

Poster Session

Feb. 18 , Foyer(2F), RoomIV(2F)

[Session A : Green processing of eco-materials]				
No.	Name		Affiliation	Title
AP-1	Takashi	OGIHARA	Daiken Chemical Sales & Mfg Co., Ltd	Mass Production and Characterization of Silver Powder for Silicon Solar Cell by High Pressure Water Atomization
AP-2	Kwan Han	YOON	Kumoh National Institute of Technology	Heat Resistance, Impact Strength, and Transparency of PET Copolymer containing Fluorenylidene bis(2-phenoxyethanol)
AP-3	Shichao	NIE	Xi'an Jiaotong University	Investigation on thermal shock resistance of SiC/h-BN composites
AP-4	Yufeng	LI	Xi'an Jiaotong University	Investigation for improving the hydrophobicity of HTV silicone rubber
AP-5	Xiaodong	HAO	China Iron & Steel Research Institute Group	Research on the Thermodynamic Behaviors of Iron Oxides during High-aluminum Limonite Direct Reduction by Fixed Carbon
AP-6	Yongcheol	KIM	Changwon National University	Operating characteristic on electrolysis of NaCl solution using RuO <sub>2</sub> /Ti electrode
AP-7	Withdrawn		—	—
AP-8	Withdrawn		—	—
AP-9	Jiantao	JU	Xi'an University of Architecture and Technology	Effect of refining slag composition on the contents of [Ca] and [Mg] in molten steel
AP-10	Gyeongah	KIM	Changwon National University	Reducing Building Temperature using High-Albedo Roof Coating
AP-11	BuYoon	KANG	Korea Institute of Industrial Technology	Effect of regenerated-foundry sand on the mechanical properties of core
AP-12	Yamato	HAYASHI	Tohoku university	Eco-Processing and Characterization of Ag Nanowire Transparent Conductive Film
AP-13	Ji-Myon	LEE	Sunchon National University	Transparent Conductive graphene/ITO hybrid layers by CVD and organic additives-free sol-gel techniques
AP-14	Byunghyun	MOON	Changwon National University	Enhanced degradation of Azo dye, Orange II by sequential nanoscale zero-valent iron and advanced oxidation processes
AP-15	Withdrawn		—	—
AP-16	Jeong Ho	RYU	Korea National University of Transporation	Thermometry Properties of NaLa(MoO <sub>4</sub> ) <sub>2</sub> Upconversion Phosphor
AP-17	Jeong Ho	RYU	Korea National University of Transporation	Fabrication and Alpha-Case Analysis of TiAl Alloy
AP-18	Kyeonghwan	CHOE	Korea Institute of Industrial Technology	The effect of reduced pressure on the casting characteristics of A356 alloy in the Lost Foam casting process
AP-19	Kang Rae	LEE	Liquid processing and casting technology R&D group	The effect of polymer type on the casting characteristics of A356 alloy in the Lost Foam casting process
AP-20	Naree	PARK	Changwon National University	Screening of toxic compounds in disposable noodle cups with suspect and non-target screening using LC-HRMS
AP-21	Ju Hun	KIM	Inha University	Prediction of Slag Thickness during Electrical Arc Furnace Wall Using One-Dimensional Heat Transfer Model
AP-22	Li	FU	Northwestern Polytechnical University	Study on texture and property of friction stir welded joints with 2A97 Al-Li alloy thin plates
AP-23	Yunkon	JOO	Changwon National University	Wear Behavior of WC-CoCr and WC-CrC-Ni Coatings by HVOF
AP-24	Changhoon	SUNG	Changwon National University	Investigation of the coupled growth in CMSX-10 superalloy
AP-25	Zeng-Chao	YANG	Chinese Academy of Sciences	Large scale production of silicon nitride powder by combustion synthesis

[Session B : Advanced eco-materials]

No.	Name		Affiliation	Title
BP-1	Taejun	KIM	Gyeongsang National University	Effects of Sn Addition on Fluidity and Microstructure of AC <sub>4</sub> CH Aluminum alloy
BP-2	Ho-Chiao	CHUANG	National Taipei University of Technology	Fabrication of high aspect ratio copper nanowires using super-critical electrodeposition technique for solid oxide fuel cell application
BP-3	Young Sil	LEE	Kumoh National Institute of Technology	Effects of MWCNT and Flow Types on the Electrical Conductivity of Polycarbonate/MWCNT Nanocomposites
BP-4	Hisataka	NISHIDA	Osaka University , Osaka Dental University	Preparation of Dental Zirconia Material with Fluorescent Color of Natural Teeth
BP-5	Dong Sik	BAE	Changwon National University	Synthesis and Characterization of Potassium Titanate Whiskers by Thermal Assisted Reaction
BP-6	Minsu	LEE	Korea Institute of Industrial Technology (KITECH)	Effect of Polyvinyl chloride Composites with Surface-Modified Ceramic Particles
BP-7	Satoshi	KOZAKAI	Kyushu University	Effects of Dopant on Oxide Ion Conductivity in NdBaInO <sub>4</sub>
BP-8	Woon Ik	PARK	Korea Institute of Ceramic Engineering & Technology (KICET)	Advanced Nano/Micro-technology based on the directed self-assembly of block copolymers for pattern formation of eco-materials
BP-9	Hyunhee	JANG	Gyutae Seo	Evaluation of zeolite as a packing medium in air stripping column to enhance ammonia recovery from human urine
BP-10	Chun-Sik	LEE	Gyeongnam National University of Science and Technology	Adsorption of nitrophenols in aqueous solution by surface modified activated carbon based eco-friendly material
BP-11	Hyeongdo	JEONG	Chosun University	Influence of initial ZrOCl <sub>2</sub> concentration on the synthesis of Y-TZP nanopowder by urea hydrolysis
BP-12	Seoyeong	KIM	Gyeongsang National University	Effect of Mg Addition on Heat-Treatment Properties and Fluidity of A356 alloy
BP-13	Guang-Ya	HOU	Zhejiang University of Technology	Effect of dealloying process on the microstructure and electrochemical properties of Ni foam
BP-14	Jae Young	PARK	Korea Institute of Industrial Technology (KITECH)	Effects on Mechanical Properties of Composites Polypropylene and Surface-Modified Talc
BP-15	Hohyeong	KIM	Korea Institute of Industrial Technology (KITECH)	Sensing Properties of Core-shell Nanoparticle Films
BP-16	Ji Soo	KWON	Ulsan University	The effect of support pretreatment with ammonia on Pd/SiO <sub>2</sub> catalyst
BP-17	Sang Yong	NAM	Gyeongsang National University	Preparation and Characterization of ion exchange material improved the ion exchange capacity for Electro-adsorption deionization process
BP-18	Peng	ZHANG	Xi'an Jiaotong University	Isothermal Surface Potential Decay of Zirconia Toughened Alumina Ceramics
BP-19	Jong Kook	LEE	Chosun University	Effects of pH on the Crystallization of Hydrous-Zirconia Particles by Hydrolysis
BP-20	Masami	MORI	Ehime University	Desorption of Hydrogen and Carbon dioxide from Adsorbed Ethanol on Zn-loaded Tin oxides in Air
BP-21	Withdrawn		—	—
BP-22	Dae Sung	KIM	Chosun University	Fabrication of zirconia ceramics by slip casting and its sintered properties
BP-23	Kenta	TSUCHIBASHI	Kumamoto University	Visible-light induced photoreduction of polyoxometalates by a Ru complex photosensitizer for photoenergy storage
BP-24	Kazuki	MIKAMI	Kumamoto University	Synthesis of Cu <sub>2</sub> O/ZnO colloidal nanocrystals for H <sub>2</sub> S sensing
BP-25	Ryunosuke	OKUDA	Kyushu University	Preparation of Gas Diffusion Electrode mixed N-doped Carbon Originated from Chitosan with Hydrophilized Ketjen Black
BP-26	Hosup	JUNG	Seoul National University	Smart Hydrogel Nano-Carrier System for Oral Delivery
BP-27	Woo-Teck	KWON	Korea Institute of Ceramic Engineering and Technology	Effect of Particle Size and Content of Ground CaCO <sub>3</sub> on the Mechanical and Thermal Property of SMC Composites

BP-28	Jin Hyeok	KIM	Chonnam National University	The study of effect of the Ag, Au, and Pd contacts for the Schottky diodes of $Mg_xZn_{1-x}O$ films
BP-29	Menghan	HU	Beihang University	Fabrication of porous alumina ceramics by freeze drying combined gel casting method
BP-30	Fumihiko	ISHIBASHI	Kyushu University	Controlling factors for Formation Reaction of Ultrathin Au Nanowires
BP-31	Takahiro	YOSHINO	Kyushu University	Material Search for New $Li^+$ Conductive Oxides
BP-32	Yuki	TANAKA	Kyushu University	Preparation of Ultrathin p-n Junction Using the n-type $TiO_2$ Nanosheet and p-type NiO Nanosheet and its Photocatalytic Activity
BP-33	Sang-Woon	KANG	Chungnam National University	Dielectric Properties of Plasma-Sprayed $Al_2O_3$ - $BaTiO_3$ Composite Coatings
BP-34	Kunihiko	KATO	Nagoya Institute of Technology	Synthesis of $TiO_{2-x}$ particle under thermal non-equilibrium field by microwave irradiation
BP-35	Gwanghyo	CHOI	Chonnam National University	Microstructural evolution and texture development of cold rolled and annealed $\beta$ type Ti-6Mo-6V-5Cr-3Sn-2.5Zr alloy
BP-36	HeeSeon	LEE	Gyoungsang University	Effect of silane coupling agent on the dispersion of $ZrO_2/o$ -phenylphenoxyethyl acrylate sol
BP-37	Jeong Min	PARK	Korea Institute of Ceramic Engineering and Technology	Preparation and characterization of nanosize $ZrO_2$ particle according to kinds of zirconium precursor for highly refractive index nanocomposite
BP-38	Tae Kwon	HA	Gangnung-wonju National University	Effect of Yttrium Additon on Microstructure and Mechanical Properties of Titanium
BP-39	Withdrawn		—	—

### [Session C: Energy conversion]

No.	Name		Affiliation	Title
CP-1	Yubao	LI	Sichuan University	The effect and wear mechanism of new antiwear additive used for ultra-low sulfur diesel
CP-2	Hao	ZHANG	Xi'an University of Architecture and Technology	Influence of $Cr_2O_3$ doping $Al_2O_3$ ceramics on microstructure and electrical properties
CP-3	Yuan	SHE	Xian University of Architecture and Technology	Thermogravimetric analysis on gasification reaction experiment research of semi-coke
CP-4	Soo Young	KIM	Chung-Ang University	Control of annealing temperature for the improved performance of cesium lead iodide solar cell
CP-5	Keiichiro	TAKEYAMA	Nagasaki University	Photoelectroless Deposition of Pt-doped Hematite Thin Films for Photoanodes
CP-6	Yurian	KIM	Inha University	Effect of Tellurite Glass Frit in Front Contact on Electrical Characteristics of Si Solar Cells
CP-7	Eisuke	MINAMI	Kyushu University	$LaGaO_3$ Oxide Thin Film Prepared with a Dip-coating and Co-sintering Method
CP-8	Young Hoon	LEE	University of Ulsan	Design of Novel Iridium(III) Cyclometalates with Tethered o-Carboranes by Alkylene Chain to Improve Their Phosphorescence Efficiency
CP-9	Withdrawn		—	—
CP-10	Ji-Yong	EOM	Korea Automotive Technology Institute	Fabrication of Graphene Embedded $LiFePO_4$ using Catalyst Assisted Self Assembly Method as Cathode Materials for High Power Lithium-Ion Batteries
CP-11	Hyung-Tae	LIM	Changwon National University	Thermal cycling of solid oxide fuel cell using electrical anode protection method
CP-12	Shintaro	IITSUKA	Kyushu University	Steam Electrolysis by Solid Oxide Electrolysis Cells (SOEC)
CP-13	Mi Yeon	BYUN	Pusan National University	The preparation of highly dispersed Pd/ $\gamma$ - $Al_2O_3$ catalyst: the relation of attracting-repelling force and Pd dispersion
CP-14	Guang-Ya	HOU	Zhejiang University of Technology	Preparation and Catalytic Performance of Ni-Cu-B/TNTs Electrode by Cyclic Voltammetry Electrodeposition for Methanol Electro-oxidation
CP-15	Hyo-Hyun	YOO	Chung Nam National University	Effects of Feedstock Powder Size and Plasma Jet Power on Electrochemical Performance of Plasma-Sprayed Ni-Al Catalyst Coatings

CP-16	Hiroshi	YAMADA	Kyushu University	Searching for new piezoelectric quasi-ternary nitrides by the first-principle calculations
CP-17	Keisuke	INDA	Kyushu University	Diffusivity of PF <sub>6</sub> <sup>-</sup> and gas formation of graphitic carbon electrode for dual carbon battery
CP-18	Min	LUO	Ningxia University	Design and synthesis of Porous Zr-metal organic frameworks (UiO-66) aerogels for supercapacitor electrodes
CP-19	Ajay	KUMAR	University of Ulsan	Deep Blue Phosphorescent Iridium(III) Complexes Based on o-Carboranyl Ligand
CP-20	Heon	LEE	Korea University	3D structured photo-electrode for efficient solar water splitting
CP-21	Ronghuan	HE	Northeastern University	Acid-Base Blended Membranes Based on Imidazolium Functionalized Poly(aryl ether ketone) and Sulfonated Poly(ether ether ketone)
CP-22	Hyeona	MUN	Sunkyunkwan University	Direct observation of dislocation arrays forming at grain boundary for the high thermoelectric performance

### [Session D: Environmental protection materials]

No.	Name	Affiliation	Title	
DP-1	Shio	KOMATSUDA	Tohoku University	N-TiO <sub>2</sub> / F-TiO <sub>2</sub> Nanocomposite with Enhanced Photocatalytic Activity under Visible Light Irradiation
DP-2	SoEun	JEON	Changwon National University	Effect of Sr doping on the magnetic and magnetocaloric properties of double perovskite Ba <sub>2-x</sub> Sr <sub>x</sub> FeMoO <sub>6</sub>
DP-3	Mi Jung	PARK	Changwon National University	The effect of interlayer materials for titanium substrate of BDD electrode
DP-4	Dong Bok	LEE	Sungkyunkwan University	High-temperature Oxidation of Inconel 690 in Air
DP-5	Soo-Min	PARK	Hannam University	Photocatalytic behavior of WO <sub>3</sub> nanorods synthesized hydrothermal methods
DP-6	Sang Yong	NAM	Gyengsang National University	Preparation and Characterization of Poly(ether-ether-ketone) Containing Imidazole Moiety for Anion Exchange Membrane for Fuel Cell
DP-7	Honghong	CHANG	Tohoku University	Pt NPs and DNAzyme Functionalized Polymer Nanospheres as Triple Signal amplification Strategy for Highly Sensitive Electrochemical Immunosensor of Tumour Marker
DP-8	Taeho	KIM	Sunmoon University	An Effective Approach for Photodeactivation of Harmful Algal Blooms with Various Photocatalyst under Simulated Solar Light
DP-9	Nguyen Van	NGHIA	University of Ulsan	Ir(III) Cyclometalates with o-Carborane as a Turn-On Phosphorescent Sensor for Fluorides
DP-10	Seiji	TAKAHASHI	Japan Fine Ceramics Center	Synthesis and NO <sub>x</sub> sensing evaluation of solid and porous La <sub>0.8</sub> Sr <sub>0.2</sub> MnO <sub>3</sub> microspheres
DP-11	JInghua	GU	Beihang University	Adsorption of Methylene Blue and Metal Ions on Porous C/Al <sub>2</sub> O <sub>3</sub>
DP-12	Wenxiu	LIU	University of Science and Technology Beijing	The Dispersion and Stability of TiO <sub>2</sub> nanoparticles in Aqueous solution
DP-13	Hwansu	YOO	Chungnam National University	Fabrication and Characterization of CuO Thin Film/ZnO Nanorods Array Oxide Heterostructure for Nitrogen Monoxide Gas Detection
DP-14	Dojin	KIM	Chungnam National University	Chemoresistive gas sensors for room temperature operation
DP-15	Nam Kyung	KIM	Kangwon National University	Sol-gel Synthesis and Properties of Nano-Sized Metal doped TiO <sub>2</sub> Powders for Photocatalytic

### [Session E: Long-term use materials]

No.	Name	Affiliation	Title	
EP-1	Withdrawn	—	—	
EP-2	Kezheng	SANG	Chang'an University	Effect of AlF <sub>3</sub> Content on Properties of Mullite/Al <sub>2</sub> O <sub>3</sub> Composite Ceramics

EP-3	Do-Young	LEE	Seoul National University of Science and Technology	Fluorine-doped tin oxide nanoparticles using the ultrasonic spray pyrolysis for high-performance lithium-ion batteries.
EP-4	Young-geun	LEE	Seoul National University of Science and Technology	Porous carbon nanofibers using electrospinning for high performance electrical double layer capacitors
EP-5	Suguru	MATSUURA	Nagaoka University of Technology	Degradation Kinetics of ZrO <sub>2</sub> Scale Formed on Zircaloy with Molten Stainless Steels-B <sub>4</sub> C at 1200° C
EP-6	Hyungyu	LIM	Keimyung University	Effect of the addition of ZrO <sub>2</sub> having different crystal structures on the mechanical properties of Al <sub>2</sub> O <sub>3</sub>
EP-7	Zhen Lin	LU	Xi'an University of Technology	Effect of Al <sub>2</sub> O <sub>3</sub> on the Friction and Wear Behaviors of Al <sub>2</sub> O <sub>3</sub> /W-Cr Composite
EP-8	Kazuhisa	SHOBU	Research Institute of Computational Thermodynamics, Inc.	New Integrated System for Chemical Thermodynamics Analysis
EP-9	Jihoon	CHAE	Gyeongbuk Hybrid Technology Institute	Optical properties evaluated according to the different thickness sapphire under the same polishing conditions
EP-10	Jihoon	CHAE	Gyeongbuk Hybrid Technology Institute	Effect of CeO <sub>2</sub> Addition and Mol Change of TZP on Characteristics of ZrO <sub>2</sub>
EP-11	Soo-Ryong	KIM	Korea Institute of Ceramic Engineering and Technology	Effects of Anti-Corrosion Coating with Polymer-derived Ceramic Materials and Combination of Active Fillers, Glass Frits
EP-12	Zhiwei	LI	Xi'an Jiaotong University	Research on Water Content and Physicochemical Properties of Water-Soaked XPPE Cable
EP-13	Zhiwei	LI	Xi'an Jiaotong University	Effect of Degassing Treatment on the Mechanical and Dielectric Properties of XLPE Cable Insulation
EP-14	Tao	ZHANG	Xi'an Jiaotong University	Analysis of physical and chemical properties of XLPE insulation for long term running cable
EP-15	Xin	YU	Electric Power Research Institute of Guangdong Power Grid Corporation Ltd.	Research on correlation between insulation performances and damage degree of burned cable
EP-16	Rui	WANG	Electric Power Research Institute of Guangdong Power Grid Corporation Ltd.	Research on stress distribution in XLPE insulation under different conditions based on ANSYS
EP-17	Xin	YU	Electric Power Research Institute of Guangdong Power Grid Corporation Ltd.	Analysis on the crystalline morphology of High Current Bending XLPE Cable
EP-18	Sang Yong	NAM	Gyeongsang National University	Gas permeation property of polyimide hollow fiber membranes in harsh condition
EP-19	Penghu	LI	Xi'an Jiaotong University	Optimizing Design on the Structure of Epoxy/Paper Composite Insulated Tubular Bus
EP-20	Chenglei	LI	Xi'an Jiaotong University	Electric Field Simulation of Typical Defects in the Epoxy/Paper Composite Insulated Tubular Bus
EP-21	Jiawei	MA	State Key Laboratory of Electrical Insulation and Power Equipment	Influence of the Morphology of Alumina Filler on Electrical and Thermal Properties of Epoxy Resin Composites
EP-22	So-Yeong	KANG	Chungnam National University	Effects of Feedstock Powder Characteristics on Microstructural Features and Erosion Resistance of WC-12Co Coatings
EP-23	Youn Sang	KIM	Seoul National University	High Capacitance Self-healing Polymer Dielectric for Thin Film Transistors
EP-24	Gang	HE	Chinese Academy of Sciences	Infrared ceramic materials for energy saving application

[Session S: Special session of "Mixed Anion compounds"]

No.	Name		Affiliation	Title
SP-1	Tae Hwan	NOH	Changwon National University	Effects of electrolyte additives on the PEO coating on the Al6061 aluminum alloy using two step electrolytic plasma processing
SP-2	Withdrawn		—	—
SP-3	Jianlei	KUANG	University of Science and Technology Beijing	Effect of Aspect Ratio on the Dielectric Permittivity and Microwave Absorption Properties of One-Dimensional SiC

SP-4	Qi	WANG	University of Science and Technology Beijing	Synthesis of Spherical AlN Granules by Carbothermal Reduction Nitridation Method
SP-5	Ye Ji	KIM	Sungkyunkwan University	Chemoselective hydrodehalogenation of organic halides utilizing two-dimensional anionic electrons of inorganic electride $[\text{Ca}_2\text{N}]^+ \cdot \text{e}^-$
SP-6	Jongho	PARK	Sungkyunkwan University	Strong localization of anionic electrons at interlayer for electrical and magnetic anisotropy in two-dimensional $\text{Y}_2\text{C}$ electride
SP-7	Ho Sung	YU	Sungkyunkwan University	New layer structured transition metal chalcogenides with 2D metallic transport