

<b>Poster Session (I) / November 13, Monday 17:00-18:30</b>				
<b>Posters assembled before 13:30. Presenters are required to stand near their poster during Poster Session (I)</b>				
Abstract No.	No.	Title	Presenter	Affiliation
0100	A-P-100	Thin-film Solid-state Electrolyte Coating for the Lithium–Sulfur Battery Anode Stabilization	Yu-Chen Wang	National Cheng Kung University
0104	A-P-104	Improving Electrochemical Stability via Mixed Phase of Li <sub>6</sub> PS <sub>5</sub> Cl-Li <sub>6.4</sub> La <sub>3</sub> Zr <sub>1.4</sub> Ta <sub>0.6</sub> O <sub>12</sub> Composite Solid Electrolytes for All-Solid-State Lithium Battery Applications	Rasu Muruganantham	Chung Yuan Christian University
0176	A-P-176	Phosphorus-doped SiO <sub>x</sub> wrapped in 3D porous graphene aerogel as high performance anode materials for lithium-ion batteries	Hsiao-Ching Wang	National Cheng Kung University
0283	A-P-283	Preparation of MoS <sub>2</sub> /Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> Composite Material for Supercapacitors by High Pressure Hydrothermal Method	Yu-Jie Lin	Da-Yeh University
0293	A-P-293	Lead-free Cs <sub>2</sub> AgBiBr <sub>6</sub> double perovskite solar cells with high open-circuit voltage by spray coating	Ting-Jui Chang	National Tsing Hua University
0371	A-P-371	Study on Enhancing Houttuynia Cordata Thunb. Extract Attachment and Achieving Antibacterial Effects through Plasma Polymerization Grafting on Modified Polydimethylsiloxane using Atmospheric Pressure Plasma Treatment	Ling Lin	National Taiwan University of Science and Technology
0374	A-P-374	High Entropy Oxide Cathode for Lithium-Sulfur Battery	Chih-Yu Liu	National Cheng Kung University
0441	A-P-441	An Electrochemical Impedance Study on High Entropy Oxide Electrodes for Water Oxidation	Yu-Wei Lin	National Yang Ming Chiao Tung University
0442	A-P-442	An Investigation of Spin-Coated Nanoscale Electrodes for Water Electrolysis in Acidic Media	Chun-Wei Chang	National Yang Ming Chiao Tung University
0484	A-P-484	Photoelectrochemical Response of SrTiO <sub>3</sub> /TiO <sub>2</sub> /TiN Heterostructure Thin Films Prepared by Hydrothermal-Galvanic Couple Synthesis with Post-Annealing Treatment	Yu-Tone Chien	National Chung Hsing University
0486	A-P-486	Photoelectrochemical Enhancement via Oxidation of Air-based Sputtered Titanium Nitride Films under Controlled Atmospheres	Guan-Sheng Wang	National Chung Hsing University
0092	A-P-92	Temperature effects on sodium-ion storage behaviors and electrochemical performance of hard carbon microspheres derived from phenolic resin as potential anode materials for sodium ion batteries	Zhi-Ting Liu	Chung Yuan Christian University
0094	A-P-94	Li <sub>1.3</sub> Al <sub>0.3</sub> Ti <sub>1.7</sub> (PO <sub>4</sub> ) <sub>3</sub> solid electrolytes synthesized by microwave-assisted hydrothermal reaction for Li all-solid-state battery applications	Cheng-En Yu	Chung Yuan Christian University
0099	A-P-99	An Electrospun Sandwiched – Structural Multi-layered Membrane-based Gel Polymer Electrolyte for Lithium–Sulfur Batteries	Tzu-Ching Chan	National Cheng Kung University

0038	B-P-38	Enhancing the Photoelectric Properties of ITO/Ag/ITO Multilayer Electrodes Using Taguchi Method and Laser Annealing Technique	Keh-Moh Lin	Southern Taiwan University of Science and Technology
0123	B-P-123	Catalytic Activity of Heterogeneous Atomic Metal Clusters Decorated Polyaniline for Electrochemical Oxidation of 1-Propanol	Yoshida Shohei	Tokyo Institute of Technology
0145	B-P-145	Flexible Negative Pyramid Microarrays Coated with Silver Nano-islands for SERS Detection	Chia-Hsien Lin	Ming Chi University of Technology
0151	B-P-151	Bioinspired Cactus Spine-Like Microfluidic SERS Chip with Self-Driving Capability in Biomedicine and Environmental Detection	Yueh Ding-Jia	Ming Chi University of Technology
0016	B-P-16	The Ti doping effect on magnetic and microstructural of lower magnetic anisotropy CoCrPtRu-oxides layer in a perpendicular recording media	Li-Xiang Liu	National Chung Hsing University
0161	B-P-161	Optical and Electrical Properties of SiC Added SiO <sub>x</sub> Films for Light Emitting and Sensing Devices	Sota Iwasaki	Meiji University
0200	B-P-200	Segregation effects of doped VN, ZrN on magnetic properties and microstructure of FePt (BN, Ag, C) films	Tsung-Yi Chen	National Chung Hsing University
0217	B-P-217	The effect of duty cycle and nitrogen flow rate on the mechanical properties of (V,Mo)N coatings deposited by high-power pulsed magnetron sputtering	Yiqun Feng	National Tsing Hua University
0242	B-P-242	Role of Mo metal Interlayer in $\gamma$ -Mo <sub>2</sub> N/Mo Bilayer Coatings on D2 Steel Deposited by High Power Pulsed Magnetron Sputtering	Yun-Yang Sun	National Tsing Hua University
0301	B-P-301	Control of Tribological Behavior of a Hard Coating by Adjusting Working Pressure during Deposition - Using TiN Coatings on D2 Steel as a Model System	I-Sheng Ting	National Tsing Hua University
0312	B-P-312	Preparation of PCN/Ni-Fe LDH DSNCs/TiO <sub>2</sub> nanocomposite for photoelectrochemical immunosensor of human chorionic gonadotropin	Yo-Li Yeh	National Taipei University of Technology
0313	B-P-313	A patterned bifunctional metallic thin film for both refractive index sensor and surface enhanced infrared absorption substrate	Sin-You Chen	Ming Chi University of Technology
0323	B-P-323	Effect of substrate bias voltage on the residual stress and wear resistance of TiN coating on the Ti6Al4V alloy deposited with UBMS and HCD-IP system	Ching-Cheng Chen	National Tsing Hua University
0331	B-P-331	Au@ZIF-67 Metal-Organic Framework Nanocomposites for High Sensitivity SERS Sensor in Environmental Detection	Peng Guang Zhi	National Taiwan University of Science and Technology
0394	B-P-394	High sensitivity achieved by integration of broadband metamaterial absorber and molecule functional group absorption	Xue-Shun Lee	Ming Chi University of Technology
0410	B-P-410	A facile method to prepare a high-performance metal nanoarray electrodes	Xu-Rui Hong	National Formosa University
0411	B-P-411	Au Nano-Island coated Laser-Scribed Graphene as EC-SERS chips for Biomedical and Illicit Drug Detection	Yu-Ju Chu	Ming Chi University of Technology

0426	B-P-426	Surface Engineering of 2D material-Ir nanosheet for Energy Photocatalysis and Electrocatalysis reaction	Yu-Cian Huang	National Taipei University of Technology
0509	B-P-509	Research on the thermistor of titanium oxynitride films by the reactive gas pulsing technique	Po-Yi Cheng	Ming Chi University of Technology
0526	B-P-526	The study of silkworm-excrement-derived carbon quantum dots for feeding silkworms to produce brightly fluorescent silk.	Ai-Wei Liu	Ming Chi University of Technology
0056	B-P-56	Core-Shell Magnetic Mesoporous Silica Nanospheres with Gold Nanoparticles for SERS Rapid Bio-Detection	Hsuan-Ting Lin	National Taiwan University of Science and Technology
0080	B-P-80	Impact of Interfacial SiO <sub>2</sub> Layers on the Photovoltaic Characteristics of n-type Nanocrystalline $\beta$ -FeSi <sub>2</sub> Embedded in Polycrystalline Si Formed on p-type Si Substrates	Kenta Yoshimura	Meiji University
0082	B-P-82	Discover The Behavior of Iron Deposition on the Surface Structure and Electrical Properties of CrBr <sub>3</sub> by STM/S	Bu-Wei Huang	National Taiwan Normal University
0134	C-P-134	The Influence of Ar-N <sub>2</sub> /O <sub>2</sub> Flow Ratio on the Types of Electrical Conductivity in Cu and N co-doped ZnO Films formed by RF Magnetron Co-Sputtering	Masaki Tanaka	Meiji University
0164	C-P-164	Evaluation of the Effects of Structural Parameters on External Quantum Efficiency of Si/Mg <sub>2</sub> Si Heterojunction Photodiodes Using Device Simulation	Keisuke Asano	Meiji University
0257	C-P-257	Vanadium-doped indium tin oxide window layer in Sb <sub>2</sub> Se <sub>3</sub> solar cell	Ching-Chuan Cheng	National Changhua University of Education
0258	C-P-258	Bilayer molybdenum contact prepared via high-power pulsed magnetron sputtering: effects of substrate bias	Rui-En Hu	National Changhua University of Education
0264	C-P-264	A Comparative Study of Homoepitaxial Growth of (100) Single Crystal Diamond on HPHT and CVD Substrates	Tzu-I Yang	National Yang Ming Chiao Tung University
0268	C-P-268	Fabrication of graphene quantum dots and their emission properties in microcavities	Yuto Masuda	Kitami Institute of Technology
0275	C-P-275	Sliver thin film monopole antenna by screen printing method for Bluetooth/ 5G Sub-6/X-band multi-frequency	Da-Zhan Huang	Da-Yeh University
0296	C-P-296	Adhesion of Post-thermal Treatment on Sputtering Copper Layer to the Transparent Polyimide Interfacial Layer	Chia-Chi Chang	National Chin-Yi University of Technology
0308	C-P-308	Adhesive properties of deposited Cu films on colorless polyimide using High Power Impulse Magnetron Sputtering System	Yuan-Nan Tsai	Lunghwa University of Science and Technology
0314	C-P-314	Preparation of CuCrO <sub>2</sub> Thin Films via Spin-Coating Method with Varying PVP Concentrations	Homg-Ming Su	National Taipei University of Technology
0035	C-P-35	The Characterizations of MoS <sub>2</sub> Thin Films Deposited at Different Temperatures by Magnetron Sputtering	Pin-Syuan Su	National Dong Hwa University

0355	C-P-355	Graphene/Si heterojunction as catalytic photocathode for photovoltaic-assisted ammonia production	Hsing-Wen Wu	National Taipei University of Technology
0359	C-P-359	Application of Parylene C Transfer-printed Graphene in Flexible Wearable Sensors	Zhu-Hsuan Li	National Taipei University of Technology
0360	C-P-360	Bifacial illumination of semi-transparent organic photovoltaic	Zih-Ting Chen	National Taipei University of Technology
0361	C-P-361	Intense pulsed light annealed electron transparent layer for indoor organic photovoltaics with large area process	Chia-Feng Li	National Taiwan University
0375	C-P-375	Photodetector Having Ultra-Broadband High Entropy Oxide Absorber Layer	I-Hsi Chen	National Cheng Kung University
0390	C-P-390	Building VHF-CCP plasma etcher for 8-inch wafer	Hao-Ying Lin	Feng Chia University
0041	C-P-41	Mechanistic study of Photocatalytic CO <sub>2</sub> conversion to CH <sub>4</sub> by P-doped SnS <sub>2</sub> thin film.	Tadios Tesfaye Mamo	Academia Sinica National Taiwan University
0120	D-P-120	Effects of thickness ratio on the microstructure, mechanical properties and wear performance of CrN/ZrB <sub>2</sub> films deposited by magnetron sputtering	Hsun-Sung Chiu	National Taiwan Ocean University
0250	D-P-250	Influence of Nitrogen Flow Rate on Elevated Temperature Tribological Properties and Oxidation Behavior of Molybdenum Nitride Coatings	Ruo-Syuan Chen	National Tsing Hua university
0251	D-P-251	Development of multilayer hard coatings on high-entropy alloys for mechanical applications	Bo-Jun Lee	National Formosa University
0255	D-P-255	The Oxidation Behavior of VMoN Thin Films Deposited by High Power Pulsed Magnetron Sputtering	Pei-Fen Peng	National Tsing Hua University
0346	D-P-346	Study of Heating Assisted Atmospheric Pressure Plasma Jet Nitriding of Tool Steel to Combat Wear and Corrosion	Zhi-Yuan Zheng	National Taiwan University of Science and Technology
0347	D-P-347	Study of Wear and Impact Resistance of JIS SACM 645 Steel by Nitriding (H <sub>2</sub> /N <sub>2</sub> ) using Atmospheric Pressure Plasma Jet	Wen-Yuan Lee	Taiwan University of Science and Technology
0468	D-P-468	Exploring Microstructural Changes in 7075 Aluminum Alloy Oxide Coatings by Modulating Current Ratios Using Plasma Electrolytic Oxidation Method	Chen-Chia Chou	National Taiwan University of Science and Technology
0480	D-P-480	Trace of MgO <sub>2</sub> presence during Plasma Electrolytic Oxidation (PEO) of AZ91D Mg Alloys in Bipolar Condition	Md Jahid Hasan	National Taiwan University of Science and Technology
0485	D-P-485	Air-Based Sputtering Deposition of TiN/TiN <sub>x</sub> O <sub>y</sub> Multilayer Films for Enhancing Mechanical Properties	Pin-Han Li	National Chung Hsing University
0523	D-P-523	Stress corrosion cracking and biocompatibility of plasma electrolytic oxidation coatings on AZ31B magnesium alloy: Effect of silver acetate additive	Sin-De Lin	Ming Chi University of Technology

0013	D-P-13	Cellulose derivative dry lubricant coating: preparation and tribology performance	Du-Yi Wang	National Cheng Kung University
0199	D-P-199	Investigating the influence of thickness on the anti-tarnish and mechanical characteristics of decorative coatings composed of Ag/Au/TiO <sub>2</sub>	Rachsak Sakdanuphab	King Mongkut's Institute of Technology Ladkrabang
0022	D-P-22	Substrate dependent cracking behavior of CrAlN coatings during nanoindentation	Muhammad Tayyab	Surface Engineering Institute
0224	D-P-224	Modulation effect on mechanical properties of nanolayered MoN/MoWN coatings	W.C Xu	National United University
0243	D-P-243	Microstructure and mechanical properties of Mo-Ta-N thin films	J.Y Hsu	National United University
0244	D-P-244	Modification on polypropylene surface by atmospheric pressure plasma technique	C.K Huang	National United University
0256	D-P-256	Influence of duty cycle and vacuum annealing on microstructure of Ta-N coatings prepared by high-power pulse magnetron sputtering technique	F.B. Wu	National United University
0026	D-P-26	Influence of Al concentration on the structural and electrical properties of TiVCrAl alloy films grown via magnetron co sputtering	Yi-Qi Wang	National Chung Hsing University
0028	D-P-28	Protecting silver jewelry from tarnish using AlN film coatings	Aparporn Sakulalavek	King Mongkut's Institute of Technology Ladkrabang
0288	D-P-288	Adhesion of Thermally Sprayed Nickel Alloy Coatings for Use as Bond and Top Coatings	Aradchaporn Srichen	Chiang Mai University
0343	D-P-343	Effect of interlayer design on adhesion strength and drill performance of AlCrCN coatings deposited by high power impulse magnetron sputtering	Fu Chi Yang	National Taiwan University of Science and Technology
0344	D-P-344	A combinatorial study of the high temperature tribological properties of AlCrSiTiN coatings	Sheng-Yu Hsu	National Tsing Hua University
0378	D-P-378	HiPIMS-DLC for improved performance of linear guide	Pin-Wen Wang	Feng Chia University
0432	D-P-432	Characterization of AlCrN coated on tungsten carbide substrate by a continuous plasma nitriding-HiPIMS hybrid process	Fu-Chi Yang	National Taiwan University of Science and Technology
0463	D-P-463	Tribological Performance of Si-doped Nanocomposite TiAlCrN Coatings	Tan-Ling Wang	National Tsing Hua University
0496	D-P-496	Ni-Based Alloy Coatings on Sliding Plate of Railway System Prepared by High-Velocity Oxygen Fuel	Man Tuiprae	Rajamangala University of Technology Lanna
0497	D-P-497	Effects of different sodium saccharin addition level on the mechanical properties and co-deposition characteristics of Ni-Co-Al <sub>2</sub> O <sub>3</sub> composite coatings	Pao-Chang Huang	National Defense University

0051	D-P-51	Effect of bias voltages and interlayer on microstructure, mechanical and adhesion properties of AlCrSiN coatings deposited by high power impulse magnetron sputtering	Bo-Ruei Lu	Ming Chi University of Technology
0059	D-P-59	Improving the mechanical properties of aluminum alloys by electroless plating	Ruei-Chi Hsu	National Taiwan University
0062	D-P-62	Hard Cr <sub>1-x</sub> Al <sub>x</sub> N coatings grown at room temperature by high-energy early arriving ion irradiation in HiPIMS	Sanath Kumar Honnali	Linköping University
0065	D-P-65	The structural and mechanical characterizations of Sb-doped ZnO thin films	Hou-Guang Chen	I-Shou University
0130	E-P-130	Study on Electrospinning of Polyethylene Glycol Containing Lanthanum Chloride Antibacterial Applications	Yuqi Huang	Da-Yeh University
0132	E-P-132	Silver-Containing MAO Ceramic Coatings on Zirconium and multiple surface treatments for biomedical Properties	Tzu-Chieh Huang	Da-Yeh University
0137	E-P-137	Electropolymerization of PEDOT:PSS with Graphene Oxide and Silver Nanoparticles for Antibacterial Coating and SERS Detection	Hsiang-Ting Lan	Ming Chi University of Technology
0141	E-P-141	Evaluation of Osteogenic Properties of Bioactive Porous Titanium for Orthodontic Applications	Li CHANG	Tohoku University
0193	E-P-193	Eco-friendly propylene glycol monomethyl ether acetate as the solvent and thickness analyses of acrylic thin films prepared by spin-coating	Ting-Wei Chu	Tamkang University
0232	E-P-232	Laser texturing and oxidation of TiZrTa thin films to improve the biocompatible performance of titanium alloys	Ming-Xun Yang	National Formosa University
0429	E-P-429	Colorful SERS Biochips Fabricated by Gold Nanoparticle Array with in-situ Thermal Evaporation	Ding-Jia Yueh Ying-Jun Lin	Ming Chi University of Technology
0478	E-P-478	Forsterite Coatings on the Plasma Electrolytic Oxidized Ti-6Al-4V Alloy Using Sol-gel Method	So-Yun Joo	Chosun University
0495	E-P-495	Mechanical Alloyed Surface with Hydroxyapatite Particles on the PEO-coated Ti-6Al-4V Alloy for Dental Implant Use	Sidra Sadaf Nisar	Chosun University
0014	E-P-14	Circular economy of agricultural waste: exploration from novel materials, friendly environment to reproductive medicine	Shih-Chen Shi	National Cheng Kung University
0152	E-P-152	Investigation of Combinatorial Coronene Nanofibers/PEDOT:PSS Active Layers on Organic Electrochemical Transistors for Tumor-related miRNA Detection	Yi-Shiuan Li	National Taiwan University of Science and Technology
0262	E-P-262	Relationship Between the Molecular Orientation and the Adhesive Strength at Metal/Epoxy polymer Interfaces	Ikeda Misaki	Chiba University
0267	E-P-267	Improve the Soft Tissue Adhesion of Titanium by Surface Electrodeposition of Collagen and Calcium Phosphate	Peng Chen	Tohoku University

0404	E-P-404	Improvement of unidirectional liquid transportation on the hydrophilic dart-shaped groove array by AP plasma treatment and APTES grafting	Ngoc Phuong Uyen Mai	National Tsing Hua university
0406	E-P-406	Comparison of blood compatibility, corrosion and erosion resistance of MAO-pretreated magnesium alloy deposited with graphene oxide and oxidized polydopamine composite coatings mixed with various pyrolytic diamine	Jin-Wei Lin	National Taiwan Ocean University
0408	E-P-408	Highly Hydrophilic Films for Sweat Sensing in Smart Clothing	Pei-Xuan Hong	National Taiwan University
0424	E-P-424	Magnesium coating on acid etched nanostructure titanium surface enhanced early osseointegration	Thu Ya Linn	Taipei Medical University
0430	E-P-430	Antibacterial Self-cleaning Expanded PTFE Membranes Grafted with Tertiary and Quaternary Amino Groups by Line Source Atmospheric-Pressure Plasma	Ta-Chin Wei	Chung Yuan Christian University
0435	E-P-435	Nitrogen plasma immersion ion implantation enhances biological responses to Zr-based bulk metallic glass alloy in dental implant applications	Her-Hsiung Huang	National Yang Ming Chiao Tung University
0436	E-P-436	Effect of anodization on corrosion resistance and cell response of Ti alloy scaffolds in bone implant applications	Her-Hsiung Huang	National Yang Ming Chiao Tung University
0048	E-P-48	Immobilized Hyaluronic acid on Silicone rubber by Low Temperature Atmospheric pressure plasma jets and UV Induced-Graft Polymerization Pseudo-Zwitterion Hydrogel for Biomedical Application	Jhong-Kun Siao	Da-Yeh University
0049	E-P-49	The antibacterial efficacy of UV-grafted Functionalization Hydrogel and Immobilization of Chinese Herb Extracts on the O <sub>2</sub> plasma-treated PET non-woven	Shu-Chuan Liao	Da-Yeh University
0490	E-P-490	On Octacalcium Phosphate Fabrication and Coatings on the Plasma Electrolytic Oxidized Ti-6Al-4V Alloys for Implant Use	Kyeong-Tae Kim	Chosun University
0491	E-P-491	Enhancement of Plant Growth to Increase Carbon Sink by Coating Graphene on Aglaonema	Yun-Liang Chien	National Cheng Kung University
0494	E-P-494	Investigating the Surface Characteristics of MoS <sub>2</sub> -Doped TiO <sub>2</sub> Coating on Ti-6Al-4V by Plasma Electrolytic Oxidation	S. Arun	Chosun University
0506	E-P-506	Comparison of Acrylic Acid and Acetic Acid Precursors for a Remote Atmospheric Pressure Plasma on Carboxylic Acid Groups Immobilisation and Antibacterial Coatings	Wei-Yu Chen	Ming Chi University of Technology
0511	E-P-511	Study on the behavior of osteoblasts on three-dimensional porous titanium surfaces treated with plasma treatment	Yun-Jung Lee	Taipei Medical University
0153	F-P-153	Improved microstructure and physical properties in highly (111)-oriented nano-twinned Ag thin films during the LASER annealing process	Tsai-Shaun Kuo	National Tsing Hua University
0179	F-P-179	Effects of nitrogen addition on microstructures and mechanical properties of (CoCrNi) <sub>100-x</sub> N <sub>x</sub> medium entropy alloy films	Yu-Chuan Lin	National Taiwan University

0291	F-P-291	Microstructure and Thermoelectric Properties of High-Entropy Thin Film-AgMnGeSbTe <sub>x</sub>	Po-Yuan Yeh	National Sun-Yat Sen University
0315	F-P-315	Effects of Nd and B contents on property evaluation of CoCrNiNd <sub>x</sub> B <sub>y</sub> medium entropy alloy films	Chia-Lin Li	Ming Chi University of Technology
0369	F-P-369	Ni Coating Enhanced Interfacial Strength of $\alpha$ -Ti/ $\alpha$ -Ti Ultrasonic Consolidation by introducing $\alpha$ -to- $\beta$ transformation	Jhong-Ren Huang	National Taiwan University of Science and Technology
0039	F-P-39	Compositional-Segregation-Induced Dual-Length-Scale Nanotubes for Enhanced Surface Bioactivity of Ti-rich Ti <sub>65</sub> -Zr <sub>18</sub> -Nb <sub>16</sub> -Mo <sub>1</sub> Medium-Entropy Alloy	Yan-Cing Lu	National University of Kaohsiung
0416	F-P-416	Laser scanning annealing of Au film in a water	Shang-Yang Yu	Chang Gung University
0471	F-P-471	Biocompatibility of Surface-textured Ti6Al4V Alloy Evaluated by Electrochemical and In-vitro studies	Jucheng Lee	Ming Chi University of Technology
0483	F-P-483	Magnetic and Crystalline Properties of CoW Co-sputtering Alloy Films	Chien-Chiang Chang	UCSM Technology Corp.
0050	F-P-50	Effects of N <sub>2</sub> /Ar flow ratio on microstructure and antibacterial properties of AlCrTiZrWN coatings prepared using high power impulse magnetron sputtering	Jung-En, Tsao	Ming Chi University of Technology
0500	F-P-500	Exploring the microstructure of crack paths in nickel-based alloys deposited by laser cladding technology	YuXiang Chen	National United University
0058	F-P-58	Preparation of Calcium Titanate Nanowires on Titanium Surface Using Alkaline Hydrothermal Treatment and Oyster Shell as Calcium Source	Tzu-Yu Shih	National University of Kaohsiung
0067	F-P-67	Investigation of AlCoCrFeNi <sub>2.1</sub> eutectic high-entropy alloy coatings prepared by mechanical alloying	Fang-Yu Huang	National Dong Hwa University
0074	F-P-74	Influence of alloying elements and dispersoids on characteristics of CoCrNiFe coatings by mechanical alloying	Pin-Hsien Lin	National Dong Hwa University
0147	F-P-147	Characterization of cosputtered (TiZrHfY)N <sub>x</sub> films	Tzu-Yu Ou	National Taiwan Ocean University
0020	F-P-20	Surface Sulfurization for Reducing Interface Scattering of Ruthenium Metallization for Low-Resistance Interconnect	Yu-Lin Chen	National Tsing Hua university
0203	F-P-203	RuAl Intermetallic Compound with Low Interface Scattering as Potential Low-Resistance Interconnect Metallization	Yi-Ying Fang	National Tsing Hua university
0025	F-P-25	Effect of Nitrogen Partial Pressure on the Structural, Mechanical, and Electrical Properties of (CrHfNbTaTiVZr)N Coatings Deposited by Reactive Magnetron Sputtering	Tsung-Wei Wang	National Chung Hsing University
0455	F-P-455	Microstructure and Mechanical Property Study of AlCrNbSiTiN/TiBN High Entropy Alloy Nitride Multilayer Thin Films	Tse-Wei Chen	Ming Chi University of Technology



0481	F-P-481	Corrosion behaviors of high-strength low-alloy steel after annealing at 1200 °C	Han Sheng Huang	National Taiwan University
0083	F-P-83	Formation of the ultrathin Mo disk on Al <sub>2</sub> O <sub>3</sub> (0001) substrate	Yao-Ming Ku	National University of Kaohsiung
0225	G-P-225	The nitrogen and carbon dioxide capture on two-dimensional transition-metal dichalcogen material with vacancy: a first principles study	Jen-Yu Bau	Yuan Ze University
0449	G-P-449	Crystal Structures and Optical Bandgaps of N-doped TiO <sub>x</sub> Coatings: Experiments and First-principles Calculations	Xin-Xian Yang	National Chung Hsing University
0245	G-P-245	Simulations for High PTCE on CIE, Fabrication and Analysis for Colored Solar Selective Absorbers of SiO <sub>2</sub> -Cr-SiO <sub>2</sub> Films in Building Applications	Zong-Ze Hong	National Kaohsiung University of Science and Technology
0335	G-P-335	Valence Band Structure of Monolayer Black Phosphorus for Hole Transport	Yun-Fang Chung	National Chung Hsing University
0341	G-P-341	First Principles Investigation of CO <sub>2</sub> Adsorption on Single Atom (Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, and Zn) supported on Graphene Systems	Xuan-Yu Wei	National Cheng Kung University
0352	G-P-352	Ab initio study of the electronic structure and defect formation energy of Sn-doped β-Ga <sub>2</sub> O <sub>3</sub>	Guang-Cheng Su	National Chung Hsing University
0368	G-P-368	Germanene: A First Principle Study of Band Structure and its Application	Shi-Hui Luo	National Chung Hsing University
0372	G-P-372	Recreating Rare Diamond Hues: The FDTD Simulation of Noble Metal Nanoparticle-induced LSPR Effects	Tsung-Jen Wu	National Taiwan University
0402	G-P-402	Thermal Flow Simulation Analysis of Low-Pressure Hot-Wall Chemical Vapor Deposition System	Hua-Lin Chen	Taiwan Instrument Research Institute, National Applied Research Laboratories
0447	G-P-447	Electron Mobility of SiGe HBT based on Strained SiGe Thin Film	Ying-Wei Yuan	National Chung Hsing University
0513	G-P-513	Atomic resolution microstructural characterization by electron ptychography	Chien-Nan Hsiao	National Applied Research Laboratories
0519	G-P-519	Chipping-Induced Fracture Investigation of Glass Interposer with Dielectric Coatings	Chang-Chun Lee	National Tsing Hua University
0528	G-P-528	Visible light Photocatalytic activity of nitrogen-doped TiO <sub>2</sub> nanoparticles and Calcined in air and nitrogen atmosphere	Swapnil Nikalje	National Dong Hwa University

<b>Poster Session (II)/ November 14, Tuesday 16:00-17:30</b>				
<b>Posters assembled before 13:30. Presenters are required to stand near their poster during Poster Session (II)</b>				
Abstract No.	No.	Title	Presenter	Affiliation
0105	A-P-105	Synthesis and characterizations of MnIn <sub>2</sub> S <sub>4</sub> /SWCNTs composite as anode materials for Lithium ion batteries	Pei-Jun Wu	Chung Yuan Christian University
0140	A-P-140	Vapor-assisted solution process (VASP) formation of perovskite film in solar cells	Yu-Hsuan Hsiao	National Cheng Kung University
0168	A-P-168	Hierarchical porous graphite felt with a synergistic effect of nitrogen-doping and TiO <sub>2</sub> decoration for high-performance vanadium redox flow batteries	Jen-Hsien Huang	National Taiwan University of Science and Technology
0220	A-P-220	Chemical vapor deposition growth of van der Waals heterostructures for photoelectrochemical conversion	Chen-Yuan Huang	Ming Chi University of Technology
0248	A-P-248	Direct growth of molybdenum disulfide on graphene via transfer supporting layer for CO <sub>2</sub> photoreduction	Yohsun Liu	National Taiwan University
0253	A-P-253	Electrodeposition Behavior of Solid-state Electrolyte for Li-ion Batteries	Rui-Tung Kuo	National Tsing Hua University
0274	A-P-274	Conductive polymer film modified carbon felt used as negative electrode in all-vanadium redox flow battery	Wan-Rou Liu	Ming Chi University of Technology
0284	A-P-284	The Assembling Method for Improving Gel Polymer Electrolyte Lithium Batteries	Shang-En Liu	Institute of Nuclear Energy Research
0290	A-P-290	Multi Element Prussian Blue Analogue for photo-Fenton process	Joshlyn Putri Budianto	National Cheng Kung University
0327	A-P-327	The composite current collector for anode-less NMC811 gel polymer electrolyte lithium batteries	Tien-Hsiang Hsueh	Institute of Nuclear Energy Research
0329	A-P-329	Effect of commercial P25 TiO <sub>2</sub> doping in Polydimethylsiloxane tribo-film on the output performance of triboelectric nanogenerator and its application	Chen-Kuei Chung	National Cheng Kung University
0333	A-P-333	Boron carbon nitride and ultra-nanocrystalline diamond on carbon cloth for supercapacitor	Jing-Cian Yeh	National Taiwan University of Science and Technology
0339	A-P-339	Carbon Capture and Storage Enabled by Cu <sub>2</sub> O Thin Film Deposition Using DMSO Solvent	Yu-Teng Wu	National Cheng Kung University
0351	A-P-351	Annealing effect on Microstructures and crystal phase evolution of BaCeZrYYbO <sub>3-δ</sub> coatings deposited by solution precursor plasma spray (SPPS) for the sustainable energy applications	Wei-Xiang Zeng	National Pingtung University of Science and Technology
0377	A-P-377	Intercalation of Gold Nanoparticles into Graphene via Supercritical Carbon Dioxide	Swatantra Kumar	National Cheng Kung University

0383	A-P-383	Kapok-assisted solution combustion synthesis of Co <sub>3</sub> O <sub>4</sub> -CoO/C for supercapacitors	Mary Donnabelle Balela	University of the Philippines
0399	A-P-399	Nitrogen Doped Graphene Using Supercritical Fluid	Li-Hung Lu	National Cheng Kung University
0413	A-P-413	Compare the deposition rates of Pd and Ni thin films by using the DC magnetron sputtering technique	Ching-Min Chang	Da-Yeh University
0417	A-P-417	Elevated Efficiency of Platinum-Cobalt Alloy Supported by Natto-like N-Doped Carbon Spheres as a Long-lasting Catalyst for Facilitating the Oxygen Reduction Reaction.	Chun-Yu Tsai	National Taiwan University of Science and Technology
0419	A-P-419	High efficient Al-MnFe <sub>2</sub> O <sub>4</sub> Thin film as an Excellent Electrocatalyst for Oxygen evolution reactions.	Ganesh Abinaya meenakshi	National Taipei University of Technology
0042	A-P-42	Hydrothermal and Atmospheric Pressure Plasma Synthesis of Cu <sub>x</sub> O/TiO <sub>2</sub> Hetero-Structures on Titanium Sheet for Photo-electrochemical Water Splitting	Jia-Zhen Li	I-Shou University
0043	A-P-43	Synthesis of Titanium Dioxide and Copper Oxide Heterostructures by Using AP Plasma and Hydrothermal Processes for Photo-electrochemical Hydrogen Generation	Cheng-Jui Tsai	I-Shou University
0044	A-P-44	Hetero-nanostructure of Copper Sheet Grown Copper Oxides and Titanium Dioxide Deposited by Atmospheric Pressure Plasma System for Photo-electrochemical (PEC) Hydrogen Generation Application	Hao-Yu Lee	I-Shou University
0443	A-P-443	Enhanced Photoelectrochemical Water Splitting Using a Heterojunction Photoelectrode of Graphitic Carbon Nitride Quantum Dots on Copper Oxide Thin Films	Bu-Jine Liu	National Yang Ming Chiao Tung University
0444	A-P-444	Electrical and Photoelectrochemical Properties of Nanostructured Copper Oxide Thin Films	Wei-Cheng Jiang	National Yang Ming Chiao Tung University
0448	A-P-448	Fabrication and Characterization of Micropatterned Prussian Blue/Poly(3,4-ethylenedioxythiophene) Complementary Electrochromic Devices	Cheng-Lan Lin	Tamkang University
0045	A-P-45	Application Research of Atmospheric Pressure Plasma Deposition of Cuprous Oxide and Zinc Oxide Heterogeneous Nano-dendrite Structures for Photo-electrochemical (PEC) Hydrogen Production	Kun-Ying Zhang	I-Shou University
0450	A-P-450	Study of Using HiPIMS-deposited Ti <sub>x</sub> N Film as Oxygen Evolution Reaction (OER) Catalyst	Yi-Cho Tsai	National United University
0454	A-P-454	Characteristics of Carbon Cloth Electrode Modified with Titanium Nitride Nanocoating by Atomic Layer Deposition for Application in Vanadium Redox Flow Battery	Yu-Chi Chang	National Pingtung University
0046	A-P-46	Hetero-nanostructure of Cuprous Oxide and Zinc Oxide synthesized by Atmospheric Pressure Plasma System and Hydrothermal System for Photo-electrochemical (PEC) Hydrogen Generation Application	Jia-Suei Wang	I-Shou University

0476	A-P-476	Preparation and Electrochemical performance of solid UV-curing polymer electrolyte film for all-solid-state lithium-ion battery	Yin-Li Wang	Yuan Ze University
0479	A-P-479	The iron-tungsten Schiff base coating on nickel foam for alkaline water electrolysis	Bo-Han Lin	National United University
0489	A-P-489	Preparation of BaTiO <sub>3</sub> /TiO <sub>2</sub> Heterostructure Thin Films with High Photoelectrochemical Response by a Hydrothermal-Galvanic Couple Method	Li-Chin Wu	National Chung Hsing University
0499	A-P-499	High Temperature Solar Absorbers with Titanium Dioxide Coating	Sean Wu	Lunghwa University of Science and Technology
0521	A-P-521	Enhancement of Photoelectrochemical Response using TiN <sub>x</sub> O <sub>y</sub> /TiN Multilayer Designs Produced by Air-based Sputtering Deposition	Xiang-Yang Li	National Chung Hsing University
0522	A-P-522	Sputtering Deposition of N-doped TiO <sub>2</sub> Multi-Layer Thin Films Using Air as a Reactive Gas for Photoelectrochemical Applications	You-Cheng Zhuang	National Chung Hsing University
0525	A-P-525	Low Temperature Metal Oxide Encapsulation Layers Formed by Atomic Layer Deposition	Jaeyeong Heo	Chonnam National University
0070	A-P-70	Investigation of the preparation approaches of ceria-based electrolyte and the cell performance for solid oxide fuel cell application	Tai-Nan Lin	National Atomic Research Institute
0084	A-P-84	Carbonization of Nickel hydroxide nanosheets for the improvement of bi-functions oxygen evolution reaction and hydrogen evolution reaction for water splitting	Jun-Kai Yang	Ming Chi University of technology
0103	B-P-103	Fabrication of Metal/Dielectric/Metal Nanocavity Structures and Their Emission Enhancement Property	Yusuke Takahashi	Kitami Institute of Technology
0113	B-P-113	Synthesis and characterization of alginate/clay coating materials and its barrier property under high relative humidity	Seoung Gil Yoon	Korea Institute of Industrial Technology
0114	B-P-114	Layer-by-layer self-assembly structured film composed of cationic exchanged clay and polyethylene glycol with its oxygen barrier property	Seoung Gil Yoon	Korea Institute of Industrial Technology
0116	B-P-116	Surface modification of electrospun polyurethane nanofibrous membranes containing silver nanoparticles for antibacterial applications	Yen-Yu Lin	Ming Chi University of Technology
0118	B-P-118	Influence of Si content on the oxidation resistance and thermal stability of (AlCrNbSi <sub>x</sub> Ti)N hard coatings	Shao-Hsuan Chin	National Tsing Hua University
0121	B-P-121	Control of Localized Surface Plasmon Resonance of Metal Nanostructures Fabricated by Nanosphere Lithography	Fuya Okuda	Kitami Institute of Technology
0124	B-P-124	Oxidation behavior of (AlCrNbTiB)N multicomponent nitride coatings with various boron contents	Chih-Hao Chen	National Tsing Hua University
0126	B-P-126	Investigation of multilayer thin film design and material behavior using high-power magnetron pulsed sputtering	Yu-Jen Liu	National Chung Hsing University

0133	B-P-133	Effect of Si content on the mechanical properties of AlCrNbTiMoSi High-entropy nitride coatings co-sputtered by magnetron sputtering	Yun Chen Chan	National Tsing Hua University
0162	B-P-162	Influence of oxygen ratio on growth and optical properties of ZnO thin film prepared by pulse electron deposition method	Nguyen Ngoc Dinh	Vietnam National University
0166	B-P-166	Effect of different sputtering power on the RF-sputtered Ni-doped Ga <sub>2</sub> O <sub>3</sub> films	Yu-Quan Zhu	Xiamen University of Technology
0002	B-P-2	Creating an ECM-like three-dimension structure to enhance the corrosion resistance and biological responses of titanium implants	Ying-Sui Sun	Taipei Medical University
0201	B-P-201	Plasma etching behavior of Y <sub>2</sub> O <sub>3</sub> -MgO nanocomposite films	Yu-Hao Chang	Da-Yeh University
0202	B-P-202	Next-generation Electrodes for Enhancing Battery Stability.	Po-Yu Chen	Chung Yuan Christian University
0230	B-P-230	Preparation and characterization of black Au films	Kazuto Takada	Kitami Institute of Technology
0235	B-P-235	Growth of Porous Films Orderly Stacked by Nanoballs with Various Sorts Carbons	Yen-Feng Li	National Kaohsiung University of Science and Technology
0261	B-P-261	Improvement of Cathodoluminescence of YAlO <sub>3</sub> :Gd <sup>3+</sup> for High-resolution Bio-imaging	Kei Hosomi	Shizuoka University
0263	B-P-263	Formation of a chromium film and its application to 3 dimension mirror tunnel effect	Nan-Ming Lin	Technology Research Institute, TYC Brother Industrial Co., Ltd, Tainan, TAIWAN
0266	B-P-266	Evaluation of Mechanical Properties of TiSiN and TiAlN Coatings for Surface Protection under Varying Deposition Conditions	Seong Lee	Pusan national university
0305	B-P-305	Investigating the Impact of Surface Charge Transfer on the Photocatalytic Performance of Thin Film FeVO <sub>4</sub> by applying Bias Voltages	Jia-You Hsieh	National Cheng Kung University
0319	B-P-319	Uniform distribution of polystyrene beads by spin-coating in the aids of machine learning	Jing-Hao Huang	Ming Chi University of Technology
0321	B-P-321	Different annealing temperatures of Boron Carbon Nitride nanomaterials for supercapacitor applications	Yu-Sheng Huang	National Taiwan University of Science and Technology
0356	B-P-356	Superhard Nanodiamond Films Grown on Ti Substrates Via Hybrid Coaxial Arc Plasma Deposition	Lama Osman	Kyushu University
0363	B-P-363	Cobalt – Doped Molybdenum Disulfide as a Catalyst for Electrochemical Nitrogen Reduction Reaction	Tsung-Min Tsai	National Taipei University of Technology
0384	B-P-384	Templated synthesis of CoFe <sub>2</sub> O <sub>4</sub> on KOH activated kapok carbon fibers as composite supercapacitor electrode	Mary Donnabelle Balela	University of the Philippines

0385	B-P-385	Slippery Liquid-Infused Particulate Bilayer Coating for Extra-Corporeal Circulation Against the Red Blood Cell Damage	Wei-Tong Li	National Taipei University of Technology
0393	B-P-393	Preparation of Ag-Decorated Graphene by Laser Scribing and its application in surface-enhanced Raman spectroscopy	Szu-Han Chao	Tamkang University
0398	B-P-398	Characterization of Sr-doped Hydroxyapatite Thin Films Grown by Magnetron Sputtering Applied to Titanium-Alloy Biomedical Implants	Bo-Yan Zhang	Da-Yeh University
0412	B-P-412	Compare the surface morphologies of Pd and Ni thin films by using the DC magnetron sputtering technique	Ching-Min Chang	Da-Yeh University
0437	B-P-437	Cu-doped ZnO/FTO/Ag nano-heterostructure arrays as the sensitive, stable, and multifunctional surface-enhanced Raman scattering substrate	Ying-Ru Lin	National Yang Ming Chiao Tung University/Feng Chia University
0458	B-P-458	Effects of Plasma Electrolytic Oxidation on Phase Distribution and Mechanical Properties of t-ZrO <sub>2</sub> Nanoparticle-Reinforced AZ91D Magnesium Alloy.	Chen-Chia Chou	National Taiwan University of Science and Technology
0473	B-P-473	High-temperature annealing of TiN epitaxial layers grown on 4H-SiC substrates	Hsueh-I Chen	National Yang Ming Chiao Tung University
0493	B-P-493	Visible photocatalyst powder doped with nitrogen TiO <sub>2</sub> annealed with different holding times was prepared by sol-gel method	Pei-xuan Yang	National Dong Hwa University
0498	B-P-498	Growth of high-quality 2D-molybdenum disulfide on nanostructured surface	Gui-Sheng Zeng	Taiwan Instrument Research Institute
0512	B-P-512	Heterostructure : Cuprous Oxide/Titanium Dioxide Nanotubes For Electrocatalytic Nitrate Reduction	Cheng-En Li	National United University
0524	B-P-524	The biocompatibility of femtosecond laser-structured acupuncture needles	Byunghak Lee	B2LAB Co., Ltd.
0060	B-P-60	Acetone gas sensor by SnO <sub>2</sub> nanoparticles decorated on sphere structure of MoS <sub>2</sub> nanosheets	Feng-Renn Juang	National Sun Yat-sen University
0072	B-P-72	The magnetic anisotropy and leakage current behaviors of Ni/ZnO thin films grown on Si substrates	Cho-Min Huang	National University of Kaohsiung
0076	B-P-76	Study on the Synergistics of Copper Doping and Porous ZnO Nanorod Arrays for Enhanced Photoelectrochemical Water Splitting Performance through Piezotronic Effect	Yu-Liang Hsiao	Nation Cheng Kung University
0088	B-P-88	Effect of Deposition Temperature on Plasma Enhanced Atomic Layer Deposition Magnesium Oxide Films	Zhan-Bo Su	Xiamen University of Technology
0090	B-P-90	In-situ synthesis and modification of Ni based metal organic frameworks of Nickel-1,3,5-benzene tricarboxylate for methanol oxidation reaction	Wen-Ya Lee	Ming Chi University of Technology
0091	B-P-91	An effective method of improving surface hardness from 1050 aluminum alloy	C. A. Ku	National Cheng Kung University

0096	B-P-96	High-k Hafnium Oxide Thin Films Prepared by High Power Impulse Magnetron Sputtering at Room Temperature	Yao-Tian Wang	Xiamen University of Technology
0097	B-P-97	Zinc-doped gallium oxide films with p-type conductivity prepared by spatial atomic layer deposition and applications in UV photodetectors	Wen-Bin Wu	Xiamen University of Technology
0102	C-P-102	Investigation of Light Confinement Effect on Radiative Process in Microcavity OLED	Takuma Endo	Kitami Institute of Technology
0106	C-P-106	Design of Experiments (DOE) for Ultra-Smooth Surface in $\beta$ -Ga <sub>2</sub> O <sub>3</sub> -Chemical Mechanical Polishing (CMP) through Orthogonal Array Experiments	Hyun Jun Cheon	Chosun University
0109	C-P-109	Control of EL Spectrum of Blue OLED with Ag/ZnS/Ag anode via Coupling between Surface Plasmon and Microcavity Mode	Tatsuhiro Goto	Kitami Institute of Technology
0111	C-P-111	Ta-Si-O films with extremely low TCR and low resistivity deposited by single-target magnetron sputtering	Yen-Chen Liu	Ming Chi University of Technology
0112	C-P-112	Epitaxial growth of p-type Li-doped NiO films by atmospheric pressure mist chemical vapor deposition and their heterojunction devices	Hou-Guang Chen	I-Shou University
0115	C-P-115	Ambient spray coating of lead-free inorganic halide perovskite thick films for X-ray detection	Zi-Xiang Wen	National Cheng Kung University
0119	C-P-119	Photoresponse of WS <sub>2</sub> Monolayers Grown by PECVD	Chia-Yu Chiang	National Yunlin University of Science and Technology
0012	C-P-12	Effects of Atmospheric Annealing on Transparent Antenna Properties of ITO Thin Films	Yoji Yasuda	Tokyo Polytechnic University
0125	C-P-125	Wetting enhancement in solder joint process via Ar / H <sub>2</sub> atmospheric pressure plasma	Pin-Yuan Lai	National Tsing Hua University
0150	C-P-150	Reducing sputtering damage in bifacial solar cell	Ming-Xun, Jiang	National Cheng Kung University
0154	C-P-154	Inference of Oxygen content on the Structure and Properties of WO <sub>x</sub> Films	T.F. Hsieh	National Formosa University
0156	C-P-156	Machine Learning-Enabled Advancements in Anti-Reflective Film for Flexible Electronics	Y.-C. WANG	Cheng Shiu University
0159	C-P-159	Deposition of rutile titanium dioxide using high-power pulsed magnetron sputtering	Takayuki Ohta	Meijo University
0167	C-P-167	Fabrication of conjugated polymer nanocomposites-based biosensor for trace biomolecules detection	Jia-Lun	Ming Chi University of Technology
0169	C-P-169	Development of Microstructure Flexible Pressure Sensors for Measurement of Mobility	Yu-Quan Chan	Chung Yuan Christian University

0180	C-P-180	Effects of low-temperature ozone annealing on operation characteristics of solar-blind photodetector based on beta-Ga <sub>2</sub> O <sub>3</sub> films	Yu-Quan Zhu	Xiamen University of Technology
0181	C-P-181	Effects of various substrate temperatures on the properties of Eu-doped NiO films	Yu-Quan Zhu	Xiamen University of Technology
0191	C-P-191	Preparation of Cu(In,Ga)(S,Se) <sub>2</sub> absorber via CuGa-NaF-KF target and the influence of Na/K ratio	Jen-Feng Hsu	National Changhua University of Education
0210	C-P-210	Preparation and Investigation of Optoelectronic Properties of Polarity-Controllable Titanium Oxide Thin Films Using High-Power Impulse Magnetron Sputtering	Shih-Chieh Hsu	Ming Chi University of Technology
0211	C-P-211	Comparison of Amino- and Sulfate- terminated Self-Assembled Monolayers for Cu/Porous Low-k Dielectrics Integration	Joe Kao	National Chi Nan University
0212	C-P-212	The role of Ar flow rate in enhancing the size of heteroepitaxial WS <sub>2</sub> flakes synthesized on c-sapphire using H <sub>2</sub> S gas-source CVD	Kun-An Chiu	Taiwan Instrument Research Institute
0214	C-P-214	Effect of mechanical stress on electrical characteristics of low-dielectric-constant dielectric materials	Yi-Lung Cheng	National Chi Nan University
0216	C-P-216	Defects and Impurities induced structural, Electronic, electrical and magnetic behavioural change of layer by layer deposited Cd <sub>0.4</sub> Zn <sub>0.6</sub> S and r-GO composites thin film (Cd <sub>0.4</sub> Zn <sub>0.6</sub> S:r-GO) Semiconductors	SEKHAR CHANDRA RAY	University of South Africa
0223	C-P-223	Properties of Ruthenium-Cobalt Alloy Thin Films Prepared by Surface-Limited Redox Reaction by Ruthenium Substitution for Cobalt Deposited at Low Potential	Yao Wen Chang	National Formosa University
0227	C-P-227	Structure and ferroelectric properties of pulsed laser deposited Bi <sub>0.95</sub> Dy <sub>0.05</sub> FeO <sub>3</sub> thin films prepared with deposition rate	Ting-Kai Lin	National Taipei University of Technology
0228	C-P-228	Corrosion behavior of Co-Ru Alloy Thin Films Prepared by Electrochemical Co-deposition on TiSi <sub>2</sub>	Jau-Shiung Fang	National Formosa University
0229	C-P-229	Characteristics of Al-based intermetallic compounds as a next-generation interconnect material	Jau-Shiung Fang	National Formosa University
0246	C-P-246	Comparison of metal drift in SiO <sub>2</sub> film for Co, Ru, and CoRu	Yi-Lung Cheng	National Chi Nan University
0265	C-P-265	Improved the Performance of Blue-light MicroLEDs with Double Passivation Layers	Yu-Hsuan Hsu	National Yang Ming Chiao Tung University
0270	C-P-270	Comparison of performance in GaN-HEMTs on SiC and on Sapphire substrates	Chia Hao Yu	National Yang Ming Chiao Tung University
0276	C-P-276	Elemental distribution and grain orientation in reaction between Sn <sub>3.5</sub> Ag and co-sputtering Cu-Ni film	ZihYou Wu	National Tsing Hua University
0279	C-P-279	Application of Crosslinked Polyimide CopolymerNanocomposite Materials as the Gate Dielectrics on Organic Thin Film Transistors	Jia-Hong Xu	Ming Chi University of Technology



0282	C-P-282	Study on Optimizing the Performance of NO Gas Sensor Fabricated by ZnGa <sub>2</sub> O <sub>4</sub> and Circuit Module Development	Zong-Ying Shen	National Yang Ming Chiao Tung University
0295	C-P-295	Synthesis of colloidal CsPbBr <sub>3</sub> nanoplates for fabr	Ming-Hsien Li	National Chi Nan University
0300	C-P-300	Low-Temperature Direct Wafer Bonding by Plasma Activation	William Anderson Lee Sanchez	National Yang Ming Chiao Tung University
0302	C-P-302	Assessment of thermoplastic-coated encapsulant with for PV recycling	Hsin-Hsin Hsieh	Industrial Technology Research Institute
0306	C-P-306	Defects properties in vanadium doped zinc oxide piezoelectric presser sensor	Heng-Chi Chu	National Cheng Kung University
0330	C-P-330	UV-curable conductive paste for screen-printed electronics on textiles	Ding-Hong Weng	National Taiwan University
0034	C-P-34	Atomic Layer Deposition of High-Quality Pt Thin Films Using DDAP Precursor	Myung-Jin Jung	Pusan National University
0342	C-P-342	The Property of Two-Dimensional RP Phase Perovskite Ca <sub>n-1</sub> Mn <sub>n-3</sub> Nb <sub>3</sub> O <sub>3n+1</sub> <sup>-</sup> (n=4,5,6) nanosheets with different centrifugal for Water splitting and Supported on Chlorella for Hydrogen Evolution	Yao-Yuan Chang	National Cheng Kung University
0358	C-P-358	Fabrication of High-Quality van der Waals Hetero-bilayer of MoS <sub>2</sub> /PtS <sub>2</sub> for Sensor Applications	Yan-Si Jiang	Da-Yeh University
0364	C-P-364	Sputtering deposition of SiO <sub>2</sub> thin film on single crystal diamond	Fan Ling Kuan	National Yang Ming Chiao Tung University
0370	C-P-370	Synthesis of ZnCo <sub>2</sub> O <sub>4</sub> on Carbon Paper Electrodes in Chloroplasts Photoelectrochemical Water Splitting	Chien-Yu Lin	National Cheng Kung University
0373	C-P-373	Metal electrodes induced optoelectronic artificial synapses in reactive sputtering In <sub>2</sub> O <sub>3</sub> thin films	En Lin Chen	MingHsin University of Science and Technology
0382	C-P-382	Microstructural Characterization of Metal-Semiconductor Interface of Electroless Au contacts on CdTe Single Crystal	Ondřej Šik	Brno University of Technology
0386	C-P-386	Robust Preparation to the Transparent and Conductive Thin Film of Stable Silver-Nanowire Suspension	Yue-Ci Wu	National Taipei University of Technology
0395	C-P-395	Carboxylate-Substituted Fluorination Polythiophenes for Enhanced Non-Fullerene Polymer Solar Cells	Hong-Yan Tang	Southern Taiwan University Science and Technology
0397	C-P-397	Reactive sputtering deposition of SiN <sub>x</sub> thin film on single crystal diamond	Ming-Min Su	National Yang Ming Chiao Tung University
0415	C-P-415	Diamond nucleation and growth on vertically aligned Si substrate in microwave plasma CVD	Ching-Ho Chen	National Yang Ming Chiao Tung University

0423	C-P-423	Study of Bipulse-HiPIMS Deposited ITZO Films for Enhancing Electrical Properties	Kai-Shawn Tang	National United University
0440	C-P-440	Phase modulation of BFO using RF-sputtering for electrocatalytic water splitting	Yueh-Lun Lee	National Chung Hsing University
0451	C-P-451	Analysis of Thin-Film Transistors on Different Bottom-Gate Insulator Processes of Dual-Gate InGaZnO TFTs	Kuan-Wei Lu	National Sun Yat-sen University
0461	C-P-461	Study on the annealing conditions for growing La-doped BaSnO <sub>3</sub> thin films by magnetron sputtering in pursuit of high flatness	De-Jing Peng	National Dong Hwa University
0462	C-P-462	Using magnetron sputtering BaSnO <sub>3</sub> doped with different proportions of La on the sapphire substrate and observe the thin film and analyze the microstructure	Yeh-Kai Yin	National Dong Hwa University
0464	C-P-464	Nanoscale Multi-Domain Switching and Thickness Scaling Impact in Dopant-Free Hafnium-Oxide Ferroelectric Devices	Ruo-Yin Liao	National Taiwan Normal University
0465	C-P-465	Effect of Deposition Sequence on the Electrical Characteristics of Hafnium Aluminum Oxide Under Thickness Scaling	Ruo-Yin Liao	National Taiwan Normal University
0467	C-P-467	Analysis of Dynamic Negative Bias Temperature Instability Degradation in P-type Low-temperature Polycrystalline Silicon Thin-film Transistors	Hsin-Chieh Chang	National Sun Yat-sen University
0469	C-P-469	Electrical Characteristics Investigation of Ferroelectric Hafnium-Aluminum Oxide Memory Using Plasma-Treated Bottom Electrode	Ruo-Yin Liao	National Yang Ming Chiao Tung University
0470	C-P-470	Improvement of Electrical Characteristics in HfAlO <sub>x</sub> Ferroelectric Field-Effect Transistor Using AlO <sub>x</sub> Capping Layer	Ruo-Yin Liao	National Yang Ming Chiao Tung University
0482	C-P-482	Heterojunction Photodetector of Bismuth Telluride nanoplate on Zinc Oxide Nanowire Arrays	Weichen Hsu	National Chung Hsing University
0488	C-P-488	Structural, Optical, and Electrical Properties of Multi-component P-type Oxide-semiconductor Cu-Mn-Sn-O Thin Films	Bui Nguyen Quoc Trinh	Vietnam National University
0492	C-P-492	Reduced graphene oxide/titanium dioxide cubic nanorods array/FTO heterojunction for visible-near infrared photodetector	C.S. Chiu	National Chung Hsing University
0502	C-P-502	New Multilayer Materials for High Electromechanical Coupling Coefficient and Low Temperature Coefficient of Frequency SAW Devices	Sean Wu	Lunghwa University of Science and Technology
0527	C-P-527	Heterogeneous integration of single-crystalline rutile thin films with steep phase transition on silicon substrates	Junwoo Son	POSTECH
0064	C-P-64	Exploring the Efficacy of Synaptic Fluorine-Functionalized Graphene/PMMA Wrapped SiO <sub>2</sub> Nanoparticles as Reliable Phototransistors for Energy-Efficient Artificial	Kuan-Han Lin	National Cheng Kung University
0069	C-P-69	Structure and Optical Properties of MoO Thin Films	Tsai-Hsin Yang Tzu-Fan Hsieh	National Formosa University

0086	C-P-86	High-Mobility Double Channel Layer In <sub>2</sub> O <sub>3</sub> /IGZO Thin-Film Transistor Based on PEALD	Zhi-Xuan Zhang	Xiamen University of Technology
0089	C-P-89	Enhanced performance of Zn-doped Ga <sub>2</sub> O <sub>3</sub> ultraviolet photodetector using plasma enhanced atomic layer deposition	Hui-Chen Fan	Xiamen University of Technology
0095	C-P-95	Aluminum-doped Hafnium Oxide Thin Film with High Dielectric Constant Deposition by PEALD and its Application in TFT Devices	Han-Bin Chen	Xiamen University of Technology
0098	C-P-98	Good-performance $\alpha$ -IGZO Thin Film Transistors Fabricated by HiPIMS at Room Temperature	Jia-Hao Yan	Xiamen University of Technology
0530	C-P-530	High Ration of Rare Earth Elements Doped YSZ for the Thermal Spraying Process	Chin Lee	National Taipei University of Technology