Poster Presentation List

1. Advanced Characterization for Materials Innovation

No	Name	Affilication/Company	Presentation Title	Award Nominee
P1-01	Tatsuya Nakamura	Institute of Science Tokyo	Thickness-dependent electronic structures and transport properties of K-intercalated graphene	🎀
P1-02	Riku Gotoh	Tokyo Univ. of Science	Operando Study of Graphene Charge Transfer Through Micro-Raman Spectroscopy and Machine Learning	🎀
P1-03	Koji Ohara	Shimane University	Lithium ion Transport Environment in Ion-Conducting Glasses	🎀
P1-04	Hajime Matsumoto	Mitsubishi Chemical Corp	Microstructure of light-emitting phosphor of (Sr, Ca)$AlSiN_3$:Eu^{2+}	
P1-05	Shuya Sato	Tokyo University of Science	Structural analysis of densified SiO_2 glass synthesized under extreme conditions using quantum beam	🎀
P1-06	Yohei Onodera	NIMS	Investigation of the Formation of a zirconium oxide crystal nucleus in the initial nucleation stage in aluminosilicate glass	🎀
P1-07	Yen-Ju Wu	NIMS	Structural Insights into Thermal Conductivity of Amorphous Germanium Using Topological Data Analysis	🎀
P1-08	Shino Hayafune	Tohoku University	Structural properties of Na_2O-SiO_2 melts under high pressure, as revealed by X-ray diffraction and molecular dynamics simulation	🎀
P1-09	Koji Kimura	Nagoya Institute of Technology	Phonon Dispersions of Element-doped Fe_2VAl Thermoelectric Compounds Studied by Inelastic X-ray Scattering	🎀
P1-10	Yasuaki Miyakawa	Institute of Science Tokyo	Formation of Ultrathin Oxide Films and Controlled Single-Photon Emitters at SiC Interfaces	🎀
P1-11	Sumbal Jamshaid	University of Erlangen-Nürnberg	Synthesis and characterization of $BaZrS_3$ thin films for photovoltaic applications using a stacked elemental layer methodology	🎀
P1-12	Mitsunori Kurahashi	NIMS	Spin-dependent O_2 chemisorption and catalytic CO oxidation on magnetized PtCo surface	
P1-13	Masataka Tansho	NIMS	Adjacent elemental analysis of oxide fuel cell materials by high field solid-state NMR Masataka Tansho1,	
P1-14	Atsushi Goto	NIMS	NMR techniques for the detection of photo-induced effects in solids	
P1-15	Kenjiro Hashi	NIMS	Development and application of high-temperature NMR	
P1-16	Ta-Te Chen	Nagoya University	Characterization of the Tensile Properties of GAN-generated 3D microstructures in Dual-Phase Steels	🎀
P1-17	Dayuan Liu	NIMS	Characterization of mechanical properties of alloys using neighboring indentation test	🎀
P1-18	Sherjeel Mahmood Baig	NIMS	Pt_5Ce Single Crystal Ingot: Nanophase Separation from Synthesis to Characterization	🎀
P1-19	Ryo Murakami	NIMS	Automatic identification of crystalline phases using Bayesian estimation in XRD	🎀
P1-20	Keyun Gu	NIMS	Revealing the Surface Adsorbates of Diamond Using MEMS Resonators	🎀
P1-21	Rabindra Nath Acharyya	NIMS	Nitrogen-Doped Cobalt/Carbon Composite from Metal Organic Framework on Fullerene Self Assemblies (MOFOF) for Energy Conversion Application	🎀
P1-22	Yasutaka Imanaka	NIMS	Magneto-optical studies in 2D carrier systems of semiconductor and semimetal under high magnetic field	

2. Synchrotron Spectroscopy and Imaging

No	Name	Affilication/Company	Presentation Title	Award nominee
P2-01	Shingo Takezawa	Tokyo University of Science	Electronic state analysis of ultra-thin Cu film on FeCo/MgO(100)	🎀
P2-02	Thang Dinh Phan	NIMS	Electronic properties of chemical vapor deposition-grown graphene on Ni (111) investigated by spin- and angle-resolved photoemission spectroscopy	🎀
P2-03	Koichiro Yaji	NIMS	Visualization of spin-polarized electronic states by imaging-type spin-resolved photoemission microscopy	
P2-04	Shunsuke Tsuda	NIMS	Angle-resolved photoemission spectroscopy of polycrystalline materials using an imaging-type photoemission microscope	🎀
P2-05	Jiangwei Liu	NIMS	Calibrating Binding Energy for Insulating/Semi-Insulating Carbon-Related Materials in X-Ray Photoelectron Spectroscopy Measurements	
P2-06	Yuta Ishii	NIMS	Time- and space-resolved soft X-ray microscopy for magnetic materials	
P2-07	Naoka Nagamura	NIMS	Machine-Learning Based Analysis for Synchrotron X-ray Spectral Imaging	🎀
P2-08	Kentaro Fuku	Tokyo Univ. of Science,	XANES spectral analysis of Ni complexes using machine learning	🎀
P2-09	Yasuhiko Igarashi,	University of Tsukuba,	Sparse Coding-Based Multiframe Superresolution for Efficient Synchrotron Radiation Microspectroscopy	
P2-10	Naoki Yamane	University of Tsukuba	High-speed measurement of MOF using sparse-view XAFS-CT reconstruction with compressed sensing	🎀
P2-11	Masashi Ishii	NIMS	Implementation of an ontology framework for integrating synchrotron radiation data	🎀

3. Scanning Probe Microscopy

No	Name	Affilication/Company	Presentation Title	Award Nominee
P3-01	Oscar Custance	NIMS	Defect Identification at Confined CO_2 Islands Using SPM	
P3-02	Tatsuhiro Hirai	Keio University	Water adsorption on the magnetite surface studied by scanning tunneling microscopy	
P3-03	Kewei Sun	NIMS	On-Surface Synthesis of Silicon Incorporated Carbon Nanostructures	
P3-04	Donglin Li	NIMS	On-surface Synthesis of Triaza triangulene and its Magnetism	
P3-05	Hironobu Hayashi	NIMS	Synthesis and Characterization of Oligoacenes	
P3-06	Yuji Isshiki	NIMS	On-surface synthesis of Azobenzene-linked porphyrin	
P3-07	Kyungmin Kim	Osaka University	Studying adsorbates on rutile TiO_2(110) – (1×2) surface using Tip-enhanced Raman spectroscopy	
P3-08	Ridwan Putraz	Hokkaido University	Unveiling the Nanomechanical Phenomena in Silicon Thin Film Electrodes by Real-time Bimodal Atomic Force Microscopy Imaging	
P3-09	Masahiro Nakayama	Osaka University	Mechanism of Triboelectric charging in fluorine-containing monolayers using amplitudefeedback frequency modulated Scanning Force Microscopy	
P3-10	Nobuyuki Ishida	NIMS	Quantitative characterization of built-in potential profile across GaAs p–n junctions using Kelvin probe force microscopy	
P3-11	Tomoki Misaka	Osaka University	EFM, KPFM measurement of photo-induced charge separation on F8T2 monolayer/ TiO_2 interface	
P3-12	Naoki Shima	Kanazawa University	Surface resistivity measurements using frequency modulation atomic force microscopy in ultrahigh vacuum	
P3-13	Yuya Hattori	NIMS	Measuring Electronic Structure of Thermoelectric Materials by Scanning Tunneling Microscopy	
P3-14	Junya Okazaki	The University of Tokyo	Structures and surface conductivity on dense Pb monolayers formed on Si(111) studied by low temperature scanning tunneling microscopy/potentiometry	
P3-15	Kazuki. Miyata	Kanazawa University	High-speed Subnanoscale-resolution 2D/3D-AFM Imaging of Calcite Dissolution Process	
P3-16	Masahiro Haze	The University of Tokyo	Role of steps on transport measurements studied by scanning tunneling potentiometry	
P3-17	Yuta Okabe	Kanazawa University	Preparation and evaluation of a high-temperature flame-etched tungsten tip for scanning probe microscopy	

4. Advanced Electron Microscopy

No.	Name	Affilication/Company	Presentation Title	Award Nominee
P4-01	Takuro Nagai	NIMS	Visualization of Magnetic Soliton Using Aberration-Corrected Lorentz Microscopy	
P4-02	Ayako Hashimoto	NIMS	In-situ TEM observation of Ni-based catalysts for DRM	
P4-03	Toshiki Shimizu	Tokyo University of Agriculture and Technology	In-situ Observation of Post-nucleation Process of NaCl Nanocrystals in an Aqueous Environment Using Liquid-cell Transmission Electron Microscopy	
P4-04	Kei Nakayama	Japan Fine Ceramics Center	In Situ Scanning Transmission Electron Microscopy of the MoS_2 Lithiation Process	
P4-05	Koji Harano	NIMS	Real-Time Electron Microscopic Imaging and Analysis for Single Molecules and Atomically-Precise Nanomaterials	
P4-06	Jun Kikkawa	NIMS	Application of nanometric thermometry based on electron spectroscopy of phonons	
P4-07	Masahiko Shimizu	Mitsubishi Chemical Corporation	Direct observation of Cu sites in SCR zeolite catalysts using Electron ptychography	
P4-08	Hieu Duy Nguyen	NIMS	Phase mapping of temperature waves in submicron-structured ceramics using PSTAM	
P4-09	Ryuto Eguchi	NIMS	Interpretable Structural Evaluation of Metal-Oxide Nanostructures in STEM Images via Persistent Homology	
P4-10	Masato Suzuki	University of Tsukuba	Image processing techniques for unveiling the internal structure of crosslinked rubber	
P4-11	Kodai Niitsu	NIMS	Observation of skyrmionic vortex using electron holography	
P4-12	Ovidiu Cretu	NIMS	Direct Imaging of Thermal Vibration Modes Using Frequency-Selective Electron Microscopy	
P4-13	Kazutaka Mitsuishi	NIMS	Deriving sample information from 4DSTEM dataset by electron ptychography	
P4-14	Yu Jimbo	JEOL Ltd.	Characterization of Aberration-Corrected Lorentz TEM and STEM	
P4-15	Ankit Singh	NIMS	Observation Conditions for Grayscale HREM Image Interpretation via Persistent Homology	
P4-16	Katsuaki Nakazawa	NIMS	Development of 5-dimensional STEM and application to glass transition phenomenon	
P4-17	Han Zhang	NIMS	High resolution and high probe current electron microscopy application for LaB6 nanostructured emitter	

5. Others

No	Name	Affilication/Company	Presentation Title	Award Nominee
P5-01	Bo Da	NIMS	Simulation of diffractive electron lenses using Monte Carlo method	
P5-02	Ikumu Watanabe	NIMS	Computational Simulation of Material behavior using Image-based Finite Element Modeling	
P5-03	Yibin Xu	NIMS	Development of Fundamental Technologies for Data-Driven Battery Material Exploration	
P5-04	Yukinori Koyama	NIMS	Exploration of Novel Eu2+-Activated Phosphor Materials Using a Data-driven Approach	
P5-05	Fumihiko Uesugi	NIMS	A feature mining method composed of Wavelet filtering and PCA	
P5-06	Daichi Ishikawa	Tokyo University of Science	Information Extraction from Fermi Surfaces Using Unsupervised Machine Learning	
P5-07	Keisuke Sagisaka	NIMS	Predictive Modeling of Two-Dimensional Electron Gas Formation at the β-FeSi2/Si(001) Interface	
P5-08	Yukari Katsura	NIMS	Starrydata: an open database of experimental measurement data from published plots	
P5-09	Soichi Takase	Tokyo University of Science	Fermi Surface Analysis of Multi-component Co-based Heusler Alloys Using Machine Learning	
P5-10	Toshiro Osawa	Tokyo University of Science	Real-time in-situ machine learning analysis of RHEED images for MBE film-growth	
P5-11	Yoshiaki Toda	NIMS	Exploration of New Alloy Compositions Using Prediction Model of Precipitation by Energetics	
P5-12	Masahiko Demura	NIMS	Inverse Design based on the concept of Materials Integration	
P5-13	Hitoshi. Izuno	NIMS	A Tandem Bayesian Model for Probabilistic Search to Improve Weld Joint Creep Property	
P5-14	Atsushi Togo	NIMS	First-principles calculation of electron-phonon interaction	
P5-15	Naoki Kikugawa	NIMS	Physical Properties of Quantum Materials under Low Temperature and High Magnetic Field	
P5-16	Yuhang Zu	The University of Tokyo	Observation of nematicity in the normal state in Sr-doped Bi2Se3	
P5-17	Supicha Trakuldit	Waseda University	Enhancing corrosion resistance by electrodeposition of Mg-Al layered double hydroxide (LDH) for AA6061 alloy	

No.	Name	Affilication/Company	Presentation Title	Award Nominee
P5-18	Akito Tateyama	Hokkaido University	Supercooled π-Gels Based on A Chiral Alkylated–Carbazole Liquid	🎀
P5-19	Kanji Takehana	NIMS	Development of the terahertz magneto-spectroscopic system with helium-3 refrigerator	
P5-20	Robert Saraczyn	Warsaw University of Technology	Physical modelling of spatial geometries at the micro- and macroscale based on the percolation phenomenon	🎀
P5-21	Maria Thea Rane Clarin	University of Tsukuba	Anti-inflammatory Nanoparticles as Potential Treatment for Aortic Dissection	🎀
P5-22	Cong Zhang	NIMS	Rational ligand design for enhanced carrier mobility in self-powered SWIR photodiodes based on colloidal InSb quantum dots	
P5-23	Ai Koizumi	NIMS	Does uncertainty-based active learning work in materials science?	🎀
P5-24	Nur Shamimie Nadzwin Hasnan	Universiti Kebangsaan Malaysia	Kapok Microtubules Incorporated Carbon-Doped Graphitic Carbon Nitride for Photocatalytic H2O2 Production	🎀
P5-25	Souta Miyai	Oita College	Differences in hydrogen behavior depending on vanadium grain size	🎀
P5-26	Sabina Shahi	University of Tsukuba	Energy performance advancement by tuning nanospace of hollow carbon spheres	🎀
P5-27	Shinji Matsumoto	NIMS	Water-cooled Bitter Magnet for Measurement in High Magnetic Fields	
P5-28	Meiqi ZHANG	NIMS	Accelerating the valid of Solid Electrolyte Candidates through Machine Learning Force Fields: A Case Study on Li8SeN2 and Li10GeP2S12	🎀
P5-29	Jiyi Yang	Tokyo Institute of Technology	AI-Assisted Crystal Plasticity Analysis of Anisotropic Cold Rolling behavior in Ni3Al	🎀
P5-30	Biplab Manna	NIMS	Decoding polymer chain using nano porous Material	🎀
P5-31	Sarita Manandhar	NIMS	Biomass-derived Carbon Nanostructures for Energy Storage Technology	🎀
P5-32	Nasrat Hannah Shudin	NIMS	Oxidation-Triggered Nanophase Separation: Numerical Simulation and Experimental Study.	🎀