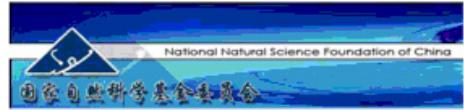




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A3 Foresight Program

Matsushima Seminar on Nanomaterials

—Sub-10 nm Wires and Nano-Structures—

November 15 (Sun) – 18 (Wed), 2009

Matsushima Ichinobo Hotel, Japan

(Matsushima Ichinobo Hotel; <http://www.ichinobo.com/matsushima/>)



Program

November 15 (Sunday)

16:00-18:00	Arrival at Matsushima Ichinobo Hotel and Registration
18:00-20:00	Welcome Dinner
20:30-22:00	Round-Table Discussion about our A3 Foresight Program

November 16 (Monday)

8:45-9:00	Opening Session and Technical Announcements
9:00-10:40	Session 1: Graphene
9:00-9:30	<u>Y. Kuk (Korea)</u>
	<i>Charge Puddles and Edge Effect in a Graphene Device Studied by Scanning Gate Microscope</i>
9:30-10:00	<u>C.-L. Song, Y.-L. Wang, Y.-P. Jiang, L.-L. Wang, K. He, X. Chen, X.-C. Ma, J.-F. Jia, and Q.-K. Xue (China)</u>
	<i>Site-specific adsorption of Cs on graphene supported by SiC(0001)-</i>
9:50-10:20	<u>K. Nakatsuji, Y. Shibata and F. Komori (Japan)</u>
	<i>Electronic structure of few layer graphene grown on vicinal SiC(0001) surface</i>
10:20-10:50	<u>X. Chen (China)</u>
	<i>Intrinsic anisotropy of thermal conductance in graphene nanoribbons</i>

10:50-11:10	Coffee Break
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11:10-12:40	Session 2: Topological Insulators
11:10-11:30	<u>T. Hirahara, Y. Sakamoto, Y. Saisyu, H. Miyazaki, S. Kimura, T. Okuda, I. Matsuda, S. Murakami, and S. Hasegawa (Japan)</u>
	<i>A topological metal at the surface of an ultrathin BiSb alloy film</i>
11:30-11:50	<u>G. Wang, Y.-Y. Li, X.-G. Zhu, M. Liu, C. Ye, X. Chen, Y. Wang, K. He, L. Wang, X. Ma, H. Zhang, X. Dai, Z. Fang, X. Xie, Y. Liu, X.-L. Qi, J.-F. Jia, S.-C. Zhang, and Q.-K. Xue (China)</u>
	<i>Layer-by-layer MBE growth and ARPES study of intrinsic topological insulator Bi₂Te₃ thin films on Si(111)</i>
11:50-12:10	<u>P. Cheng, T. Zhang, X. Chen, J.-F. Jia, X. Ma, K. He, L. Wang, H. Zhang, X. Dai, Z. Fang, X. Xie, Q.-K. Xue (China)</u>
	<i>Experimental evidence for the topological surface states protected by time-reversal symmetry</i>
12:10-12:40	<u>I. Matsuda (Japan)</u>
	<i>Spin-polarized surface bands of a three-dimensional topological insulator studied by high-resolution spin- and angle-resolved photoemission spectroscopy</i>

12:40-14:00	Lunch
14:00-15:40	Session 3: Organic/Inorganic Nano-wires
14:00-14:30	<u>M. Tsukada</u> (Japan)
	<i>Theory of Coherent vs Dissipative Electron Transport of Molecular Bridges</i>
14:30-15:00	<u>J.-Y. Park</u> (Korea)
	<i>Roles of acid treatments on the characteristics of single-walled carbon nanotube network devices</i>
15:00-15:20	<u>Y. Li</u> (China)
	<i>A Novel concept of composite half-metallic sandwich molecular wires</i>
15:20-15:40	<u>Y. Yue, L. Zhang, K. Zheng, X. Han and Z. Zhang</u> (China)
	<i>Structure evolution study on individual amorphous silica glass NW under uniaxial tensile strain</i>
15:40-16:00	<u>S. Yokoya and K. Kakitani</u> (Japan)
	<i>Theoretical analyses of Atomic arrangement and electronic states for Al nano-wire on NaCl(100) surface</i>
16:00-16:20	Coffee Break
16:20-18:20	Session 4: New Techniques and Silicon
16:20-16:50	<u>T. Eguchi, T. Okuda, K. Akiyama, A. Harasawa, Y. Hasegawa, T. Kinoshita, M. Kawamori, Y. Haruyama, S. Matsui</u> (Japan)
	<i>Nanoscale Chemical Imaging by Scanning Tunneling Microscopy Assisted by Synchrotron Radiation</i>
16:50-17:10	<u>T. Uetake, R. Hobara, N. Nagamura, T. Hirahara, and S. Hasegawa</u> (Japan)
	<i>Development of a low temperature 4-tip STM and application to nanoscale surface conductivity measurements</i>
17:10-17:30	<u>K. Iwaya, T. Hitosugi, and T. Hashizume</u> (Japan)
	<i>STM/STS study of a heavy impurity in the Si(001) surface</i>
17:30-17:50	<u>K. Murata and K. Miki</u> (Japan)
	<i>Laser Anneal to activate Bi impurity in Si crystal</i>
19:00-21:00	Banquet

November 17 (Tuesday)

9:00-12:00 **Session 5: Surfaces and Nano-Films**

9:00-9:30 [K. Liu, C. Feng, L. Liu, Y. Sun, J. Wang, S. Fan, K. Jiang \(China\)](#)

Super-aligned carbon nanotube transparent conducting films and their application in touch panels

9:30-9:50 [J. K. Yoon, H. Kim, M. H. Chang, and S.-J. Kahng \(Korea\)](#)

Two-dimensional molecular ordering through hydrogen and halogen interaction

9:50-10:10 [Y. Cheng, X. D. Han, Z. Zhang, T. Zhang, Z. T. Song, B. Liu and S. L. Feng \(China\)](#)

The structural characterization of Si-Sb-Te nano-composite phase change materials

10:10-10:40 [H. Kim, J. K. Yoon, M. H. Chang, and S.-J. Kahng \(Korea\)](#)

Mixed-Island Formation and Electronic Structure of Magnetic Ion Containing Porphyrin Molecules on Au(111)

10:40-11:00 Coffee Break

11:00-11:30 [L. Xiao \(China\)](#)

Carbon nanotube loudspeakers

11:30-12:00 [J. Yoshinobu \(Japan\)](#)

Acceptor molecules on chemically modified Si surfaces for surface transfer doping

12:00-13:30 Lunch

13:30-17:30 **Session 6: Round Table Discussion about Dirac Fermion at Matsushima Bay**

18:00-20:00 Dinner

November 18 (Wednesday)

9:00-11:00 **Session 7: Summary and Closing**

11:00 Departure