

IWSDRM2008
SCIENTIFIC PROGRAM

Oral Presentations
Conference room 1, 1F, Segen-site, NIMS
July 7-9, 2008

July 7 (Monday)

Chairman: Takayoshi Yokoya

1:00-1:15 *Opening Remarks*
Yoshihiko Takano

Chairman: Hiroshi Kawarada

1:15-1:45 *Structure and Superconductivity of Isotope-Enriched Boron-Doped Diamond*
Evgeny Ekimov

1:45-2:15 *Core-level photoemission spectroscopy of heavily boron-doped diamond*
Takayoshi Yokoya

2:15-2:45 *Electronic Structure of B-doped Diamond: Effects of B-H Complex and B Dimer Formation*
Tamio Oguchi

2:45-3:15 *Coherent Transport and Superconductivity in Boron-Doped Nanocrystalline Diamond*
Jiří J. Mareš

3:15-3:45 Poster Session & Coffee Break

Chairman: Ganapathy Baskaran

3:45-4:15 *Insulator-metal transition and low-temperature p-type conduction in perovskite $BaTiO_{3-x}$*
Taras Kolodiazhnyi

4:15-4:45 *Metal transition of one-dimensional polymer nanowire*
Megumi Akai-Kasaya

4:45-5:15 *2D Superconductivity at the $LaAlO_3/SrTiO_3$ interface*
Reyren Nicolas

5:15-5:45 *Control of physical properties of low carrier density superconductor by local field effect*
Kei Takahashi

5:45-6:15 *Electric field induced superconductivity in a $SrTiO_3$ single crystal with electric double layer transistor*
Kazunori Ueno

July 8 (Tuesday)

Chairman: Jiří J. Mareš

9:00-9:25 *The relationship between Hall coefficient factor and superconductivity of heavily boron doped diamond.*
Hiroshi Kawarada

9:25-9:50 *Superconductivity and localization in hole doped semiconductors*
Youichi Yanase

9:50-10:15 *Disorder and Superconductivity in Doped Semiconductors*
Yukinori Ohta

10:15-10:35 *Semiconductor-metal transition and electron-phonon coupling in boron-doped diamond*
Jifeng Yu

10:35-11:05 Poster Session & Coffee Break

Chairman: Kosmas Prassides

11:05-11:30 *11B high-resolution solid-state NMR studies on B-doped diamond*
Miwa Murakami

11:30-11:55 *Synthesis and superconducting properties of CaC₆*
Nicolas Emery

11:55-12:20 *Synthesis conditions of graphite intercalation compound with Ca in molten Li-Ca alloy and its superconducting characteristics*
Masahiro Toyoda

12:20-1:30 Photo & Lunch

Chairman: Christophe Marcenat

1:30-1:55 *High Pressure Synthesis of Boron Doped Diamond and Its Properties: What Superconducts in Polycrystalline Samples?*
Natalia Dubrovinskaia

1:55-2:20 *Surface Structure and Superconducting Energy Gap of Boron Doped Diamond Films Probed by STM/STS*
Terukazu Nishizaki

2:20-2:40 *STM/STS study of superconducting boron doped diamond*
Trojanovskiy Alexey

2:40-3:05 *Electrochemical properties of highly boron-doped diamond electrodes including superconducting diamond*
Yasuaki Einaga

3:05-3:35 Poster Session & Coffee Break

Chairman: Jun Akimitsu

3:35-4:05 *Superconductivity in the ReFeAsO_{1-δ} (Re = rare earth) Systems: A New High-T_c family*
Zhi-An Ren

4:05-4:30 *High-Pressure Synthesis of F-free NdFeAsO_{1-y} with T_c = 54 K*
Hijiri Kito

4:30-4:55 *Theory of High T_c Superconductivity in doped LaOFeAs*
G Baskaran

4:55-5:20 *Unconventional pairing in iron arsenide compounds—multiple nesting across multiple Fermi surfaces*
Seiichiro Onari

6:00-9:00 Banquet. Bus departs from NIMS at 5:45.

July 9 (Wednesday)

Chairman: Tsuyoshi Tamegai

9:00-9:30 *Fullerene Superconductivity – an Ongoing Voyage into the Unexpected*
Kosmas Prassides

9:30-9:55 *Physical properties of fullerene materials found by chemical doping and field-effect doping*
Yoshihiro Kubozono

9:55-10:15 *Structure and Superconductivity of H₂ Endohedral C₆₀*
Katsumi Tanigaki

10:15-10:45 Poster Session & Coffee Break

Chairman: Yasuaki Einaga

10:45-11:05 *Theory of Inhomogeneous Superconductivity in BDD*
Naoyuki Yorozu

11:05-11:25 *Impurity band structure of boron-doped Diamond*
Takashi Inushima

11:25-11:45 *Superconductivity in low carrier transparent Zinc-doped In₂O₃ films*
Kazumasa Makise

11:45-1:15 Lunch at Restaurant, Bus departs from NIMS at 11:50.

Chairman: Zhi-An Ren

1:15-1:35 *Carbon-doped boron: synthesis and properties of semiconductors in the B-C system*
Leonid S. Dubrovinsky

1:35-1:55 *Boron-doping Effects on Electrical Properties of MWNTs*
Satoshi Ishii

1:55-2:15 *Electronic structures and electron-phonon interactions of the boron-doped carbon nanotubes*
Takashi Koretsune

2:15-2:40 *Superconductivity in doped silicon*
Christophe Marcenat

2:40-3:10 Poster Session & Coffee Break

Chairman: Katsumi Tanigaki

3:10-3:35 *Superconductivity in carrier doped SiC*
Jun Akimitsu

3:35-3:55 *Superconductivity in the wide-gap semiconductor silicon carbide*
Markus Kriener

3:55-4:20 *Two-Gap Superconductivity in R₂Fe₃Si₅ and R₅Ir₄Si₁₀ (R = Lu, Sc)*
Tsuyoshi Tamegai

4:20-4:40 *Superconductivity of electron doped (Zr,Hf)NCl with independently controlled carrier concentration and interlayer distance*
Takumi Takano

4:40-5:05 *Unconventional superconductivity in doped charge-transfer type band insulators: possible application to β-MNCl (M=Hf,Zr)*
Kazuhiko Kuroki

5:05- Closing

Poster Presentations
Conference room 2, 1F, Segen-site, NIMS
July 7-9, 2008

Chairman: Takahide Yamaguchi, Shunsuke Tsuda

1. *Lattice expansion and superconductivity in heavily boron-doped diamond thin film*
Shingo Iriyama
2. *Diamond Route To High Temperature Superconductivity*
G Baskaran
3. Utilization of high pressure for synthesizing superconductivity in semiconductors: -analysis of Ekimov's method-
Koun Shirai
4. *Localized Nature of Carriers in Boron-Doped Diamond Revealed by Laser Photoemission Spectroscopy*
Kyoko Ishizaka
5. *Superconducting properties of heavily boron-doped diamond films fabricated by microwave plasma chemical vapor deposition with bias-enhanced nucleation*
Kazuhiro Yoshida
6. *Surface Effect on Heavily Boron-Doped Diamond*
Takeshi Watanabe
7. *Electronic structure of homo-epitaxial growth boron doped diamond by soft x-rays absorption and emission spectroscopy*
Jin Nakamura
8. *The Influence of SiC on Critical Current Density of High Pressure Synthesized MgB₂ Superconductors*
Tatiana Prikhna
9. *Superconductivity in Al doped SiC*
Takahiro Muranaka
10. *Superconductivity of Silicon and Germanium Network Polyhedra*
Jun Tang
11. *Superconductivity in the AIB₂-type ternary silicide YbGa_xSi_{2-x}*
Motoharu Imai
12. *Multigap superconductivity in Y₂C₃ and La₂C₃ probed by ¹³C-NMR/¹³⁹La-NQR*
Atsushi Harada
13. *Effect of oxygen hole and F-doping on superconductivity and structural parameters in the new high-T_c ReFeAsO family*
Guang-Can Che
14. *Pressure effect on Ca intercalated graphite*
Fumiaki Tomioka
15. *Novel CVD growth of boron-doped multi-walled carbon nanotubes*
Tohru Watanabe
16. *La₂₁₄ phase single crystal whiskers*
Showgo Ogawara
17. *Macroscopic Quantum Tunneling in La_{2-x}Sr_xCuO₄: Possibility for Phase Qubit above Liquid Helium Temperature*
Yuimaru Kubo