

2. e-POSTER SESSIONS

e-POSTER SESSION LETTERS

- **PA** : Poster Session A (on November 25th (Wednesday))
- **PB** : Poster Session B (on November 26th (Thursday))

e-Poster Presentation Numbers are listed with the Session letter first, and the number of the paper last (i.e., PA-1 = Session A, Scheduled on Nov. 25 (Wed), 1st poster presentation paper)

Wednesday Afternoon Poster Session
Nov. 25, 2020
(Time: 13:30 p.m. - 18:00 p.m.)
(On-line)

Poster Session PA (Nov. 25, 2020)

Poster No.	Title of Presentation	Presenting Author	Nationality
PA-1	Preparation of monolayer CrWN and nanomultilayer CrWN/MoN coatings using arc ion plating	Changwei Zou	China
PA-2	Effect of Carbides Formed in 9Cr-1Mo-V-Nb Weld Metals on Elevated Temperature Tensile Strength	Byungrok Moon	Korea
PA-3	Piezoelectric Performance of Cubic-Phase BaTiO ₃ Nanoparticles Vertically Aligned via Electric Field	Guhyun Kwon	Korea
PA-4	A study on the low-temperature impact toughness according to the Ni content of welding materials when welding low-temperature steel	Su Jong Kim	Korea
PA-5	Magnetic Abrasive Finishing-assisted Hybrid Electrochemical Polishing	Seong Ung Kwak	Korea
PA-6	Tensile and microstructural behaviors of high manganese steel welds for cryogenic applications	Myeonghwan Choi	Korea
PA-7	GTA weldability and applicability evaluation of commercial cryogenic steel with high-entropy alloy filler metal	Seong Hoon Yoo	Korea
PA-8	Structural and tribological properties of AlCrN/Cu coatings deposited by the hybrid PVD method	Dongsen Geng	China
PA-9	Thickness Dependent Work Function Variation of Pt-Ru Bimetallic Alloy prepared via Atomic Layer Deposition	Hyun Jae Woo	Korea
PA-10	Facile synthesis NiSb nanoparticles anchored in 3D carbon nanosheet networks for enhanced lithium storage property	Litao Yu	China
PA-11	Uniform amorphous FePO ₄ nanospheres as cathode for sodium ion batteries	Li Guo Zhang	China
PA-12	Electroforming-Free Bipolar Resistive Switching in GeSe Thin Films with a Ti-Containing Electrode	Woohyun Kim	Korea
PA-13	Performance improving of pure sulfide Cu(In,Ga)S ₂ solar cells via new annealing method	ILYEONG KWON	Korea
PA-14	Polymeric nanoparticles containing Lumogen® dyes for cellular detection and imaging	Mingyeong Kang	Korea
PA-15	Influence of annealing temperature on crystal orientation of electrodeposited Sb ₂ Se ₃ thin-film photovoltaic absorbers	Seonghyun KIM	Korea
PA-16	Ni-Fe layered double hydroxide synthesis for oxygen evolution reaction via gavanic process	Seong Hyun Kim	Korea
PA-17	A Study on the Characteristics of Welding Characteristics by Welding Process Variables in Hot Stamping Steel Bolt Projection Welding Area	Seunghun LEE	Korea
PA-18	Microstructure and corrosion behavior of duplex oxynitride coatings in molten aluminum	Lin Zhang	China
PA-19	Effects of Deposition Temperature on the Polarization Switching Kinetics of Hf _{0.5} Zr _{0.5} O ₂ thin film	Dong Hyun Lee	Korea

PA-20	Charge-Dependent Cellular Uptake of Spherical Polymeric Nanoparticles	Hyosung Choi	Korea
PA-21	A study on electrocaloric effect of $\text{Hf}_{0.3}\text{Zr}_{0.7}\text{O}_2$ film with field induced ferroelectricity	Kun Yang	Korea
PA-22	Mitigating wake-up effect in 9.2 nm-thick $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ film by optimizing fatigue pulses	Ju Yong Park	Korea
PA-23	Memristive Reservoir Computing for Medical Diagnosis	Yoonho Jang	Korea
PA-24	Controlled self-assembly of block copolymers with high- χ by solvent based annealing for advanced nanolithography applications	Young Joong Choi	Korea
PA-25	Influence of source and drain metal type on the programming and erasing performances of charge trap flash using atomic layer deposited (Zn,Sn)Ox channel layer	Sukin Kang	Korea
PA-26	Electrochemical preparation of hybrid meso-macro porous structure of copper	Seong-Hyeok Ha	Korea
PA-27	Charge/Discharge Characteristics of Silver-Zinc Battery	Jiung Jeong	Korea
PA-28	First-principles analysis on the role of rare-earth doping in affecting nitrogen adsorption and diffusion at Fe surface towards clarified catalytic diffusion mechanism in nitriding	Yang Yang	China
PA-29	Electrochemical analysis of all-solid-state batteries	Yu-Jeong Min	Korea
PA-30	Electrolytic metal phosphide with tunable pore structure	Jae Young Hong	Korea
PA-31	Hybrid functional band-gap database for semiconducting inorganic materials	Sangtae Kim	Korea
PA-32	Li substituted β -TCP dissolution behavior on hDPSCs	Sun-Woo Gyeong	Korea
PA-33	Wireless Temperature and Humidity Sensors using Reduced Graphene Oxide via Tunable Reduction Method for Continuous and Real Time Monitoring	Young Won Kim	Korea
PA-34	Fabrication of Transparent heater using Reduced Graphene Oxide with Mesh pattern	Hae-in Moon	Korea
PA-35	Preparation of rare earth doped zirconia nano-agglomerated spray powder and nano-structured thermal barrier coating	Zhaolu Xue	China
PA-36	A novel volatile-memristor-based true random number generator	Kyung Seok Woo	Korea
PA-37	Towards aquaculture systems powered by renewable energy sources: Case study of Croatia	Marija Korican	Croatia
PA-38	Simulation-based Analysis of Novel Phase Change Memory Structure with Separated Program and Read Paths for Low Program Current and Endurance Enhancement	Inhyuk Choi	Korea
PA-39	$1/f$ noise in amorphous Sb_2Te_3 for energy-efficient stochastic synapses in neuromorphic computing	Deokyoung Kang	Korea
PA-40	Solving Constraint Satisfaction Problem with Spiking Neural Network based on 1.4M 6T2R PCM Synaptic Array with 1.6K Stochastic LIF Neurons Neuromorphic Hardware	Seongwon Yoon	Korea
PA-41	Photocatalytic performance of $\text{Bi}_2\text{VO}_{5.5}/\text{Bi}_2\text{O}_3$ laminated composite films under simulated sunlight irradiation	Wei Xie	China

Thursday Afternoon Poster Session
 Nov. 26, 2020
 (Time: 13:30 p.m. - 18:00 p.m.)
 (On-line)

Poster Session PB (Nov. 26, 2020)

Poster No.	Title of Presentation	Presenting Author	Nationality
PB-1	Insight into H ₂ O ₂ selectivity in the electrocatalytic oxygen reduction reaction on sulfur-doped disordered carbon synthesized by the plasma-in-liquid process	Hanvin Kim	Japan
PB-2	Size-Controllable Nickel Nanoparticles on Reduced Graphene Oxide for Hydrogen Evolution in Alkaline Media	Seung Geun Jo	Korea
PB-3	Controlling of graphene layers according to growth time of CVD and evaluation of performance as transparent electrode	Yeon Wook Jung	Korea
PB-4	Improved durability of amorphous carbon films/stainless steel bipolar plates in PEMFCs by optimizing their compactness and component	Yang Xin	China
PB-5	Oxygen vacancy induced electron redistribution and acid sites of tungsten-doped CeTiO _{2-δ}	Myung-Ju Kim	Korea
PB-6	Optimizing machine learning models for nanocrystalline NdFeB magnets by very fast simulated annealing	Hyeon-Kyu Park	Korea
PB-7	Intrinsic defects of Ni catalysts and growth behavior of CNT	Taewoo Kim	Korea
PB-8	Chlorine groups as the novel bonding sites in functional carbon catalysts to cellulose hydrolysis	Lusha Qin	China
PB-9	Simulation study of dynamic target etching behavior based on PIC/MCC plasma sputtering model	Zheng Jin	China
PB-10	Synergetic effect of carrier transport and carrier filtering in PEDOT:PSS by introducing vertically aligned Se nanowire array for thermoelectric power factor improvement	In Yea Kim	Korea
PB-11	Mechanical properties of Lu ₂ O ₃ and Y ₂ O ₃ co-doped ZrO ₂	Min-sun Park	Korea
PB-12	Improving buildability of cement mixture with calcite-ettringite seeds addition for 3D printing	Tae-Heun Lim	Korea
PB-13	Influence of deposition temperature on the AlCrTiSiN coatings and its cutting performance	Qiang Zhu	China
PB-14	The role of Tin(Sn) in cold-annealed surface scale and corrosion resistance of ferritic stainless steel containing high Si	Chan Yang Kim	Korea
PB-15	Effect of substrate roughness and morphology on the magnetic properties of amorphous CoFeB thin films	Yungeun Ha	Korea
PB-16	Single-Walled Carbon Nanotube-Based Chemi-Capacitive Sensor For Alcohol gas	Ki-Hwan Lim	Korea
PB-17	Wetting behavior of Water on Polymer Surfaces with Micropillar Array and Nanoprotrusion	Ju-Hwan Baeg	Korea
PB-18	Hydrothermally Synthesized CIS-BNC as Highly Efficient OER Catalyst with Ultrastability	Sobin Mathew	India
PB-19	Effects of reducing atmosphere on the microstructure and properties of Zr-Ti-B-N nanocomposite coating	Ren Ren Xu	China
PB-20	Negative Capacitance in Polycrystalline Ferroelectric-Dielectric Bilayer Thin Films	Minsik Oh	Korea
PB-21	Effect of drawing strain of carbon steel on TTT diagram	Min-Woo Park	Korea
PB-22	Effect of plastic deformation and heat treatment on microstructure and thermal conductivity of 3003 Al alloy	Tae Yang Bang	Korea
PB-23	Design of the multilayered AlCrSiN/AlCrN/AlCrON/AlCrN coatings and their properties	Qian Liu	China
PB-24	Short-Term Creep Life Based Long Term Creep Life Predictions for Ni-based Superalloy	Chang Ho Lee	Korea
PB-25	Ultra-high rate of temperature increment in resonant spin dynamics-excitation in superparamagnetic nanoparticles for highly efficient hyperthermia	Jae-Hyeok Lee	Korea

PB-26	Heteroatom-doped carbon with molybdenum carbide for advanced oxygen evolution reaction electrocatalyst	Jihun Kim	Korea
PB-27	Synthesis of Cobalt Single atom in Nitrogen doped carbon catalyst for Oxygen Reduction Reaction	Jae pil Yoon	Korea
PB-28	Organic near-infrared dye loaded photostable polymeric nanoparticle with enhanced biocompatibility under hyperthermal irradiation at low-temperature	Gyurin Kim	Korea
PB-29	Designed Fabrication of a Core-Double Shell Heterostructure $\gamma\text{-Fe}_2\text{O}_3\text{@FeS}_2\text{@C}$ Nanocubics using Interface Engineering for Oxygen Evolution Reaction	Kai Chen	China
PB-30	Research on Properties of Low-Melting-Point glass-graphene	Liu-Liyu	China
PB-31	Carrier-Free Micellar CpG Adjuvant for Immunological Treatment of HIV-1	Haejoo Kim	Korea
PB-32	Structural and Wettability analysis of Low Sintering Borosilicate Glass by Cobalt(II) Oxide	Hyun-Joon Lee	Korea
PB-33	Characteristic of 3D MXenes fabricated by freeze-casting method	Tae Gang Kim	Korea
PB-34	High energy and power density of self-grown $\text{CuS@Cu}_2\text{O}$ core-shell supercapattery positrode	Hyun Woo Lee	Korea
PB-35	Improvement of adhesion property of plated Ni film on AAO for interposer application	Chae-Yoon Kim	Korea
PB-36	Effect of coating thickness on the tribological behavior of Ni-P-PTFE composite coating	Myung Won Lee	Korea
PB-37	Wireless control of two-and three-dimensional actuations of kirigami patterns composed of magnetic-particles-polymer composites	Jae-Hyeok Lee	Korea
PB-38	Insight to bifunctionality of Fe-Ni-P ternary electrocatalyst for water splitting in broad pH range	Seulgi Ji	Germany
PB-39	Influence of deposition temperature on the AlCrTiSiN coatings and its cutting performance	Qiang Zhu	China
PB-40	Catalytic effect of Ni metal on diamond (111) surface : An ab-initio study	Jeong Woo Yang	Korea
PB-41	New CVD Process for Low Temperature Depostion	Sung Chun Hong	Korea