

FMS2015 Program

Nov. 19 -21, 2015, Waseda University, Tokyo, Japan

DAY 1 (11/19, Thu.)

1 st Floor, Bldg. #63	
17:00-20:00	Registration (1 st floor, Bldg. #63)
18:00-20:00	Welcome Reception (1 st floor, Bldg. #62 : Meeting room-M)

DAY 2 (11/20, Fri)

63-03,04,05 Meeting room (2 nd Floor, Bldg #63)			
9:00-9:30	Opening		
Plenary Session #1 (Chair: Katsuyuki Matsunaga, Kazuaki Toyoura)			
9:30-10:00	Plenary-1: <u>Fumiyasu Oba</u> Accurate Predictions of Defect Properties in Semiconductors: Towards Understanding and Screening of Materials		
10:00-10:30	Plenary-2: <u>Markus Münzenberg</u> Ultrafast Dynamics of Spins and Spin Currents: Magnetic Storage, Spintronic Devices and Topological Insulators		
10:30-11:00	Coffee (1 st Floor, Bldg. #63)		
	Session R1-1, 63-2-03(2nd Floor, Bldg #63) (Chair: Shigemi Mizukami, Andy Thomas)	Session R2-1, 63-2-04 (2nd Floor, Bldg #63) (Chair: Yoichi Horibe, Nam-Nhat Hoang)	Session R3-1, 63-2-05 (2nd Floor, Bldg #63) (Chair: Taisuke Ozaki, Duc-Thang Pham)
11:00-11:30	R1-1-1: <u>Manfred Albrecht (Invited)</u> Amorphous Ferrimagnetic Tb-Fe Thin Films: Coupling Phenomena and All-Optical Helicity Dependent Magnetic Switching	R2-1-1: <u>Jens Müller (Invited)</u> Studying Charge Carrier Dynamics by Fluctuation Spectroscopy – An Overview	R3-1-1: <u>Ryoji Funahashi (Invited)</u> Development of Thermoelectric Materials and Application
11:30-12:00	R1-1-2: <u>Bernd Wolf (Invited)</u> Magnetic Cooling in Frustrated Magnets Close to a Quantum Phase Transition	R2-1-2: <u>Atsutomo Nakamura (Invited)</u> Electrical Conductivity at Artificial Charged Domain-Walls in LiNbO ₃	R3-1-2: <u>Van-Hong Le (Invited)</u> Piezoelectric Properties of BaZr _{0.2} Ti _{0.8} O ₃ -Ba _{1-x} Ca _x O ₃ (x=0.10-0.35)
12:00-12:30	R1-1-3: <u>Merlin Pohlit (Invited)</u> Micro-Hall Magnetometry: Stray-Field Studies on Ferromagnetic Direct-Write Nanostructures	R2-2-3: <u>Eita Tochigi (Invited)</u> TEM Characterizations of Low-angle Grain Boundaries of α -Al ₂ O ₃	R3-1-3: <u>Chikako Moriyoshi (Invited)</u> Electron Density Study of Ferroelectric Oxides by Synchrotron X-ray Diffraction

12:30-13:00	Poster Preview session #1 (Chair: Hidenobu Murata)	Poster Preview Session #2 (Chair: Tetsuya Tohei)	Poster Preview Session #3 (Chair: Hidekazu Ikeno)
13:00-14:00	Lunch		
14:00-14:30	Poster session (1 st Floor, Bldg. #63)		
	Session R1-2, 63-2-03(2nd Floor, Bldg #63) (Chair: Manfred Albrecht, Bernd Wolf)	Session R2-2, 63-2-04 (2nd Floor, Bldg #63) (Chair: Jens Müller, Atsutomo Nakamura)	Session R3-2, 63-2-05 (2nd Floor, Bldg #63) (Chair: Van-Hong Le, Chikako Moriyoshi)
14:30-15:00	R1-2-1: <u>Shigemi Mizukami (Invited)</u> THz Magnetization Precession for a Tetragonal Heusler-Like Compensated Ferrimagnet	R2-2-1: <u>Yoichi Horibe (Invited)</u> Nano-sized Checkerboard Domains in Manganese Spinel Oxides	R3-2-1: <u>Taisuke Ozaki (Invited)</u> O(N) Krylov Subspace Density Functional Methods and Its Applications to Complicated Interface Structures
15:00-15:30	R1-2-2: <u>Andy Thomas (Invited)</u> Atomic Layer Deposited HfO ₂ -Based Magnetic Tunnel Junctions	R2-2-2: <u>Wataru Norimatsu (Invited)</u> Epitaxial Graphene Growth on SiC and Its Electronic Functionalization	R3-2-2: <u>Kazuaki Toyoura (Invited)</u> Correlation between Ionic Conduction and Crystal Structures in Proton-Conducting Oxides - A First-Principles Study
15:30-15:50	R1-2-3: <u>Thanh-Cong Pham (Invited)</u> Magneto-Acoustic Studies of Frustrated Quantum Magnets	R2-2-3: <u>Akiko Sekine (Invited)</u> In situ Control of Solid-State Photochromic Reactivity in Dual Photoreactive Cobaloxime Crystals	R3-2-3: <u>Uichiro Mizutani (Invited)</u> Role of FLAPW-Fourier-theory Derived Electrons per Atom Ratio, e/a, for 54 Elements in the Periodic Table Including All Transition Metal Elements
15:50-16:20	R1-2-4: <u>Teruyasu Mizoguchi (Invited)</u> Individual Dopant and Nano-Scale Phase Separation in Glass Investigated Using STEM, EELS, and Theoretical Calculations	R2-2-4: <u>Akihiko Hirata (Invited)</u> Direct Observation of Short- to Medium-Range Order in Metallic Glasses	R3-2-4: <u>Koretaka Yuge (Invited)</u> Equilibrium Macroscopic Structure Revisited From Spatial Constraint
16:20-16:40	R1-2-5: <u>Duc-Thang Pham (Invited)</u> Ablation Process of Nanostructured Oxide-based Composites	R2-2-5: <u>Tristan Barbier (Invited)</u> Relationship between the Structural, Magnetic Properties and the High Permittivity Observed in a Complex Hexagonal Perovskite	R3-2-5: <u>Masaya Ukita</u> First-Principles Thermodynamics in CaCO ₃ polymorphs
16:40-18:20	Poster Session (16:40-17:30 Odd number, 17:30-18:20 Even number, 1 st Floor, Bldg. #63)		
18:30-20:30	Banquet (1 st Floor, Bldg. #63)		

DAY 3 (11/21, Sat.)

	Session R1-3, 62-L (1st Floor, Bldg #62) (Chair: Akihide Kuwabara, Hidenobu Murata)	Session R2-3, 62-M (1st Floor, Bldg #62) (Chair: Fabio Pichierri, Jürgen Schnack)	Session R3-3, 63-2-05 (2nd Floor, Bldg #63) (Chair: Hajime Hojo, Henning Ulrichs)
8:30-9:00	R1-3-1: <u>Hidehiro Yoshida (Invited)</u> Doping Effect on Grain Boundary Nanostructure and High Temperature Mass Transport Phenomena in Polycrystalline Ytria	R2-3-1: <u>Harald Jeschke (Invited)</u> Effects of Doping and Pressure in Copper Based Kagome Materials: spin Liquid and Strongly Correlated Dirac Metal	R3-3-1: <u>Stefan Mathias (Invited)</u> Ultrafast Laser-Induced Charge- and Spin-Dynamics in Alloys and Multilayer Structures
9:00-9:30	R1-3-2: <u>Thanh-Cong Bach (Invited)</u> Magnon Spectrum at the Symmetric and Antisymmetric Exchange Interactions in Ultrathin Films	R2-3-2: <u>Chiara Botta (Invited)</u> Aggregation Induced Emission in Organic and Organometallic Compounds	R3-3-2: <u>Takashi Kimura (Invited)</u> Efficient Spin Injection and Absorption Using CoFe-Based Alloys and Its Application
9:30-9:50	R1-3-3: <u>Takuya Satoh</u> One to One Mapping of Optical Polarization to Magnetic Oscillations in Hexagonal YMnO ₃	R2-3-3: <u>Miroslav Dramićanin</u> Judd-Ofelt Analyses of Europium(III) Emission in TiO ₂ Nanoparticles Co-Doped With Li Ions	R3-3-3: <u>Masashi Akabori (Invited)</u> Characterization of Spin-Orbit Coupling in Gated Wire Structures Using In _{0.75} Ga _{0.25} As/In _{0.75} Al _{0.25} As Inverted Heterojunctions
9:50-10:10	R1-3-4: <u>Lee Burton</u> Computational Analysis of the Effect of Layered Materials in Photovoltaic Devices	R2-3-4: <u>Kouta Imaizumi</u> First-Principles Analysis of oxide-Ion Conductions in Apatite-Type Lanthanum Silicate and Germanate	R3-3-4: <u>Shuichi Kawamata</u> Effective Mass of Two-dimensional Electrons in InGaAsN/GaAsSb TypeII Quantum Well by Shubnikov-de Haas Oscillation
10:10-10:30	Coffee (1 st Floor, Bldg. #63)		
	Session R1-4, 62-L (1st Floor, Bldg #62) (Chair: Masahiro Nagao, Ikuya Yamada)	Session R2-4 62-M (1st Floor, Bldg #62) (Chair: Hiroki Moriwake, Hiroki Taniguchi)	Session R3-4, 63-2-05 (2nd Floor, Bldg #63) (Chair: Stefan Mathias, Takashi Kimura)
10:30-11:00	R1-4-1: <u>Tetsuya Tohei (Invited)</u> Phonon and Related Properties of Ceramics Materials from First Principles Calculations	R2-4-1: <u>Fabio Pichierri (Invited)</u> Computational Design of Soft Materials for the Capture of Cs-137	R3-4-1: <u>Hajime Hojo (Invited)</u> Ferromagnetism at Room Temperature Induced by Spin Structure Change in BiFe _{1-x} Co _x O ₃
11:00-11:20	R1-4-2: <u>Abel Carreras Conill</u> Lattice Anharmonicity from MD Calculations Using DynaPhoPy	R2-4-2: <u>Linh-Trung Nguyen (Invited)</u> Chaotic Compressed Sensing and Its Application to Magnetic Resonance Imaging	R3-4-2: <u>Akihide Kuwabara (Invited)</u> First-Principles Calculation of Hydration Reaction in Acceptor-doped Rare-Earth Phosphates

11:20-11:50	R1-4-3: <u>Hidekazu Ikeno (Invited)</u> First-Principles Analysis of X-ray Magnetic Circular Dichroism for Transition Metal Oxides	R2-4-3: <u>Jürgen Schnack (Invited)</u> Magnetism of Free and Deposited Magnetic Molecules	R3-4-3: <u>Henning Ulrichs (Invited)</u> Spin-Current and Thermally Induced Magnetic and Elastic Dynamics in Thin-film Nanostructures
11:50-12:10	R1-4-4: <u>Nam-Nhat Hoang (Invited)</u> Time-Dependent DFT Study of New Observable Quantum Surface Effects in Colloidal ZnS	R2-4-4: <u>JooHWi Lee</u> Band-Gap Prediction of AX Binary Compounds by Combination of Density Functional Theory and Machine Learning Techniques	R3-4-4: <u>Yu Kumagai</u> Theory of Ionization Potentials of Solids
12:10-12:30	R1-4-5: <u>Yoshifuru Mitsui</u> Magnetic-Field-Induced Reaction in Bi-Mn Alloys		R-3-4-5: <u>Shunsuke Chikada</u> Effects of Interactions between Doped Mn and Oxygen Vacancy in BaTiO ₃ on Insulation Resistance and Reliability
12:30-13:30	Lunch		
13:30-14:00	Poster Session (1 st Floor, Bldg. #63)		
	Session R1-5, 62-L (1st Floor, Bldg #62) (Chair: Ryoji Funahashi, Akihiko Hirata)	Session R2-5, 62-M (1st Floor, Bldg #62) (Chair: Harald Jeschke, Chiara Botta)	Session R3-5, 63-2-05 (2nd Floor, Bldg #63) (Chair: Koretaka Yuge, Tetsuya Tohei)
14:00-14:30	R1-5-1: <u>Masahiro Nagao (Invited)</u> Lorentz Transmission Electron Microscopy Study of Magnetic Skyrmions in Chiral Magnets	R2-5-1: <u>Hiroki Moriwake (Invited)</u> Functional Electronic Ceramic Materials Research by Collaboration between Atomic Level Structure Analysis and Theoretical Calculations	R3-5-1: <u>Hidenobu Murata (Invited)</u> First-Principles Calculations for Phase Transition of High-Pressure Phase of TiO ₂ during Decompression
14:30-14:50	R1-5-2: <u>Gabriel Sánchez</u> Resonant Tunneling Across an Artificial Multiferroic Tunnel Junction	R2-5-2: <u>Kazuhito Takeuchi</u> Efficient Configuration Sampling in Alloys to Obtain the Density of States	R3-5-2: <u>Abdul Majid (Invited)</u> Band Gap Dependence of Exchange Interactions in III-Nitride Based Diluted Magnetic Semiconductors
14:50-15:20	R1-5-3: <u>Ikuya Yamada (Invited)</u> Novel Quadruple Perovskite Catalysts for Oxygen Evolution Reaction	R2-5-3: <u>Hiroki Taniguchi (Invited)</u> Toward the Development of New Ferroelectric Oxides	R3-5-3: <u>Nobufumi Ueshima (Invited)</u> Significance of Nucleation Stage on Selective Variant Growth in FePd under External Magnetic Fields: Phase-Field Modeling

15:20-15:40	R1-5-4: <u>Yuki Sakai</u> Negative thermal expansion in A- or B-site substituted BiNiO ₃	P2-5-4: <u>Takuro Kinoshita</u> Research on Activation of N ₂ Adsorption on Transition Metals Surfaces Based on Density Functional Theory	R3-5-4: <u>Shaojie Hu</u> Indirect Detection of Magnetization Direction Using Thermal spin Injection
Plenary Session #2 (Chair: Markus Münzenberg, Thanh-Cong Bach), 57-202 (2nd Floor, Bldg. #57)			
15:40-16:10	Coffee (2 nd Floor, Bldg. #57)		
16:10-16:40	Plenary-3: <u>Vinh-Hung Tran</u> Low-Temperature Physical Properties of Nano TiO ₂ and Ag-TiO ₂		
16:40-17:10	Plenary-4: <u>Motoko Kotani</u> Mathematical Challenge to Structural Understanding of Materials		
17:10-17:40	Award Ceremony and Closing Remarks		

Posters

Poster Preview Session: (63-2-03, 04, 05, 2nd Floor, Bldg. #63)
12:30-13:00, 11/20(Fri)

Poster Session (1st Floor, Bldg. #63)

#1: 14:00-14:30, 11/20(Thu)

#2: 16:40-17:30, 11/20(Fri) Odd number posters

#3: 17:30-18:20, 11/20(Fri) Even number posters

#4: 13:30-14:00, 11/20(Sat)

Poster Preview Session #1 (63-2-03, 2 nd Floor, Bldg. #63)	Poster Preview Session #2 (63-2-04, 2 nd Floor, Bldg. #63)	Poster Preview Session #3 (63-2-05, 2 nd Floor, Bldg. #63)
P1-1: <u>Keiichi Koyama</u> Magnetic Properties of Mn _{1.9} Cu _{0.1} Sb under High Pressure	P2-1: <u>Hideaki Takagi</u> Structural Analysis of Polymer Thin Films using GISAXS in the Soft X-ray Resion	P3-1: <u>Hiroimi Oda</u> Prediction of Structure and Energy of BCC Grain Boundaries
P1-2: <u>Masahiro Hirashima</u> Magnetocaloric properties of (MnFe) ₂ PGe and (MnFe) ₂ PSi	P2-2: <u>Kota Tomita</u> Exitonic Effect on Na-L _{2,3} edge XANES	P3-2: <u>Junya Terasaka</u> Proton and Hydroxide-ion Conduction in Tin Pyrophosphate Analyzed by First-principles Calculations
P1-3: <u>Kentaro Kojima</u> Crystallographic Features of Orbital Ordering Related to the C-type Antiferromagnetic State in the Highly-correlated Electronic System Ca _{1-x} Pr _x MnO ₃	P2-3: <u>Hiroataka Katsukura</u> Effect of Van der Waals Interactions for Theoretical Calculation of Liquid ELNES	P3-3: <u>Yuji Ikeda</u> First-Principles Calculation Method of Phonon Frequencies for Disordered Magnetic Alloys at Finite Temperatures
P1-4: <u>Kosuke Ozono</u> Magnetic and Structural Properties of MnCo _{1-x} Fe _x Ge (0 ≤ x ≤ 0.12)	P2-4: <u>Yuho Furushima</u> Atomic Structure and Electric Property of (0001)/<11-20> Low-Angle Tilt Grain Boundary in LiNbO ₃	P3-4: <u>Akira Takahashi</u> Representation of Many-Body Effect for Constructing Interatomic Potential with Machine Learning Technique
P1-5: <u>Yoshiki Ito</u> Heat Generation Ability in AC magnetic Field of MgAl _x Fe _{2-x} O ₄ Ferrite Powder Prepared by Sol-Gel method	P2-5: <u>Tomohiro Miyata</u> Molecular Vibrational Measurement of Localized Areas in a Liquid	P3-5: <u>Kazuki Shitara</u> Local Environment of Oxygen Atoms in δ-Bi ₂ O ₃ Solutions; First-principles Molecular Dynamics Study
P1-6: <u>Taiga Shiraishi</u> The Magnetic Properties for Mg _{1-x} CuXFe ₂ O ₄ Having High Heat Generation Ability in an AC Magnetic Field	P2-6: <u>Yoichi Shimbo</u> Fabrication of Ferromagnetic Dislocations along SrTiO ₃ Grain Boundary by Mn-Doping	P3-6: <u>Craig Fisher</u> Molecular Dynamics Simulations of NiO/YSZ Heterointerfaces

<p>P1-7: <u>Duy-Truong Quach</u> Correlation of Hysteresis Loop and Domain Structure of CoFeB/Pd</p>	<p>P2-7: <u>Akihito Ishihara</u> Atomic-Scale Fracture Behavior of a Doped Alumina $\Sigma 13$ Grain Boundary</p>	<p>P3-7: <u>Takafumi Ogawa</u> First-Principles Calculations of Point Defect Formation in $Y_2Ti_2O_7$ Pyrochlore</p>
<p>P1-8: <u>Dong-Hyun Kim</u> Nanometer-Scale Local XMCD Mapping for Co/Pt Multilayer Films Using Scanning Transmission X-ray Microscopy</p>	<p>P2-8: <u>Taoto Wakamori</u> High Field X-ray Diffraction Measurements in Ge-Substituted Mn_2Sb</p>	<p>P3-8: <u>Yosuke Suzuki</u> Stable Crystal Structures of Intermetallics Containing Modifier Elements for Refinement of Eutectic Si in Al-Si Alloys</p>
<p>P1-9: <u>Chisato Murayama</u> Correlation between Magnetism and Crystal Structure in the Layered Chalcogenide $FePS_3$</p>	<p>P2-9: <u>Bin Feng</u> Atomic Structure and Quantitative Determination of Oxygen Nonstoichiometry in CeO_2 Grain Boundaries</p>	<p>P3-9: <u>Daisuke Kanayama</u> Impacts of Impurities Doped in Magnéli Phases Ti_nO_{2n-1} on Thermoelectric Properties by first principles Calculations</p>
<p>P1-10: <u>Morishige Yoneda</u> Simulation of Magnetic Hysteresis Curves in the Spin Valve System by Fe_3O_4</p>	<p>P2-10: <u>Satoru Yoshioka</u> XAFS Study of Hydrogen Absorption in Palladium Nanoparticles</p>	<p>P3-10: <u>Susumu Fujii</u> Systematic Calculations for Phonon Thermal Conductivity and its Underlying Mechanism in Layered Cobaltites</p>
<p>P1-11: <u>Masahide Shibata</u> Solubilization of Membrane Proteins in an Aqueous Buffer Using the Polymer Conjugated PG-Surfactants</p>	<p>P2-11: <u>Kouichi Masuda</u> Electronic Structure Analysis of $RE_{1-x}Sr_xCoO_3$ (RE = La, Pr, Nd) by Co-L₃ X-ray Absorption Spectra</p>	<p>P3-11: <u>Yuki Obukuro</u> First-Principles Study on Electronic Structure of $LaYbO_3$</p>
<p>P1-12: <u>Seong Huh</u> Experimental and Theoretical Investigation of the Gas Sorption Properties of a 3D In-NDC Metal-Organic Framework</p>	<p>P2-12: <u>Tatsuya Suzuki</u> Observation of Structural Phase Transition in $EuBaCo_2O_{5+\delta}$</p>	<p>P3-12: <u>Noriko Otani</u> Cluster Expansion Studies of Ti-V Dihydride Solid Solutions</p>
<p>P1-13: <u>Eun-Hee Kim</u> Effects of the Temperature on the Self-Healing of Poly(styrene-co-methacrylic acid) Ionomers</p>	<p>P2-13: <u>Shaohua Li</u> Coherent-Incoherent-Transition of γ-γ' Interface during Hot Deformation in Ni-based alloy 730</p>	<p>P3-13: <u>Ryohei Tanaka</u> First-Principles Study On Disordered Phase Stability of Mg-based Alloy</p>
<p>P1-14: <u>Hamzeh Kashani</u> Mechanical Properties of Graphene and Graphene Reinforced Metal and Polymer Composites</p>	<p>P2-14: <u>Hiroshi Fujii</u> Enhancement of Catalytic Activity of Perovskite-Type Manganese Oxides for Oxygen Evolution Reaction</p>	<p>P3-14: <u>Hirokazu Satoh</u> Determination of e/a for Equiatomic II-VI and III-V Compounds by Means of the FLAPW-Fourier Theory</p>

P1-15: <u>Tsong-Long Hwang</u> Anti-Inflammatory Effect of Oleic Acid-Encapsulated Lipid Nanoparticle in Human Neutrophils	P2-15: <u>Mihiro Takasaki</u> Crystal Growth through Oriented Attachment of Calcite Nanocrystals	P3-15: <u>Toshimitsu Hayashi</u> Anti-Site Defect States of Off-stoichiometric $\text{Fe}_{2-x}\text{V}_{1+x}\text{Al}$ Studied by Electronic Band Structure Calculation and Photoelectron Spectroscopy
P1-16: <u>Munehika Kobayashi</u> Control of Electric Conductivity at Ferroelectric Domain-Walls Fabricated in LiNbO_3	P2-16: <u>Daisuke Urushihara</u> Domain Structures in the Ferroelectric Layered Perovskite $\text{Bi}_4\text{Ti}_3\text{O}_{12}$	P3-16: <u>Kazuo Soda</u> Electronic Structures of High-Pressure Phase PdF_2 -type MO_2 (M = Ru, Rh, Ir, Pt)
P1-17: <u>Takanori Motoki</u> Characteristic Microstructures Observed in Cl-Doped YBCO Superconducting Thin Films Prepared by Fluorine-Free MOD Method	P2-17: <u>Jae-Won Lim</u> Thermodynamic Assessment of Oxygen Behavior of Ti Powder by Ca-Saturated Atmosphere	P3-17: <u>Hideo Ohzuku</u> First-Principles Calculations of the OH-Adsorption Energy on Perovskite Oxide
P1-18: <u>Yuki Kugimoto</u> Preparation and Characterization of Optically Transparent Antistatic Sheets from Coating Solutions Containing a Quaternary Ammonium Salt	P2-18: <u>Chun Cheng</u> The B/C Ratio Effect on the Structure and Property of Boron Carbide	P3-18: <u>Tetsuya Kishimoto</u> Theoretical Study on Microscopic States via Random Matrices
P1-19: <u>Jia-You Fang</u> Squalene-Containing Photonic Nanoparticles as an Exogenous Contrast Agent to Ameliorate the Resolution for Fluorescence Angiography	P2-19: <u>Takahiro Machida</u> Effects on Recrystallization and Precipitation Behavior in Co-Al-W-Based Alloys	P3-19: <u>Yutaka Osada</u> Valence State Analysis of Fe Ions in $\text{LaM}_{1-x}\text{Fe}_x\text{O}_3$ (M = Al, Ga, In)
P1-20: <u>Katarina Vukovic</u> Judd-Ofelt Analysis of Luminescence from Eu^{3+} doped $\text{Gd}_2\text{Ti}_2\text{O}_7$ and $\text{Lu}_2\text{Ti}_2\text{O}_7$ Pyrochlore Nanopowders	P2-20: <u>Mahunnop Fakkao</u> Effect of Mechanical Stress on Chemical Potential of Lithium in Cathode Materials for All-Solid-State Lithium-Ion Batteries	P3-20: <u>Kazuki Morita</u> DFT Study of Ti Interstitial in Rutile TiO_2 (110) Surface
P1-21: <u>Jiuhui Han</u> Bicontinuous Nanoporous Graphene Materials for High-Performance Rechargeable Li-O_2 Battery	P2-21: <u>Satoshi Ishimoto</u> Effect of Lanthanum Vacancies on Oxide-Ion Conduction in Apatite-Type Lanthanum Germanate	P3-21: <u>Qian Dong</u> DFT Calculations of Pt Adsorption on Rutile TiO_2 (110) surfaces
P1-22: <u>Marina Tsujimoto</u> Synthesis of Nano-Carbon Films on Insulator Substrates by Alcohol Chemical Vapor Deposition	P2-22: <u>Thanh-Cong Bach</u> Conductive-Perovskite LaNiO_3 Thin Films Prepared by Using Solution Process for Electrode Application	P3-22: <u>Shin Kiyohara</u> Application of Non-linear Regression to predict Grain Boundary Structure and Energy

<p>P1-23: <u>Fan Zhu</u> Spatial Heterogeneity as the Origin of β-Relaxation in Metallic Glass</p>	<p>P2-23: <u>Kei Nakayama</u> Orientation Relationship between the T Structure and the Icosahedral Quasicrystal in the Mg-Zn-Al Alloy System</p>	<p>P3-23: <u>Tristan Barbier</u> Combined Experimental and DFT Computational Study of Silicide Based compounds</p>
<p>P1-24: <u>Dang-Thanh Tran</u> Magnetic and Magnetocaloric Properties near the First-to-Second Order Magnetic Phase Transformation of $\text{La}_{0.7}\text{Ca}_{0.275}\text{Ba}_{0.025}\text{MnO}_3$ Nanocrystals</p>	<p>P2-24: <u>Akihisa Kamata</u> Necessary Condition to form Double-Perovskite Structured BaBiO_3 by Rare-Earth Doping</p>	<p>P3-24: <u>Kakeru Ninomiya</u> Electronic Structure of $\text{Ag}_6\text{Ge}_2\text{O}_7$</p>
<p>P1-25: <u>Dang-Thanh Tran</u> Extended X-ray Absorption Spectra and Highly Photocatalytic Activity of (N, Ta)-Doped TiO_2 Nanoparticles</p>	<p>P2-25: <u>Tomoya Murai</u> Substitution Mechanism of Mn ions in CaTiO_3</p>	<p>P3-25: <u>Kazuya Kojima</u> Application of Configurational Polyhedra to Phase Stability</p>
<p>P1-26: <u>Thi-Ngoc-Mai Pham</u> Modification of Rice Husk Towards Application in Solid Phase Extraction</p>	<p>P2-26: <u>Joshua Hoemke</u> Preparation of Mn-Al co-Doped ZnO Thermoelectric Ceramics by Conventional Sintering and Spark Plasma Sintering (SPS)</p>	<p>P3-26: <u>Md. Earul Islam</u> In-Plane Transport Properties of MnAs/InAs/GaAs(111)B Grown by Molecular Beam Epitaxy</p>
<p>P1-27: <u>Thi-Thanh-Xoan Ngo</u> Raman Spectroscopy of La-implanted LaMnO_3</p>	<p>P2-27: <u>Makoto Murakami</u> Inverse-Type Charge Transfer in Quadruple Perovskite Oxide</p>	<p>P3-27: <u>Yusuke Okamoto</u> Influence of Cation Nonstoichiometry to Oxygen Nonstoichiometry in Mixed Ionic and Electronic Conducting Perovskite Oxides</p>
<p>P1-28: <u>Thi-Phuong Nguyen</u> Synthesis and Investigation of M-Cu₂O Heterostructures</p>	<p>P2-28: <u>Hua-Wei Chen</u> Application of Modified Magnetite to Adsorb Rhodamine B</p>	<p>P3-28: <u>Keita Matsuda</u> Electrical Transport Properties of Close-Packed and Well-Aligned Carbon Nanotube Films Depending on Length</p>