

Poster Presentation

Symposium.1

August 24 (Wed)

13:30-15:30

SP1-1	Effect of Post-Treatment on the Surface of Stainless Steel based Anodes for Alkaline Water Electrolysis	Byounguk Yu	Korea Institute of Industrial Technology (KITECH)
SP1-2	Electrochemical reduction of CO₂ via electrocatalyst supported liquid metal electrode	Dain Park	Seoul National University of Science and Technology
SP1-3	Sequential Electrodeposition of 3D hierarchical heterostructures NiFe-LDH electrocatalyst for water splitting	Deokki Cho	Seoul National University
SP1-4	Unassisted selective solar hydrogen peroxide production by an oxidised buckypaper-integrated perovskite photocathode	Dongrak Oh	Ulsan National Institute of Science and Technology (UNIST)
SP1-5	Anion exchange membranes for water electrolysis: A new perspective on the relevant membrane properties	Hamza Khalid	Korea Institute of Science and Technology (KIST)
SP1-6	Spin-Controlled Oxygen Evolution Reaction with Chiral Cobalt Oxides for Photoelectrochemical Water Splitting	Hayoung Im	Yonsei University
SP1-7	A Facile Synthesis of Sulfur Incorporated into Zinc Oxide Nanostructure for Selective Electrochemical CO₂ Reduction Reaction	Hee-il Nam	Korea Institute of Industrial Technology (KITECH)
SP1-8	Adjusting the Orientation of Anisotropic 2D SnS Photocathode for Bias-Free Hydrogen Production	Hyungsoo Lee	Yonsei University
SP1-9	The Effect of Sputtering Substrate Temperature on ZTO Films Properties and its PEC Performance	Ignatius Andre Setiawan	Yeungnam University
SP1-10	In Situ Construction of 2D/2D Nanosheets Heterostructures for Efficient Photoelectrochemical Water Splitting Performance	Ilanchezhian P	Dongguk University
SP1-11	Rare earth perovskite based heterogeneous nanostructures for energy and environmental applications	Ilanchezhian P	Dongguk University
SP1-12	Modulating Band Alignment of Photocathodes with TiO₂ Protective Layer Anchoring Interfacial Dipole Layer	Juwon Yun	Yonsei University
SP1-13	PBI nanofiber mat-reinforced anion exchange membranes with covalently linked interfaces for use in water electrolyzers	Malikah Najibah	Korea Institute of Science and Technology (KIST)
SP1-14	Direct propylene epoxidation with oxygen using a photo-electro-heterogeneous catalytic system	Myohwa Ko	Ulsan National Institute of Science and Technology (UNIST)
SP1-15	Carbon Nanotube-Decorated La₂O₃ Nanoparticles for Enhanced Water Splitting	Sankar Sekar	Dongguk University
SP1-16	Enhanced Electrocatalytic Water Splitting Performances of MoO₃ Nanoparticles Anchored with Human Hair-Derived Activated Carbon Nanosheets	Sankar Sekar	Dongguk University
SP1-17	Polyacrylic Acid-based Hydrogel Overlayer Enabling High Performance and Durable Photocathodes for Photoelectrochemical Water Splitting	Soobin Lee	Yonsei University
SP1-18	Enhancement of Cu₃BiS₃ Photocathode via Modulating Crystal Facet for Bias-Free Photoelectrochemical Hydrogen Evolution	Subin Moon	Yonsei University
SP1-19	Achieving high performance in solid oxide electrolysis cell using LSGM electrolyte support for hydrogen production	Suji Kim	Korea Institute of Ceramic Engineering and Technology
SP1-20	Carbon conversion with Co/Al₂O₃ and Co/SiO₂ in the microchannel reactor	Young Kim	Korea Institute of Machinery and Materials (KIMM)
SP1-21	High Performance Photovoltaic Electrochemical Hydrogen Generation Using Atomic Layer Deposited MoS₂ Driving Superior and Durable Iodide Oxidation Reaction	Young Sun Park	Yonsei University
SP1-22	Facial efficient Ag-Zn co-doped In₂S₃ supported reduced graphene oxide for environmental remediation and solar-hydrogen generation applications	Salh Alhammadi	Yeungnam University
SP1-23	Reduction of Catalyst adsorption by the backbone structure of the ionomer and the efficiency of the anion exchange membrane water electrolysis	Haeryang Lim	Pohang University of Science and Technology (POSTECH)

Symposium.2

August 22 (Mon)

16:00-18:00

SP2-1	Betelnut Shell Derived 3D-Hierarchical Porous Carbon Electrodes for High-Performance Supercapacitor	ARIHARAN ARJUNAN	Jeonbuk National University
SP2-2	A new microfluidics-based fabrication method of highly aligned graphene oxide lithium-ion battery anodes	Dae Kun Hwang	Toronto Metropolitan University
SP2-3	PEDOT: PSS electrode for energy devices	Dong-Hyuk Kim	Seoul National University of Science and Technology
SP2-4	Porous nanostructure of monodisperse starburst carbon spheres intercalated in rGO nanosheets for energy storage	Eun Seo Kim	Jeonbuk National University
SP2-5	Rational Design of Metal Nanoparticle/Ti3C2 MXene Composites on Nickel Foam for High-performance Supercapacitor Applications	Ganghyun Jang	Chonnam National University
SP2-6	Construction of core-shell MnCo2S4@CoOx via atomic layer deposition for supercapacitor applications	Gi-Hyeok Noh	Chonnam National University
SP2-7	Enhanced Quick-charge Capability of Li4Ti5O12 Negative Electrode Prepared by Phase Inversion Process	Gyeong Rae Gim	Tech University of Korea
SP2-8	All-solid-state Batteries with Sulfide-based Composite Lithium Ion Conductor	Haejin Hwang	Inha University
SP2-9	Electrochemical properties of Li1.3Al0.3Ti1.7(PO4)3 oxide solid electrolyte improved through additives	Heewoong Kim	Cheongju University
SP2-10	A facile and green method for fabrication of carboxylic acid functional group rich carbon nanotube having low-defected feature and its use for vanadium redox flow battery	Heeyeon An	Korea National University of Transportation
SP2-17	Electrochemical Characteristics and Deterioration Behavior of Silicon Monoxide Negative Electrode for Lithium-ion Batteries	Hyangsun Jeon	Tech University of Korea
SP2-18	Ameliorating the interfacial issues of supercapacitor by infilling of organic gel polymer electrolyte into electrode	Hyeongmin Park	Jeonbuk National University
SP2-19	Comparative Study of Cycling Stability at Fast Charging Rate of Solid Electrolyte Interphase with Respect to Morphology and Composition in SiOx Anode	Hyeon-Woo Yang	Sejong University
SP2-20	Improved Cycle Performance of Graphite-Silicon Oxide Blend Electrode by Using Dual Binders	Jeong Min Kang	Tech University of Korea
SP2-21	Multifunctional Interlayer Based on TiO2-MoS2 Heterostructures for High-Performance Lithium-Sulfur Batteries	Jeongyoub Lee	Yonsei University
SP2-22	Carbon-coated FeOx nanoparticles via spray solidification as high-performance anode material for lithium-ion batteries	Jiasheng Chen	Chungbuk National University
SP2-23	Cobalt(II)-Centered Fluorinated Phthalocyanine-Sulfur SNAr Chemistry for Robust Lithium-Sulfur Batteries with Superior Conversion Kinetics	Jiheon Kim	Seoul National University
SP2-24	Activated carbon electrode derived from organic waste for high performance supercapacitor	JIWON KIM	Jeonbuk National University
SP2-25	Gel Type Cell for Thermally Regenerative Electrochemical Cycle	Jongbin Won	Seoul National University of Science and Technology
SP2-26	Capillary-enhanced Carbon Nanotube to enable High Performance Graphite-Si Composite Anode	Junghwan Kim	Korea Institute of Ceramic Engineering and Technology
SP2-27	ZIF-based microporous carbon coated electrodes for high efficiency vanadium redox flow battery	Juyeong Kim	Korea Institute of Industrial Technology (KITECH)
SP2-28	Interfacial engineering for enhancing the electrochemical reaction rate and stability	Ki-Wook Sung	Seoul National University of Science and Technology
SP2-29	Investigation of Co-W-S electrode and it's interaction with CoOx Atomic layer deposition for Supercapacitive performance	Manasi Murmu	Chonnam National University
SP2-30	Sulfur-doped SnO2 nanoparticles encased in porous carbon derived from a metal-organic framework for lithium-ion battery anodes	Maniyazagan Munisamy	Sejong University
SP2-31	Hierarchically porous carbon developed by lignin extracted from wooden biomass for high-performance electrode material of supercapacitor	Min Sung Choi	Sungkyunkwan University
SP2-32	Entropymetry for detecting micro-cracks of high-nickel layered oxide cathodes	Minsoo Kim	Seoul National University

SP2-33	Polyaniline (PANI) based capacitors and sensors	Minyoung Choi	Seoul National University of Science and Technology
SP2-34	Polybenzimidazole membranes for Vanadium Redox Flow Batteries: Effect of sulfuric acid doping conditions	Muhammad Mara Ikhsan	Korea Institute of Science and Technology (KIST)
SP2-35	Nanoplate SnS incorporated SiOC anode material for lithium-ion batteries	Naveenkumar Perumal	Sejong University
SP2-36	Evaluation of Polymer Electrolyte Membrane water electrolysis catalyst durability by Accelerated Stress Tests	Seongjun Kim	Seoul National University of Science and Technology
SP2-37	Surface Coating of Electrode Material to Improve Cyclic Performance of Sodium Ion Storage	Song Yeul Lee	Chonnam National University
SP2-39	Fabrication of spherical micro-sized Li_{1.167}Mn_{0.548}Ni_{0.18}Co_{0.105}O₂ with high crystallinity by using flame spray pyrolysis	Sung Nam Lim	Korea Institute of Industrial Technology (KITECH)
SP2-40	Synthesis of a novel mesoporous TiO₂ using a mesoporous hard template and its performance as an anode for lithium ion battery	Sun-gie Han	Pukyong National University
SP2-41	Ceria decoration on CoO nanosheets for high-performance electrochemical supercapacitor applications	Umesh T. Nakate	Jeonbuk National University
SP2-42	Polybenzimidazole sandwiched membranes for highly energy efficient vanadium redox flow batteries	Xuan Huy Do	Korea Institute of Science and Technology (KIST)
SP2-44	Suppression of volume expansion by graphene encapsulated Co₃O₄ quantum dots for boosting lithium storage	Young Jae Park	Pohang University of Science and Technology (POSTECH)
SP2-45	3D interconnected structure based lithium-sulfur batteries with high energy densities	You-Jin Lee	Korea Electrotechnology Research Institute (KERI)
SP2-46	PEO based composite solid electrolyte for High Voltage NCM solid-state Li-metal battery	Je-gwang Ryu	Chonnam National University
SP2-47	Galvanic replacement synthesis of iridium oxide nickel-coated nanoparticles for oxygen evolution reaction	Kyuhwan Hyun	Seoul National University of Science and Technology

Symposium.3

August 25 (Thu)

13:30-15:20

SP3-1	High Efficiency and Moisture Stable Perovskite Solar Cells Enabled by an C12F4N4 Organic Additive	Ashique Kotta	Jeonbuk National University
SP3-2	Novel Mini-module Architecture for Perovskite Photovoltaics	Ashique Kotta	Jeonbuk National University
SP3-3	Phase transition induced defect passivation engineering for highly efficient and stable perovskite solar cells	Dohyun Kim	Pohang University of Science and Technology (POSTECH)
SP3-4	Enhanced light emission of organic light emitting diode by using small molecular hole transport layer	Dong Su Shin	Korea Institute of Science and Technology (KIST)
SP3-5	Effects of annealing temperature on structural, optical and electrical properties evolution of Cs _{0.17} FA _{0.83} Pb ₃ (I _{0.83} Br _{0.17}) ₃ perovskite	Duangmanee Wongratanaphisan	Chiang Mai University
SP3-6	Suppression of Dark Current in Near-Infrared Organic Photodiode through Donor-Acceptor Interfacial Morphology Control	Enoch Go	Korea Institute of Science and Technology (KIST)
SP3-7	High Performance and Eco-Friendly Organic Solar Cells Using Halogen-Free Solvent	Febrian Tri Adhi Wibowo	Ulsan National Institute of Science and Technology (UNIST)
SP3-8	Stable Methylammonium-Free Wide Bandgap Perovskites for Efficient Photovoltaics	Geon Pyo Hong	Seoul National University
SP3-9	Rapid Crystallization Enabled Phase-Pure Ruddlesden-Popper Perovskite for Highly Efficient Deep-Blue Light-Emitting Diodes	Gyumin Jang	Yonsei University
SP3-10	Rational Design of Dimensionally Stable Anodes for Active Chlorine Generation	Hyun Woo LIM	Seoul National University
SP3-11	Development of a Third Component Polymer Acceptor for High-Performance Large-Area Ternary Blend Organic Photovoltaics Module	Hyunjung Jin	Korea Institute of Science and Technology (KIST)
SP3-12	Subcell Characterization of Monolithic Perovskite/Silicon Tandem Solar Cells	Jae Hyun Park	Seoul National University
SP3-13	Improving efficiency and stability of wide-bandgap perovskite solar cells through PEABF ₄ passivation layer	Jaehyuk Koh	Korea Advanced Institute of Science and Technology (KAIST)
SP3-15	Drop-casted Platinum Nanocubes Act as Highly Active Catalysts for (Photo)Electrochemical Hydrogen Evolution Reaction	Jinwoo Chu	Korea Advanced Institute of Science and Technology (KAIST)
SP3-16	A Facile Methodology for Enabling Reverse-Graded Ruddlesden-Popper Two-Dimensional Perovskite Solar Cells	Junwoo Lee	Yonsei University
SP3-17	Enhanced performance of perovskite solar cells via reactive post-treatment process utilizing guanidine acetate as interface modifier	Pramila Patil	Jeonbuk National University
SP3-18	Polymer-based Hole Transport Materials for Thermally Stable Perovskite Solar Cells	SoJeong Park	Seoul National University
SP3-19	Suppressing Phase Segregation of Mixed-Halide Perovskite for Highly Light-Stable Perovskite/Perovskite/Si Multi-Junction Tandem Solar Cells	Su geun Ji	Seoul National University
SP3-20	Reduced defects and roughness in the electrodeposited Cu ₂ ZnSn(S,Se) ₄ thin-film solar cells with In ₂ S ₃ passivation layers	Sun Kyung Hwang	Seoul National University
SP3-21	Implementation of an efficient colored artificial light cell using metal/oxide/metal color filter electrodes	Sunghyun Kim	Korea University
SP3-22	Elucidating the Antisolvent Bathing Effect on Dimethylammonium-iodide assisted CsPbI ₃ Fabrication under Ambient Conditions	Wooyong JEONG	Yonsei University
SP3-23	High Performance Wide-Bandgap Perovskite Solar Cells for Si/Perovskite/Perovskite Triple Junction Tandem Solar Cells	Yeo Jin Choi	Seoul National University
SP3-24	Development of Non-Fullerene Acceptor Organic Photovoltaics Processed from Non-Halogenated Solvent System	Yeri Joo	Hongik University
SP3-25	Solution-Processed Li doped NiOx as a Hole Transport Layer for Pb-Sn Mixed Low Bandgap Perovskite Solar Cells	Youjin Ahn	Seoul National University
SP3-26	Large area, sensitive Halide perovskite single crystal X-ray detector using self-assembled monolayer	Youngseung Choi	Korea Advanced Institute of Science and Technology (KAIST)

Symposium.4

August 25 (Thu)

13:30-15:20

SP4-1	Rollable ultraviolet photodetector based on ZnAl-layered double hydroxides nanostructure via polyvinylidene fluoride film	Ba-Da On	Seoul National University of Science and Technology
SP4-2	Improving Molten Carbonate Electrolysis Cell Performance by Deposition of Au Nanoparticles on Oxygen Electrode	Byeongcheol Na	Korea Institute of Industrial Technology (KITECH)
SP4-3	Boosting Selective Oxidation of Ethylene Glycol to Glycolic Acid using Pt over Se-doped Porous Carbon	Daehee Jang	Pohang University of Science and Technology (POSTECH)
SP4-4	Study of Flower-like Ternary (Ni, Fe, W) based Layered Double Hydroxide Nanosheet Arrays Grown on Nickel Foam as Efficient Oxygen Evolution Reaction Electrocatalysts	Hye-ji Sim	Korea Institute of Industrial Technology (KITECH)
SP4-5	Effect of Co contents on the catalytic performance of Co/Fe-N-C atomic catalysts for oxygen reduction reaction	Hye-Won Jeong	Jeonbuk National University
SP4-6	Sr _{0.92} Y _{0.08} Ti _{1-x} Ni _x O _{3-d} (x=0.05, 0.10, 0.15, 0.20) perovskite catalysts for CO ₂ dry reforming of methane in solid oxide fuel cells	Jeong Woo Yun	Chonnam National University
SP4-7	WO ₃ Nanostructured Electrode for Oxygen Evolution Reaction and Supercapacitor Applications in alkaline Electrolyte	Jeongsik Choi	Jeonbuk National University
SP4-8	Development of Lithium Concentrated Water Production System by Combining Water Electrolytic and Ion Separation Membrane	Jeungjai Yun	Korea Institute of Industrial Technology (KITECH)
SP4-9	Evaluation of Ni-based catalysts for Hydrogen Oxidation Reaction in Alkaline Media	Kyeong-Rim Yeo	Chung-Ang University
SP4-10	Self-supported NiFe based sulfide nanosheet arrays on porous Ni foam for efficient oxygen evolution reaction under alkaline media	Kyoung Ryeol Park	Korea Institute of Industrial Technology (KITECH)
SP4-11	Self-assembled Iridium Oxide Nanoparticles on rGO via Microwave-assisted Rapid Oxidation Method as high efficient electrocatalysts for PEM water electrolysis	Pyeong Kang Yoo	Korea Institute of Industrial Technology (KITECH)
SP4-12	On the Application of a Doped Ceria Cathode Functional Layer for Thin-Film Solid Oxide Fuel Cells Supported by a Nanoporous Substrate	SangHoon Ji	Korea Institute of Civil Engineering and Building Technology
SP4-13	Enhanced Hydrogen Desorption for Efficient Hydrogen Evolution Reaction in PtNC/ReS ₂ Hybrid Electrocatalyst	Sang-Mun Jung	Pohang University of Science and Technology (POSTECH)
SP4-14	Modulation of electrical and optical properties of SnO ₂ thin film based on transition metal doping	SangSeok Lee	Seoul National University of Science and Technology
SP4-15	Enhanced Oxygen Reduction Reaction Pt/Carbon by Atomic Layer Controlled Metal Oxide Thin Layers	Seung-Min Woo	Seoul National University of Science and Technology
SP4-16	High performance of 3D printed one-compartment hydrogen peroxide fuel cell by using buckypaper electrodes and eddy flow	Sieun Jeon	Korea National University of Transportation
SP4-17	Vertical Alignment of Carbon Nanotubes in Photocurable Polymer for Multi-Functional Hybrid Materials	Sunwoo Kim	Ewha Womans University
SP4-18	Effect of manganese concentration on oxidation behavior of ferritic stainless steels for metallic interconnect material of solid oxide fuel cell	Taehun Kim	Korea University of Science and Technology, Korea Institute of Energy Research (KIER)
SP4-19	The Influence of Dynamic Structure and Chemical State of Non- Pt Group Materials based Anodes for Direct Alcohol Fuel Cells	Yong-Wook Choi	Korea Institute of Industrial Technology (KITECH)

Symposium.5

August 24 (Wed)

13:30-15:30

SP5-1	Flexible and transparent metal electrodes for optoelectronic devices	Byungmin Jeon	Sungkyunkwan University
SP5-2	Overcoming Trade-off Between Responsivity and Distinguish Ability to Circularly Polarized Light in Chiral 2D Perovskite by a Non-volatile Lewis Base Additive Urea	Chan Uk Lee	Yonsei University
SP5-3	Highly Sensitive and Selective NO2 flexible Sensor Based on reduced graphene oxide-Indium oxide Composite Operated at low temperature	Chan Woong Na	Korea Institute of Industrial Technology (KITECH)
SP5-4	Synthesis of ZnxCo2-xO4 balls using by solvothermal method and their electrical properties	Deukhyeon Nam	Korea Institute of Industrial Technology (KITECH), Korea university
SP5-5	A General Strategy of Two Dimensional Transition Metal Doped BiOCl Nanosheets by Chemical Coprecipitation Method	Deukhyeon Nam	Korea Institute of Industrial Technology (KITECH), Korea university
SP5-6	Crystallized Ag NW network with enhanced mechano-electric property	Hiesang Sohn	Kwangwoon University
SP5-7	Hybrid Conductor of Irregularly Patterned Graphene Mesh and Silver Nanowire Networks	Hiesang Sohn	Kwangwoon University
SP5-8	3D Feature profile simulation toward next generation high aspect ratio contact hole etching process under fluorocarbon and additive gas mixture	Jaehyeong Park	Jeonbuk National University
SP5-9	Structural Isomer Cations for Chiral 2D Perovskite: Effect of Perovskite Structure on Chiroptical Response	Jaehyun Son	Yonsei University
SP5-10	High-resolution intaglio transfer printing of one-dimensional nanomaterials for wearable touch sensor applications	Jimin Yang	Daegu Gyeongbuk Institute of Science and Technology (DGIST)
SP5-11	Electrochromic Flexible Self-Powered Glucose Sensor	Joonyoung Lee	Seoul National University of Science and Technology
SP5-12	A facile approach to eco-friendly electrochromic devices based on cellulose nanofibers/epoxy composites	Kangyun Lee	Kyung Hee University
SP5-14	Copper/PDMS composite for flexible electrode via surface activated bonding	Kyubong Jang	Korea Institute of Industrial Technology (KITECH)
SP5-15	Ba-doped tin oxide (BaSnO3) electron transport materials for efficient perovskite solar cells	MOHAMMADHOSSEIN KOHAN	Jeonbuk National University
SP5-16	Phyllotactic patterned piezoresistive pressure sensor for biomedical application	Moon Kee Choi	Ulsan National Institute of Science and Technology (UNIST)
SP5-17	Titanium dioxide modified nanocomposites for environmental remediation	Muzafar Ahmad Kanjwal	Khalifa University
SP5-18	High aspect ratio SiO2 contact hole etching using hydrofluoroether plasmas	Sanghyun You	Ajou University
SP5-19	Plasma etching of SiO2 using a mixture of fluorinated ether and fluorinated alcohol	Sanghyun You	Ajou University
SP5-20	Energy funneling Process in 1D/2D Chiral Perovskite Composite Films for Enhanced PLQYs.	Seongyeon Yang	Yonsei University
SP5-21	Development of mechanically tough and reusable superhydrophobic styrene-butadiene rubber/multi-walled carbon nanotube nanocomposite cryogels for oil spill recovery	UDAY SHANKAR	Jeonbuk National University
SP5-22	A Non-Enzymatic Electrochemical Sensor Composed of Nano-Berries Shaped Cobalt Oxide Nanostructures on Glassy Carbon Electrode for Uric Acid Detection	Vandana Nagal	Jamia Millia Islamia
SP5-23	Ba doped SnO2 as electron selective layer for LED application	Zheyu Zhang	Jeonbuk National University

Symposium.6

August 23 (Tue)

10:00-11:30

SP6-1	Piezoelectric properties of electrospun silk membrane and applied as Self-powered motion detecting sensor	Changwan Sohn	Jeonbuk National University
SP6-2	Piezoelectric Nanocomposite Sponge Generators Based on BaTiO ₃ Nanoparticles and PDMS Polymer	Yujin Na	Kyungpook National University
SP6-3	Enhanced Energy Harvesting Effect by Modifying Surface Morphology of ZnO Nanorods	Dong Jin Lee	Dongguk University
SP6-4	Improved piezoelectricity of boron nitride nanotube-ZnO QDs core-shell nanogenerator	Dong Su Shin	Korea Institute of Science and Technology (KIST)
SP6-5	Templated Grain Growth of Mn-doped PYN-PMN-PT piezoelectric ceramics using (001) oriented BaTiO ₃ template	Dong-Gyu Lee	Korea Institute of Science and Technology (KIST)
SP6-6	Characterization of single-crystal macro-fiber composite-based piezoelectric energy harvesters in various temperature and humidity environments testing	Han-Sol Kim	Korea Institute of Materials Science (KIMS)
SP6-7	Plasticized PVC-gel single layer based stretchable triboelectric nanogenerator for harvesting mechanical energy and tactile sensing	Hyosik Park	Daegu Gyeongbuk Institute of Science and Technology (DGIST)
SP6-8	Acoustic energy transfer enhanced by ferroelectric-based contact electrification through liquid and solid media	Hyun Soo Kim	Korea Institute of Science and Technology (KIST)
SP6-9	Flexoelectric-boosted Piezoelectric flexible energy harvester using nanoscale BaTiO ₃ @SrTiO ₃ Core-Shell structure determined by multiscale simulation	Hyunseung Kim	Jeonbuk National University
SP6-10	Phase-Transition-Induced Growth Method for Layer Control and Electronic State Modulation of a Transition Metal Dichalcogenides MoS ₂	Jeong-hune Shin	Sungkyunkwan University
SP6-11	Fabrication of bulk nanostructured thermoelectric materials using ball milling	JI EUN LEE	Chonnam National University
SP6-12	Self-resonance tunable energy harvesters based on adaptive clamping systems	Joonchul Shin	Korea Institute of Science and Technology (KIST)
SP6-13	Rotational triboelectric nanogenerator (RoTENG) based neuro-stimulator for controlling the muscle by frequency modulation	Minseok Kang	Daegu Gyeongbuk Institute of Science and Technology (DGIST)
SP6-14	Synthesis of self-modified black BaTiO ₃ -x nanoparticles and effect of oxygen vacancy for the expansion of piezocatalytic application	Myeongjun Ji	Seoul National University of Science and Technology
SP6-15	Durable magneto-mechanical-electric generator with high power and long-term life cycle	Jongmoon Jang	Korea Institute of Materials Science (KIMS)
SP6-16	Cellulose-based tailorable and foldable biodegradable thermoelectric papers	Seoha Kim	Kyungpook National University
SP6-17	Development of Cellulose Sponge Power Generator That Harvests Energy From Water and Application of Water Electrolysis Hydrogen Production	Seung-Hwan Lee	Korea Institute of Industrial Technology (KITECH)
SP6-18	Butylated melamine formaldehyde as positive triboelectric material for durable and high-performance energy harvesting	So-Hee Kim	Sungkyunkwan University
SP6-19	Laboratory waste to triboelectric nanogenerator for effective energy harvesting and self-powered human safety unit	Sugato Hajra	Daegu Gyeongbuk Institute of Science and Technology (DGIST)
SP6-20	A biocompatible PVDF-CaTiO ₃ composites for energy harvesting and self-powered applications	Swati Panda	Daegu Gyeongbuk Institute of Science and Technology (DGIST)
SP6-21	Magnet Assisted Sustainable Triboelectric Nanogenerator	Yeji Kim	Seoul National University of Science and Technology
SP6-22	Utilization of Evaporation-induced Electricity Generation Technology to Discarded-mask for New-paradigm on Waste to Energy	Yongbum Kwon	Korea Institute of Industrial Technology (KITECH)
SP6-23	Cold-rolled Metal Layer based Extremely Durable Triboelectric Nanogenerator	Yoonsang Ra	Kyung Hee University
SP6-24	Kinetic Study of Molybdenum Oxide Reduction Reaction Using in-situ Hygrometry Analysis	Yoseb Song	Korea Institute of Industrial Technology (KITECH)
SP6-25	Dynamic balanced controllable for high performance hybridization system via Tesla turbine for effectively harvesting mechanical energy	Nghia Dinh Huynh	Sungkyunkwan University
SP6-26	Ultrahigh power output from a serrated-electrode triboelectric nanogenerator via spark discharge	Inah Hyun	Sungkyunkwan University
SP6-27	Self-powered Triboelectric Sensing system for Cooling fan monitoring	Hakjeong Kim	Sungkyunkwan University
SP6-28	Conductive Composite Fibrous Mats Composed of Coaxial Nanofiber for Piezo/Tribo-electric Hybrid Nanogenerator	Jinseok Kim	Chung-Ang University
SP6-29	3D Printed Piezoelectric Materials for Flexible Self Power Systems	Sang-Mi Chang	Korea Institute of Science and Technology (KIST)

Symposium.7

August 23 (Tue)

15:50-17:30

SP7-1	Effect of dual shim configuration for uniform coating flow in slot coating process for PEMFC	Donguk Kim	Korea University
SP7-2	Permeability evaluation from structural characteristics and tortuosity of porous ceramic filters	Gi Wook Lee	Korea University
SP7-3	Dimensionality reduction method for the development of high-performance catalysts	Haechang Kim	Seoul National University
SP7-4	Enhancement of performance and thermal stability of Pd, Pt and Rh supported on alumina by synthesis method	Hyoseong Woo	Korea University
SP7-5	Synergistic effect of physically-mixed V2O5-WO3/TiO2 and H-ZSM-5 catalysts on the selective catalytic reduction of NOx with NH3	Hyun Sub Kim	Seoul National University
SP7-6	Experimental and DFT studies on Cu/Ba-coimpregnated γ -Al2O3 for NOx storage and regeneration at low temperature	Hyunwook Kim	Korea University
SP7-7	The reaction of methanol to hydrocarbons using self-pillared ZSM-5 catalyst	Jaehee Shim	Korea University
SP7-8	Cu loaded lamellar-structured MFI zeolite synthesis and the effect of its physical and chemical properties as effective hydrocarbon trap	Jinseong Kim	Korea University
SP7-9	Optimizing the Oxygen Reduction Reaction in Oxide-derived Cu Grain Boundaries via Complexion Separation and Segregation	Matthew T. Curnan	Pohang University of Science and Technology (POSTECH)
SP7-10	Reaction Mechanism Study of the Supported Metal Catalyst toward Water-Gas Shift Reaction	Myeong Gon Jang	Pohang University of Science and Technology (POSTECH)
SP7-11	Rheological properties and drying behaviors of ceria suspensions under different pH conditions	Seonghwan Kim	Korea University
SP7-12	Impact of reduced-graphene oxide cap layer on surface roughness and states density of ultra-high temperature processed 4H-SiC	Seongjun Kim	Pohang University of Science and Technology (POSTECH)
SP7-13	Adsorption behavior of BTX on boro-, nickel-, and zirconosilicate molecular sieves	Sungjoon Kweon	Incheon National University
SP7-14	Controlled Power Consumption of Phase Change Memory Devices via Block Copolymer Self-Assembly	Taewan Park	Korea Institute of Ceramic Engineering and Technology
SP7-15	Regulating the electronic structures of metal nitrogen-doped carbon catalysts via heteroatom doping into graphene	Yechan Lee	Pohang University of Science and Technology (POSTECH)
SP7-16	Effect of Calcination Temperature on NOx Adsorption over Hydrotalcites-Based Mixed Oxides: A Combined Experimental and DFT Study	Yeji Choi	Korea University
SP7-17	Hydroxyl Functional Group on Gamma Alumina Surface to Anchor Active Species for Durable Catalytic Performance	Yunji Choi	Korea Advanced Institute of Science and Technology (KAIST)
SP7-18	Feature extraction and Early prediction of Lithium-ion battery cycle life for Electric vehicle	Junseop Shin	Seoul National University

Symposium.8

August 22 (Mon)

16:00-18:00

SP8-1	Identification of Relation Ion Permeation Property with Structure-Performance by Using Commercial Nafion® Membranes	Bao Hoang Thai Ngo	Korea Institute of Energy Technology (KENTECH)
SP8-2	Development of In-situ Production Quantification System Suitable for Electrocatalytic Hydrogen Evolution Reaction	Do Hyeong Kwon	Korea Institute of Energy Technology (KENTECH)
SP8-3	Ni-based electrocatalysts for green hydrogen production via urea electrolysis	Hyogyun Roh	Pohang University of Science and Technology (POSTECH)
SP8-4	Electrochemical Ammonia Synthesis at Intermediate Temperature using Cesium Dihydrogen Phosphate-based Electrolyte in Solid Acid Electrochemical Cell	Jihoon Kim	Pohang University of Science and Technology (POSTECH)
SP8-5	Boosting Electrocatalytic Nitrogen Reduction Reaction for Ammonia Synthesis by Amorphous MnOx with Plasma-induced Oxygen Vacancies	Junbeom Maeng	Pohang University of Science and Technology (POSTECH)
SP8-6	Effect of preparation methods on the performance of Co/SiO2 catalysts for ammonia decomposition	Sujin Kim	Pohang University of Science and Technology (POSTECH)
SP8-7	Enhanced polymeric water splitting efficiency by introducing oligo(ethylene glycol) side chain on amphiphilic polymer	Wooteak Jung	Pohang University of Science and Technology (POSTECH)
SP8-8	Understanding of Ion Permeation Properties by Using Commercial Nafion® Membranes	Yu Jin Jo	Korea Institute of Energy Technology (KENTECH)
SP8-9	Modulating Pt Single Atoms on Titanium Nanotubes for Photoelectrochemical Oxidation of Ammonia in Aqueous Matrixes	Zhen ru Zhang	Korea Institute of Energy Technology (KENTECH), Sungkyunkwan University

Symposium.9

August 23 (Tue)

10:00-11:30

SP9-1	Polymer Ligand Exchange to Control InP QDs Dispersion in Siloxane Films	Boram Kim	Sungkyunkwan University
SP9-2	Enhanced Photoluminescence Quantum Yield of Blue-Emitting Core/Shell Quantum Dots via Surface Passivation with MX₂-type Ligands	Byoungjun Lee	Korea Research Institute of Chemical Technology (KRICT)
SP9-3	Lead selenide colloidal quantum dot-based diffusion solar cell with increased mobility for high efficiency	CHAEYEON CHAE LIM	Sungkyunkwan University
SP9-4	Photoluminescence and Photocurrent of Nonstoichiometric Silver Telluride Colloidal Quantum Dots in the Extended Short-Wavelength Infrared Region	GAHYEON KIM	Korea University
SP9-5	Quantum-Confined Nanorod Synthesis and Growth Optimization for Photocatalytic Hydrogen Generation	Gui-Min Kim	Korea Advanced Institute of Science and Technology (KAIST)
SP9-6	Intraband Transition of Non-toxic Colloidal Ag₂Se Quantum Dots for Mid-Infrared photocurrent measurement	Haemin Song	Korea University
SP9-7	Barrierless Carrier Injection in Quantum Dot Electroluminescent Devices	Hyeonjun Lee	Korea Advanced Institute of Science and Technology (KAIST)
SP9-8	Colloidal synthesis of zero dimensional cesium Lanthanide chloride nanocrystals	Hyesun Chung	Chung-Ang University
SP9-9	Beneficial aging effect of epoxy-based encapsulation on InP quantum dot light-emitting diodes	Hyunwoo Jang	Hanyang University
SP9-10	Photodynamic Therapy for Antimicrobial-Resistant Bacteria Inactivation with Cadmium-Free Quantum Dot	Ilson Lee	Korea Advanced Institute of Science and Technology (KAIST)
SP9-11	Fabrication of graphene quantum dots using self-assembled nanoparticles	Jaehee Cho	Jeonbuk National University
SP9-12	Hybrid System of Colloidal Quantum Dots and Azotobacter vinelandii for Ammonia production	Jayeong Kim	Korea Advanced Institute of Science and Technology (KAIST)
SP9-13	Efficiency-Preservable Aqueous Phase Transfer of Quantum Dots Using Hybrid Ligand Complex	Jisu Han	Sungkyunkwan University
SP9-14	Synthesis of Non-toxic Ag-Based NIR Quantum Dots and Its Application into Photoelectronic Device	Jisu Kwon	Pohang University of Science and Technology (POSTECH)
SP9-15	Effect of alloy chalcogen precursors on Photoluminescence and Electroluminescence of Zn-based Chalcogenide Nanocrystals	MinWoo Lee	Hanyang University
SP9-16	Polycyclic aromatic hydrocarbon derived hydrophilic carbon dots for enhanced NIR-triggered photothermal bactericidal activity	Moniruzzaman Md	Gachon University
SP9-17	Surface modification with anions on CdS QDs for efficient photocatalytic CO₂ reduction	Pan Lu	Korea Advanced Institute of Science and Technology (KAIST)
SP9-18	Controlling Energy Levels of Triphenylamine-Based Conjugated Polymers for Efficient Blue Quantum Dot Light Emitting Diodes: Effects of Electron-Withdrawing Groups	SAN SEOMUN	Korea Research Institute of Chemical Technology (KRICT)
SP9-19	Controlled Sulfurization of Ag Nanorod into Ag-Ag₂S Hetero-Nanorod	Taeyong Ha	Pohang University of Science and Technology (POSTECH)
SP9-20	Solar-Driven Conversion of CO₂-to-CO with All-inorganic CdS Nanosheets	Wang Nianfang	Korea Advanced Institute of Science and Technology (KAIST)
SP9-21	Highly efficient and stable photodetectors using heavy metal-free CuInS₂ quantum dots	Wookjin Chung	Daegu Gyeongbuk Institute of Science and Technology (DGIST)
SP9-22	Tin oxo cluster-based Hybrid Organic-Inorganic Photoresist for EUV Lithography	Yeo Kyung Kang	Sungkyunkwan University
SP9-23	Deciphering III-V/II-VI Heteroepitaxy Reaction Pathway on Colloidal Semiconductor Nanocrystals	Yeongho Choi	Sungkyunkwan University
SP9-24	Single-step Hydrothermal Synthesis of Monoclinic Vanadium Dioxide for High Performance Smart Windows	Yoonjoo Choi	Chung-Ang University
SP9-25	InP Magic Sized Clusters: Doping, Transformation, and Evolution	Youngjae Ryu	Pohang University of Science and Technology (POSTECH)
SP9-26	Charge-Selective, Narrow-Gap InAs Colloidal Quantum Dot Layer for Highly Stable and Efficient Organic Photovoltaics	Youngsang Park	Korea Advanced Institute of Science and Technology (KAIST)

Symposium.11

August 23 (Tue)

15:50-17:30

SP11-1	Bio-Inspired Titanium Dioxide Nanowire Arrays for Antibacterial Surfaces	Eun-Ju Kim	Korea Institute of Science and Technology (KIST)
SP11-2	Fully bioresorbable, soft, and transient electronic devices for biomedical applications	Gyan Raj Koirala	Sungkyunkwan University
SP11-3	Sweat pore-inspired permeable skin patch for long-term vital monitoring	Han Eol Lee	Jeonbuk National University
SP11-4	Microfluidic chip-based fabrication of Alginate Fiber Scaffolds for selective capture of CTCs and electrochemical analysis.	Heekyung Park	Chung-Ang University
SP11-5	Electrically super stable Liquid-Metal based Kirigami Electrode (LMKE) for stretchable electronics	Hyesu Choi	Sungkyunkwan University
SP11-6	Synthesis of lanthanum oxide nanomaterials for efficient phosphate removal	Hyon Bin Na	Myongji University
SP11-7	Enhancement of focal cell adhesion and osteogenic differentiation of polycaprolactone surface-modified with oxygen plasma reactive ion etching	Inho Bae	Chosun University
SP11-8	Using thermal conductive composite islands to inhibit heating interference and guide thermal conduction in stretchable devices	Jae-hun Yang	Sungkyunkwan University
SP11-9	Target frequency controllable vibration damping hydrogel filter and bio-application	Jehyung Ok	Sungkyunkwan University
SP11-10	Amine-functionalized mesocellular silica foam supports for heterogeneous enantioselective hydrogenation over Pd catalysts	Jeongmyeong Kim	Pohang University of Science and Technology (POSTECH)
SP11-11	Biocompatible and Hydrophilic Soft Cranial Window at Brain for In Vivo Imaging	Jiwon Kim	Sungkyunkwan University
SP11-12	Tattoo-like Epidermal Microneedle Electrode for Long-term Electrophysiology Measurement in Daily Life	Jiyeong Choi	Sungkyunkwan University
SP11-13	Wearable EEG Electronics for a Brain-AI Closed-Loop System to Enhance Autonomous Machine Decision Making	Joo Hwan Shin	Sungkyunkwan University
SP11-14	MOF-COF nanocomposite as a robust solid state ordered porous material for superior electrochemical sensing of biomolecules	Jose Paul	Gachon University
SP11-15	Hexagonal Boron Nitride Heat Dissipation Neural Opto-probe for in vivo Applications	Ju Seung Lee	Sungkyunkwan University
SP11-16	Electrical Interconnection System for Microelectronics Based On Nanoscale Dewetting Application	MinJun Gwak	Sungkyunkwan University
SP11-17	Preparation of Carbonaceous Hybrid from Electrospun Polyacrylonitrile@Lignin Composite and Its Sensing and Adsorption Capabilities	Oh-Nyoung Hur	Soongsil Univeristy
SP11-18	Electrical stimulation of human adipose-derived mesenchymal stem cells on O₂ plasma-treated ITO glass promotes osteogenic differentiation	Seungho Baek	Chung-Ang University
SP11-19	Optical properties and structure of BYZGO: Er³⁺ nanomaterials with green light emission for modern lighting applications	SWEETY Verma	Inje University
SP11-20	Protein-based conductive composites for wearable biosensors	Tae-Jun Ha	Kwangwoon University
SP11-21	Different Dielectrophoretic Behavior of Janus Particles with Various Biomolecule Conjugations and Electrical Conditions	Yangwoo Lee	Seoul National University of Science and Technology
SP11-22	Biocompatible and biodegradable solid-state electrolyte for organic transistors	Yeong-sinn Ye	Sungkyunkwan University
SP11-23	A Liquid Metal Mediated Metallic Coating on Fabric	Yong Ming	Sungkyunkwan University
SP11-24	ZIF-8/regenerated wood aerogel as high-performance absorbent for carcinogenic synthetic dye	Youngho Jeon	Kyung Hee University
SP11-25	Stimuli-sensitive nanophotosensitizers composed of phenyl boronic acid pinacol ester-conjugated chitosan for photodynamic treatment of oral cancer cells	Young-IL Jeong	Chosun University