symposium** **Presentation Sessions** **S7 & S8**	(14:30 - 18:00) **Symposium** **Presentation Sessions** **S10 & S11**	
	Transport to UCC *Pre-Lecture Reception*	*Transport to UCC* *Pre-Lecture Reception*		
	(18:00 - 20:00) **Public Lectures @ UCC** **Peter Doherty** Nobel Laureate in Medicine Chair: George Radda, A*STAR, Singapore **Peter Gruenberg** Nobel Laureate in Physics Chair: Andrew Wee, NUS, Singapore	(19:00 - 20:00) **Public Lecture @ UCC** **Hartmut Michel** Nobel Laureate in Chemistry Chair: Keith Carpenter ICES, Singapore	(19:00 - 22:00) **Conference Banquet** Suntec Ballroom *(for invited guests)*	