

Chapter 6 Academic Activities

1. Presentations at International Conferences and Symposia

Theory of Solid State Physics

MAEKAWA Sadamichi	Prof.	
Invited	Tohoku–Cambridge Forum Spin Dependent Transport in Magnetic Nanostructure UK Cambridge	2004 6 10 – 2004 6 11
Invited	2nd Asia–Pasific Physics Workshop Novel Phenomena Caused by Spin–Charge Separation Hong Kong Hong Kong	2004 6 21 – 2004 6 24
Invited	Spectroscopies in Novel Superconductor Sitges 2004 Electronic State and Superconductivity in Frustrated Lattices Spain Sitges	2004 7 10 – 2004 7 16
Invited	The 20 th General Conference of the Condensed Matter Division of the European Physical Society New oxides–superconductors: Similarity and dissimilarity to HTSCs Czechoslovakia Prague	2004 7 17 – 2004 7 23
Invited	Inelastic X-ray Scattering 2004 Theory of RIXS in Strongly Correlated Electron Systems USA Argonne	2004 9 19 – 2004 9 24
Invited	The 4th International Conference Stripe 04 Nanoscale Heterogeneity and Quantum Phenomena In Complex Matter Kagome vs. Triangular Lattice in Cobaltates Italy Roma	2004 9 26 – 2004 9 29
Invited	Australia–Japan Workshop on Advanced Materials Concepts in Spin Electronics Australia Sydney	2004 12 5 – 2004 12 7
Invited	The 5th Korea–Japan–Taiwan Symposium on Strongly Correlated Electron Systems Theory of RIXS in Strongly Correlated Electron Systems Korea Busan	2004 12 10 – 2004 12 11

TOHYAMA Takami

Assoc. Prof.

Invited	Fifth International Conference on New Theories, Discoveries and Applications of Superconductor and Related Materials (New3SC-5) Numerical study of the electronic states in hole- and electron-doped high-Tc cuprates	China	Chongqing	2004 6 11 – 2004 6 16
Poster	7th International Conference on Spectroscopies of Novel Superconductors (SNS2004) Spectral function in hole- and electron-underdoped high-Tc cuprates	Spain	Sitges	2004 7 11 – 2004 7 16
Invited	The 4th International Workshop on Novel Quantum Phenomena in Transition Metal Oxides Electronic and charge excitations in the upper Hubbard band	Japan	Sendai	2004 11 22 – 2004 11 24
Invited	Workshop on “Electron-Phonon Interaction in High-Tc Superconductors” Numerical Study on High-Tc Superconductors	Japan	Tsukuba	2005 1 5 – 2005 1 7

TAKAHASHI Saburo

Res. Assoc.

Poster	Spectroscopies in Novel Superconductors Quantum interference due to crossed Andreev reflection in a d-wave superconductor with two nano-contacts	Spain	Sitges	2004 7 11 – 2004 7 16
Invited	2nd Euro-Asian Symposium “Trends in Magnetism” Spin Injection, Accumulation, and Transport in Hybrid Nanostructures	Russia	Krasnoyarsk	2004 8 24 – 2004 8 27
Invited	Tohoku University/UMR CNRS-Thales Workshop “Trends in Spintronics” Spin injection and transport in hybrid structures	France	Orsay	2005 3 22 – 2005 3 22

KOYAMA Tomio

Res. Assoc.

Invited	The 2nd CREST-NANOFAB workshop NFS2004 Phenomenological Quantum Phase Dynamics of Compact	Japan	Osaka	2004 12 1 – 2004 12 2
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KOSHIBAE Wataru

Res. Assoc.

Invited	Fifth International Conference on New Theories, Discoveries, and Application of Superconductors and Related Materials (New3SC-5) Electronic state of CoO ₂ layer	China	Hilton-Chongqi	2004 6 11 – 2004 6 16
Poster	2nd Asia-Pacific Physics Workshop Frontier in Condensed Matter Physics Hall Effect in the CoO ₂ Layer with Hexagonal Structure	Hong Kong	Hong Kong	2004 6 21 – 2004 6 24
Invited	The 4th International Workshop on Novel Quantum Phenomena in Transition Metal Oxides and The 3rd Asia-Pacific Workshop on "Strongly Correlated Electron Systems" Hall effect in CoO ₂ layer with hexagonal structure	Japan	Sendai	2004 11 22 – 2004 11 24

Crystal Physics

NAKAJIMA Kazuo

Prof.

Invited	1st AIST-RCPV International Workshop Melt growth of SiGe multicrystals with microscopic compositional distribution for new solar cell applications	Japan	Tsukuba	2004 5 12 – 2004
Invited	2004 Asian Symposium on Crystal Growth and Crystal Technology Melt growth of SiGe multicrystals with microscopic compositional distribution for new solar cell applications	China	Shandong	2004 5 26 – 2004
Invited	The Tohoku-Cambridge Forum, Cambridge University Melt growth of SiGe bulk crystals with uniform composition and SiGe multicrystals with microscopic compositional distribution for new SiGe solar cell applications	UK	Cambridge	2004 6 10 – 2004 6 11
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 11 – 2004 6 17
Oral	The Fourteenth International Conference on Crystal Growth (ICCGE-14) 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

Oral	The first International SiGe: Materials, Processing, and Devices Symposium in the Fall 2004 Electrochemical Society Conference Improvement of device performance of multicrystalline Si-based solar cells using multicrystalline SiGe with microscopic compositional distribution	USA	Honolulu	2004 10 3 – 2004 10 8
Invited	The Second Japan–Australia Workshop on Advanced Materials Growth and properties of SiGe multicrystals with microscopic compositional distribution and their applications for high efficiency solar cells	Australia	Sydney	2004 12 5 – 2004 12 7

USAMI Noritaka	Assoc. Prof.			
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Oral	19th European Photovoltaic Solar Energy Conference and Exhibition, Systematic variation of Si spacer width in solar cells with stacked Ge islands and its effect on photovoltaic performance	France	Paris	2004 6 7 – 2004 6 11
Oral	14th International Conference on Crystal Growth and 12th International Conference on vapor growth and epitaxy Growth of SiGe-on-insulator and its application as a substrate for epitaxy of strained Si layer	France	Grenoble	2004 8 9 – 2004 8 13
Invited	1st IEEE International Conference on Group IV Photonics New Solar Cells Using Ge Dots Embedded in Si PIN Structures	Hong Kong	Hong Kong	2004 9 29 – 2004 10 1
Poster	Third international workshop on new group-IV (Si–Ge–C) semiconductors Growth of SiGe bulk crystal with uniform composition	Japan	Sendai	2004 10 12 – 2004 10 13
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SAZAKI Gen	Lecturer			
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Poster	10th International Conference on Crystallization of Biological Macromolecules In situ observation of elementary growth steps on protein crystals and individual protein molecules diffusing in the vicinity of crystal surfaces	China	Beijing	2004 6 5 – 2004 6 8
Oral	14th International Conference on Crystal Growth and 12th International Conference on vapor growth and epitaxy Development of novel in situ techniques for the observations of elementary growth steps on protein crystals and individual protein molecules diffusing in the vicinity of crystal surfaces	France	Grenoble	2004 8 9 – 2004 8 13

FUJIWARA Kozo	Res. Assoc.		
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Poster	14th International Conference on Crystal Growth and 12th International Conference on vapor growth and epitaxy Direct observation of melt growth behavior of polycrystalline silicon for solar cells	France	Grenoble 2004 8 9 – 2004 8 13
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MATSUI Takuro	Post Doctoral Researcher		
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Poster	10th International Conference on Crystallization of Biological Macromolecules Impurity effects of fluorescent labeled lysozyme on the crystallization of tetragonal and monoclinic crystals	China	Beijing 2004 6 5 – 2004 6 8
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ALGUNO Arnold	PhD student		
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Oral	2004 Joint International Meeting The Electrochemical Society , The Electrochemical Society of Japan and The Japn Society of Applied Phisics Improved photovoltaic cell performance based on Ge islands embedded into the intrinsic layer	USA	Hawaii 2004 10 3 – 2004 10 8
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OKADA Masashi	PhD student		
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Poster	10th International Conference on Crystallization of Biological Macromolecules In Situ observation of diffusing process of individual protein molecules in the vicinity of crystal surface	China	Beijing 2004 6 5 – 2004 6 8
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AZUMA Yukinaga	PhD student		
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Poster	14th International Conference on Crystal Growth and 12th International Conference on vapor growth and epitaxy Restraining polycrystallization of multicomponent semiconductors using seed crystals of random orientations	France	Grenoble 2004 8 9 – 2004 8 13
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KUTUKAKE Kentaro

PhD student

Oral	2004 Joint International Meeting The Electrochemical Society , The Electrochemical Society of Japan and The Jpn Society of Applied Phisics A Comparative study of strain field in strain ed Si on SiGe virtual substrates	USA	Hawaii	2004 10 3 – 2004 10 8
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Magnetism

NOJIRI Hiroyuki

Prof.

Oral	The Xth MEGAGAUSS-Conference DEVEROPMENT OF MINIATURE COILS AND A SMALL CAPACITOR BANK FOR SYNCHROTRON RADIATION EXPERIMENTS IN HIGH MAGNETIC FIELS	Germany	Berlin	2004 7 18 – 2004 7 23
Keynote	Conference Digest of the 2004 Joint 29th International conference on infrared and Millimeter Waves and 12th International Conference on Terahertz Electronics FIR-Magnetspectroscopy on Molecular Magnets	Germany	Karlsruhe	2004 9 27 – 2004 10 12

Oral	The IXth International Conference on Molecule-based Magnets Half Step Magnetization for Spin Chirality in Frustrated Spin Rings	Japan	Tsukuba	2004 10 4 – 2004 10 8
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Oral	International Symposium on Quantum Spin Systems (QSS04) Effect of spin chirality on magnetization in triangle based compounds	Japan	Hayama	2004 11 30 – 2004 12 3
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Invited	International Symposium on Nano-astructures and Physicochemical Properties of Polyoxometalate Superclusters and Related Colloid Particles Manipulation of Spin State in Nano-clusters by Pulsed Magnetic Fields	Japan	Kanagawa	2004 12 21 – 2004 12 25
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MOGI Iwao

Res. Assoc.

Oral	2004 Joint Int. Meeting of Electrochemical Society Thermal Convection in Water under Strong Gradient Magnetic Fields	USA	Honolulu	2004 10 3 – 2004 10 7
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OSHIMA Yugo	Res. Assoc.	
Oral	International Conference on Science and Technology of Synthetic Metals (ICSM2004) EMR measuremens of field-induced superconductor lambda-(BETS)2FexGa1-xCl4 Australia	Wollongong 2004 6 1 –

CHOI Kwang Yong	Res. Assoc.	
Invited	International Workshop on Collective quantum states in low-dimensional transition metal oxide Magnetic excitations in helical ordered quantum spin systems Germany	Dresden 2005 2 22 – 2005 2 26

Surface and Interface Research

SAKURAI Toshio	Prof.	
Invited	Beijing –TEDA 2004 Scanning Probe Microscopy, Sensors and Nanostructures Dynamics and Nano-clustering of Alkali Metals Adsorbed on the Si(111)–(7x7) Surface China	Beijing-TEDA 2004 5 23 – 2004 5 27
Invited	Swiss–Japanese Nanoscience Workshop Role of strained surface structure in the growth of Ge quantum dot Japan	Nara 2004 6 23 – 2004 6 25
Invited	The Sixth Taipei Symposium on Surfaces, Thin Films, and Nano Sciences Alkali Metal Adsorption on the Si(111)–(7x7) Surface Taiwan	Taipei 2004 8 17 – 2004 8 19
Invited	Functionality of Organized Nanostructures (FON'04) Alkali metals adsorption on the Si (111)–7x7 surface: From 2D gas to magic clusters Japan	Tsukuba 2004 11 30 – 2004 12 2

FUJIKAWA Yasunori	Res. Assoc.	
Oral	American Physical Society March Meeting 2005 Local distribution of segregated Si on the hydrogen-treated Ge/Si(001) studied by STM USA	Los Angeles 2005 3 21 – 2005 3 25

Oral AVS 51st International Symposium
Identification of Si and Ge on the Hydrogen-Terminated Ge/Si(001) Surfaces for Observation of Intermixing
USA Anaheim 2004 11 15 – 2004 11 19

Invited Second Japan–Australia Workshop on Advanced Materials
Role of strained surface structure in the growth of Ge quantum dots
Australia Sydney 2004 12 6 – 2004 12 7

Low Temperature Physics

KOBAYASHI Norio Prof.

Oral Tohoku University – Cambridge University Forum
VORTEX PHYSICS IN HIGH-Tc SUPERCONDUCTOR YBa₂Cu₃O_y
UK Cambridge 2004 6 10 – 2004 6 11

Poster Joint Workshop on Superconductivity:Progress in nanoscopic superconductors and vortex physics
Resistive transition curve in magnetic fields in organic superconductors–Influence of thermal and quantum fluctuations
Japan Osaka 2004 12 1 – 2004 12 2

Poster Joint Workshop on Superconductivity:Progress in nanoscopic superconductors and vortex physics
Vortex state of untwinned YBa₂Cu₃O_y single crystals in the underdoped regime
Japan Osaks 2004 12 1 – 2004 12 2

SASAKI Takahiko Assoc. Prof.

Oral International Conference on the Science and Technology of Synthetic Metals 2004
Phase separation proved by the local infrared reflectance spectra near the Mott transition in the κ -type BEDT-TTF dimer system
Australia Wollongong 2004 6 28 – 2004 7 2

KUDO Kazutaka Res. Assoc.

Poster The 4th International Workshop on Novel Quantum Phenomena in Transition Metal Oxides and The 3rd Asia-Pacific Workshop on Strongly Correlated Electron Systems
Pseudogap formation and superconductivity of Bi_{1.74}Pb_{0.39}Sr_{1.88}CuO_{6+δ} by studies of out-of-plane resistivity in magnetic fields
Japan Sendai 2004 11 22 – 2004 11 24

Oral	17th International Symposium on Superconductivity (ISS2004)				
	Hole-doping and magnetic-field effect on the pseudogap in $\text{Bi}_{1.74}\text{Pb}_{0.38}\text{Sr}_{1.88}\text{CuO}_{6+\delta}$ studied by the out-of-plane resistivity				
	Japan	Niigata	2004 11 23 – 2004 11 25		
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NISHIZAKI Terukazu		Res. Assoc.			
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Oral	17th International Symposium on Superconductivity (ISS2004)				
	Vortex Phase Diagram in Impurity doped $\text{YBa}_2\text{Cu}_3\text{O}_y$ Single Crystals				
	Japan	Niigata	2004 11 23 – 2004 11 25		
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Invited	Joint meeting of The International Symposium on JSPS Core-to-Core Integrated Action Initiative "Nanoscience and Engineering in Superconductivity" (CTC-NES) and The 4th International Symposium on Intrinsic Josephson Effect and Plasma Oscillations in High-Tc Superconductors (PLASMA 2004)				
	Vortex order-disorder transition and the effect of Zn and Ni substitution in $\text{YBa}_2\text{Cu}_3\text{O}_y$				
	Japan	Tsukuba	2004 11 26 – 2004 11 28		
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Invited	Tenth International Vortex Workshop (IVW10)				
	Vortex Phase Diagram in Ni and Zn Doped Untwinned $\text{YBa}_2\text{Cu}_3\text{O}_y$				
	India	Mumbai	2005 1 9 – 2005 1 14		
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YONEYAMA Naoki		Res. Assoc.			
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Poster	The International Conference on the Science and Technology of Synthetic Metals 2004 (ICSM2004)				
	Vortex-pinning effect in the mixed crystal of $\kappa-(\text{BEDT-TTF})_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$ consisting of the fully-hydrogenated and deuterated donors				
	Australia	Wollongong	2004 6 28 – 2005 7 2		
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Poster	International Symposium on Frontier in Materials Design, Synthesis and Measurements				
	Electronic phase diagram and metal-insulator phase separations in the band width controlled organic system $\kappa-(\text{BEDT-TTF})_2\text{Cu}[\text{N}(\text{CN})_2]\text{Br}$				
	Japan	Awaji	2005 3 11 – 2005 3 15		
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Low Temperature Condensed State Physics

IWASA Yoshihiro

Prof.

Invited	205th Electrochemical Society Meeting Control of transistor properties of fullerene thin films using self-assembled monolayers	USA	San Antonio	2004 5 10 – 2004 5 15
Invited	Japan-Korea Symposium on Carbon Nanotubes Transport and Optical Properties of Doped Carbon Nanotubes	Korea	Jeju Island	2004 10 13 – 2004 10 15
Invited	Japan-Singapore Symposium on Nanoscience and Nanotechnology Tuning Charge Carrier Properties in Carbon Nanostructures by interaction with organic molecules	Singapore	Singapore	2004 11 1 – 2004 11 3
Invited	International Workshop on Multifunctional Molecular Materials A new aspect of carrier doping in molecule based materials	Japan	Kyoto	2005 1 20 – 2005 1 21
Poster	2005 Materials Research Society Spring Meeting Control of thin film transistor operations with polar self-assembled monolayers	USA	San Francisco	2005 3 28 – 2005 4 1

TAGUCHI Yasujiro

Assoc. Prof.

Invited	Gordon Research Conference on Magnetic Nanostructures Spin chirality as a source of anomalous Hall effect	USA	Montana	2004 8 22 – 2005 8 27
Poster	17th International Symposium on Superconductivity Anomalously large electron-phonon coupling constant in layered nitride superconductors as revealed by high pressure measurements	Japan	Niigata	2004 11 23 – 2004 11 25

KOBAYASHI Shin-ichiro

Res. Assoc.

Oral	The 2004 Electronic Materials Conference Control of Transport by Self-Assembled-Monolayers in Organic Thin-Film Transistors	USA	Sounth Bend	2004 6 23 – 2004 6 25
Oral	The International Conference on Synthetic Metals(ICSM) 2004 Turning carrier density in organic thin film transistors with self-assembled monolayers	Australia	Wollongong	2004 6 26 – 2004 7 3

TAKENOBU Taishi

Res. Assoc.

Poster The International Conference on Synthetic Metals(ICS)M 2004
Structure and transport properties of doping controlled carbon nanotube by encapsulation of organic molecules
Australia Wollongong 2004 6 26 – 2004 7 3

Poster XIXth International Winterschool Euroconference on Electronic Properties of Novel Materials
Carbon nanotubes under electric field: Stark effect and carrier accumulation
Austria Kirchberg 2005 3 12 – 2005 3 19

SHIMOTANI Hidekazu

Researcher

Poster Third International Conference on Molecular Electronics and Bioelectronics
Comparison of Field-Effect and Electrochemical Transistor of Poly(3-Hexylthiophene)
and SWNT: Effect of Dopant
Japan Tokyo 2005 3 3 – 2005 3 4

KANBARA Takayoshi

PhD student

Poster Nano Phys 2005
The TLL-Like behavior observed in multiwalled carbon nanotube
Japan Tokyo 2005 1 26 – 2005 1 28

Poster XIXth International Winterschool Euroconference on Electronic Properties of Novel Materials
Gate-induced crossover from unconventional metals to fermi liquid in multiwalled carbon nanotubes
Austria Kirchberg 2005 3 12 – 2005 3 19

HISAKABE Michinori

PhD student

Poster 17th International Symposium on Superconductivity
Anomalously large electron-phonon coupling constant in layered nitride
superconductors as revealed by high pressure measurements

Neutron and γ -Ray Spectroscopy on Condensed Matters

YAMADA Kazuyoshi

Prof.

invited	The Second American Conference on Neutron Scattering Field-induced Magnetic Correlation in High Tc Cuprates USA	College Park	2004 6 6 – 2004 6 10
invited	2nd Asia-Pacific Workshop Frontier in Condensed Matter Physics High Energy Spin Excitations in High Tc Studied by Neutron Scattering China	Hong Kong	2004 6 20 – 2004 6 24
invited	Japan-French Meeting on Quantum Complex Systems", 2004 July 21–24, Grenoble Issues of Spin Excitations in high Tc Cuprates France	Grenoble	2004 7 21 – 2004 7 24
invited	The 7th International Conference on Spectroscopies in Novel Superconductors Spin and Charge Fluctuations in High-Tc Cuprates Studied by Neutron and X-ray Inelastic Scattering Spain	Sitges	2004 7 22 – 2004 7 26
invited	The 4th International workshop on Novel Quantum Phenomena in Transition Metal Oxides and The 3rd Asia ?Pacific Workshop on Novel Quantum Phenomena in Transition Metal Oxides New Aspects of High-Tc Cuprates Found by Neutron Scattering during the Maekawa Project Japan	Sendai	2004 11 22 – 2004 11 24
invited	International Symposium on Frontier in Materials Design, Synthesis and Measurements Neutron Scattering, a Unique Probe for Static and Dynamical Spin NanoStructures in Strongly Correlated Electron Systems Japan	Awaji	2005 3 11 – 2005 3 15

OHOYAMA Kenji

Assoc. Prof.

Poster	The International Conference on Strongly Correlated Electron Systems (SCES2004) Characteristic profile of magnetic diffuse scattering in ErB\$_2\$C\$_2\$S Germany	Karlsruhe	2004 7 26 – 2004 7 30
Poster	International Symposium on Frontier in Materials Design, Synthesis and Measurements Crystal Structure Refinement of Li, Mg-Based Complex Hydrides by Neutron Diffraction Japan	Awaji	2005 3 11 – 2005 3 15

FUJITA Masaki

Res. Assoc.

Oral 17th international Symposium on Superconductivity
Neutron Scattering Study on Stripe Correlations in La_{2-x}Ba_xCuO₄
Japan Niigata 2004.11.23 - 2004.11.25

Poster International Symposium on Frontier in Materials Design, Synthesis and Measurements
Spin Correlatinons in Electron -Doped High-Tc Superconduntor
Japan Awaji 2005 3 11 – 2005 3 15

HIRAKA Haruhiro

Res. Assoc.

Poster International Workshop on Novel Quantum Phenomena in Transition Metal Oxides
Characterization of low-energy magnetic excitations in Cr
Japan Sendai 2004.11.22 – 2004.11.24

Poster International Workshop on Novel Quantum Phenomena in Transition Metal Oxides
Ni impurity effects on magnetism and superconductivity in the hole-doped
 $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$
Japan Sendai 2004 11 22 – 2004 11 24

Poster International Symposium on Frontier in Materials Design, Synthesis and Measurements
Ni impurity effect on antiferromagnetic order in lightly hole-doped La_{2-x}Sr_xCuO₄
Japan Awaji 2005 3 11 – 2005 3 15

HINO Aya

PhD student

Poster 17th international Symposium on Superconductivity
A Study of Impurity Effect on Spinn Correlations in Electron-Doped
 $\text{Pr}_{1-x}\text{LaCe}_x\text{Cu}_{1-y}\text{Zn}_y\text{O}_4$
Japan Niigata 2004 11 23 – 2004 11 25

Physics of Crystal Defects

Invited	The 14th International Conference on Crystal Growth Growth and Fundamental Properties of SiGe Bulk Crystals France	Grenoble	2004 8 9 – 2004 8 13
Poster	14th International Conference on Crystal Growth Dislocation–impurity Interaction in Czochralski-grown Si heavily doped with B and Ge France	Grenoble	2004 8 9 – 2004 8 13
Poster	14th International Conference on Crystal Growth Behavior of the edge dislocation propagating along the growth direction in Czochralski Si crystal growth France	Grenoble	2004 8 9 – 2004 8 13
Poster	11th International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials Atomic structure of SixGe_{1-x} solid solution crystals Japan	Sendai	2004 8 22 – 2004 8 26
Invited	The 10th International Conference on Extended Defects in Semiconductors Dislocation–Impurity Interaction in Si Russia	Moscow	2004 9 11 – 2004 9 17
Poster	10th International Conference on Extended Defects in Semiconductors Photoluminescence study of plastically deformed GaN Russia	Moscow	2004 9 11 – 2004 9 17
Oral	5th International Conference on Materials for Microelectronics and Nanoengineering Atomic structure and relaxation in Czochralski-grown SixGe_{1-x} bulk alloys UK	Southampton	2004 9 13 – 2004 9 14
Poster	5th International Conference on Materials for Microelectronics and Nanoengineering Dislocation of high quality large ZnTe substrate examined by X-ray topography UK	Southampton	2004 9 13 – 2004 9 14
Oral	Materials Research Society 2004 Fall Meeting Photoluminescence study of plastically deformed GaN USA	Boston	2004 11 28 – 2004 12 3
Poster	International Symposium on Characterization of Real Materials and Real Processing by Transmission Electron Microscopy Dynamics and Characters of dislocations in ZnSe Japan	Nagoya	2005 1 26 – 2005 1 27

Poster	International Symposium on Characterization of Real Materials and Real Procesing by Transmission Electron Microscopy Atomic structure of dislocations and stacking faults in deformed GaAs	Japan	Nagoya	2005 1 26 – 2005 1 27
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High Purity Metallic Materials

YOSHIMI Kyousuke

Assoc. Prof.

Oral	The fifth Pacific Rim International Conference on Advanced Materials and Processing Substructure Development in Rapidly Solidified B2-Type TiCo Ribbons	China	Beijing	2004 11 2 – 2004 11 5
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Oral	The fifth Pacific Rim International Conference on Advanced Materials and Processing Surface Morphology Characterization for Nanoself-patterned FeAl Single Crystal	China	Beijing	2004 11 2 – 2004 11 5
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Oral	2004 MRS Fall Meeting Effect of Heat Treatments on Microstructure of Rapidly Solidified TiCo Ribbons	USA	Boston	2004 11 29 – 2004 12 3
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NAKAMURA Ryusuke

Post Doctoral Researcher

Poster	2004 MRS Fall Meeting Thermal Analysis of Relaxation Process of Supersaturated Vacancies in B2-Type Aluminides	USA	Boston	2004 11 29 – 2004 12 3
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Materials Design by Computer Simulation

KAWAZOE Yoshiyuki

Prof.

Invited	Tsinghua University – Nikkei BP Nanotech Forum What is Genuine Nanotechnology?	China	Beijing	2004 4 15 – 2004 4 16
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Invited	Second Conference of the Asian Consortium for Computational Materials Science (ACCMS-2) Ultimate ab initio Calculations to Predict New Materials for Nanotechnology	Russia	Novosibirsk	2004 7 14 – 2004 7 16
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Invited	The 3rd Advanced Science Institute the Japan Society for the Promotion of Science Ultimate ab initio Calculations to Predict New Materials Expected to be Used in Nanotechnology	Japan	Sendai	2004 7 26 – 2004 7 31
Invited	The 2nd International Symposium on Nanomanufacturing (ISNM2004) Ultimate ab initio Study to predict New Nanoscale Materials	Korea	Daejeon	2004 11 3 – 2004 11 5

TAKAHASHI Masae Res. Assoc.

Oral	16th International Conference on Phosphorus Chemistry Ab Initio MO Study of Charged P6 and Their Silicon Analogues: Stability and Aromaticity	UK	Birmingham	2004 7 4 – 2004 7 9
Oral	Second Conference of the Asian Consortium for Computational Materials Science Design for UV-cut Materials Made of Novel Silicon Oligomers	Russia	Novosibirsk	2004 7 14 – 2004 7 16
Poster	International Conference on Organic Photonics and Electronics 2005 & 8th International Conference on Organic Nonlinear Optics UV-Absorption Spectral Property of Novel Silicon Oligomers: An Ab Initio Study	Japan	Matsushima	2005 3 7 – 2005 3 11

SAHARA Ryoji Res. Assoc.

Poster	The European Materials Research Society'04 Thermodynamic properties of transition metals using FCC and HCP lattice models with renormalized potentials	France	Strasbourg	2004 5 23 – 2005 5 30
Oral	Second Conference of the Asian Consortium for Computational Materials Science First principles calculation of hardness analysis in perovskite-type rare earth rhodium borides and carbides	Russia	Novosibirsk	2004 7 14 – 2004 7 16

Irradiation Effects in Nuclear and Their Related Materials

HASEGAWA Masayuki Prof.

Oral	22nd Symposium on Effect of Radiation on Materials(ASM) Positron Annihilation Study of Vacancy–Cu Aggregations in A533B Reactor Pressure USA	Boston	2004 6 8 – 2004 6 10
Invited	The International School of Solid State Physics and NATO Advanced Study Institute “Formation and evolution of nanovoids and nano–precipitates in irradiated Fe–Cu model alloys and RPV steels ” , “ Radiation Effects in Solids ” Italy	Elice	2004 7 17 – 2004 7 29
Invited	The International School of Solid State Physics and NATO Advanced Study Institute “ Positron annihilation methods in the studies of irradiation–induced defects in metals and semiconductors: Identification of the defects by positron annihilation ” , “ Radiation Effects in Solids ” Italy	Elice	2004 7 17 – 2004 7 29

NAGAI Yasuyoshi Assoc. Prof.

Invited	Second International Conference on Multiscale Materials Modeling Analysis of Embedded Nano-clusters by Positron Annihilation Spectroscopy USA	LA	2004 10 11 – 2004 10 15
Oral	(ICAA-9) The 9th International Conference on Aluminium Alloys Coincidence Doppler Broadening and 3DAP Study of the Pre-Precipitaion Stage of Al(-Li)-Cu-Mg(-Ag) Alloys Australia	Brisbane	2004 8 2 – 2004 8 5
Oral	The 35th Polish Seminar on Positron Annihilation Coincidence Doppler Broadening Spectroscopy in Embedded Nano–Materials (IL) Poland	Turawa	2004 9 20 – 2004 9 24

TANG Zheng Res. Assoc.

Oral	Eighth Japan–China Symposium on Materials for Advanced Energy Systems and Fission & Fusion Engineering First–Principles Studies of Atomic and Electronic Structures of Cu Precipitate in Dilute Fe–Cu Alloys Japan	Sendai	2004 10 4 – 2004 10 8
Oral	International Symposium on Positron Beam and its Application Using Positron to Map Electron Distribution in Momentum Space China	Wuhan	2004 10 28 – 2004 10 30

Invited	The 4th International Workshop on Positron Studies of Semiconductor Defects (PSSD-2004)			
	Self-Energy Correction to Momentum Density Distribution of Positron-Electron Pairs in Si	USA	Coeur d'Alene	2004 11 7 – 2004 11 12
Oral	The 4th International Workshop on Positron Studies of Semiconductor Defects			
	Theoretical studies of positronium localization and annihilation in siliaca	USA	Coeur d'Alene	2004 11 7 – 2004 11 12
IOUE Koji	Res. Assoc.			
Oral	The 4th International Workshop on Positron Studies of Semiconductor Defects (PSSD-2004)			
	Vacancy Clusters and Vacancy-Impurity Complexes in Electron-Irradiated Si Positron Annihilation, Electron Spin Resonance and Hall Coefficient Measurement	USA	Coeur d'Alene	2004 11 7 – 2004 11 12
Oral	The 4th International Workshop on Positron Studies of Semiconductor Defects (PSSD-2004)			
	Positronium studies of structural open volumes in two-component silica-based glasses	USA	Coeur d'Alene	2004 11 7 – 2004 11 12
OYAMA Takeshi	PhD student			
Oral	Second International Conference on Multiscale Materials Modeling			
	Nano Cu precipitate in pressure vessel steel of nuclear power reactor studied by positron annihilation and 3D atom probe	USA	Los Angeles	2004 10 11 – 2004 10 15
Nuclear Materials Science				
HIKAMA Tatsuo	Prof.			
Oral	2nd European Workshop on Optical Fiber Sensors			
	Optical fast neutron and gamma-ray detection system utilizing radioluminescence	Spain	Santander	2004 6 9 – 2004 6 11
Invited	International Conference on Cybernetics and Information Technologies, Systems and Applications			
	Optical Radiation Detection Systems Utilizing Radioluminescence Materials and Optical Fibers	USA	Orlando	2004 7 21 – 2004 7 25

Poster	20th IAEA Fusion Conference Development of Optical Diagnostic System for Burning Plasma Machine Poltigar Vilamoura	2004 11 1 – 2004 11 6
Keynote	ISTC-Japan Japanese Irradiation Technologies Japan Oarai	2004 11 17 – 2004 11 17
NAGATA Shinji	Assoc. Prof.	
Poster	14th International Conference on Ion-Beam Modification of Materials Hydrogen uptake in noble gas implanted W USA Monterey	2004 9 5 – 2004 9 11
TSUCHIYA Bun	Res. Assoc.	
Poster	15th Int. Conf. on Defects in Insulating Materials Optical Absorption of Yb-doped SrCeO ₃ by Electron Irradiation Latvia Liga	2004 7 11 – 2004 7 16
Poster	6th Int. Conf. on Excitonic Processes and Condensed Matter Electron Induced Luminescence of SrCe _{0.95} Yb _{0.05} O _{3-d} Poland Kracow	2004 7 6 – 2004 7 9
Poster	14th Int. Conf. on Ion Beam Modification of Materials Effects of Ion Beam Modification on Absorption and Transport of Hydrogen in Perovskite-Type Oxide Ceramics USA Monterey	2004 9 6 – 2004 9 10
Poster	16th Int. Conf. on Technology of Fusion Energy Radiation Damage of Proton Conductive Ceramics Under 14 MeV Fast Neutron Irradiation USA Madison	2004 9 14 – 2004 9 16
TOH Kentaro	Res. Assoc.	
Poster	Second European Workshop on Optical Fiber Sensor Heat-treatment effect of fused silica optical fiber for improvement of radiation-resistance Spain Santander	2004 6 9 – 2004 6 11
Symp. or Workshop	UCSB/IMR Joint Workshop Development of optical materials for nuclear applications Japan Sendai	2004 9 7 –

Nuclear Materials Engineering

MATSUI Hideki

Prof.

Oral	2nd International Conference on Multiscale Materials Modeling In situ Observation of Dislocation Interaction with Small Obstacles Virtually Invisible to Conventional TEM	USA	Los Angeles	2004 10 11 – 2004 10 15
Invited	23rd Symposium on Fusion Technology Present Status and Prospects for the IFMIF Project	Italy	Venice	2004 9 20 – 2004 9 24

Physics of Electronic Materials

YAO Takafumi

Prof.

Invited	International Workshop on ZnO Heteroepitaxy of ZnO on various substrates	USA	Maui	2004 5 16 – 2004 05 20
Invited	2004 Spring Meeting of European Materials Research Society High-energy XPS studies of III-V nitrides	France	Strasbourg	2004 5 23 – 2004 05 29
Keynote	The 5th International Conference on Thin Film Physics and Applications Nitrides and Oxides as new classes of semiconductors	China	Shanghang	2004 5 30 – 2004 06 3
Invited	Tohoku University–Cambridge University Forum Oxides and Nitrides as New Classes of Semiconductors	UK	Cambridge	2004 6 9 – 2004 06 13
Invited	2004 International Symposium on Crystal Growth and Devices Control of Crystal polarity of ZnO and GaN by Interface Engineering	Korea	Seoul	2004 11 11 – 2004 11 13
Invited	2004 Fall Meeting of Materials Research Society Polarity Control of ZnO epilayers and their applications	USA	Boston	2004 11 29 – 2004 12 03

Oral	2004 International Symposium on Low-Dimensional Semiconductors and Devices Formation and evolution of strain-induced self-assembled dots	Mexco	Cancun	2004 12 12 – 2004 12 17
Invited	2nd AFOSR International Workshop on InN XPS studies of the band structure of InN	USA	Kona	2005 1 9 – 2005 1 13
CHO Meoung-Whan	Assoc. Prof.			
Poster	22nd North American Conference on Molecular Beam Epitaxy CrN buffer layer study for GaN growth using Molecular beam epitaxy	Canada	Banff	2004 10 10 – 2004 10 14
HANADA Takashi	Res. Assoc.			
Oral	The Fifth International Conference on Low Dimensional Structures and Devices (LDSD2004) Formation and evolution of strain-induced self-assembled dots	Mexco	Cancun	2004 12 12 – 2004 12 17
MAKINO Hisao	Res. Assoc.			
invited	International Symposium on Compound Semiconductors High-energy photoemission studies of transition metal ion doped III-V nitrides	Korea	Seoul	2004 9 12 – 2004 9 16
BUCKMASTER Ryan	PhD student			
Poster	International Symposium on Compound Semiconductors Fabrication of Self-Assembled Nanodots at Arbitrary Locations by Spatially Controlled Implant Source Growth	Korea	Seoul	2004 9 12 – 2004 9 16
Poster	The Fifth International Conference on Low Dimensional Structures and Devices GaN nanocrystal fabrication by implant source growth	Mexico	Cancun	2004 12 12 – 2004 12 17

VASHAEI Zahra	PhD student			
Poster	International Symposium on Compound Semiconductors Structure Properties and Phase Evolution of Mg _x Zn _{1-x} O Layers Grown on c-sapphire by P-MBE	Korea	Seoul	2004 9 12 – 2004 9 16
LEE Wook-Hyun	PhD student			
Oral	International Symposium on Compound Semiconductors CrN buffer layer study for GaN growth using molecular beam epitaxy(MBE)	Korea	Seoul	2004 9 12 – 2004 9 16
KIM Jung-Jin	PhD student			
Poster	XIV International Conference on Vacuum Ultraviolet Radiation Physics Electronic structure of the Ga _{1-x} Cr _x N studied by high-energy photoemission spectroscopy	Australia	Cairns	2004 7 19 – 2004 7 23
Poster	22nd North American Conference on Molecular Beam Epitaxy Structure and magnetic properties of Cr-doped GaN	Canada	Banff	2004 10 10 – 2004 10 14
OH Dong-Cheol	PhD student			
poster	The 3rd International Workshop on ZnO and Related Materials Electrical characterization of Au/ZnO:N Schottky contacts and ZnO/GaN heterostructures	Japan	Sendai	2004 10 5 – 2004 10 8
Poster	22nd North American Conference on Molecular Beam Epitaxy Electrical characterization of the heterostructure of ZnO/GaN grown by molecular-beam epitaxy	Canada	Banff	2004 10 10 – 2004 10 14

GOTO Hiroki

PhD student

Poster International Symposium on Compound Semiconductors

Growth and Characterization of HVPE GaN on Al_2O_3 with CrN buffer

Korea Seoul 2004 9 12 – 2004 9 16

MORI

PhD student

Poster 22nd North American Conference on Molecular Beam Epitaxy

GaNAs(001) surface phases under growing condition

Canada Banff 2004 10 10 – 2004 10 14

BABA Takeshi

PhD student

Poster International Symposium on Compound Semiconductors

Observation of optical Fano resonance by measuring PL spectrum of ZnS : Mn/ SiO_2 1D photonic crystal

Korea Seoul 2004 9 12 – 2004 9 16

MINEGISHI Tsutomu

PhD student

Poster The 3rd International Workshop on ZnO and Related Materials

Correlation of the crystal structure of MgO buffer with the crystal polarity of ZnO overgrown layers

Japan Sendai 2004 10 5 – 2004 10 8

Poster 22nd North American Conference on Molecular Beam Epitaxy

Selective growth of Zn- and O-polar ZnO layers by plasma-assisted molecular beam epitaxy

Canada Baff 2004 10 10 – 2004 10 14

SUZUKI Hideyuki

PhD student

Poster International Symposium on Compound Semiconductors

The effect of surface treatment on Zinc Oxide

Korea Seoul 2004 9 12 – 2004 9 16

Chemical Physics of Non-Crystalline Materials

MATSUBARA Eiichiro

Prof.

Invited	TMS 2005 Characteristic Local Structure of Bulk Metallic Glasses	USA	San Francisco	2005 2 13 – 2005 2 17
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Kouichi Hayashi

Assoc. Prof.

Oral	The 8th international Conference on Surface X-ray and Neutron Scattering X-ray waveguide phenomenon in organic thin films	Germany	Badhoffnes	2004 6 28 – 2004 7 2
Poster	4th International Conference on Synchrotron Radiation in Materials Science X-Ray Fluorescence Holography in Dilute System	France	Grenoble	2004 8 23 – 2004 8 25

Superstructured Thin Film Chemistry

KAWASAKI Masashi	Prof.
Invited	Zinc Oxide Workshop Recent advances in ZnO epitaxy
	USA Hawaii 2004 5 17 – 2004 5 20
Invited	THE 3RD INTERNATIONAL CONFERENCE ON PHYSICS AND APPLICATIONS OF SPIN RELATED PHENOMENA IN SEMICONDUCTORS Ferromagnetic Oxide Semiconductors
	USA Santa Barbara 2004 7 21 – 2004 7 23
Invited	Agenda for the First UCSB/IMR Joint Workshop Oxide Electronics:A New Stone Age
	Japan Sendai 2004 9 7 – 2004 9 7
Invited	Japan-US Workshop on Combinatorial Material Science and Technology Spatial and temporal modulation of the temperature in thin film growth:a successful approach for realizing p-type ZnO
	Japan Okinawa 2004 12 8 – 2004 12 10
Invited	32nd Conference on the Physics and Chemistry of Semiconductor Interfaces(PCSI32) Current status and future challenges of oxide semiconductor technology
	USA Montana 2005 1 23 – 2005 1 27

Invited	Japan–USA Workshop on Combinatorial Materials Combinatorial Exploration of Oxide Semiconductors	USA	Dallas	2005 3 5 – 2005 3 7
Invited	International conference of the Creative Scientific Research program on “ Collaboratory on Electron Correlations –Toward a New Research Network between Physics and Chemistry–” Atomically Engineered Interface of Transition metal Oxides	Japan	Awaji	2005 3 11 – 2005 3 15
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FUKUMURA Tomoteru	Lecturer			
Poster	The Third Japan–U.S. Workshop on Combinatorial Materials Science Multiply transition–metal–doped TiO ₂ epitaxial thin film library	Japan	Okinawa	2004 12 8 – 2004 12 10
Poster	International Symposium on Frontier in Materials Design, Synthesis and Measurements Room temperature ferromagnetic oxide semiconductor: Co-doped TiO ₂	Japan	Awaji	2005 3 11 – 2005 3 15
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OHTOMO Akira	Res. Assoc.			
Invited	2004 MRS Spring Meeting Combinatorial integrations of oxide field effect transistors	USA	San Francisco	2004 4 12 – 2004 4 16
Invited	Zinc Oxide Workshop ZnO field effect devices	USA	Wailea	2004 5 16 – 2004 5 20
Poster	The 3rd Japan?U.S. Workshop on Combinatorial Materials Science Combinatorial studies of field effect transistors based on wide-gap oxide semiconductors	Japan	Okinawa	2004 12 8 – 2004 12 10
Poster	International Symposium on Frontier in Materials Design, Synthesis and Measurements (Creative Scientific Research on Collaboratory on Electron Correlations ? Towards a New Research Network between Physics and Chemistry) Electronic structures in perovskite titanate heterointerfaces	Japan	Awaji	2005 3 11 – 2005 3 15
Invited	APS March Meeting 2005 Artificial charge-modulation in atomic-scale perovskite titanate superlattices	USA	Los Angeles	2005 3 21 – 2005 3 25
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Oral The 3rd International Workshop on ZnO and Related Materials
A ZnO lateral superlattice: one dimensional grain boundary array in ZnO epitaxial layer
Japan Sendai 2004 10 5 – 2004 10 8

YAMADA Yasuhiro PhD student

Poster The 3rd International Conference on Physics and Applications of Spin Related Phenomena in Semiconductors
Bandgap engineered insulating $Ti_{1-x}Zr_xO_2$ epitaxial thin films
USA Santa Barbara 2004 7 21 – 2004 7 23

NISHII Junya PhD student

Poster Japan-US Workshop on Combinatorial Material Science and Technology
High-throughput Synthesis and Characterization of $Mg_{1-x}Ca_xO$ Film as a Lattice and Valence-matched Gate Dielectric for ZnO Based Field Effect Transistors
Japan Okinawa 2004 12 8 – 2004 12 10

Oral 32nd Conference on the Physics and Chemistry of Semiconductor Interfaces(PCS132)
ZnO field effect transistors
USA Montana 2005 1 23 – 2005 1 27

OHKUBO Atsushi PhD student

Poster Japan-US Workshop on Combinatorial Material Science and Technology
Optical Absorption Spectra of Interface Engineered $SrTiO_3/LaAlO_3$ Superlattices
Japan Okinawa 2004 12 8 – 2004 12 10

TSUKAZAKI Atsushi PhD student

Invited Zinc Oxide Workshop
Layer-by-layer growth of nitrogen doped ZnO single crystalline films
USA Hawaii 2004 5 17 – 2004 5 20

Oral 11th Workshop on Oxide electronics
Electroluminescent from ZnO p-i-n homojunction
Japan Hakone 2004 10 3 – 2004 10 5

Oral The 3rd International Workshop on ZnO and Related Materials
A homostructural ZnO p-i-n light emitting diode
Japan Sendai 2004 10 5 – 2004 10 8

Poster The 3rd International Workshop on ZnO and Related Materials
High electron mobility in ZnO thin films
Japan Sendai 2004 10 5 – 2004 10 8

FUJII Takeshi PhD student

Poster 11th Workshop on Oxide electronics
Pulsed-voltage induced resistance switching at $\text{SrRuO}_3/\text{Nb-doped SrTiO}_3$ interface
Japan Hakone 2004 10 3 – 2004 10 5

SUZUKI Takao PhD student

Oral	The 3rd International Workshop on ZnO and Related Materials Single-crystalline ZnO field effect transistors: A high-mobility channel fabricated in lattice-matched ZnO/ScAlMgO ₄ heterointerface	Japan	Sendai	2004 10 5 – 2004 10 8
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Non-Equilibrium Materials

INOUE Akihisa

Invited Tohoku University -Cambridge University Forum
Developments of New Metallic Materials by Using the Stabilization of Supercooled Liquid
UK Cambridge 2004 6 10 – 2004 6 13

Oral The 7th International Conference on Nanostructured Materials (NANO2004)
Soft Magnetic Properties of Fe-M-B (M=Transition and Rare Earth Metals)
Nanostructure Alloys and their Applications
Japan Sendai 2004 6 22 – 2004 6 24

Invited The third Advanced Science Institute on New Frontiers of Functional Materials
Stabilization of Supercooled Metallic Liquid and Bulk Glassy Alloys
Japan Miyagizao 2004 7 26 – 2004 7 28

Keynote The Fifth Pacific Rim International Conference on Advanced Materials and Processing (PRICM5)
Mechanical and Magnetic Properties of Fe- and Co-Based Bulk Glassy Alloys
China Beijing 2004.11.5 - 2004.11.7

Invited 49th Conference on Magnetism and Magnetic Materials (MMM2004)
Nanocrystalline Fe-Pt-B Base Hard Magnets with High Coercive Force Obtained
from Amorphous Precursor
USA Florida 2004 11 8 – 2004 11 11

Keynote 2004 International Symposium on Nano Science and Technology
Fabrication and Functional Characteristics of Fe- and Co-Based Bulk Glassy Alloys
Taiwan Taiwan 2004 11 20 – 2004 11 23

TAKEUCHI Akira Assoc. Prof.

Invited 85th work shop on amorphous -nano materials 147 committee
Development of Metallic Glassy by Thermal Dynamics
Japan Tokyo 2004 6 7 –

Oral 11th International Symposium on Metastable, Mechanically Alloyed and
Nanocrystalline Materials (SMANAM 2004)
Development of Metallic Glasses by Semi-Empirical Calculation Method
Japan Sendai 2004 8 21 – 2004 8 25

HASEGAWA Masashi Assoc. Prof.

Oral 11th International Symposium on Metastable, Mechanically Alloyed and
Nanocrystalline Materials (SMANAM 2004)
Electronic structure of compounds related to Zr-Ni-Al glassy alloys
Japan Sendai 2004 8 – 2004 8

LOUZGUINE Dmitri Res. Assoc.

Oral The 1st Symposium on Advanced Metallic Materials, Posco Center, Seoul, Korea
Nanoscale icosahedral phase formation in Cu-Zr-Ti-NM (NM=noble metals) bulk
glassy alloys
Korea Seoul 2004 4 7 – 2004 4 8

Oral 11th International Symposium on Metastable, Mechanically Alloyed and
Nanocrystalline Materials (SMANAM 2004)
Non-equilibrium arc-melted binary Ti-Fe bulk alloys with ultra-high strength and
enhanced ductility
Japan Sendai 2004 8 22 – 2004 8 26

KATO Hidemi Res. Assoc.

Poster 12th International Conference on Liquid and Amorphous Metals (LAM12)
Softening and heating behaviors during the nonlinear viscous flow and their influence
on glassy phase of Zr-based bulk metallic glasses
France Mets 2004 7 14 – 2004 7 16

Oral	11th International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials Influence of Pd Content and Hydrostatic Pressure during Casting on Structure and Strength of Zr-Al-Ni-Cu-Pd rods	Japan	Sendai	2004 8 22 – 2004 8 26
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Magnetic Materials

TAKANASHI Koki

Prof.

Invited	The 3rd International Workshop on Surface, Interface, and Thin Film Physics Spin dependent single electron tunneling in self-assembled magnetic nanoparticles	China	Shanghai	2004 5 27 – 2004 5 30
Invited	Tohoku–Cambridge Forum, Workshop I, Advances in Materials Science Spin dependent single electron tunneling in self-assembled magnetic nanoparticles	UK	Cambridge	2004 6 11 –
Invited	ECI "L ₁ ₀ Ordered Intermetallic and Related Phases for Permanent Magnet and Recording Applications" Nanostructure and high coercivity in sputtered FePt thin films	USA	Copper	2004 8 15 – 2004 8 20
Invited	Joint European Magnetic Symposia Nanostructure and magnetic properties in highly coercive FePt films	Germany	Dresden	2004 9 5 – 2004 9 10
Invited	The Magnetics Society of Japan, The First Asia Forum "Ordered Magnetic Alloys" Nanostructure and magnetic properties in highly coercive FePt films	Japan	Okinawa	2004 9 22 –

MITANI Seiji

Assoc. Prof.

Invited	7th Oxford–Kobe Materials Seminar: Spintronic Materials and Technology Spin dependent single electron tunneling and spin accumulation in self-assembled nanoparticles	Japan	Kobe	2004 9 1 – 2004 9 4
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OBI Yoshihisa

Res. Assoc.

Poster The International Conference on Strongly Correlated Electron Systems
Dense Kondo behavior in the electric resistivity and the specific heat of amorphous
C_xMn100-x alloy
Germany Karlsruhe 2004 7 26 – 2004 7 30

SHIMA Toshiyuki

Res. Assoc.

Oral ECI "L₁₀ Ordered Intermetallic and Related Phases for Permanent Magnet and
Recording Applications"
Nucleation-type magnetization behavior in epitaxially grown FePt island-like films
USA Copper 2004 8 15 – 2004 8 20

Oral 18th International Workshop on High Performance Magnets and their Applications
Achievement of high coercivity for FePt particulate films magnetized at low applied
field
France Annecy 2004 8 30 – 2004 9 2

YAKUSHIJI Kei

Res. Assoc.

Oral 5th International Symposium on Metallic Multilayers
Spin accumulation effect on spin-dependent single-electron tunneling in ferromagnetic
nanoparticles
USA Boulder 2004 6 7 – 2004 6 11

Crystal Chemistry

UDA Satoshi

Prof.

Invited International Conference on Crystal Growth XIV
Growth technology of piezoelectric langasite single crystal
France Grenoble 2004 8 9 – 2004 8 13

Oral International Conference on Crystal Growth XIV
The effect of an external electric field on the growth of incongruent-melting material
France Grenoble 2004 8 9 – 2004 8 13

HUANG Xinming

Assoc. Prof.

Invited The 14th inter. conf. Cryst. Growth
Heavily Doped Silicon Crystals: Neck-less Growth and Robust Wafers
France Grenoble 2004 8 9 – 2004 8 13

Poster The 14th inter. conf. Cryst. Growth
Robust Si wafer
France Grenoble 2004 8 9 – 2004 8 13

KOU Shinii

Res. Assoc.

Poster 1st IEEE International Conference on Group IV Photonics
Fabrication of p-i-n Si0.5Ge0.5 photodetectors on SiGe-on-Insulator Substrates
Hong Kong Hong Kong 2004 9 29 – 2004 10 1

Oral International Conference on Crystal Growth XIV
Growth of Functional Structures on SiGe-on-Insulator Substrate with high Ge Content
France Grenoble 2004 8 9 – 2004 8 13

Poster Third International Workshop on New Group IV Semiconductors
Fabrication of p-i-n SiGe photodetectors on SiGe-on-Insulator Substrates
Japan Sendai 2004 10 12 – 2004 10 13

TSUNEKAWA Shin

Res. Assoc.

Poster Rare Earths '04
Nano-Science of Cerium Oxides from the Experiments and First-Principles
Calculations
Japan Nara 2004 11 7 – 2004 11 12

High-Temperature Materials Science

ORIMO Shin-ichi

Assoc. Prof.

Invited International Union of Pure and Applied Physics, Workshop on Energy
Hydrogen Storage for Energy Applications
Japan Ueno 2004 5 13 –

Oral 15th World Hydrogen Energy Conference (WHEC)
Materials Designing of Li-based Complex Hydrides for Hydrogen Storage
Japan Yokohama 2004.6.27 - 2004.7.2

Oral	2004 International Energy Agency, Task 17–Semiannual Workshop Development of nanostructured Li-based composite hydrides	Norway	Oeystese	2004 7 6 – 2004 7 9
Poster	11th International Symposium on Metastable,Mechanically Alloyed and Nanocrystalline Materials Structural and hydriding properties of the Mg–Ni–H system with nano-and/or amorphous structures	Japan	Sendai	2004 8 22 – 2004 8 26
Poster	The International Symposium on Metal Hydrogen Systems,Fundamentals and Applications–MH2004 Dehydriding and rehydriding reactions of LiBH ₄	Poland	Cracow	2004 9 5 – 2004 9 10
Invited	ASM–International Conference, Materials Challenges for Hydrogen Storage Advanced hydrogen storage propertise of Li-based complex hydrides	USA	Columbus	2004 10 18 – 2004 10 20
Invited	The Fifth Pacific Rim International Conference on Advanced Materials and Processing Lithium-based Complex Hydrides for Solid-State Hydrogen Storage	China	Beijing	2004 11 2 – 2004 11 5
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NAKAMORI Yuko	Res. Assoc.			
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Oral	The International Symposium on Metal Hydrogen Systems,Fundamentals and Applications–MH2004 Hydrogen storage properties of Li–Mg–N systems	Poland	Cracow	2004 9 5 – 2004 9 10
Poster	The International Symposium on Metal Hydrogen Systems,Fundamentals and Applications–MH2004 First principles study on lithium borohydride LiBH ₄	Poland	Cracow	2004 9 5 – 2004 9 10
Keynote	ASM Materials Solutions Conference,13th International Symposium on Processing and Fabrication of Advanced Materials Complex Hydrides for Solid-State Hydrogen Storage	Singapore	Singapore	2004 12 6 – 2004 12 8
Oral	2004 International Energy Agency, Task 17–Semiannual Workshop, Development of nanostructured Li-based composite hydrides Solid and Liquid State Hydrogen Strage Materials	USA	Hiltonhead	2005 2 13 – 2005 2 17

Multi-Functional Materials Science

GOTO Takashi

Prof.

Keynote The 2nd International Conference on Technological Advances of Thin Films & Surface Coatings (Thin Films 2004)
 Thermal barrier coatings deposited by laser CVD
 Singapore Singapore 2004 7 13 – 2004 7 17

Invited International Symposium in Honor of Professor Katsutoshi Komeya ; Synthesis, Processing and Applications of Advanced Ceramics
 High-speed oxide coatings by laser CVD for engineering applications
 Japan Kobuchizawa 2004 9 5 – 2004 9 7

Invited Fifth International Conference on High Temperature Ceramic Matrix Composites (HTCMC-5)
 Preparation of YSZ coatings by laser CVD at extremely high deposition rate
 USA Seattle 2004 9 12 – 2004 9 16

Invited EnCera 04 (The 3rd International Symposium on the Science of Engineering Ceramics)
 Laser chemical vapor deposition for thick oxide coatings
 Japan Osaka 2004 10 31 – 2004 11 3

Invited The 5th Pacific Rim International Conference on Advanced Materials and Processing (PRICM-5)
 Laser CVD process for high speed deposition of YSZ films
 China Beijing 2004 11 2 – 2004 11 5

Invited Second Japan-Australia Workshop on Advanced Materials
 Application of laser CVD for thermal barrier coatings
 Australia Sydney 2004 12 5 – 2004 12 7

Invited International Symposium for Interface Oral Health Science
 Surface coating technology for biomaterials: Morphology and nano-structure control
 Japan Sendai 2005 2 2 – 2005 2 3

TU Rong

Res. Assoc.

Oral The 5th Pacific Rim International Conference on Advanced Materials and Processing (PRICM-5)
 Preparation of rutile and anatase TiO₂ films by MOCVD
 China Beijing 2004 11 2 – 2004 11 5

KIMURA Teiichi

Res. Assoc.

Oral	The 2nd International Conference on Technological Advances of Thin Films & Surface Coatings (Thin Films 2004) Ir-YSZ Nano-composite Electrodes for Oxygen Sensors Singapore	Singapore	2004 7 13 – 2004 7 17
Oral	The 2nd International Conference on Technological Advances of Thin Films & Surface Coatings (Thin Films 2004) Thermal Conductivities of Yttria-stabilized Zirconia Films Measured by a Laser-heating Singapore	Singapore	2004 7 13 – 2004 7 17
Oral	11th International Symposium on Metastable, Mechanically Alloyed and Nanocrystalline Materials Preparation of noble metal (Ru, Ir)-carbon nano-composites by MOCVD as catalytic electrode for oxygen sensors Japan	Sendai	2004 8 22 – 2004 8 26
Poster	2nd International Workshop for Advanced Ceramics Nano-structures of YSZ films prepared by laser chemical vapor deposition Japan	Nagahama	2004 11 5 – 2004 11 6
Oral	The 43rd Symposium on Basic Science of Ceramics, World Young Ceramist Meeting Preparation of Y_2O_3 films by laser chemical vapor deposition Japan	Chiba	2005 1 20 – 2005 1 21

LI Wen jun

Post Doctoral Researcher

Oral	The 43rd Symposium on Basic Science of Ceramics, World Young Ceramist Meeting Preparation of TiC-TiB ₂ -SiC system composites by melt-solidification process Japan	Chiba	2005 1 20 – 2005 1 21
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ITO Akihiko

PhD student

Oral	The 5th Pacific Rim International Conference on Advanced Materials and Processing (PRICM-5) Electrical conductivity of SrRuO ₃ thin films prepared by laser ablation China	Beijing	2004 11 2 – 2004 11 5
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Deformation Processing

HANADA Shuji

Prof.

Oral	ASM Material & Processes for Medical Devices Conference Development of Beta Titanium Alloys with Low Young's Modulus	USA	St.Paul	2004 8 25 – 2004 8 27
Oral	SMST-Europe2004 Elastic deformation behavior of Ti–Nb–Sn thin wires and sheets	Germany	Baden-Baden	2004 10 3 – 2004 10 7
Oral	PM2004 Mechanical properties of porous titanium compacts synthesized by powder sintering	Austria	Vienna	2004 11 17 – 2004 11 21
Poster	AUSTCERAM2004 Fabrication of pure Al/Mg–Li alloy clad plate and its mechanical properties	Australia	Melbiurune	2004 11 29 – 2004 12 1

MASAHASHI Naoya

Assoc. Prof.

Invited	International Conference on New Frontiers of Process Science and Engineering in Advanced Materials Fabrications and Corrosion resistance of Iron-Aluminum Alloy/High Carbon Steel Composites prepared by Clad Rolling	Japan	Kyoto	2004 11 24 – 2004 11 26
Invited	The 13th International Symposium on Processing and Fabrication of Advanced Material on ASM Material's Solution Conference Fracture Behavior and Microstructural Changes of Niobium by Hydrogenation	Singapore	Singapore	2004 11 29 – 2004 12 3

Radiochemistry of Metals

SHIOKAWA Yoshinobu

Prof.

Oral	34iemis Journees des Actinides Uranium Redox Flow Battery	Germany	Heidelberg	2004 4 17 – 2004 4 20
Oral	5th International Conference on f-elements Preparation of Electropositive metals by Hydrometallurgy	Slovakia	Herlany	2004 5 25 – 2004 5 28

Invited International Conference Rare Earths '04 in Nara
Uranium Redox Flow Battery
Japan Nara 2004 11 7 – 2004 11 12

YAMAMURA Tomoo Res. Assoc.

Oral	The first COE-INS international symposium, INES-1 "Innovative nuclear energy systems for sustainable development of the world" An extreme disposition method for radioactive organic wastes in nuclear power plants using supercritical water with RuO ₂ catalyst
Japan	Tokyo

Poster International Conference Rare Earth in Nara
Crystal Structure and Magnetic States of U_2TSi_3 (T=Fe,Pt,Ir)
Japan Nara 2004 11 7 – 2004 11 12

HOMMA Yoshiya Res. Assoc.

Poster International Conference of Strong Correlated System (SCES2004)
Magnetic Ordering in Ternary Germanide Nd_2CuGe_6
Germany Karlsruhe 2004 7 26 – 2004 7 30

LI Dexin Res. Assoc.

Poster International Conference on Strongly Correlated Electron Systems
Specific Heat and AC Susceptibility of UAuAl
Germany Karlsruhe 2004 7 26 – 2004 7 30

Poster International Conference on Rare Earths'04 in Nara, Japan
Microscopic Magnetism of NpFeGa_5
Japan Nara 2004 11

A.V.Andreev Visiting Prof.

Invited Workshop on the New Phenomena in the Exotic Electron Systems
 Magnetism and magnetoelasticity of uranium intermetallics
 Japan Fukuoka 2004 11 5 – 2004

Poster International Conference Rare Earth in Nara
Influence of Isolelectronic Substitutions on Magnetism of UCoAl
Japan Nara 2004 11 7 – 2004 11 12

Poster International Conference Rare Earth in Nara
Magnetostriction Study of $U_{0.8}Lu_{0.2}Fe_2$ Sibgle Crystal
Japan Nara 2004 11 7 – 2004 11 12

SIROZAKI Kenji PhD student

Poster International Conference Rare Earth in Nara
Preparation of Active Materials of Uranium Redox Flow Battery at Discharged and Charged States
Japan Nara 2004 11 7 – 2004 11 12

Analytical Science

WAGATSUMA Kazuaki Prof.

Oral ASIANALYSIS VII
Sampling modulation technique in radio-frequency powered glow discharge emission source by pulsed laser ablation
Hong Kong Hong Kong 2004 7 27 – 2004 7 31

Oral The 31st Annual Conference of the Federation of Analytical Chemistry and Spectroscopy Societies
Study on applications of dc voltage modulation technique in GD-OES for a thin film analysis
USA Portland 2004 10 6 – 2004 10 10

Invited The 12th Symposium on Laser Spectroscopy
Laser-ablation sampling technique in helium radio-frequency glow discharge optical emission spectrometry
Korea Daejeon 2004 11 4 – 2004 11 5

Invited The 10th International Symposium on Advanced Analytical Techniques and Applications
Emission characteristics of helium radio-frequency glow discharge plasma associated with Nd:YAG laser irradiation
Korea Daejeon 2004 11 6 – 2004 11 8

Oral European Winter Conference on Plasma Spectrochemistry:
Development of helium radio-frequency glow discharge plasma source associated with laser ablation sampling
Hungary Budapest 2005 1 30 – 2005 2 3

TAKADA Kunio

Lecturer

Oral	11-th International Conference on Ultra-High Purity Base Metals, UHPM-2004 Effect of removal of major component of determination of ultra-trace elements in high-purity iron and iron-based alloy	USA	Gaithersburg	2004 12 6 – 2004 12 9
Oral	11-th International Conference on Ultra-High Purity Base Metals, UHPM-2004 Trace analysis of ultra-high purity iron ---- Results of RRT on Fe-C, Fe-S and Fe-O alloys	USA	Gaithersburg	2004 12 6 – 2004 12 9
Oral	11-th International Conference on Ultra-High Purity Base Metals, UHPM-2004 Determination of ultra-trace amount of sulfur in ultrahigh-purity iron by high-resolution ICP-MS with sulfide solution	USA	Gaithersburg	2004 12 6 – 2004 12 9

MATSUTA Hideyuki

Res. Assoc.

Oral	Asian International Symposium on Instrumental Analysis of Various Materials Emission Intensity Modulation of radio frequency helium glow-discharge emission sources by laser ablation	Japan	Sendai	2004 7 23 – 2004 7 25
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PARK Hyun Kook

Res. Assoc.

Poster	32nd The Federation of Analytical Chemistry and Spectroscopy Societies Study on applications of dc voltage modulation technique for a thin film analysis	USA	Portland	2004 10 3 – 2004 10 10
Poster	The 10th International Symposium on Advanced Analytical Techniques and Applications Study on a dc voltage modulation technique in glow discharge optical emission spectrometry(GD-OES) for a thin film analysis	Korea	Daejeon	2004 11 5 – 2004 11 8

ASHINO Tetsuya

Res. Assoc.

Oral	Asian International Symposium on Instrumental Analysis of Various Materials, AISIA Determination of Ultra Trace Selenium, Tellurium, Gold and Silver in Several Metal Samples by Electrothermal Atomic Absorption Spectrometry after Reductive Co-precipitation with Palladium	Japan	Sendai	2004 7 23 – 2004 7 25
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Oral International Conference on Ultra High Purity Metallic Base Metals, UHPM-2004
Effect of removal of major component on determination of ultra-trace elements in
high-purity iron and iron-based alloy

USA

Gaithersburg

2004 12 6 – 2004 12 9
