

Recent Advances in Graphene and Related Materials

Poster List

August 1-6, 2010
Singapore

S. No. Title

Session: Chemical and Biosensors on Graphene

1. **Graphene -Based SELDI Probe with Ultrahigh Etraction and Sensitivity foe DNA**
Lena Ai Ling Tang, Junzhong Wang, Loh Kian Ping
2. **Solution Gated Graphene Bioelectronics**
Priscilla Kailian Ang
3. **Highly Sensitive Graphene Biosensors Based on Surface Plasmon Resonance**
Wu Lin
4. **Surface-Enhanced Raman Scattering Of Single- And Few-Layer Graphene By The Deposition Of Gold Nanoparticles**
Hyeon Suk Shin

Session: Chemistry of Graphene Composites and Derivatives

5. **Graphene as Atomic Template and Structural Scaffold in the Synthesis of Organic-Graphene Core-Shell Structures**
Bee Min Goh
6. **Microstructure and Electronic Structure Evolution from Graphite Oxide to Reduced Graphite Oxide**
Li Sun

Session: Engineering Applications of Graphene

7. **Graphene -Based Nanocomposites for Energy Storage**
Jishan Wu
8. **Transparent Flexible Heaters Based on Large-Scale Graphene Films**
Junmo Kang, Hyeong Keun Kim, Young Chul Park, Jong Hyun Ahn, Jae-Boong Choi, Young-Jin Kim, Byung Hee Hong
9. **Few-Layer Graphene from Non-Oxidative Graphite Exfoliation Builds Nanocrystal / Graphene Heterojunction Solar Cells**
Junzhong Wang

Recent Advances in Graphene and Related Materials

Poster List

August 1-6, 2010
Singapore

S. No. Title

10. **Adhesion characteristics of graphene sheets fabricated by chemical vapor deposition (CVD) process**
Kwang-Seop Kim
11. **Facile Synthesis of New Amino Groups Functionalized Graphene as Electrochemical Supercapacitors**
Linfei Lai, Li Sun, Da Zhan, Zexiang Shen, Jianyi Lin
12. **Graphene-Based Si and CIGS Solar Cells**
Sang Jin Kim, Byung Hee Hong
13. **Graphene-Nanoparticle Composite Film as the Electrode for Dye-Sensitized Solar Cells**
Sung-Ryong Kim, Gi-Moon Yoo, Ju Ho Kim, In Sik In
14. **Photo Current Generation Using Transferred Graphene Film**
Seoung-Ki Lee, Byung Hee Hong, Jong-Hyun Ahn
15. **Graphene Films for Flexible Touch Sensor**
Youngbin Lee, Byung Hee Hong, Jong-Hyun Ahn

Session: Functionalization and Surface Modification of Graphene

16. **Investigation of the Diamond-Graphene Interface**
Candy Haley Yi Xuan Lim
17. **Electronic And Thermal Properties Of Graphene-Diamond Hybrid Structures**
Satoru Konabe

Session: Graphene Characterisation (Spectroscopy, Raman etc)

18. **Raman Study on G Mode of Graphene For Determination of Edge Orientation**
Chunxiao Cong
19. **Strain-Induced Changes in the Electronic Structure of Graphene Studied with Polarized Raman Spectroscopy**
Duhee Yoon
20. **Identifying Stacking Order of Graphene Layers by Scanning Probe Microscopy**
Hye Ri Kim, Sukang Bae, Byung Hee Hong

Recent Advances in Graphene and Related Materials

Poster List

August 1-6, 2010
Singapore

S. No. Title

21. **NEXAFS and HREELS Studies of Hydrogenated Epitaxial Graphene**
Lanfei Xie
22. **Scanning Auger Electron Spectroscopy : A Rational Method for Characterization of Graphene Layers**
Mingsheng Xu
23. **Scanning Tunneling Microscopy and Spectroscopy of Bilayer Graphene With Back-Gate**
Shyam Kumar Choudhary, Anjan Kumar Gupta
24. **Gold Film / Graphene as a New Substrate for SERS Study**
Wang Yingying
25. **Raman Spectroscopy Of Graphene With Gold Nanoparticles**
Sung Huh, Pohang University of Science and Technology

Session: Latest Development on Preparation Techniques for Large Area Graphene

26. **Graphene from One-Step Heating of Graphite**
Chunxiao Cong
27. **Effect of Ni Film Morphology on Graphene Characteristics Grown by Chemical Vapor Deposition**
Myung Hee Jung, Yunsung Woo, Byung Hee Hong
28. **Low-temperature Growth of Graphene Films on Plastic Substrates**
Sukang Bae, Myung Hee Jung, Youngbin Lee, Houk Jang, Jong Hyun Ahn, Byung Hee Hong
29. **Large-scale Synthesis and Applications of Flexible Graphite Films**
Sung Hyun Sim, Byung Hee Hong

Session: Multiscale Modeling, Theory and Computation in Graphene

30. **From Benzene to Graphene and Things in Between**
De-en Jiang
31. **First-Principles Design and Functionalization of Hydrogenated Boron Nitride Sheet**
G.P. Das

Recent Advances in Graphene and Related Materials

Poster List

August 1-6, 2010
Singapore

- | S. No. | Title |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 32. | Crossed Andreev reflection in Graphene Normal-Superconductor-Normal Structure with Pseudo-Diffusive Interfaces
Hakimeh Mohammadpour |
| 33. | Computational Study of Double-Gate Graphene Nanoribbon FET
Hakimeh Mohammadpour |
| 34. | From Ultranarrow Graphene to Monoatomic Carbon Chains
Hengan Wu |
| 35. | First-Principles Study on Periodic Nanoholes in a Graphene Sheet
Hideyuki Jippo |
| 36. | DFTB Investigations of Finite -Size Graphene Flakes and Their Vacancy defects : Structures and Dynamics
Lili Liu, Stephan Irle |
| 37. | Designing of Electronic Filter by Potential Barriers in Graphene
T. Vazifeshenas |
| 38. | Non-Uniform Electronic Perturbation of Graphite Near the Fermi Level by the Point Defect
Takahiro Kondo |
| 39. | Valley Polarization in a Mono- and Bilayer Graphene Junction
Takeshi Nakanishi |
| 40. | Bandgap Engineering of Graphene : A Density Functional Theory Study
Yan Jiaxu |
| 41. | Magnetic Moment on (0001) Surfaces of Rhombohedral Graphite Induced by Edge States
Y.Takagi, M.Otani, M.Koshino, and S.Okada |

Session: Nanoscale Graphene Devices (Physics)

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| 42. | Spin Transport in CVD Graphene at Room Temperature
A. Avsar |
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Recent Advances in Graphene and Related Materials

Poster List

August 1-6, 2010
Singapore

- | S. No. | Title |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 43. | Gate Modulation of Superconducting Proximity Effect in Single and Multi-Layer Graphene
Akinbo Kanda |
| 44. | Epitaxial Graphene-on-Silicon Logic Inverter
Amine El Moutaouakil |
| 45. | Electrical Properties of Graphene Films Doped by Various Wet Chemicals
Eun Seon Kim, Hye Ri Kim, Sukang Bae, Hyoung Keun Kim, Byung Hee Hong |
| 46. | Non-Volatile Graphene P-N Junctions
Guangxin Ni |
| 47. | Fabrication and Transport Properties of Ultrashort Graphene Josephson Junctions
Hikari Tomori |
| 48. | Anisotropic Transport in Graphene Grown on Vicinal SiC Substrate
Hisao Miyazaki |
| 49. | High-Performance OTFT based on Graphene Electrodes
Jae Sung Park, K. S. Kim, G. Cho, B. H. Hong |
| 50. | Magnetic Field Dependence of Interlayer Screening Length in Multilayer Graphene FETs
Kazuhito Uchida |
| 51. | High Doping of Graphene Flakes by Polymer Electrolyte Gating
Manu Jaiswal |
| 52. | Non-Volatile Band Gap Opening in Bilayer Graphene Nanoribbons with Ferroelectric Gating
Orhan Kahya |
| 53. | Origin of Distortion in Transfer Characteristics of Graphene Field-Effect Transistors
Ryo Nouchi |
| 54. | Magnetic Finger Print due to Electron-Hole Puddles in Monolayer Graphene System
Ryuta Yagi |
| 55. | Complementary-like Graphene Logic Inverters
Song-Lin Li |

Recent Advances in Graphene and Related Materials

Poster List

August 1-6, 2010
Singapore

S. No. Title

56. **Molecular Electronic Devices Based on Graphene Nano-Gaps**
Tian Lei, Park Jae Sung, Hak Rim Jeon, Hong Byung Hee
57. **Enhanced Mobility Reduced Graphene Oxide Thin Film Transistors at Short Channel Length**
Toshiyuki Kobayashi
58. **Engineering Electrical Properties of Graphene by Point Strain**
Youngsoo Kim, Danho Im, Byung Hee Hong
59. **Tunable Electronic Transport and Unidirectional Quantum Wires in Graphene Subjected to Electric and Magnetic Fields**
Yu. Bliokh, V. Freilikher, F. Nori
60. **Transport and Localization in Disordered Graphene Superlattices**
Yu. Bliokh, V. Freilikher, S. Savel'ev, F. Nori
61. **High performance, Flexible Graphene Field Effect Transistors**
Houk Jang, Byung Hee Hong, Jeong Ho Cho and Jong-Hyun Ahn

Session: Nanostructuring of Graphene (Ion beam, Cutting, Making of Graphene Nanoribbons)

62. **Negative E-beam Patterning of Graphene Using Calix[4]hydroquinone Thin Films**
Chung Seon Lee, Ju Young Lee, Jea Sung Park, Sung Kyu Kim, Kwang S. Kim, Byung Hee Hong
63. **Scalable Synthesis of Few Layer Graphene Ribbons with Controlled Morphologies by a Template Method**
Dacheng Wei
64. **Ultranarrow Graphene Nanoribbon Fabricated by Helium Ion Milling**
Kaiwen Zhang, Xiangming Zhao
65. **Wet Chemical Etching of Graphene Edges**
Kyung Eun Kim, and Hyong Keun Kim, Byung Hee Hong
66. **Fabrication of Graphene Nanogap with Parallel Edges and Its Electron Emission Properties**
Wang Haomin

Recent Advances in Graphene and Related Materials

Poster List

August 1-6, 2010
Singapore

S. No. Title

Session: Related Materials - Carbon Nanotubes

67. **Raman Spectroscopy of Electric Field Aligned MWNT / PC Nanocomposites**
Balram Tripathi
68. **Characterization of Single- and Few-Layered Hexagonal-Boron Nitride Prepared by Mechanical Exfoliation**
Hidefumi Hiura
69. **Molecular and Electronic Properties of Thulium-Containing Metallofullerenes**
Jian Wang
70. **Electron Transport Property of Atomic Carbon Wires**
Lei Shen
71. **Electronic Structure of Activated Carbon Fibers Investigated by XAFS**
Manabu Kiguchi
72. **Carbon Nanotubes as Support Material for Nanoparticulate Nobel-Metal Catalyst in Fuel Cells**
Mikkel Juul Larsen
73. **Reversible Targeting and Controlled Release Delivery of Daunorubicin to Cancer Cells by Aptamer-Wrapped Carbon Nanotubes**
Mohammad Ramezani
74. **High-Temperature Formation of Carbon Nanotubes from Diamond and Amorphous Carbon : An Atomistic Simulation**
Sorkin Anastassia

Session: Thermal and Optical Properties of Graphene

75. **Anomalous Dirac Charge Dynamics in Multilayer Graphene at High Optical Transition Energies**
Iman Santoso

Recent Advances in Graphene and Related Materials

Poster List

August 1-6, 2010
Singapore

- | S. No. | Title |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 76. | Rhodamine 6G Fluorescence Quenching Induced by CVD-Grown Graphene
Jingzhi Shang |
| 77. | Photoconductor Hybrid for Printable Graphene Based Photodetectors
Kiran Kumar Manga |
| 78. | Transparent and Flexible Heat Spreader of Graphene Films
Shou-En Zhu, Ho Jin Kim, Byung Hee Hong, Jong-Hyun Ahn |
| 79. | Raman Study of The Graphene Edge Thermal Stability
Yanan Xu |
| 80. | Preparation of Defect-Controlled Large-Scale Graphene by Chemical Vapour Deposition and its Application
Chun-Chiang Kuo, J. Y. Huang, C. K. Chang, L. C. Chen, K.H. Chen |
| 81. | Graphen as a Metamaterial Superstate
Ze Xiang Shen |
| 82. | Measurments of Thermal and Thermoelectric Properties of Suspended Few-Layer Graphene
Ziqian Wang |