【Session Group List】

Session A ～Materials and Devices for energy～

Time	Japan	9:45am-11:45am on December 15 (Wed.)
	U.S.A. (EST)	19:45pm-21:45pm on December 14 (Tue.)
	U.S.A. (PST)	16:45pm-18:45pm on December 14 (Tue.)
Room	for Tokyo Tech only	Lecture Theater
Chair	Minoru Ashizawa	Tokyo Institute of Technology
Co-Chair	Yiwei Zhang	Tokyo Institute of Technology

Lecturer	Affiliation	Abstruct Title
Peilu Jiang	Tokyo Institute of Technology	Liquid-phase Synthesis of L-P-S-Br Solid Electrolyte for the Cathode Composite of All-solid-state Li-S Battery
Elio Gonzalez	University of California, Santa Barbara	Impact of V Substitution by Mg and Al on Structure and Na^+ Diffusion in $Na_3V_2(PO_4)_3$ Na-ion Cathodes
Moe Okazaki	The University of Tokyo	System Design for Ammonia Electrosynthesis using Proton-Conducting Ceramic Electrolysis Cells
David L. Simeroth	Georgia Institute of Technology	Control of Apparent Optical Properties with Structured Metamaterials
Mengqi Shi	Tokyo Institute of Technology	Preparation of CeO2 Nanoparticles by Laser Ablation in Liquid Method and the UV Absorption Properties
Wahid Zaman	Princeton University	Influence of Kinetic Limitations in Stable Cycling of All Solid-state Li-metal Batteries

Session B ～Reactions for energy～

Time	Japan	9:45am-11:45am on December 15 (Wed.)
	U.S.A. (EST)	19:45pm-21:45pm on December 14 (Tue.)
	U.S.A. (PST)	16:45pm-18:45pm on December 14 (Tue.)
Room	for Tokyo Tech only	W831
Chair	Tsuyoshi Nagasawa	Tokyo Institute of Technology
Co-Chair	Hiroshi Noma	Tokyo Institute of Technology

Lecturer	Affiliation	Abstruct Title
Chunyuan Zhan	Tokyo Institute of Technology	Carbon Recycling by Nonthermal Plasma-Driven CO_2 Methanation
Sibo Huang	Tokyo Institute of Technology	Measurement of Flame Temperature Using OH PLIF of A-X (0-0) and (0-1) Bands
Taichi Watanabe	Tokyo Institute of Technology	Investigation on Emission Spectrum from 10-parallel Diaphragm Discharge Plasma
Dawei Shen	Tokyo Institute of Technology	A Large-scale Simulation of Driftwood Disaster by Using LBM with AMR

Session C ～Materials and Devices for energy～

Time	Japan	18:30pm-20:30pm on December 15 (Wed.)
	France, Germany	10:30am-12:30pm on December 15 (Wed.)
	UK	9:30am-11:30am on December 15 (Wed.)
Room	for Tokyo Tech only	Lecture Theater
Chair	Atsunori Ikezawa	Tokyo Institute of Technology
Co-Chair	Akira Kumashiro	Tokyo Institute of Technology

Lecturer	Affiliation	Abstruct Title
Philippine de Crevoisier	CEA, LITEN	Understanding Flooding Phenomena in Mini-Channel of Proton Exchane Membrane Fuel Cells
Yuri Tei	Tokyo Institute of Technology	Preparation of Gd_2O_3:Er,Yb Upconversion Nanoparticles by Laser Ablation in Liquid and Characterization
Thomas Dursap	Univ. Lyon	III-V Core / Oxide Shell Nanowires for Light-Driven Water Splitting
Tomohiro Imai	Tokyo Institute of Technology	Design and Synthesis of Polymers Having Robust Triarylsulfonium Salt Moieties by Addition Reaction of Arynes and Their Applications to Alkaline Exchange Membranes
Timothée Drugeot	Univ. Grenobles Alpes	Investigation and Quantification of Irreversible Degradations in Start-Up Phase of a PEMFC System by an Accelerated Emulation of Reverse Current Decay Mechanism
Daichi Sakakibara	Tokyo Institute of Technology	Tensile Behavior of Bundle SiC_f/SiC Composites with Boron Nitride Interphase Formed by Electrophoretic Deposition Method

Session D～Systems and Data Science for energy～

Time	Japan	18:30pm-20:30pm on December 15 (Wed.)
	France, Germany	10:30am-12:30pm on December 15 (Wed.)
	UK	9:30am-11:30am on December 15 (Wed.)
Room	for Tokyo Tech only	W831
Chair	Isao Ono	Tokyo Institute of Technology
Co-Chair	Muhammad Nasir	Tokyo Institute of Technology

Lecturer	Affiliation	Abstruct Title
Sander Välk	Imperial College London	Tools to Support Interdisciplinary Knowledge Sharing for Creativity and Innovation
Roland Hartanto	Tokyo Institute of Technology	Automatic Speech Recognition System for Code-switching Speech
Malak Sadek	Imperial College London	The Importance of Designing User-Centred AI Metrics for System Evaluation
Wang Fan	Tokyo Institute of Technology	Understanding of Water-Induced Force through Thermodynamical Analysis of Surface Forces
Mimi Nguyen	Imperial College London	Moody Man: Improving Creative Teamwork Through Dynamic Affective Recognition

Session E ～Materials and Devices for energy～

Time	**Japan**	**9:45am-11:45am on December 16 (Thu.)**
	U.S.A. (EST)	**19:45pm-21:45pm on December 15 (Wed.)**
	U.S.A. (PST)	**16:45pm-18:45pm on December 15 (Wed.)**
Room	**for Tokyo Tech only**	**Lecture Theater**
Chair	Sachiko Matsushita	Tokyo Institute of Technology
Co-Chair	Moe Okazaki	The University of Tokyo

Lecturer	**Affiliation**	**Abstruct Title**
Yiwei Zhang	Tokyo Institute of Technology	Creation of Smart PDMS Sponge for Selective Recovery of Molybdenum from Radioactive Wastes
Emily E. Foley	University of California, Santa Barbara	Investigation of Mixed Manganese-Iron Sodium Metal Fluorides as a New Na-ion Battery Cathode
Shunta Chikami	Tokyo Institute of Technology	Prediction of Protein Adsorption onto Polymer Surface using Machine Learning
Onur A. Kucuktas	Georgia Institute of Technology	Control of Apparent Optical Properties via Semitransparent Mesostructures for Radiant Energy Conversion Applications
Huang Yumin	Tokyo Institute of Technology	The Development of HCT116 cell line with Norepinephrine Transporter (NET) Expression
Howie Nguyen	University of California, Santa Barbara	Direct Insight into Electrochemical Processes in Alkali-ion Cathodes from *Operando* Electron Spin Probes

Session F～Systems and Data Science for energy～

Time	**Japan**	**9:45am-11:45am on December 16 (Thu.)**
	U.S.A. (EST)	**19:45pm-21:45pm on December 15 (Wed.)**
	U.S.A. (PST)	**16:45pm-18:45pm on December 15 (Wed.)**
Room	**for Tokyo Tech only**	**Innovation Hall**
Chair	Kenichi Kawabe	Tokyo Institute of Technology
Co-Chair	Hartanto Roland	Tokyo Institute of Technology

Lecturer	**Affiliation**	**Abstruct Title**
Masahiro Ito	Tokyo Institute of Technology	Sequential Distributed Development of Multiple Retrofit Controllers: Independence of Identification, Design, and Operation
Muhammad Nasir	Tokyo Institute of Technology	Three-dimensional Pore-scale Observation of Drying Process of Porous Media
Natsuki Otoshi	Tokyo Institute of Technology	Construction of Prediction Model for Shadowed Photovoltaics Power Generation by Multiple Regression and IQE-Based Model
Wilson Ricks	Princeton University	The Value of In-Reservoir Energy Storage for Flexible Operation of Geothermal Systems
Zhang Bo	Tokyo Institute of Technology	Bioinformatics Analysis of Radiation Response of Gene Expression

Session G ～Materials and Devices for energy～

Time	**Japan**	**18:30pm-20:30pm on December 16 (Thu.)**
	France, Germany	**10:30am-12:30pm on December 16 (Thu.)**
	UK	**9:30am-11:30am on December 16 (Thu.)**
Room	**for Tokyo Tech only**	**Lecture Theater**
Chair	Masahiko Nakase	Tokyo Institute of Technology
Co-Chair	Yuri Tei	Tokyo Institute of Technology

Lecturer	**Affiliation**	**Abstruct Title**
Kexin Chen	Tokyo Institute of Technology	Study on the Activity of the Citric Acid-decorated Carbon Nanotubes for Oxygen Reduction Reaction
Jérémy Dumoulin	Univ. Lyon	Modelling the Potential Benefit of Enhanced Radiative Sky Cooling of Solar Cells, and Investigation of Possible Optimisation Routes
Leo Adachi	Tokyo Institute of Technology	Preparation of Cellulose Nanofibers by Laser Irradiation and Characterization
Tristan Le Carre	Univ. Grenoble Alpes	Gas Diffusion Layer submitted to Patterned Compression Loading in Proton Exchange Membrane Fuel Cells
Akira Kumashiro	Tokyo Institute of Technology	Proposal of High Speed Magnetic Geared Motor with Magnetic Levitated High-speed Rotor
Toudret Pierre	Univ. Grenoble Alpes	Understanding and Optimization of Proton Exchange Membrane Fuel Cell Electrodes

Session H～Reactions for energy～

Time	**Japan, Korea**	**18:30pm-20:30pm on December 16 (Thu.)**
	France, Germany	**10:30am-12:30pm on December 16 (Thu.)**
	UK	**9:30am-11:30am on December 16 (Thu.)**
Room	**for Tokyo Tech only**	**Innovation Hall**
Chair	Shintaro Matsushita	Tokyo Institute of Technology
Co-Chair	Chunyuan Zhan	Tokyo Institute of Technology

Lecturer	**Affiliation**	**Abstruct Title**
Abraham Castro Garcia	Tokyo Institute of Technology	Machine Learning Based Analysis of Phenomena in Lignin Depolymerization Reactions
Tongda Lian	Tokyo Institute of Technology	Liquid Foam Simulation with Consideration of Surfactant Transportation by Using Weakly Compressible Scheme
Sanguk Lee	Korea Advanced Institute of Science and Technology	Comparison of Hydrogen Mixture Formation in a Spark Ignition Engine
Hiroshi Noma	Tokyo Institute of Technology	Study on Friction-Increasing Mechanism of Tribofilms Formed in the Combination of Multiple Lubricating Additives
Zijing Li	Tokyo Institute of Technology	X-ray Tomographic Study on Characteristics of Shear Enhanced Dispersion in Porous Media