



STAC-16 and DEJI²MA-6 Joint Conference
October 14-16, 2026
Yokohama Campus, Institute of Science Tokyo

The 16th International Conference on the Science and Technology for Advanced Ceramics (STAC-16)

The 6th International Symposium on Design & Engineering by Joint Inverse Innovation for Materials Architecture (DEJI²MA-6)

PROGRAM BOOK

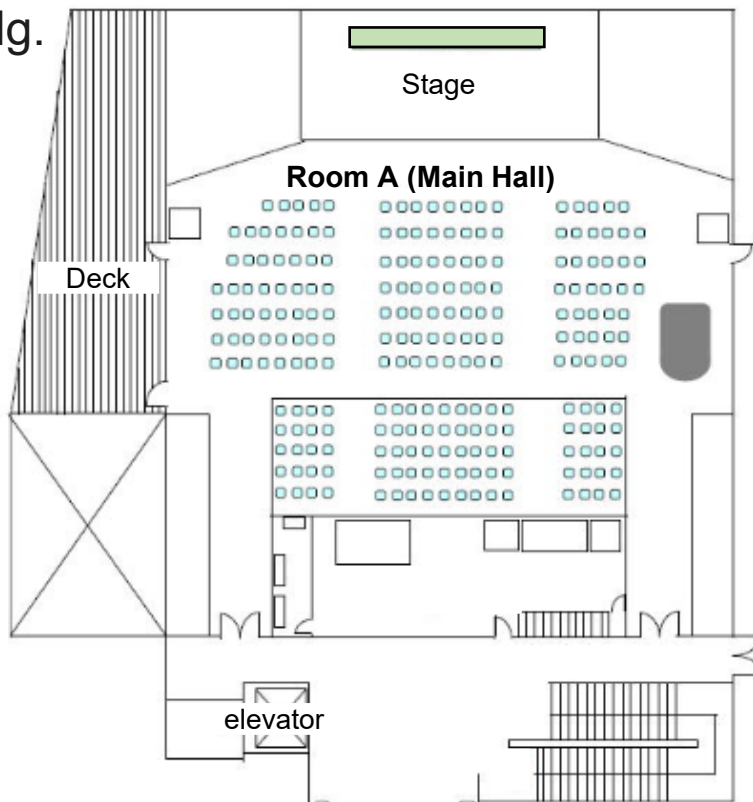
October 14-16, 2026
Yokohama Campus, Institute of Science Tokyo

Floor Map

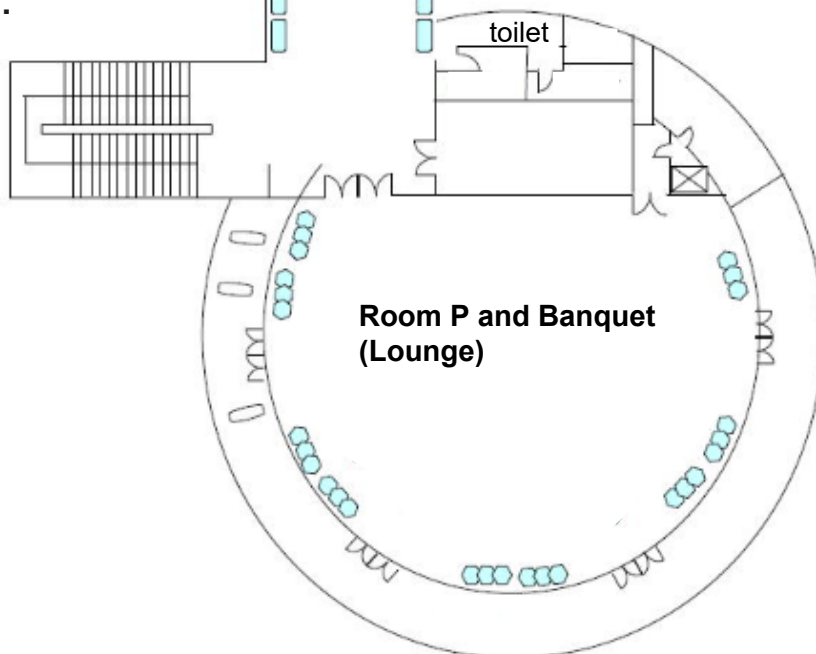
Wi-Fi

Wi-Fi (**eduroam**) is available in all rooms.

H2 bldg.
3F



H1 bldg.
3F



Floor Map

H2 bldg.
2F



14-Oct

	RoomA (Main Hal, 3F)	RoomC (2F)
10:30-10:45	Opening remarks	
	Electro magnet	Chemical mater
10:45-11:00	Hiroshi Naganuma	Shunsaku Yasumura
11:00-11:15		
11:15-11:30	Koomok Lee	Shun Sato
11:30-11:45	Nan Zhang	Jiazhen Wu
11:45-12:00		
12:00-12:15	Takanori Mimura	Yuan Jing
12:15-13:45	Lunch Break	
	Electro magnet	Chemical mater
13:45-14:00		
14:00-14:15	Chung-Hsin Lu	Ryota Osuga
14:15-14:30	Kazuki Okamoto	Hiroki Numata
14:30-14:45	Abdul Halil Nur Intan Farliah	
14:45-15:00	Takeshi Yoshimura	Michael Huang
15:00-15:15		Yun Hu
15:15-15:30	N/A	
16:00-18:00	Poster (Room P)	

15-Oct

	RoomA (Main Hal, 3F)
	DEJf ² MA
	N/A
10:00-10:05	Opening remarks
10:05-10:35	Ulrich Starke
10:35-10:55	Ryotaro Sakakibara
10:55-11:25	Ruben Canton-Vitoria
11:25-11:45	Yan Li
11:45-13:15	Lunch Break
	DEJf ² MA
13:15-13:45	Chi-Ho Ng
13:45-14:05	Yu Han
14:05-14:35	Guoping Chen
14:35-14:55	Kosuke Ueki
14:55-16:30	Poster (Room P)
16:30-17:00	Hisashi Serizawa
17:00-17:20	Seong Min Hong
17:20-17:40	Hiroto Arima
18:00	Banquet (Room P)

16-Oct

	RoomB (2F)	RoomC (2F)
	Solid State Chem	Engineering mater
9:00-9:15	Peter Meisenheimer	Shuntaro Ida
9:15-9:30		
9:30-9:45	Kota Hanzawa	Ravi Kumar
9:45-10:00	Shigenori Ueda	Shimon Yokoyama
10:00-10:15		
10:15-10:30	Nur Rahmawati Ayukaryana	Yuka Yamaguchi
10:30-10:45	Break	Break
	Solid State Chem	Engineering mater
10:45-11:00	Shigeo Mori	Wei-Hsing Tuan
11:00-11:15		
11:15-11:30	Takumi Nishikubo	Hidehiro Yoshida
11:30-11:45		
11:45-12:00	N/A	Koji Morita
12:00-12:15		
12:15-13:45	Break	Break
	Solid State Chem	Bio
13:45-14:00	Zhao Pan	Daichi Noda
14:00-14:15		
14:15-14:30	Yuki Sakai	Dehui Wan
14:30-14:45		
14:45-15:00	N/A	Kohji Mitsubayashi
15:00-15:15		
15:15-15:30	Break	Weishan Chang
15:30-15:45	Computational Mater	
15:45-16:00	Zewen Xiao	
16:00-16:15		
16:15-16:30	Yasuhide Mochizuki	N/A
16:30-16:45		
16:45-17:00	Ryoma Yamamoto	
17:00-17:15	Tasuku Watanuki	
17:15-17:30	Tianwei Wang	
18:00	Banquet (Room P)	

	RoomB (2F)	RoomC (2F)
		Semiconductors
9:00-9:15		Ady Suwardi
9:15-9:30		
9:30-9:45	N/A	Daichi Oka
9:45-10:00		
10:00-10:15		Shabab Ali
10:15-10:30		Tomoya Suzuki
10:30-10:45	Break	Break
	Computational Mater	Semiconductors
10:45-11:00		
11:00-11:15	Anderson Janotti	Nitish Rai
11:15-11:30		
11:30-11:45	JooHWi Lee	Kyohei Nakano
11:45-12:00	Kansei Kanayama	Ryoma Ikeda
12:00-12:15	Zan Yang	Takumu Hirano
12:15-12:30	Jan Hempelmann	Yutaka Nakano

Invited, Oral Lectures

14 October, 2026

Room A (Main Hal, 3F)				
Time		Name	Affiliation	Title
10:30	Opening remarks	Michikazu Hara	Institute of Science Tokyo	
Room A (Main Hal, 3F)				
Electro-magnetic materials				
[Chair: Takeshi Yoshimura]				
Time		Name	Affiliation	Title
10:45	1A01 (Invited)	Hiroshi Naganuma	The University of Toyama	Interfacial Multiferroics at Room Temperature by Super-Orbital-Splitting
11:15	1A02	Koomok Lee	Institute of Science Tokyo	Electric-Field-induced Weakly Ferromagnetic Domain Change by Ferroelectric Topological Domain Switching in Co-Substituted BiFeO3 Nanodots
11:30	1A03 (Invited)	Nan Zhang	Xian Jiaotong University	The correlated local disorder in relaxor ferroelectrics revealed by diffuse scattering
12:00	1A04	Takanori Mimura	Gakushuin University	Synthesis and dielectric properties of NaNb6O15F-type Ta-based oxides
12:15	Lunch Break			
[Chair: Hiroshi Naganuma]				
13:45	1A05 (Invited)	Chung-Hsin Lu	National Taiwan University	Non-Contact Thermal Sensing Properties of Rare-Earth-Doped Spherical CeO2 hosphors Produced via Inorganic Template-Assisted Wet Chemical Tech
14:15	1A06	Kazuki Okamoto	Institute of Science Tokyo	Fabrication and characterization of ferroelectric AIBN films at different deposition atmosphere
14:30	1A07	Abdul Halil Nur Intan Farihah	Institute of Science Tokyo	Silica-Shell Engineering to Distinguish Interaction-Driven from Size-Driven Brownian Relaxation in Anisotropic Fe3O4@SiO2 Nanorods
14:45	1A08 (Invited)	Takeshi Yoshimura	Toyohashi University of Technology	Epitaxial Ferroelectrics on Silicon for In-Sensor Reservoir Computing
15:15				
16:00	16:00-18:00 Poster Session (Room P)			

Room C (2F)				
Chemical materials				
[Chair: Satoshi Ishikawa]				
Time		Name	Affiliation	Title
10:45	1C01 (Invited)	Shunsaku Yasumura	The University of Tokyo	Computational Discovery of Methan Complete Oxidation Catalysts using Neural Network Potential
11:15	1C02	Shun Sato	Institute of Science Tokyo	Tuning the binding strength of hydride ions and electrons in oxyhydrides through cation-size modulation for efficient ammonia synthesis
11:30	1C03 (Invited)	Jiazhen Wu	Southern University of Science and Technology	Electrides in Intermetallics: Opportunities for Advanced Catalysis
12:00	1C04	Yuan Jing	Institute of Science Tokyo	Reaction-Induced Inverse Segregation Stabilizes Iron Catalysts for Ammonia Synthesis under Mild Conditions
12:00	Lunch Break			
[Chair: Chun-Yi Chen]				
13:45	1C05 (Invited)	Ryota Osuga	Tohoku University	Heterogeneous catalysis for selective glucose fragmentation via in-situ protection strategies
14:15	1C06	Hiroki Numata	Institute of Science Tokyo	Synthesis of Crystalline Sulfated Niobium Oxides as Acid Catalysis
14:30	1C07 (Invited)	Michael Huang	National Tsing Hua University	Semiconductor Facet Effects in Photocatalytic Organic Transformations
15:00	1C08 (Invited)	Yun Hu	South China University of Technology	Development of Photo/electrocatalytic CO2 Reduction-Waste Oxidation Coupled System
15:30				
16:00	16:00-18:00 Poster Session (Room P)			

Room A (Main Hal, 3F)				
DEJi ² MA				
[Chair: Takayoshi Katase, Minoru Osada]				
Time		Name	Affiliation	Title
10:00				Opening remarks
10:05 2A01		Ulrich Starke	Max Planck Institute for Solid State Research	Functionalization of epitaxial graphene by intercalation and nanostructuring
10:35 2A02		Ryotaro Sakakibara	National Institute for Materials Science	Formation of 2D Material Heterostructures by Solid-Phase Epitaxy
10:55 2A03		Ruben Canton-Vitoria	Nagoya University	Modification of 2D Materials for Target Applications
11:25 2A04		Yan Li	Nagoya University	Ferroelectricity at the 2D Limit: From Nanosheets to Nanoelectronics
11:45				Lunch Break
[Chair: Takayuki Mokudai, Masakazu Kawashita]				
13:15 2A05		Chi-Ho Ng	Tohoku University	Sulphur Microalloying to Improve the Machinability of Additively Manufactured Ti-6Al-4V
13:45 2A06		Yu Han	Tohoku University	GL13K Antimicrobial Peptide Coating Regulates Osteoimmune Responses through the NF-κB/MIP-2 Axis to Promote Osteogenesis
14:05 2A07		Guoping Chen	National Institute for Materials Science	Preparation of Calcium Phosphate Nanoparticles/Collagen Composite Scaffolds with Microgroove Networks for Bone Regeneration
14:35 2A08		Kosuke Ueki	Institute of Science Tokyo	Development of Ni-Free Co-Cr Alloys for Next Generation Balloon-Expandable Stents
14:55				Poster
[Chair: Hiroya Abe, Fumiyasu Oba]				
16:30 2A09		Hisashi Senizawa	The University of Osaka	Basic Corrosion Properties of F82H/SUS316L Dissimilar Joints Produced by Fiber Laser Welding or Friction Stir Welding
17:00 2A10		Seong Min Hong	The University of Osaka	Effect of Electrode-Negative Ratio in AC-Pulsed GMAW on Al-Mg Alloy Wire Arc Additive Manufacturing
17:20 2A11		Hiroto Arima	Institute of Science Tokyo	Development of a high-throughput time domain thermoreflectance technique
17:40				
18:00				Banquet
RoomC (2F)				
Engineering materials				
[Chair: Koji Morita]				
Time		Name	Affiliation	Title
9:00 2C01 (Invited)		Shuntaro Ida	Japan Fine Ceramics Center	Laser-Induced Eutectic Microstructures and Toughening in ZrB2-SiC Composites
9:30 2C02 (Invited)		Ravi Kumar	Indian Institute of Technology Madras	Small-scale mechanical testing and investigation of anisotropic deformation of FDM printed alumina
10:00 2C03		Shimon Yokoyama	Tokyo University of Science	Development and Evaluation of High-Entropy Ceramics Incorporating Multiple Metallic and Non-metallic Elements
10:15 2C04		Yuka Yamaguchi	Institute of Science Tokyo	Thermodynamic Analysis of Sintering Behavior of Yb2Si2O7-Added Al4SiC4 Ceramics
10:30				Break
Engineering materials				
[Chair: Katsumi Yoshida]				
10:45 2C05 (Invited)		Wei-Hsing Tuan	National Taiwan University	Long-term stability of zirconia biomedical implants
11:15 2C06 (Invited)		Hidehiro Yoshida	The University of Tokyo	Promotion of Grain Boundary Nano-dynamics in Structural Ceramics via External Electric Fields and Currents
11:45 2C07 (Invited)		Koji Morita	National Institute for Materials Science	Effect of Electric Field/Current on Grain Growth Behavior of Zirconia
12:15				Lunch Break
Bio/medical/environmental materials				
[Chair: Saeko Yanaka]				
13:45 2C08 (Invited)		Daichi Noda	Nagaoka University of Technology	Engineering Biomimetic Apatite Surfaces: From Fibrinogen Adsorption to Platelet Responses
14:15 2C09 (Invited)		Dehui Wan	National Tsing Hua University	Unlocking the Potential of Surface-Enhanced Raman Scattering in Precision Medicine
14:45 2C10 (Invited)		Kohji Mitsubayashi	Institute of Science Tokyo	Non-invasive gas-sensing & -imaging of VOCs derived from blood vessels
15:15 2C11 (Invited)		Weishan Chang	Tokyo Metropolitan University	Application of ceramic thermoluminescent dosimeters in proton therapy
15:45				Break
18:00				Banquet

RoomB (2F)				
Solid State Chemistry				
[Chair: Shigeo Mori]				
Time	Name	Affiliation	Title	
9:00 2B01 (Invited)	Peter Meisenheimer	Kepler Computing	Engineered mm-wave properties in ferroelectric superlattices	
9:30 2B02	Kota Hanzawa	Institute of Science Tokyo	A Novel Wide-Gap n-Type Semiconductor β -TeO3	
9:45 2B03 (Invited)	Shigenori Ueda	National Institute for Materials Science	Probing buried electronic structures of solids with hard X-ray photoelectron spectroscopy	
10:15 2B04	Nur Rahmawati Ayukaryana	Tokyo University of Agriculture and Technology	Surrogate-Filtered Bayesian Optimization for Spark Plasma Sintering of Y-doped Ba0.6K0.4Fe2As2: From Benchmarking to Experimental Validation	
10:30	Break			
Solid State Chemistry				
[Chair: Shigenori Ueda]				
10:45 2B05 (Invited)	Shigeo Mori	Osaka Metropolitan University	Atomic-Scale Imaging and Structural Analysis of Advanced Functional Materials by STEM/TEM	
11:15 2B06 (Invited)	Takumi Nishikubo	Institute of Science Tokyo	A new anion-defect ordered perovskite BiNi1-xFexO2.8 with specific charge ordering	
11:45				
12:00				
12:15	Lunch Break			
Solid State Chemistry				
[Chair: Peter Meisenheimer]				
13:45 2B07 (Invited)	Zhao Pan	Chinese Academy of Sciences	Enhanced Negative Thermal Expansion in PbTiO3-Based Ferroelectrics	
14:15 2B08 (Invited)	Yuki Sakai	Kanagawa Institute of Industrial Science and Technology	Colossal Negative Thermal Expansion in Lanthanoid-substituted BiCoO3	
14:45				
15:15				
15:30	Break			
Computational Materials Science and Materials Informatics				
[Chair: Toshio Kamiya, Hena Das, Akira Takahashi]				
15:45 2B09 (Invited)	Zewen Xiao	Central South University	Beyond the Promise: Why Many "p-Type" Oxides" May Not Be	
16:15 2B10 (Invited)	Yasuhide Mochizuki	Tokyo University of Science	CrystOD: Software package for crystal-orbital diagram	
16:45 2B11	Ryoma Yamamoto	Institute of Science Tokyo	Gradient-Based Atomic-Site Attribution for Interpreting Crystal Graph Neural Networks	
17:00 2B12	Tasuku Watanuki	Institute of Science Tokyo	First-principles calculation of temperature dependences of dielectric constants	
17:15 2B13	Tianwei Wang	Kanagawa Institute of Industrial Science and Technology	First principles prediction of n-type dopability and ultrahigh work functions in a novel wide-gap semiconductor β -TeO3	
17:30				
18:00	Banquet			

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Room B (2F)				
Computational Materials Science and Materials Informatics				
[Chair: Naoki Ohashi, Fumiyasu Oba, Yasuhide Mochizuki]				
Time		Name	Affiliation	Title
10:45 3B01 (Invited)		Anderson Janotti	University of Delaware	Persistent Photoconductivity and Defect Engineering in KTaO_3
11:15 3B02 (Invited)		Joochi Lee	Toyota Central R&D Labs., Inc.	Exploring and Predicting Beyond the Existing Data: Evolutionary Search and Explainable AI for New Materials
11:45 3B03		Kansei Kanayama	Institute of Science Tokyo	Structure Search for Surface Reconstructions of CsPbI_3 and CsSnI_3 Using a Genetic Algorithm
12:00 3B04		Zan Yang	Institute of Science Tokyo	Mechanism of High Transverse Thermoelectric Performance in Re_4Si_7 Revealed by First-Principles Calculations
12:15 3B05		Jan Hempelmann	Institute of Science Tokyo	Intra-Structural Force Constant Decay as a Descriptor for Fundamental Bonding and Materials Properties with a New Open-Source Tool: betapy

Room C (2F)				
Semiconductors				
[Chair: Takayoshi Katase]				
Time		Name	Affiliation	Title
9:00 3C01 (Invited)		Ady Suwardi	The Chinese University of Hong Kong	Thermoelectrics for Ambient Energy Harvesting
9:30 3C02 (Invited)		Daichi Oka	Tokyo Metropolitan University	Heteroepitaxy of Functional Materials on Oxide Substrates by Mist Deposition
10:00 3C03		Shabab Ali	Tokyo Metropolitan University	Control of Phase Purity in Solid-Phase Epitaxy of Sputter-Deposited Rutile-Type GeO_2 Thin Films
10:15 3C04		Tomoya Suzuki	Institute of Science Tokyo	Roles of Hydrogen in Rutile-type Germanium Oxide Introduced by Hydrogen Plasma Treatment
10:30				Break
[Chair: Seiichiro Izawa]				
10:45 3C05 (Invited)		Nitish Rai	Monash University	Cation–Anion Synergy in Ionic-Salt Stabilization of Perovskite Solar Cells
11:15 3C06 (Invited)		Kyohei Nakano	RIKEN CEMS	Origin of Variation in Electrical Properties and Device Performance of Semiconducting Polymers
11:45 3C07		Ryoma Ikeda	Institute of Science Tokyo	Strong Optical Absorption and Optoelectronic Properties of Layered $\text{Bi}_3\text{O}_2.5\text{Se}_2$ epitaxial films
12:00 3C08		Takumu Hirano	Institute of Science Tokyo	Conductivity enhancement of amorphous NiO thin films on flexible substrates by vacuum-ultraviolet light irradiation
12:15 3C09		Yutaka Nakano	Institute of Science Tokyo	Solid-phase crystallization of epitaxial tin oxide thin films and donor doping by excimer laser annealing

Poster Sessions

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Room P (Launge, 3F) 16:00-18:00			
Electro-magnetic materials			
	Name	Affiliation	Title
1P01	Tomohiro Yamashita	Institute of Science Tokyo	Polarization Switching at Antiphase Boundaries in Antiferroelectric PbZr _{0.98} Ti _{0.02} O ₃
1P02	Masanori Inaba	Institute of Science Tokyo	Dielectric breakdown properties of titanite-type oxide ceramics
1P03	Masaki Tozuka	Institute of Science Tokyo	Evaluation of ferroelectricity of Mn and Zr co-substituted ZnO thin films
1P04	Daiki Okuda	Institute of Science Tokyo	Large Anomalous Hall effect in Single Crystals of a Compensated Ferrimagnet Fe _{1/2} (Ti,Fe)Se ₂
Chemical materials			
1P05	Kazuki Miyashita	Institute of Science Tokyo	Development of BaZrO ₃ -xNy as a support for Ni catalysts in ammonia decomposition
1P06	Miyuki Koga	Institute of Science Tokyo	Controlling nitrogen vacancy formation via Madelung potential engineering in Ni-loaded nitride catalysts for ammonia synthesis
1P07	Sein Sato	Institute of Science Tokyo	Effect of Surface Fluorination of Barium Titanate Oxyhydride on Hydrogen Poisoning Behavior in Ru-Catalyzed Ammonia Synthesis
1P08	Takumi Ota	Institute of Science Tokyo	Synthesis and Application of Metal-doped β-MnO ₂ Nanoparticle Catalysts for PEM Water Electrolysis
1P09	Koyo Ueno	Institute of Science Tokyo	Effects of Chromium Addition on Iron Catalysts for Ammonia Synthesis
1P10	N/A	N/A	N/A
1P11	Shunki Tagawa	Institute of Science Tokyo	Effects of Rare-Earth Addition on Aluminum Hydride-Modified Iron Catalysts
1P12	Mai Hayakawa	Institute of Science Tokyo	Design of Pd-Supported Oxide Catalysts for High-Yield Aniline Synthesis via Direct Amination of Phenol
1P13	Sayaka Tada	Institute of Science Tokyo	Synthesis of crystalline H ₂ SnS ₂ O ₉ as an acid catalyst
1P14	Tsukino Ishizaki	Institute of Science Tokyo	Development of Ru-Doped Hexagonal SrMnO ₃ Catalysts for Selective Oxidation of Primary Amines and Investigation of Elemental Effects
1P15	Kosei Yamamoto	Institute of Science Tokyo	Development of Oxidative Upcycling of Polystyrene Over Iron Oxide-based Catalyst
1P16	Satoshi Ishikawa	Institute of Science Tokyo	Crystalline Zr ₂ WO ₇ ·1.0H ₂ O and Zr ₂ WO ₇ : Synthesis and Acid Properties
1P17	Shunsuke Kamimura	Institute of Science Tokyo	Synthesis of Chevrel-type Mo ₆ S ₈ Nanoparticles with High-Purity for hydrodesulfurization
1P18	Reo Sasaki	Institute of Science Tokyo	NiFe ₂ O ₄ /BiFeO ₃ Nanocomposites for Dual-Mode Photocatalysis and Piezocatalysis
1P19	MUGE SARI YILMAZ	YILDIZ TECHNICAL UNIVERSITY	BORON-DOPED WASTE-BASED BIOCHAR AS A SUSTAINABLE ADSORBENT FOR DYE REMOVAL: EFFECTS OF ADSORBENT DOSAGE AND
1P20	Mao Sugaya	Institute of Science Tokyo	n-Butane Isomerization over Non-Noble-Metal-Supported Zr ₃ SO ₉
1P21	Hayate Akasegawa	Institute of Science Tokyo	Low-Temperature Synthesis of Transparent Conductive Graphene Films by Reduction of Graphene Oxide
1P22	Hayato Motohashi	Institute of Science Tokyo	Synthesis and Particle Size Control of Barium Zirconate Nanoparticles by the Solvothermal Method
1P23	Yosei Omi	Institute of Science Tokyo	Fractionation and Optical Response of Sulfate Green Rust-Derived Nanoparticle Dispersions toward the Formation of Fe ₃ O ₄ Quantum Dots
Solid State Chemistry			
1P24	Goro Kitano	Tokyo University of Agriculture and Technology	Effects of Substitution on the Superconducting Properties of Ba _{0.6} K _{0.4} Fe ₂ (As _{1-x} Px) ₂
1P25	Ichiro Mizuto	Tokyo University of Agriculture and Technology	Fabrication and evaluation of prototype ring-shaped K-doped Ba ₁₂₂ bulks
1P26	Osuke Kinouchi	Tokyo University of Agriculture and Technology	Investigation of Hydrogenation in the Sm–Fe–Si System Using Hot Isostatic Pressing
1P27	Haruto Okoshi	Institute of Science Tokyo	Charge distribution and physical property in perovskites Bi _{0.75} Pb _{0.25} MnO ₃
1P28	Shoya Nagano	Institute of Science Tokyo	Thin film growth of co-substituted BiFeO ₃ with Ca and Ru
1P29	Zen Masuko	Institute of Science Tokyo	MFM observation of BiFe _{0.9} Co _{0.1} O ₃ Nanodots templated by EB-patterned HSQ
1P30	Sorato Kataoka	Institute of Science Tokyo	Unprecedented Colossal Negative Thermal Expansion in Chemically Substituted Perovskite-type BiCoO ₃
1P31	Yusuke Shiono	Institute of Science Tokyo	PFM Observation of Ferroelectric and Paraelectric Phase Coexistence in BiFeO ₃ -Based NTE Materials

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Engineering materials			
1P32	Shintaro Maeda	The University of Osaka	Weld Solidification Cracking Analysis using Idealized Explicit FEM
1P33	Masumi Aoki	Institute of Science Tokyo	Mechanical Properties of Unidirectional Al ₂ O ₃ /Al ₂ O ₃ Composites with Carbon Interphase Formed by Electrophoretic Deposition
1P34	Satoshi Kawasumi	Tokyo City University	High-Temperature Bending Evaluation of Multicomponent Mo-NiB _x -Ni Cermets
1P35	Takuya Hasegawa	Institute of Science Tokyo	Ti ₃ SiC ₂ Coating on SiC Fibers Formed by Electrophoretic Deposition Using Exfoliated Ti ₃ SiC ₂ Particles
1P36	Miku Takahashi	Tokyo University of Science	Characterization of Phenolic Monoliths for Thermal Protection Systems
1P37	Ryo Yoshida	Tokyo University of Science	Evaluation on Recession Behavior of Al ₂ O ₃ -Dispersed Carbon Monolith as Thermal-Storage Ablators for Atmospheric Re-entry
1P38	Yuto Fujita	Tokyo City University	Effect of Annealing on the Mechanical Properties of TiB ₂ -MoB ₂ Composites
Bio/medical/environmental materials			
1P39	YUJI SATO	The University of Osaka	Freeform Fabrication of Copper Wire by Blue Directed Energy Deposition
1P40	Takaaki Miyamoto	Institute of Science Tokyo	Tuning Cell-Penetrating Peptide Hydrophobicity for Efficient Protein Delivery into Plant Cells
1P41	JING HU	Institute of Science Tokyo	Dynamic Magnetic Readout of Tumor Extracellular Matrix Remodeling Using Heparan Sulfate-Functionalized Magnetic Nanoparticles
1P42	Koki Shimmachi	Institute of Science Tokyo	Comprehensive Engineering and Elucidation of Intramolecular Networks in VH Domain Antibodies Based on NMR Analysis
1P43	Haru Kiriya	Institute of Science Tokyo	Development of a Antimicrobial Drug Delivery System Using Injectable Microgels for Fracture-related Inflammation Treatment
1P44	Hiroki Oshiba	Institute of Science Tokyo	Annealing-Induced Phase Evolution in Electrodeposited Fe/FeOOH Nanoforest Films for Non-Enzymatic Glucose Sensing
1P45	Miri Kusano	Institute of Science Tokyo	Drug Loading into Fe ₃ O ₄ -Mesoporous Silica Composites: Cancer hyperthermia therapy and drug thermal release utilizing heat generation from Fe ₃ O ₄ .
Computational Materials Science and Materials Informatics			
1P46	Haruki Nakajima	Institute of Science Tokyo	First-Principles Evaluation of Defect Concentrations beyond the Dilute Limit in Sn-Doped In ₂ O ₃
1P47	Kenji Ueda	Institute of Science Tokyo	Effects of Surface Orientation and Stoichiometry on the Band Alignment of Rutile SnO ₂
1P48	Jimbee Tanaka	Institute of Science Tokyo	High-Throughput Exploration and Machine-Learning Analysis of Semiconductor and Dielectric Properties in Ilmenite-Type Compounds
Semiconductors			
1P49	Sangjin CHOI	Osaka University	Hetero-epitaxial Growth and Thermal Transport Properties of Wurtzite-Structured Thin Films
1P50	Suzuna Kobayashi	Institute of Science Tokyo	Semi-Transparent Organic Photovoltaics Using Silver Nanowire/Polymer Composite Electrodes
1P51	Daichi Katanosaka	Institute of Science Tokyo	Heavy n-Type Doping and Enhanced Thermoelectric Properties of SnSb ₂ Se ₃ with Ultralow Thermal Conductivity
1P52	Tatsuki Wakugami	Institute of Science Tokyo	Enhancement of Thermoelectric Properties in Defective Rock-salt-type Sc ₂ S ₃ by Controlling Sc Vacancies
1P53	Yusuke Murata	Institute of Science Tokyo	Development of a Fabrication Method for Near-Infrared Photon Upconversion Aqueous Solutions Utilizing Charge-Transfer States
1P54	Naoto Hoshi	Institute of Science Tokyo	Thin-film growth and resistance switching properties of (Pb _{1-x} Sn _x)Se with 2D–3D Structural Phase Transition
1P55	Izumi Otsuki	Institute of Science Tokyo	Enhanced thermoelectric performance by Cu/Si ordering-induced electronic structure modulation in layered Ba(Si _{1-x} Cu _x) ₂
1P56	Alec Romagosa	Institute of Science Tokyo	Gate-Controlled Potassium Intercalation and Superconductivity in Molybdenum Disulfide
1P57	Yuta Hagino	Waseda University	RF-MBE Growth of AlGaN Thermoelectric Thin Films
1P58	Yoshito Kano	Waseda University	RF-MBE growth of GaN on single-crystal diamond

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Room P (Lounge, 3F) 14:55-16:30			
DEJ ² MA			
	Name	Affiliation	Title
2P01	Shota Kariya	The University of Osaka	2 GPa α -Titanium Alloy Enabled by Mechanical Anisotropy
2P02	Takayuki Yamashita	The University of Osaka	Low-temperature tensile deformation behavior of friction-stir-welded duplex stainless steel: An in situ neutron diffraction study
2P03	Masaya Shimabukuro	Institute of Science Tokyo	Electrochemically modified tantalum surface with antibacterial and pro-osteogenic activities
2P04	Katase Takayoshi	Institute of Science Tokyo	Data-Driven Design of Axis-Dependent Conduction Polarity Semiconductors for Transverse Thermoelectrics
2P05	HIRAMATSU Hidenori	Institute of Science Tokyo	Optoelectronic properties of spinel-type chalcogenides
2P06	Yusuke Nishimura	Waseda University	Structural evolution of silicon during melt-quench simulations using a lightweight Tersoff-type neural network potential
2P07	Shota Yanagisawa	Waseda University	Direct delivery of fluorescent nanodiamonds into cells by nanotube stamping
2P08	Akira Takahash	Institute of Science Tokyo	Interpretation of Machine-Learning Prediction Models of Carrier Effective Masses via Materials Classification
2P09	Yuya Sato	Tohoku University	In-Air Activity Measurement of Neuronal Spheroids using Collagen Gel Matrices
2P10	Keitaro Antoku	Waseda University	Real-Time Quantum Measurements with Diamond NV Centers Using FPGA Photon Counting and GPU Maximum Likelihood Estimation
2P11	JUNGHOE HER	Institute of Science Tokyo	Engineering Au@Cd _{1-x} Zn _x S Yolk@Shell Nanostructures for Solar Hydrogen Production
2P12	Ammarueda Issariyapat	The University of Osaka	LPBF-based design of non-toxic Ti-Mo-Zr alloys for high-performance implant functionality
2P13	Derong Chen	Institute of Science Tokyo	Chemical and Biological Properties of Calcium Phosphate Ester Salts Derived from Monoanionic or Dianionic Ethyl Phosphate Monoesters
2P14	Zhiwei ZHOU	Institute of Science Tokyo	Engineering an Osteogenic Nano-Interface on 1.5YSZ Using Abaloparatide-Loaded Zinc–Strontium Metal-Phenolic Networks
2P15	Takeshi Aihara	Institute of Science Tokyo	Synthesis of Rb-Doped SrTiO ₃ Nanoparticles and Application for Transesterification of Glycerol with Dimethyl Carbonate
2P16	Mariya Kuboki	Institute of Science Tokyo	Photothermal Antibacterial Activity of Copper-Functionalized Carbonate Apatite Scaffolds under Near-Infrared Irradiation
2P17	Takahiro Kozawa	The University of Osaka	Vapor-Assisted Synthesis of Breathable, Water-Repellent γ -MnOOH Nests
2P18	Sarisa Trithipchatsakul	Institute of Science Tokyo	Red shift in fluorescence of octacalcium phosphate through incorporation of aromatic dicarboxylate ions with electron-donating substituent
2P19	Masaaki Nakai	Institute of Science Tokyo	Thermomechanical Processing for Localized Control of Mechanical Properties in β -Type Titanium Alloy Rods for Spinal Fixation
2P20	Saeko Yanaka	Institute of Science Tokyo	Decoding and Engineering the Molecular Meridian of Antibodies
2P21	ZHOU XIAOHE	Institute of Science Tokyo	Nano-niobium regulates senescent macrophages to promote osteogenesis by suppressing intracellular ROS
2P22	Ayato Yamane	Waseda University	Strain modulation in graphene induced by Pd intercalation
2P23	Kaichi Takayama	Waseda University	Nickel Silicide Interconnects Enhance Performance of Silicon Micro Thermoelectric Generators
2P24	Takanobu Watanabe	Waseda University	Development of Mg ₂ Si-based Micro Thermoelectric Devices
2P25	Yoshio Kobayashi	Institute of Science Tokyo	Influence of post-processing on residual stress and fit accuracy of LPBF-fabricated Co–Cr–Mo FDPs
2P26	Fuka Onodera	Waseda University	Influence of gas flow on carbon nanotube growth on SiC substrate
2P27	Kosuke Takenaka	The University of Osaka	Effects of Atmospheric-Pressure Non-Equilibrium RF Plasma Jet Irradiation on Polyether Ether Ketone Surfaces
2P28	Akihiro Horiuchi	Institute of Science Tokyo	An In Vitro Study of Ectopic Ossification Induced by a Novel Calcium Compound
2P29	Takayuki Mokudai	The University of Osaka	Evaluation of the Efficacy of Highly Purified Hypochlorous Acid Water Produced by Electrolysis and Reverse Osmosis Treatment
2P30	Koki Shimizu	Tohoku University	Crystallization control of metastable Fe ₂ 3B6 by third element addition for improving glass-forming ability of Fe-B amorphous alloys
2P31	YUTAO HU	Nagoya University	Surfactant-Templated Growth of 2D Platinum Nanodendrites: Mechanistic Insights into the Reduction Pathway and Ultraclean Synthesis
2P32	Hayato Kawamoto	Institute of Science Tokyo	Highly Horizontally Oriented Molecules in Blue UC-OLEDs

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2P33	Susumu Toko	The University of Osaka	Catalyst-Dependent Reaction Mechanism in Inductively Coupled Plasma-Driven CO ₂ Methanation
2P34	Wu Hao	Institute of Science Tokyo	Fabrication and Preliminary Biological Characterization of a Gold Nanoparticle/Polydopamine Coating on Yttria-Stabilized Zirconia
2P35	Ayae Sugawara-Narutaki	Institute of Science Tokyo	Engineered Protein Nanofibers and Hydrogels for Biomaterial Applications
2P36	Masashi Mitoma	Institute of Science Tokyo	In Situ AC Monitoring of Single-Molecule Junction Formation in HS-Au/Pt Nanogap Electrodes
2P37	Minoru Osada	Nagoya University	2D dielectrics and ferroelectrics
2P38	Linjia Li	Tohoku University	Blue Diode Laser-Deposited Copper Coatings: A Fast-Acting Antimicrobial Surface for Biomedical Applications
2P39	Quang Huy Duong	The University of Osaka	External Magnetic Field-Enhanced Micro-Porosity Removal in Plasma Transferred Arc-Based Wire Arc Additive Manufacturing
2P40	Keita Nishibashi	Nagoya University	Atomic layer engineering of Dion–Jacobson type perovskite ferroelectrics
2P41	Aditya Nirmale	Institute of Science Tokyo	Crystallographic Layer Parity and Inverse Area Scaling in Two-Dimensional Perovskite Nanosheet Ferroelectric Tunnel Junctions
2P42	Yoh Onozawa	Institute of Science Tokyo	HMM-Based Detection of ssDNA Translocation Events and Metadata-Linked Dataset Construction Using ELGP Nanopores
2P43	wenda wang	The University of Osaka	FEM-Integrated Reinforcement Learning for Welding Sequence Optimization of a Stiffened Ship Panel
2P44	Kentaro Ito	Nagoya university	Tailored synthesis of single-crystalline ceria nanosheet with controlled rare-earth doping
2P45	Hiroya Ishii	Tohoku University	Evolution of Microstructure and Properties in Biodegradable Fe–Mn Alloys Fabricated by L-PBF
2P46	Keichi Suzuki	Tohoku University	Dissimilar joining via infiltrating resin into steel with a porous surface prepared by liquid metal dealloying
2P47	Takahiro Wada	Institute of Science Tokyo	Effects of Nozzle and Annealing Temperatures on Crystallinity and Mechanical Properties of 3D-Printed Dental-Grade PEEK
2P48	Kai Hiyama	Tohoku University	Effect of W and Ni on mechanical property and biocompatibility of carbon added biomedical Co–Cr–W–Ni alloys
2P49	Neeraphat Kunbuala	Tohoku University	Spark Plasma Sintering of Bimetallic CoCrMo/Ti-6Al-4V for Biomedical Joints: Interfacial Microstructure and Diffusion Behavior
2P50	Kosei Ochiai	Waseda University	Tiling of Diamond(111) Substrates for Large-Area Wafers using MPCVD
2P51	Sunyong Shim	Tohoku University	Effect of post-annealing on the visible-light-induced photocatalytic and antibacterial activities of C-doped TiO ₂ films fabricated via reactive sputtering
2P52	Tomoharu Yoshino	Institute for Materials Research	Tuning Magnetic Properties of (Cr,Fe)S Compound through Cation (Cr/Fe) and Anion (S/Se) Substitutions
2P53	Makoto Takahashi	The University of Osaka	Accumulation of Cation Elements in Glass at the Bond Interface Due to the Application of Reverse Voltage to Anodically-bonded Joints
2P54	Qiuming Huang	Nagoya University	Electrostatically coupled cesium tungsten oxide nanosheet/porphyrin hybrid material and photoelectrochemical application
2P55	Peng Chen	Institute of Science Tokyo	Surface Oxide Crystalline Phases and Antibacterial Activity of Nitrogen-Doped Titanium at Different Treatment Times and Temperatures
2P56	Seongmin Seo	Institute of Science Tokyo	Boron-Incorporated Solid-Phase Crystallization of In ₂ O ₃ for High-Mobility Thin-Film Transistors
2P57	Yusuke Hiruma	Institute of Science Tokyo	Photoelectric Properties in Single Crystals of a Polar Semiconductor CuCrS ₂
2P58	Masaki Azuma	Institute of Science Tokyo	Weak Ferromagnetism and Negative Thermal Expansion in A- and B-sites co-substituted BiFeO ₃
2P59	Hiroaki Tatsumi	The University of Osaka	Thermal Evaluation of Lotus-Type Porous Cu/Solder Composite Joints for Power Modules
2P60	HIKARU KAJIHARA	Institute of Science Tokyo	Preparation and Characterization of Ca(Ti,Mn)SiO ₅ titanite thin films
2P61	Miri Kusano	Institute of Science Tokyo	Monodispersing and Drug Loading of Fe ₃ O ₄ -Mesoporous Silica Composites for Cancer Hyperthermia and Drug Delivery
2P62	Kimiko Kano	Nagoya University	Layer-by-layer engineering of 2D polytungstate nanosheets for tailored thermal shielding materials