

Chapter 6 Academic Activities

1. Presentations at International Conferences and Symposia

International Research Center for Nuclear Materials Science

KURISHITA Hiroaki

Assoc. Prof.

Oral	Eighth Japan-China Symposium on Materials for Advanced Energy Systems and Fission & Fusion Engineering Current Status of Fine-Grained, Nano-TiC Dispersed Tungsten Alloy Development by Mechanical Alloying Japan	Sendai	2004 10 4 – 2004 10 8
Oral	6th Workshop on the Materials Technology for Spallation Neutron Source Current Status of Fine-Grained Tungsten Alloy Development for Ductility Improvement Japan	Tsukuba	2005 1 27 – 2005 1 28

SATOH Isamu

Assoc. Prof.

Poster	The International Conference on Strongly Correlated Electron Systems Pressure -induced quantum critical point in the heavy fermion compound CeAl ₂ Germany	Karlsruhe	2004 7 26 – 2004 7 30
Poster	Rare Earths '04 in Nara JAPAN Single-crystal growth of layered Ce-Ni-Ge ternary compounds Japan	Nara	2004 11 8 – 2004 11 9

AOKI Dai

Res. Assoc.

Invited	Emerging Issues in Heavy Fermion Materials Physics Fermi surfaces in Np-115 compounds (T=Ni,Co) Netherlands	Leiden	2004 7 – 2004 7
Poster	SCES2004 First observation of the dHvA effect in NpTGa ₅ (T=Ni,Co) Germany	Karlsruhe	2004 7 – 2004 7

Laboratory for Advanced Materials

ASAMI Katsuhiko

Prof.

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| Oral | 12th International Conference on Solid Surfaces
Angle-Resolved XPS Study of Ni-P Surface
Italy Venice | 2004 6 28 – 2004 7 2 |
| Oral | Ninth International Conference on Plasma Surface Engineering
CaTiO ₃ Films Sputter-Deposited under Simultaneous Ti-Ion Implantation on Ti-Substrate
Germanay Garmisch-Part | 2004 9 13 – 2004 9 17 |
| Invited | International Conference on New Frontiers of Process Science and Engineering in Advanced Materials
Recent Development of Highly Corrosion Resistant Amorphous Alloys
Japan Kyoto | 2004 11 24 – 2004 11 26 |
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SLUITER Marcel H. F.

Assoc. Prof.

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| Oral | Kyoto Joint Symposium on Materials Science and Engineering for the 21th Century
First Principles Calculation of Hyperfine Parameters for Si Structure in Presence of Defects
Japan Kyoto | 2004 8 18 – 2004 8 20 |
| Oral | The 2nd International Symposium on Nanomanufacturing ISNM2004
Ultimate ab initio Study to Predict New Materials in Nanoscale
Korea Daejeon | 2004 11 3 – 2004 11 5 |
| Oral | International Workshop on Novel Quantum Phenomena in Transition Metal Oxides
Large Scale Computer Simulation Environment on Distributed Super computers Connected by Nano Technology Research Network with ITBLSysytems
Japan Sendai | 2004 11 22 – 2004 11 24 |
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SHISHIDO Toetsu

Assoc. Prof.

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| Poster | 2004 MRS Spring Meeting
Preparation and magnetic properties of M (M: Fe and Cu) doped In ₂ O ₃
USA San Francisco | 2004 4 12 – 2004 4 16 |
| Poster | 19th European Photovoltaic Solar Energy Conference and Exhibition
Growth and properties of SiGe multicrystalline solar cells with microscopic compositional distribution
France Paris | 2004 6 7 – 2004 6 11 |
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Poster	Asian Conference on Computing Materials Science A first principles study of hardness in perovskite-type rare earth rhodium borides and carbides	Russia	Novosibirsk	2004 7 14 – 2004 7 16
Oral	14th International Conference of the Crystal Growth Growth and properties of SiGe multicrystals with microscopic compositional distribution and their applications for high efficiency solar cells	France	Grenoble	2004 8 9 – 2004 8 13
Poster	14th International Conference on Ternary and Mulyinary Compounds, ICTMC 14 Evaluation of stoichiometric rare-earth molybdate and tungstate compounds as laser materials	USA	Denver	2004 9 27 – 2004 10 1
Poster	International Symposium on Inorganic and Environmentasl Materials Crystal growth of a new aluminum sodium boride AlNaB14 and some properties	Nethelands	Eindhoven	2004 10 18 – 2004 10 21
Poster	International Symposium on Inorganic and Environmentasl Materials Mechanochemically assisted preparation of NbB2 powder	Nethelands	Eindhoven	2004 10 18 – 2004 10 21
Poster	Rare Earths 04 in Nara Hardness and oxidation resistance of the perovskite-type solid solution of $RRh_3B_xC_{1-x}$ (R=Y,Sc)	Japan	Nara	2004 11 7 – 2004 11 12
Poster	Rare Earths 04 in Nara Study on the phase behavior of BaEu ₂ Mn ₂ O ₇ through heat treatment of a single crystal	Japan	Nara	2004 11 7 – 2004 11 12
Poster	Rare Earths 04 in Nara Structure of new phase SrGdMnO ₄	Japan	Nara	2004 11 7 – 2004 11 12
Poster	Rare Earths 04 in Nara R dependence of electronic structure in Perovskite type structure, RBRh ₃ (R: Sc, Y and La)	Japan	Nara	2004 11 7 – 2004 11 12
Poster	Rare Earths 04 in Nara ¹⁶⁶ Er Mossbauer spectroscopic study of Er-Rh-B and related systems	Japan	Nara	2004 11 7 – 2004 11 12
Poster	Rare Earths 04 in Nara Solid solution range of boron and hardness in perovskite-type rare earth rhodium borides and their hardness	Japan	Nara	2004 11 7 – 2004 11 12

Poster	Rare Earths 04 in Nara Properties of REAlB ₄ and Lu ₂ AlB ₆ crystals grown from RE-Al-B(RE=Tm,Yb,Lu) melts
	Japan Nara 2004 11 7 – 2004 11 12

Poster	SISSIN 04 Spin glass transition at room temperature of In ₂ O ₃ :Fe
	Japan Osaka 2004 12 6 – 2004 12 7

ZHANG Wei Assoc. Prof.

Poster	11th International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials Thermal Stability and Magnetic Properties of (Fe,Co)-RE-B Bulk Glassy Alloys
	Japan Sendai 2004 8 22 – 2004 8 26

YAMAURA Shin-ichi Res. Assoc.

Oral	The 1st Symposium on Advanced Metallic Materials – IMR(Tohoku Univ.), INHA Univ. and RIST – Hydrogen Permeation Characteristics and Structural Features of Melt-Spun Ni-Nb-Zr Amorphous Alloy Membranes
	Korea Seoul 2004 4 7 – 2004 4 8

Oral	15th World Hydrogen Energy Conference Hydrogen Permeation Characteristics and Structural Features of Melt-Spun Ni-Nb-Zr Amorphous Alloy Membranes
	Japan Yokohama 2004 6 27 – 2004 7 2

Oral	11th International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials (ISMANAM 2004) Hydrogen Permeation Characteristics and Structural Features of Melt-Spun Ni-Nb-Zr Amorphous Alloy Membranes
	Japan Sendai 2004 8 22 – 2004 8 26

MIZUSEKI Hiroshi Res. Assoc.

Oral	The European Materials Research Society'04 (E-MRS) Theoretical Study on Junction of Metal Porphyrin Oligomer for Molecular Nanoelectronics
	France Strasbourg 2004 5 24 – 2004 5 29

Oral	The European Materials Research Society'04 (E-MRS) Genetic Algorithm Approach for Nanoscale Conducting Wires
	France Strasbourg 2004 5 24 – 2004 5 29

Oral	The European Materials Research Society'04 (E-MRS) Theoretical Approach for Supramolecular Devices based on Phthalocyanine Dimer France Strasbourg 2004 5 24 – 2004 5 29
Invited	The 3rd International Conference on Computational Modeling and Simulation of Materials (CIMTEC) Advanced Ab Initio Simulations Applied to Nanotechnology Italy Acireale 2004 5 30 – 2004 6 4
Oral	The Second Conference of the Asian Consortium for Computational Materials Science (ACCMS-2) Ultra-fast Designing of Functional Materials for Molecular Devices by First Principles and Genetic Algorithm Approaches Russia Novosibirsk 2004 7 14 – 2004 7 16
Oral	International Conference on Solid State Devices and Materials (SSDM2004) Genetic Algorithm Approach to Functional Molecules for Nanoscale Devices Japan Tokyo 2004 9 15 – 2004 9 17
Oral	Transport Phenomena in Micro and Nanodevices Theoretical Approach for Transport Properties of Molecular Electronics based on Binuclear Phthalocyanine USA Hawaii 2004 10 17 – 2004 10 21
Oral	1st Conference on Advanced Nanotechnology: Research, Applications, and Policy Evolutionary Approach to Functional Oligomers for Nanoscale Devices USA Washington,DC 2004 10 22 – 2004 10 24
Invited	2nd International Symposium on Combinatorial Computational Chemistry Combinatorial Approach on Organic Molecules for Nanoscale Devices Japan Sendai 2004 11 20 – 2004 11 24
Invited	MRS Fall 2004 Quantum Mechanical Computations to be able to Predict New Materials in Nanotechnology USA Boston 2004 11 29 – 2004 12 3
Oral	6th International Conference on Nano-Molecular Electronics (ICNME 2004) Electronic Structure and Transport Properties of Molecular Electronics based on Binuclear Phthalocyanine Japan Kobe 2004 12 15 – 2004 12 17
Oral	7th Engineering Foundation Conference on Molecular-Scale Electronics Theoretical Approach for Transport Properties of Porphyrin and Phthalocyanine Oligomers USA SanDiego 2005 1 23 – 2005 1 26

OHTSU Naofumi Technician

Poster International Conference on New Frontiers of Process Science and Engineering in
Advanced Materials
Effect of Annealing Treatment on CaTiO_3 Thin Films Deposited with Ion-beam
Assisted Deposition (IBAD)
Japan Kyoto 2004 11 24 – 2004 11 26

SATO Kenji PhD student

Poster International Conference on New Frontiers of Process Science and Engineering in
Advanced Materials
Bone Conductivity Improvement of CaTiO_3 -Coated Titanium
Japan Kyoto 2004 11 24 – 2004 11 26

High Field Laboratory for Superconducting Materials

WATANABE Kazuo Prof.

Oral 20th International Cryogenic Engineering Conference
Cryogen-Free Superconducting Magnet Fabricated by a React and Wind Method
Employing Nb_3Sn Wires with CuNbTi Reinforcement
China Beijing 2004 5 11 – 2004 5 14

Oral Applied Superconductivity Conference 2004
Large T_c , B_{c2} and I_c Enhancement Effect Due to the Prebending Treatment for
Bronze Route Nb_3Sn Wires
USA Jacksonville 2004 10 3 – 2004 10 8

Invited International Workshop on the Latest Developments in Magnet Technology for Nano
and Bio Science Opportunities, 2004
Progress and Challenges in Cryogen-Free Hybrid Magnets
Korea Seoul 2004 11 18 – 2004 11 19

KOYAMA Keiichi Assoc. Prof.

Invited The second international symposium on intelligent artifacts and bio-systems
High field x-ray diffraction studies of New high performance magnetic materials
France Lyon 2005 1 27 – 2005 1 28

Poster The international conference on rare earths
Magnetic and structural properties of SmMn_2Ge_2
Japan Nara 2004 11 7 – 2004 11 12

AWAJI Satoshi

Assoc. Prof.

Oral	Applied Superconductivity Conference 2004 Mechanism of a high irreversibility field for (Nd, Eu, Gd)Ba ₂ DRCu ₃ DRO ₇ DR bulk USA Jacksonville 2004 10 3 – 2004 10 9
Invited	International Workshop on Coated Conductor for Applications (CCA2004) Superconducting Properties of YBCO Films Prepared by the in-field CVD Japan Oiso 2004 11 18 – 2004 11 20
Invited	Korea-Japan Seminar on ``Large scale application of superconductivity science and technology`` Flux Pinning and Vortex State in R123 Superconductors and Application to Coated Conductors Japan Miyazaki 2004 12 10 – 2004 12 12

NISHIJIMA Gen

Res. Assoc.

Poster	Applied Superconductivity Conference Superconducting property and thermal stability of high-strength Nb ₃ Sn wire with Ta-reinforced filaments USA Jacksonville,FL 2004 10 3 – 2004 10 8
Oral	Asian Conference on Applied Superconductivity Development of Large Bore and High Field Cryocooled Superconducting Magnets Japan Miyazaki 2004 12 13 – 2004 12 14

International Frontier Center for Advanced Materials

FUKUYAMA Hidetoshi

Prof.

Invited	8th Japanese-German Symposium on Competing Phases in Novel Condensed Matter Systems Molecular Solids as a Showcase of Strongly Correlated Systems Germany Lauterbad 2004 8 1 – 2004 8 5
Invited	Physics Colloquium, Leiden University Electronic Properties of Molecular Solids – A Showcase of Strong Correlations Netherlands Leiden 2004 11 5 –
Invited	2nd Asia-Pacific Physics Workshop –Frontier in Condensed Matter Physics– Metal Insulator Transition in Molecular Solid Hong Kong Hong Kong 2004 6 21 – 2004 6 24

Invited	Japan–France Colloquium –Quantum Complex Systems– Recent Developments and Issues in the Studies of Molecular Solids France	2004 7 21 – 2004 7 24
Symp. or Workshop	UCSB/IMR Joint Workshop IFCAM: A Think–Tank of Material Science Japan Sendai	2004 9 7 –
Keynote	International CREST Workshop Contact Problem – Toward Molecular Devices Japan Sapporo	2004 10 8 – 2004 10 9
Invited	9th Asia Pacific Physics Conference Molecular Solids: Frontiers in Condensed Matter Physics Vietnam Hanoi	2004 10 25 – 2004 10 31
Invited	Frontiers in Chemical Physics of Solids, MPI–CPFS Electronic Properties of Molecular Solids Germany Dresden	2004 11 4 – 2004 11 5
Invited	International Workshop on Materials Science and Nano–Engineering Strong Correlations in Molecular Conductors Japan Osaka	2004 12 11 – 2004 12 14
Keynote	3rd International Symposium on Physics of Organic and Inorganic Superconducting Materials Molecular Conductors: A Showcase of Strong Correlations Japan Sagami-hara	2005 2 4 – 2005 2 5