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International Thin Film Conference

Poster List

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Symposium A. Coatings for sustainable energy

Poster number	Title	Presenter	Affiliation	Corresponding Author
A-P-002	Thermoelectric characteristics of a vertically-aligned carbon nanotube array with bismuth telluride	Shih Chun Tseng	Minghsin University of Science and Technology	Shih Chun Tseng
A-P-016	Synthesis, characterization and reaction mechanism of novel CuIn ₂ S ₄ /C composite anode materials for Li-ion batteries	Ting-Hao Hsu	Chung Yuan Christian University	Wei-Ren Liu
A-P-019	Synthesis of Co ₃ O ₄ /reduced graphene oxide/C as anode materials for lithium ion batteries	Yi-Xuan Guo	Chung Yuan Christian University	Wan-Ren Liu
A-P-020	Co/N-doped carbon composite anode derived from metal organic frameworks by vulcanization process for lithium-ion batteries	Ya-Chun Chang	Chung Yuan Christian University	Wei-Ren Liu
A-P-021	Nitrogen-doped biomass carbon derived from waste mushroom bags as anode materials for sodium ion batteries	Yu-Xuan Chiang	Chung Yuan Christian University	Wei-Ren Liu
A-P-022	A facile and green process to synthesize 3D network few-layered graphene/carbon nanotubes composite for electromagnetic interference shielding	Yeh Yu Hong	Chung Yuan Christian University	Wei-Ren Liu
A-P-023	Improvement of the Electromagnetic Interference Properties of 3D-Few Layer Graphene Composite by Freeze-Drying Process	Yi-Ting Hsieh	Chung Yuan Christian University	Wei-Ren Liu
A-P-024	Nitrogen doping effects on few-layer graphene as anode materials for Lithium-ion batteries	Pei-Min Ting	Chung Yuan Christian University	Wei-Ren Liu
A-P-041	Constructing Three-Dimensional Porous Silicon/Graphene Aerogel Composite as Anode Materials for Lithium-Ion Batteries	Wei-Ren Liu	Chung Yuan Christian University	Wei-Ren Liu
A-P-042	A combined first principles and experimental study on Al-doped Na ₃ V ₂ (PO ₄) ₂ F ₃ cathode for rechargeable Na batteries	Wei-Ren Liu	Chung Yuan Christian University	Wei-Ren Liu

A-P-078	Effect of Cu doped ZnO based nanostructure for hydrogen sensor	Wen-Chang Huang	Kun Shan University	Wen-Chang Huang
A-P-079	Electrochromic performance of sputtering deposited Co-doped V2O5 film	Wen-Chang Huang	Kun Shan University	Wen-Chang Huang
A-P-095	Effect of HfO2 Formed with Different Deposition Method in TAOSs-Based Bilayer Switching for Low Power CBRAM	Shu-Wei Chang	National Yung Ming Chaio Tung university	Po-Tsun Liu
A-P-106	Control of hole carrier density of Si/nanocrystalline β -FeSi2 composite films by co-sputtering	Takumi Kidokoro	Meiji University	Hiroshi Katsumata
A-P-114	Plasma Functional Treatment on Graphite Felt Using Atmospheric Pressure Plasma Jets for All-Vanadium Redox Flow Battery	Jung-Bin Chen	National Taiwan University of Science and Technology	Jung-Bin Chen
A-P-129	Fast Growth of Stacked Graphene-Containing Multi-Porous Nanoparticle Carbon film	Fu-Der Lai	Institute of Photonics Engineering	Fu-Der Lai
A-P-132	The Reaction Mechanism of Copper-Silver Bimetallic Electrocatalyst During Electrochemical CO2 Reduction	Jiahao Lai	National Taiwan University	I-Chung Cheng
A-P-134	Transparent Conducting Oxide Coatings of Polycrystalline Perovskite-structured La-doped BaSnO3 by Magnetron Sputtering	Yi-jun Yan	National Dong Hwa University	Yi-Jia Chen
A-P-142	Effect of oxygen flow rate on plasma radicals and properties of copper oxide films prepared by room-temperature high-power impulse magnetron sputtering	Shui-Yang Lien	Xiamen University of Technology	Shui-Yang Lien
A-P-143	Microwave-assisted synthesis of carbon-supported PtNi nanofillers for quasi-solid-state dye-sensitized solar cells	Hong-En Tsai	National Chung Hsing University	Chih-Liang Wang
A-P-152	Preparation of Co3O4-NiO/TiO2/carbon cloth electrode by hydrothermal method for capacitive deionization system	Jung-Jie Huang	Da-Yeh University	Jung-Jie Huang
A-P-153	High performance of TiO2/pyramidal black silicon anti-reflection structure by metal-assisted chemical etching and liquid phase deposition	Jung-Jie Huang	Da-Yeh University	Jung-Jie Huang
A-P-166	Film properties of silicon nitride thin films embedded with	Tomohiro Matsuda	Meiji University	Hiroshi Katsumata

	nanocrystalline Si			
A-P-177	Effect of the layer thickness in Al ₂ O ₃ /Ti/Al ₂ O ₃ /Ti Multilayer stack solar absorber films on the photo-thermal conversion efficiency for rapid manufacturing	Ting-Yang Lin	National Kaohsiung University of Science and Technology	Ting-Yang Lin
A-P-179	Effects of deposition time and pre-heat temperature on structural and thermoelectric properties of thick Sb ₂ Te ₃ films	Rachsak Sakdanuphab	King Mongkut's Institute of Technology Ladkrabang	Rachsak Sakdanuphab ⁴
A-P-190	Air-Based Sputtering Deposition of TaN _x O _y Thin Films for Photoelectrochemical Applications	Huang Yu Cheng	National Chung Hsing University	Fu-Hsing Lu
A-P-204	Si/SiC/C Composite Derived from Plasma-assisted Discharge Process as a Potential Anode Material for Li-ion Batteries	MURUGANANTH AM RASU	Chung Yuan Christian University	Wei-Ren Liu
A-P-230	Synthesis of ZnO/In ₂ S ₃ /Cu ₂ ZnSnS ₄ /ZnS Core-shell Nanowires for Photoelectrochemical Water Splitting	Wei-Ren Su	National Dong Hwa University	Yu-Kuei Hsu
A-P-259	UTILIZATION OF SOLVENTS AND REDUCED GRAPHENE OXIDE FOR ENERGY HARVESTING IMPROVEMENT OF PVDF-HFP FILMS	Pisan Sukwisute	King Mongkut's Institute of Technology Ladkrabang	Pisan Sukwisute
A-P-287	In-situ lithium and magnesium ion doping Tantalum conductor with Arc Plasma Source (APS) for electrochromic devices	Shang-En Liu	Institute of Nuclear Energy Research	Shang-En Liu
A-P-288	The progress of a roll-to-roll polymer electrolyte production technique for lithium batteries	Shang-En Liu	Institute of Nuclear Energy Research	Shang-En Liu
A-P-299	B-Site Substituted Two-Dimensional Nanosheets Perovskite Material Ca ₂ Ti _n -3Nb ₃ O _{3n+1} - in Photoelectrochemical Water Splitting Application.	Thi Bao Ngoc Le	National Cheng-Kung University	Yen-Hsun Su
A-P-311	Doping of polydimethylsiloxane film for enhancement of sustainable triboelectricity with aluminum and its application	Lin Lin	National Cheng Kung University	C.K. Chung
A-P-388	Thickness-controllable coating on graphite surface using glucose solutions as anode materials for Lithium-ion Battery	Jarrn-Horng Lin	National University of Tainan	Jarrn-Horng Lin

A-P-390	One-step Na/K doping approach for Cu(In,Ga)(S,Se) ₂ solar cells using CuGa-NaF-KF target	Yi-Cheng Lin	National Changhua University of Education	Yi-Cheng Lin
A-P-405	Copper Induced Lateral Crystallization of Amorphous Silicon Films	Guo-Ju Chen	I-Shou University	Guo-Ju Chen
A-P-417	Highly efficient tin-free catalytic colloid on siloxane bonding polycarbonate and glass for selective chemical metallization	Hsueh-Yu Chen	National Taiwan University of Science and Technology	Chen-Hao Wang
A-P-428	Fabrication of Garnet-Solid Electrolytes by sputtering for solid state batteries	Shu-Yi Tsai	National Cheng Kung University	Shu-Yi Tsai
A-P-439	The Operating Characteristics of the PEMFCs with the different Coated Aluminum Alloy Bipolar Plate	Chen-Yu Chen	National Chiayi University	Chen-Yu Chen
A-P-441	The Effect of Mole Fraction on The Microstructure and Optical Properties of Ba _x Sr _{1-x} TiO ₃ Thin Films	Johan Iskandar	Universitas Pakuan	Johan Iskandar
A-P-444	Electroless deposition of Co nanoparticles for hydrogen evolution reaction	Luigi Dahonog	University of the Philippines Diliman	Mary Donnabelle L. Balela
A-P-466	Modulation of Optoelectronic Property of 2D Graphene Oxide Sheets by Nitrogen Doping for Composite Films	Chia-Wei Chang	National Cheng Kung University	Yen-Hsun Su

Symposium B. Nanostructured and nanocomposite coatings

Poster number	Title	Presenter	Affiliation	Corresponding Author
B-P-018	CsPbBr ₃ /Metal-Organic Aerogel - Aluminium (III)-1,3,5,- Benzenetricarboxylate Composites for White Light-Emitting Diodes Applications	Shu-Yu Chang	Chung Yuan Christian University	Wei-Ren Liu
B-P-026	Few-layer graphene as an additive for negative active material of lead-acid batteries	Shih-Han Chang	CSB Energy Technology Co., Ltd	Wei-Ren Liu
B-P-038	Multi-Application of Piezo-composite Thin Film	Nghi Nhan Nguyen Thi	National Cheng Kung University	Kao Shuo Chang
B-P-046	The Studies of g-C ₃ N ₄ Doped ZnO Nanorods Grown on Pyramid Substrates for H ₂ Sensing Applications	Huang Bohr-Ran	National Taiwan University of Science and Technology	Bohr-Ran Huang
B-P-049	Study on the phase transition of low-temperature deposited tantalum film using high-power pulsed magnetron sputtering (HiPIMS)	Wei-Chieh Chen	National Chung Hsing University	Ming-Tzer, Lin
B-P-051	Simulation and Fabrication for Optical Properties and Color Distribution of Al ₂ O ₃ /Ti/Al ₂ O ₃ /Ti Multilayer Stacks for Colored Solar Selective Absorbers at Buildings	Fu-Der Lai	Institute of Photonics Engineering	Fu-Der Lai
B-P-061	Polyimide-coated LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ cathode materials with improving cycling stability for high-voltage Li-ion batteries	Wen-Chen Chien	Ming Chi University of Technology	Wen-Chen Chien
B-P-072	Magnetic properties and microstructure of FePt(Ag, C) films with MgTiOBN/CrRu underlayer	Jai-Lin Tsai	National Chung Hsing University	Jai-Lin Tsai
B-P-075	Preparation and Characterization of Polycrystalline and Single Crystalline NCM523 Cathode Materials for Lithium-ion Batteries	Wen-Chen Chien	Ming Chi University of Technology	Wen-Chen Chien
B-P-076	Development of Innovative Porous MoS ₂ Composite Material	Lee Meng-Ting	National Taipei University	Po-Chun Chen

	Framework and Its Application on Hydrogen Evolution Reaction		of Technology, Taipei Tech	
B-P-082	Electrodeposition of Nickel-Cobalt Alloy Films and their Micro-Hardness	Yiming Jiang	Tokyo Institute of Technology	Yiming Jiang
B-P-087	Combine FIB-DIC method for the Residual stress measurement of Sputter Deposited ZrN/Zr Thin Films	Meng-Chieh Lee	National Chung Hsing University	Ming-Tzer Lin
B-P-093	Effect of annealing temperature on the light absorption and visible photoluminescence spectra of nanocrystalline SiC embedded in SiO _x films prepared by co-sputtering	Nakamura Takamasa	Meiji University	Hiroshi Katsumata
B-P-099	Effect of sputtering with Kr gas on electrical resistivity of Ag-multilayer used for Low-Emissivity glass	Koji Mizukoshi	YKK AP Incorporated	Midori Kawamura
B-P-110	Non-enzymatic Polypyrrole/Nano-Gold Composite Electrode for Glucose Oxidation	hiroki kawakami	Tokyo Institute of Technology	Hiroki Kawakami
B-P-115	Nanoporous Copper-Silver Thin Film: Synthesis, Microstructure Analysis, and Application to Electrocatalytic CO ₂ Reduction	Yu-Shuo Lee	National Taiwan University	Wen-Yueh Yu, I-Chung Cheng
B-P-119	Ultrasensitive sticky superhydrophobic SERS chip	Jiann Shieh	National United University	Jiann Shieh
B-P-121	Effect of Morphological Change in Ag Nanostructures on Plasmonic Emission Enhancement of Organic Emitter	Atsushi Furumoto	Kitami Institute of Technology	Takayuki, Kiba
B-P-130	MAGNETIC REDUCED GRAPHENE OXIDE 2D NANOSHEETS-BASED CONDUCTIVE POLYMER COMPOSITE COATING FOR EMI SHIELDING	Chi-Ming Liu	Ming Chi University of Technology	Ting-Yu Liu
B-P-131	Effects of Process Parameters on Structure and Properties of Molybdenum Nitride Thin Films by High-Power Impulse Magnetron Sputtering	Ting-Hsun Lai	National Tsing Hua University	Jia-Hong Huang
B-P-136	Low Temperature Ga ₂ O ₃ Films Grown by Atmospheric Atomic Layer Deposition	Shui-Yang Lien	Xiamen University of Technology	Shui-Yang Lien
B-P-140	Deposition and Characterization of RP-ALD Ga ₂ O ₃ Thin Films	Shui-Yang Lien	Xiamen University of	Shui-Yang Lien

	with Different Oxygen Plasma Power		Technology	
B-P-144	Nitrite sensor with cupric oxide nanoparticles stacked on sputtered thin-film	Feng-Renn Juang	National Sun Yat-sen University	Feng-Renn Juang
B-P-162	Improvement of thermal stability in sputtered Co/MnN films on the glass substrates with the insertion of thin TaN underlayer	Chenyu Hung	Tunghai University	C.Y. Hung
B-P-167	The ZnO nanostructures made by electrospinning and hydrothermal growth processes for hydrogen sensing	Yang-Ming Lu	National University of Tainan	Yang-Ming Lu
B-P-174	Electrochemical Preparation of Palladium Nanoparticles for Non-enzymatic Glucose Sensor	Yang Sheng Lu	National Taipei University of Technololy	Shao-Sian Li
B-P-188	Comparison of Self-Assembled Monolayers on SiO ₂ and Porous Low-k Dielectrics by Decyltrimethoxysilane Vapor Treatment	Yi-Lung Cheng	National Chi-Nan University	Yi-Lung Cheng
B-P-193	Properties of sheet-like nanostructured single-phase tin monosulfide thin films grown at different bath temperature by electrochemical deposition with a simple two-electrode configuration	Wen-Jen Lee	National Pingtung University	Wen-Jen Lee
B-P-199	Interconnected Carbon Nanotube-Nanoparticle Hybrid Networks and Their Polymer Composite Films for Gas Sensing	Sheng-Rui Jian	I-Shou University	I-Ju Teng
B-P-207	Alloy Electrodeposition of Gold-Nickel Alloys and the Mechanical Property in Micro-Scale	Akiyama Takumi	Tokyo Institute of Technology	Takumi Akiyama
B-P-212	Heteroepitaxial growth of single-phase ϵ -Ga ₂ O ₃ on c-plane sapphire by MOCVD with a two-step growth process	Hsu Yu-Hsuan	National Yang Ming Chiao Tung University	Ray-Hua Horng
B-P-222	Nano-structural Bismuth Electrode for High-Performance Asymmetric Supercapacitor	Yu-Hung Fang	National Dong Hwa University	Yu-Kuei Hsu
B-P-223	Bioinspired Durable Superhydrophobic Surface from a Hierarchically Wrinkled Nanoporous Polymer	Ting-Lun Chen	National Chung Hsing University	Han-Yu Hsueh
B-P-234	Electrochemical Deposition of Platinum Nanoparticle Added with Halild Ions for Non-enzymatic Glucose Sensor	Zheng-Yan Yeh	National Taipei University of Technololy	Shao-Sian Li

B-P-247	Using a unique complex surface treatment, sand-blasting/acid-etching/alkaline-immersion, to enhance the corrosion resistance and biological responses of titanium surface Content	ying-sui Sun	Taipei Medical University	Ying-Sui Sun
B-P-273	Artificial Canyons Influenced the Absorption of Ions on Co/graphene Interface	Cheng-Hsun-Tony Chang	Minghsin University of Science and Technology, Hsinchu 30401, Taiwan.	Jyh-Shen Tsay
B-P-276	Synthesis of MoS ₂ /ZnO Composite Materials and Their Doping Characteristics	Yung-Huang Chang	National Yunlin University of Science and Technology	Yung-Huang Chang
B-P-281	Electrical Characterization of Metal Contacts to Nitrogen-Incorporated Nanowall Structures	Zewen Sun	Kyushu University	Kungen Teii
B-P-291	Metal Oxides Coupling with Surface Plasmon Resonance of Gold Nanoparticle to Mediate Efficiency of Carbon Dioxides Reduction	Kaoru Onuma	National Cheng Kung University	Yen-Hsun Su
B-P-295	Effect of Annealing Temperature on ZnCo ₂ O ₄ Nanosheets to Modulate Supercapacitor Performance on Carbon Paper	Vinay Kumar Bandarla	National Cheng-Kung University	Yen-Hsun Su
B-P-300	Surface Modification on Cathode by Pulsed Arc Plasma Source to Enhance High Rate Charge-discharge Ability for Gel Electrolyte Lithium Batterie	Tien-Hsiang Hsueh	Institute of Nuclear Energy Research	Yu-Chen Li
B-P-306	FIB-DIC method for the Residual stress measurement of HiPIMs TiN, TiN/Ti duplex coating and cold spray Ti coating	Zhao-Ying Wang	National Chung Hsing University	Ming-Tzer Lin
B-P-314	Preparation of chitosan/hydroxyapatite composite coating from crab shells on hierarchical micro/nano-textured Ti surface	Hsiao Han Chang	National University of Kaohsiung	Wen-Fu Ho
B-P-326	Surface Plasmon Resonance of Muti-layer Noble Metal Nanoparticles Mediated ZnO Nanorods Heterostructure Controlled by Machine Learning	Yu-Kai Liao	National Cheng Kung University	Yen-Hsun Su
B-P-331	Solution-processed WO ₃ @Si heterostructures as highly efficient room-temperature NO ₂ sensor	Yu-Ren Chen	National Cheng Kung University	Chia-Yun Chen

B-P-332	Bionic flexible gold-silver nanoarray for rapid and sensitive SERS sensing	Chia-Wei Hsiao	National Taiwan University of Science and Technology	Ting-Yu Liu
B-P-333	Microstructural, optical and mechanical properties of tungsten oxide films fabricated using superimposed HiPIMS-MF system	Igamcha Moirangthem	National Taiwan University of Science and Technology	Jyh-Wei Lee
B-P-341	Hydrothermal Fabrication and Morphology Tuning of Nanostructured BaTiO ₃ Films and Their Piezoelectricity-related Applications	Yen-Lun Chiu	National Cheng Kung University	Kao-Shuo Chang
B-P-344	SERS Detection of SARS-CoV-2 Virus by Noble Metal Core-Shell Nanosphere with 4-Mercaptobenzoic Acid (4-MBA) on Gold Nano-Island Arrays	Ting-Yin Chien	MING CHI UNIVERSITY OF TECHNOLOGY	Ting-Yu Liu
B-P-346	The role of thin AlN layer to improve neuromorphic behavior in a nitride based memristor	Aftab Saleem	National Yang Ming Chiao Tung University	Tseung-Yuen Tseng
B-P-347	Fabrication and Characterization of Ultraviolet Light Sensing devices of Graphene Combined with Nano Oxide Composite Structures	Yang-Ming Lu	National University of Tainan	Yang-Ming Lu
B-P-352	Humidity-dependent capacitive response in the PVA/graphene flower composite	Sheik Abdur Rahman	Jeju National University	Woo Young Kim
B-P-367	Design of superhydrophobic SERS substrate by deposited organic conjugated molecules and noble metal nanoislands	Zi-Ling Zeng	National Taiwan University of Science and Technology	Ting-Yu Liu
B-P-369	Enhanced Thermal Stability for High Temperature Solar Selective Coatings by Strong Carbon-Formers: Cr, W, and Ti	Siang-Yun Li	National Cheng Kung University	Jyh-Ming Ting
B-P-383	Ozone treatment effect on humidity sensitivity in P(VDF-TrFE)/Graphene flower composite	Seongwan Kim	Jeju National University	Woo Young Kim
B-P-389	Rapid Synthesis of Molybdenum Disulfide Powder via Microwave-assisted Template Method	Yi-Chang Chung	National University of Kaohsiung	Yi-Chang Chung
B-P-394	Space-controllable TiO ₂ @IrO ₂ core-shell nanotube array as a	Po-Chun Chen	National Taipei University	Po-Chun Chen

	multifunctional bio-interface electrode		of Technology	
B-P-401	Design and fabrication of a Nafion-Modified nanoporous platinum film for non-enzymatic glucose sensor application	Yun Yang Sun	National Taipei University of Technology	Po-Chun Chen
B-P-418	Enhancement of electron field emission properties of vertically aligned carbon nanotube arrays by coating with aluminum thin film	Li Heng Wang	National Taiwan University of Science and Technology	Kuei-Yi Lee
B-P-419	Nonenzymatic Electrochemical Glucose Sensor by Hierarchical Synthesis of Ni@Pd Core@Shell Nanocatalyst	Yi-Chieh Lin	National Taipei University of Technology	Po-Chun Chen
B-P-431	Hierarchical silica nanowires with negative static charge	Jiann Shieh	National United University	Jiann Shieh
B-P-434	Silver-incorporating nanotubes on TiNiMo alloy by pulse oxidation for dental applications	Hsueh-Chuan Hsu	Central Taiwan University of Science and Technology	Hsueh-Chuan Hsu
B-P-435	A study of hydroxyapatite coated porous Ti-5Nb-5Mo alloy by electrolytic deposition	Hsueh-Chuan Hsu	Central Taiwan University of Science and Technology	Hsueh-Chuan Hsu
B-P-436	A Piezoresistance Model of N-type Germanium Nanosheet Transistor	Yun-Fang Chung	National Chung Hsing University	Shu-Tong Chang
B-P-437	Photocatalytic Capability and Reusable SERS Detection by Ag Nanoparticles Immobilized on g-C ₃ N ₄ /Graphene Oxide Nanosheets	Ting-Yu Liu	Ming Chi University of Technology	Ting-Yu Liu
B-P-438	The structure and conductivity of the TiN films grown on the Al ₂ O ₃ substrates.	Chien Chang	National University of Kaohsiung	Chien Chang
B-P-440	Effect of NaOH concentration and Cu Salts on the Morphology of CuO Nanostructured Electrode for Pseudocapacitor Application	Salvacion Orgen	University of the Philippines Diliman	Mary Donnabelle L. Balela
B-P-442	Study and Properties of Solution-processed 2D Nanoplate Ceramic Nano-composites for Functional Coatings	Chia-Wei Chang	National Cheng Kung University	Yen-Hsun Su
B-P-443	Colloidal Properties of Surfactant-Modified 2D Nanoplates Used in Functional Coatings	Yun Liang Chien	National Cheng Kung University	Yen-Hsun Su
B-P-450	A Stress Response Model for Electron Mobility of N-type Gallium Arsenide Nanowires Transistor	Shu-Tong Chang	National Chung Hsing University	Shu-Tong Chang

B-P-464	Bioactive Element Coatings on the Titanium Mesh for Dental Clinical Use	Chang Su Seo	Chosun University	Choe han-chol
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Symposium C. Semiconductor, optoelectronic, and flexible device films

Poster number	Title	Presenter	Affiliation	Corresponding Author
C-P-033	Study of Pt/PET Composite Textile Prepared by Supercritical CO ₂ Assisted Electroless Plating	Masaki Mitsumoto	Tokyo Institute of Technology	Masaki Mitsumoto
C-P-034	Simulated methodology development and experimental demonstration of residual stress induced warpage for SiN _x PECVD coating process	Chang-Chun Lee	National Tsing Hua University	Chang-Chun Lee
C-P-047	Heteroepitaxial Growth of TiN on 4H-SiC (0001) substrate by DC Reactive Sputtering	Kun-An Chiu	National Yang Ming Chiao Tung University	Li Chang
C-P-070	Industrial applications of copper alloy film	Chon-Hsin Lin	Lunghwa University of Science and Technology	Chon-Hsin Lin
C-P-074	Evaluation of N-type (nitrogen-doped) nanodiamond films deposited on p-type silicon for optoelectronic applications	Abdelrahman Ahmed	Kyushu University	Abdelrahman Zkria
C-P-086	Multilayered VO ₂ moth-eye nanostructure with ultrahigh thermochromic performances for smart window applications	Ying Chou Lu	National Taiwan University	Ying-Chou Lu
C-P-089	Effect of W addition for Cu diffusion barrier properties of Cr–W–N films	Li-Chun Chang	Ming Chi University of Technology	Li-Chun Chang
C-P-094	Effects of Oxygen-rich and -poor InWZnO Thin Film Stacking Sequence on Oxide-based Conductive Bridge Random Access Memory	Su Sheng Jie	National Yang Ming Chiao Tung University	Po-Tsun Liu
C-P-100	Electron-Phonon Coupling in ZnO Thin Films	Ya-Chuan Chang	National Cheng Kung University	Jow-Lay Huang
C-P-108	Characterizations of conductive copper nitride films deposited by	Yin-Hung Chen	National Taiwan University	Sheng-Chi Chen

	high power impulse magnetron sputtering			
C-P-120	Fabrication and Characterization of CaF ₂ /ZnS Distributed Bragg Reflector (DBR) on a Flexible Substrate	Tsubasa Tanno	Kitami Institute of Technology	Takayuki Kiba
C-P-127	Substrate effect for the growth of h-BN thin films by molecular beam epitaxy	Ing-Song Yu	National Dong Hwa University, Taiwan	Ing-Song Yu
C-P-141	Effect of Discharge Power on Sn/In Composition and Optoelectronic Properties of ITO Films Deposited using High Power Impulse Magnetron Sputtering	Shui-Yang Lien	Xiamen University of Technology	Shui-Yang Lien
C-P-146	Deposition of Mg ₂ Si _{1-x} Sn _x films by co-sputtering using two different targets and a comparison of the effect of subsequent thermal annealing process on film properties	Kenta Uefuji	Meiji University	Hiroshi Katsumata
C-P-158	In situ synthesis of flexible patterned non-enzymatic micro glucose sensor by pulse electro chemical deposited Nickel Selenium nanoparticles on polyethylene terephthalate	wenya lee	National Taipei University of Technology	Chien-Kuo Hsieh
C-P-161	Heteroepitaxial Growth of ZrC on Si (100) substrate by DC Reactive Sputtering	Jing-Feng Lin	National Yang Ming Chiao Tung University	Li Chang
C-P-172	Characteristics of Al-doped BaTiO ₃ Thin Films Produced by a Hydrothermal-Galvanic Couple Method on TiN/Si Electrodes	Yu-Zhen Zheng	National Chung Hsing University	F.-H. Lu
C-P-176	Study of Defects in Gallium Sulfide by Photoluminescence Spectroscopy	Chao-Yun Huang	National Dong Hua University	Yi-Jia Chen
C-P-189	In-situ X-ray photoelectron spectroscopy study on the initial oxidation stage of 4H-SiC via inductively coupled Ar/O ₂ /ClO ₂ plasma	Jhong-Ren Huang	National Taiwan University of Science and Technology	Jhong-Ren Huang
C-P-194	The study of etching on GaN epitaxial layer by acid solution	Shih-Chieh HSU	Tamkang University	Shih-Chieh Hsu
C-P-205	Low temperature growth Van der Waals epitaxy of AlN ultra-thin film on WS ₂ by PA-MOMBE	Wei-Chun Chen	National Applied Research Laboratories	Wei-Chun Chen

C-P-206	Supercritical Carbon Dioxide Assisted Metallization of 3D-Printed Polymer Structure as Functional Components in Electronic Devices	Po Wei Cheng	Institute of Innovative Research, Tokyo Institute of Technology	Po Wei Cheng
C-P-209	Effect of Al ₂ O ₃ -doping on the structure and optoelectronic characteristics of MgZnO thin film prepared by RF magnetron sputtering	Kuo Po-Sheng	National Chung Hsing University, Taiwan, Republic of China	Fuh-Sheng Shieu
C-P-224	Crystalline and electrical properties of phosphorous lightly-doped Co alloy films electrochemically deposited on Ni substrate for nanoscale interconnects	Jau-Shiung Fang	National Formosa University	Jau-Shiung Fang
C-P-236	Resistive Switching Properties of Composition-dependent In-Ga-Zn-O and ZnO Nanocomposites	Yuan-Fu Chang	Chung Yuan Christian University	Shu-Hao Chang
C-P-237	CuO/ZnO RRAM Devices Fabricated by Sol-gel Process	Jia-You Liou	Chung Yuan Christian University	Shu-Hao Chang
C-P-238	Titanium Dioxide and Copper Oxide Nanocomposites and Their Resistive Switching Properties	Yi-Xiang Zeng	Chung Yuan Christian University	Shu-Hao Chang
C-P-239	The annealing mechanism effect on polymer crystallography based on photomultiplication type organic photodetectors	Tai-Yung Wang	Ming Chi University of Technology	Yu-Ching Huang
C-P-240	Study of The Conducting Polymer as The Interfacial Buffer Layer of Screen-Printed Electrodes for Perovksite Solar Cells	Yun Hsiang Cheng	Chang Gung University	Yu-Ching Huang
C-P-245	The Optical and Electrical Properties of ZnO/Ag/ZnO and ZnO/Cu/ZnO Multilayers Deposited on Flexible Substrates Using High Power Impulse Magnetron Sputter Technique	Hsu Yu-Hsuan	National Yang Ming Chiao Tung University	Wan-Yu Wu
C-P-252	Oxygen effects of the rf sputtered V ₂ O ₅ thin films for electrochromic application	Tien Chai Lin	Kun Shan University	Tien-Chai Lin
C-P-254	Electrochromic properties of tantalum doped vanadium pentoxide thin film as ionic storage layer	Tien Chai Lin	Kun Shan University	Tien-Chai Lin

C-P-255	Study on the Optimum Thickness of ITO/Ag/ITO Transparent Conductive Coating Deposited by HiPIMS	Ying-Jie Gao	Da-Yeh University	Wan-Yu Wu
C-P-257	Impact of Oxygen Defects on Device Performance of Oxide Semiconductors	Endah Kinarya Palupi	Kwansei Gakuin University, Sanda, Japan	Akihiko Fujiwara
C-P-261	Transfer CuCr _{1-x} Fe _x O ₂ thin films on polymethyl methacrylate flexible substrate	Chien-Ching Wang	National Taipei University of Technology	Te-Wei Chiu
C-P-268	Preparation of High-Performance Organic Photodetector for Near-Infrared Sensing by Solution Process	Yan-Cheng Peng	Ming-Chi University of Technology	Yang-Yen Yu
C-P-270	Morphology-Performance Relationships in High-Efficiency Organic Photovoltaics	Liu Chao-I	Ming Chi University of Technology	Yang-Yen Yu
C-P-272	Preparation of High Efficiency Ternary Small Molecule Organic Photovoltaics	Chun Chieh Lee	Ming Chi University of Technology	Yang-Yen Yu
C-P-274	Silicon Dioxide layer synthesized by Very-High-Frequency PECVD	Cheng-Hsun-Tony Chang	Minghsin University of Science and Technology, Hsinchu, Taiwan.	Cheng-Hsun-Tony Chang
C-P-279	Preparation of Biomass-Based Carbon Dots and its Application on the Interfacial Modification Layer of Organic Solar Cells	Wei-En Wu	Ming Chi University of Technology	Yang-Yen Yu
C-P-282	Delafossite CuFeO ₂ thin films prepared by atmospheric pressure plasma process	Hong-Ying Chen	National Kaohsiung University of Science and Technology	Hong-Ying Chen
C-P-303	Demonstration of Ferroelectric Tunnel Thin-Film Transistor with HfZrO _x Gate Dielectric for Application of Synaptic Device	Cheng-Yu Ma	National Sun Yat-sen University, Kaohsiung, Taiwan	William Cheng-Yu Ma
C-P-310	Effects of Electrical Properties of PEDOT:PSS on Device Performance of Perovskite Solar Cells	Chun-Cheng Lin	R.O.C. Air force Academy	Chun-Cheng Lin
C-P-319	Effect of Different Oxygen Flow and Annealing on Electrical	Chi Wei Ho	National University of	Shih-Chang Shei

	Performance of ZTO TFTs and Photodetector		Tainan	
C-P-323	Color adjustment of transparent ITO glass using anodizing alumina	Chung Chen-Kuei	Natonal Cheng Kung University	C.K. Chung
C-P-354	Complementary Electrochromic Devices Composed of Polyaniline and Tungsten Trioxide Thin Films with Succinonitrile/Polyethylene Glycol Quasi-Solid-State Composite Electrolyte	Cheng-Lan Lin	Tamkang University	Cheng-Lan Lin
C-P-355	On the Direct Electrodeposition of Micropatterned Platinum Thin Films and Their Catalytic Behaviors Investigated using Scanning Electrochemical Microscope	Cheng-Lan Lin	Tamkang University	Cheng-Lan Lin
C-P-363	Effects of Ni Doping on CuO-Based Thin Films Prepared on Glass Substrates via Solution Processing	La Thi Ngoc Mai	Vietnam National University, Hanoi	Bui Nguyen Quoc Trinh
C-P-382	Influence of fabrication process parameters on high-quality sputtered ITO thin films on electro-optical properties for transparent electrodes	Devendra Singh	Ulsan National Institute of Science & Technology	Kwanyong Seo
C-P-396	Fabrication of p-n Diode Made with Graphene Oxide and Layered HfS ₂	Kuo-Yuan Chen	National Taiwan University of Science and Technology	Kuei-Yi Lee
C-P-403	Annealing treatments on microstructures and properties of Copper doped In ₂ O ₃ thin films	Guo-Ju Chen	I-Shou University	Guo-Ju Chen
C-P-411	Effect of O ₂ concentration on the properties of RF magnetron sputtered MoO ₂ thin films	Boen Houn	I-Shou University	Chiun Der Kao
C-P-412	Development of high-definition dual light source dental endoscope 405nm LED excited dental plaque fluorescence optical filter	Feng-yi chen	National Applied Research Laboratories, Taiwan Instrument Research Institute	Feng-yi Chen
C-P-426	An investigation into the interface reaction between CuO and AlN thin film	Shu-Tzu Yu	National Taipei University of Technology	Min-Te Lu

C-P-429	The Effect of Different Seed Layer on Nanorods Morphology and Their Gas Sensing Performance	Pragya Singh	National Taiwan University of Science and Technology	Tseung-Yuen Tseng
C-P-430	Dielectric Responses of Hybrid Langmuir Films Prepared upon Simultaneous Oriented Self-Assembly of Fluorescent Polyfluorenes and Carbon Nanotubes	Hsin-Hui Lin	National Cheng Kung University	Jrjeng Ruan
C-P-445	Influences of the mutual interactions between perovskite materials and polymer ferroelectric crystals on film structures and piezoelectric properties	Yi-Hsueh Chen	National Cheng Kung University	Jr-Jeng Ruan
C-P-456	Electrical Characteristics Investigation of Ferroelectric Memories Using Stacked and Mixed Hafnium Zirconium Oxides	Hsiao-Hsuan Hsu	National Taipei University of Technology	Hsiao-Hsuan Hsu
C-P-457	Effect of Capping Layer on the Ferroelectricity of Hafnium Oxide	Hsiao-Hsuan Hsu	National Taipei University of Technology	Hsiao-Hsuan Hsu
C-P-458	Performance Investigation of Dopant-Free Ferroelectric Hafnium Oxide Transistor Using Remote Nitrogen Plasma Treatment	Chun-Hu Cheng	National Taiwan Normal University	Chun-Hu Cheng
C-P-459	Interface Engineering Through Nitrogen Plasma Passivation for Improving Switching Performance in Highly-Scaled Ferroelectric Devices	Chun-Hu Cheng	National Taiwan Normal University	Chun-Hu Cheng
C-P-460	Electrical and Optical Characterization of n-AZO/p-InP Hetero-Junction Device Deposited by RF Reactive Sputtering	jia-chen jhuang	National Taipei University of Technology, Taiwan	Wen-Jeng Ho
C-P-462	Improved Optoelectronic Characteristics of ZnO:In-Ga UV photodetectors by using Asymmetric Interdigitated Electrodes	Hsuan Meng Tsai	Feng Chia University	Chien-Yie Tsay
C-P-463	Enhanced NO Gas Sensor Response Based on Ag-Doped ZnO Epilayers by Simple Spin Coating Method	Ting-Yu Chang	National Yang Ming Chiao Tung University	Ting-Yu Chang

Symposium D. Tribological and protective coatings

Poster number	Title	Presenter	Affiliation	Corresponding Author
D-P-004	Tribology behavior of collagen/ cellulose hybrid coating in artificial knee joint	Shih-Chen Shi	National Cheng Kung University	Shih-Chen Shi
D-P-005	Study of tribology behavior and third body observation of metal oxide/MoS ₂ /cellulose composite	Shih-Chen Shi	National Cheng Kung University	Shih-Chen Shi
D-P-011	Thermal Reliability and Electrochemical Corrosion Protection of Au/Pd/Ni(P) and Au/Pd(P)/Ni(P) Surface Finishes over Cu Interconnects	Cheng-Yu Lee	Yuan Ze University	Cheng-En Ho
D-P-032	Tribological and Mechanical properties of AlCrBN hard coating deposited using cathodic arc evaporation	Zong-Hong Tsai	National Formosa University	Yin-Yu Chang
D-P-040	Effect of Coating Architecture on Stress Relief Mechanism of TiZrN Coating on Silicon Substrate	Matthew Wei-Jun Liu	National Tsing Hua University	Jia-Hong Huang
D-P-085	Engineered Phase Differences between HiPIMS Power and Substrate Bias for Improved Mechanical Properties of TiN/Ti Coatings	Ying-Xiang Lin	Da-Yeh University	Wan-Yu Wu
D-P-101	Output Performance and Characteristics of Cu-doped ZnO Triboelectric Nanogenerator	Tung-Sheng Chen	National Chen Kung University	Jow-Lay Haung
D-P-128	Effect of CrN addition on the mechanical and tribological performances of multilayered AlTiN/CrN/ZrN hard coatings	Bao-yu Chang	National Formosa University	Yin-Yu Chang
D-P-163	The fracture toughness of V(1-x)/2Mo(1-x)/2Nx coatings measured by internal energy-induced cracking method	Yiqun Feng	National Tsing Hua University	Jia-Hong Huang
D-P-173	Air-Based Deposition of (Ti,Al)N _x O _y Films by Reactive Magnetron	Xin-Xian Yang	National Chung Hsing	Fu-Hsing Lu

	Sputtering		University	
D-P-186	Tribological properties of spray-painted IF-WS ₂ /Ag and IF-WS ₂ /diamond composite films on a medium carbon steel under atmospheric environment	Chi Yun Tang	National Taiwan Ocean University	Chau-Chang Chou
D-P-258	Application of Hydrophobization Coating of Ancient Calligraphy and Painted by Cold Plasma Polymerization of Hexamethyldisilazane	Chang-Hao Yah	Tatung University	Ko-Shao Chen
D-P-267	Effects of Duty Cycle and Working Pressure on Structure and Properties of TiZrN Coatings by Co-sputtering HiPIMS/UBMS	Chin Yu Shiang	National Tsing Hua University	Jia-Hong Huang
D-P-275	Tribocorrosion Study of Electrodeposited Ni–W Alloy/BN(h) Composite Coatings for Piston Rings	Pao-Chang Huang	Chung Cheng Institute of Technology, NDU	Pao-Chang Huang
D-P-278	Lowering of the Substrate Bias Voltage for Formation of Cubic Boron Nitride Films in Microwave Plasma	Kungen Teii	Kyushu University	Kungen Teii
D-P-283	Ternary Cr _{1-x} Al _x N thin films prepared using atmospheric pressure plasma process	Hong-Ying Chen	National Kaohsiung University of Science and Technology	Hong-Ying Chen
D-P-312	Microstructure and high-temperature tribological characteristics of Self-lubricating TiAlSiN/VSiN Multilayer Coatings	Tsai Ni Ku	National Tsing-Hua University, Hsinchu, Taiwan	Jenq-Gong Duh
D-P-321	The Influence of Metallic Layer Materials on tribological Performance aof High Entropy Alloy Cr _{0.35} Al _{0.25} Nb _{0.12} Si _{0.08} V _{0.20} Nitride Coating	Tan Ling Wang	National Tsing-Hua University	Jenq-Gong Duh
D-P-348	Microstructure and mechanical properties investigation of TiZrSiN coatings: Effect of Si content	Sheng-Yan Chen	Ming Chi University of Technology	Jyh-Wei Lee
D-P-370	Effect of Alloying Metals on microstructure and mechanical properties of CrAlC(N) coated using Metal Plasma Activated Deposition Process	Wei-Chih Chen	National Chung Hsing University, Taiwan	Wei-Chih Chen

D-P-410	Effect of Pretreatments on the Corrosion Behaviour of Mn-Ce Conversion Coating on LZ91 Magnesium Alloy	Shun-Yi Jian	Chung Cheng Institute of Technology, National Defense University	Shun-Yi Jian
D-P-421	HIGH-TEMPERATURE OXIDATION OF CR-COATED WELDS FROM ZIRCONIUM ALLOY	Dmitrii V. Sidelev	National Research Tomsk Polytechnic University, Russian Federation	Dmitrii V. Sidelev
D-P-423	OXIDATION BEHAVIOR OF ZIRCONIUM ALLOYS COATED BY MULTILAYER CRN/CR COATINGS	Dmitrii Sidelev	Tomsk Polytechnic University	Dmitrii V. Sidelev
D-P-427	Effect of a Fe-Cr-Al sublayer on the efficiency of alumina protective coating in a lead flow	Arseniy Evsin	National Research Nuclear University MEPhI	Arseniy Evsin
D-P-432	Effect of Nitrogen Flow in the Deposition of CrN Coatings Using High Power Impulse Magnetron Sputtering Technique	Liu Jia Wei	Da-Yeh University	Jia-Wei Liu
D-P-448	Influence of fluoride on the formation of electroless Ni-P plating film on MAO coated AZ31B Magnesium alloy	Chia-Yu Lee	Chung Cheng Institute of Technology	Ming-Der Ger
D-P-451	Effect of NiTi metallic layer thickness on scratch resistance and wear behavior of high entropy alloy (CrAlNbSiV) nitride coating	Tzu-Ling Chen	National Tsing Hua University	Jenq-Gong Duh
D-P-452	Tribological and Corrosion Behaviors of Arc Sprayed NiCrMoAl Alloy Coating after Heat Treatments	Aradchaporn Srichen	Chiang Mai University	Chaiyasit Banjongprasert
D-P-461	Study on Electroplating of High-strength Ni-B Alloy with Different Buffers	An-Yu Cheng	Chung Cheng Institute of Technology, National Defense University	Ming-Der Ger

Symposium E. Organic and biological coatings

Poster number	Title	Presenter	Affiliation	Corresponding Author
E-P-48	Improvement of hydrophilicity and wetting behavior on patterned PLA substrate by AP plasma treatment and hydrolyzed APTES grafting	Mai Ngoc Phuong Uyen	National Tsing Hua university	Po-Yu Chen
E-P-63	Blood coagulation characteristics of titanium dioxide films with different crystal structures on titanium implant surface	Her-Hsiung Huang,	National Yang Ming Chiao Tung University	Her-Hsiung Huang
E-P-88	Surface Modified of Silicone rubber to offer Antibacterial effect and Improve Biocompatibility by Atmospheric Pressure Plasma-Induced Zwitterion Hydrogel Graft Polymerization	Jhong-Kun Siao ,	Da Yeh University	Shu-Chuan Liao
E-P-96	Application of Low-temperature Plasma Modified Functionalization Hydrogel grafted PET Non-Woven for the Anti-bacterial and Biomedical Applications	Qing-Xiu Shi -	Da-Yeh university	Shu-Chuan Liao
E-P-104	Surface Modification of Polyurethanewith UV grafting Zwitterion Hydrogel for improved antifouling and Antibacterial Ability	Yu-De Wu	Da-Yeh university	Shu-Chuan Liao
E-P-154	Bone Nucleation and Growth on the Nano-scaled Surface according to Change of Tube Shape	Byeong-Seok Lim,	Chosun University	Han-Cheol Choe
E-P-155	Control of Micro-scaled Morphology of Ti-40Nb-xZr Alloy according to Applied Time in the Plasma Electrolytic Oxidation Process	Hye-Ri Cho	Chosun University	Han-Cheol Choe
E-P-195	Adhesion, degradability, and blood compatibility of MAO-pretreated magnesium alloy coated with graphene oxide and pyrolytic diamine-incorporated oxidized polydopamine	Sheng-Yueh Chang,	National Taiwan Ocean University	Chau-Chang Chou

E-P-198	The thiol-end group dendritic polymer graft Au nanoparticle arrays on low-damage plasma treated CVD-graphene TEM grid as highly efficient SERS platform	Kuan-Syun Wang,	Ming Chi University of Technology	Ting-Yu Liu
E-P-242	Raman Enhanced Chip with Bionic Nepenthes Structure Applied in Biomedical Detection	Yen-Ying Lin	Ming Chi University of Technology	Ting-Yu Liu
E-P-246	Coating a layer of hydrogel containing chitosan on the titanium surface with complex three-dimension porosity for bone regeneration	Ying-Sui Sun	Taipei Medical University	Ying-Sui Sun
E-P-301	Preparation and characterisations of polyelectrolyte multilayer coatings through layer-by-layer assembly towards antibacterial and bone regeneration	Yu-Jie Chen,	National Taipei University of Technology	Ren-Jei Chung
E-P-322	Biodegradation and electrochemical behavior of Mg-9Li alloy	Ying-Sui Sun	Taipei Medical University	Ying-Sui Sun
E-P-338	Plasma Parylene Film Incorporated with Silver for Antibacterial Purpose	Yu-Han Wei	Feng Chia University	Ning-Chien Chin
E-P-377	Electrochemical Polymerization of Conductive Polymer with Graphene Nanosheets and Silver Nanoparticles for Antibacterial Coating and SERS Detection	Kuo-Sung Sun,	Ming Chi University of Technology	Ting-Yu Liu
E-P-384	Antibacterial Efficacy of High Power Impulse Magnetron Sputter Deposited Silver film on Titanium	Shu-Ting Li	Feng Chia University	Ning-Chien Chin
E-P-391	Comparative Study on Nano-organosilicon Film Growth by Cyclonic Atmospheric Plasma Deposition using Hexamethyldisilane and Hexamethyldisilazane/Nitrogen Gas Mixture	Li-Yu Wu	Yuan Ze University	Chun Huang
E-P-400	Deposition of Gold and Silver Nano-Island Array on Laser Scribed Graphene Oxide Substrate for SERS Detection	Chia-Hsien Lin	Ming Chi University Of Technology	Ting-Yu Liu
E-P-408	Using nitrogen plasma immersion ion implantation treatment to modify the friction force, corrosion resistance, and antibacterial	Jing-Ying Chen	National Yang Ming Chiao Tung University	Her-Hsiung Huang

	adhesion of dental orthodontic brackets			
E-P-409	SURFACE HYDROPHOBILIZATION OF ZWITTERIONIC HYDROGELS VIA PLASMA DEPOSITION FOR SKIN WOUND HEALING	Wei-Chung Lu	Chung Yuan Christian University	Ta-Chin Wei
E-P-446	Interface adhesion and optical properties of magnetron sputtering flexible transparent polyimide metallized thin film	Yi-Chen Chung	National Chin-Yi University of Technology	Mei-Hui Tsai
E-P-449	Study on corrosion mechanism of 3D-printed porous Ti-Nb-Zr-Sn alloy scaffolds immobilized with type I collagen in simulated inflammatory conditions	Jia-Yi Wen, Her-Hsiung Huang	National Yang Ming Chiao Tung University	Her-Hsiung Huang

Symposium F. Metallic and high entropy alloys coatings

Poster number	Title	Presenter	Affiliation	Corresponding Author
F-P-013	Significantly Improving the Mechanical/Electrical Characteristics of Blind-Hole Cu Filling through Crystal Coherent Modification	Yu Ming Lin	Yuan Ze University, Taiwan	Cheng-En Ho
F-P-039	Lattice Distortion or Cocktail Effect Determines the Properties of Tantalum-based High-Entropy Nitride Coatings	Yu-Lin Chen	National Tsing Hua University, Taiwan	Shou-Yi Chang
F-P-066	The Microstructure and Oxidation Behavior of the High-Entropy Alloy Ni ₂ FeCoCrAl _{10.35} Surface Treated by Atmospheric Pressure Plasma	De-Yao Hung	National United University, Taiwan	Fan-Bean Wu
F-P-091	Using Taguchi Method to Find the Optimized Parameters of Sputtered CoCrFeNi High Entropy Alloy Film	Zhong Sheng Su	National Tsing Hua University	Zhong Sheng Su
F-P-102	Effects of aluminium addition on microstructures and mechanical properties of Al _x NbTiVZr high entropy alloy nitride film	Lo-Chi Chang	National Taiwan University, Taiwan	Chun-Hway Hsueh
F-P-105	Nanostructured AlTiSiCrVZr Nitride Coatings Synthesized by Cathodic Arc Deposition- Mechanical Properties and Cutting Performance	Shu-Yan Lee	National Formosa University, Taiwan	Yin-Yu Chang
F-P-107	Research on Surface Modification and Jointing Technology of Aluminum Alloy	Min-Chen Chuang	Ming Chi University of Technology, Taiwan	Sheng-Chi Chen
F-P-122	Influence of sputtering gas species on resistivity of Al and Pt thin films	Fumito Hayasaka	Kitami Institute of Technology, Japan	Midori Kawamura
F-P-126	Sputter-deposition of Ti and TiN thin films using different gas species	Kazuhisa Suzuki	Kitami Institute of Technology, Japan	Midori Kawamura
F-P-160	A new approach to fabricate hybrid structure: ZnO-NWs/metallic	Pragya Singh	National Taiwan University	J.P Chu

	glass nanotube arrays		of Science and Technology, Taiwan	
F-P-180	Microwave reflection and transmittance properties of non-conductive CrVZr/graphene oxide nano-multilayer composite	Yi-Ru Chen	National Formosa University, Taiwan	Yin-Yu Chang
F-P-183	Modifications of mechanical properties and strain rate sensitivity of CoCrFeMnNi high-entropy alloy films by adding Nd element	Chia-Lin Li	National Taiwan University, Taiwan	Chia-Lin Li
F-P-184	Micro-Mechanical Property of Single Crystal Gold for Applications in Microelectronics	Kazuya Fujita	Tokyo Institute of Technology, Japan	Kazuya Fujita
F-P-191	Comparison of CoW/SiO ₂ and CoB/SiO ₂ interconnects from perspective of electrical and reliability characteristics	Wei-Fan Peng	National Chi-Nan University, Taiwan	Yi-Lung Cheng
F-P-192	Residual stress analysis of electrodeposited thick CoMnP monolayers and CoMnP/Cu multilayers	Chiao-Chi Lin	Feng Chia University, Taiwan	Chiao-Chi Lin
F-P-210	Conversion of vanadium oxide thin film by atmospheric pressure plasma technology	Yung Chi Chang	National United University, Taiwan	Yung-Chi Chang
F-P-218	High-entropy High-k Ba(Ti,Zr,Ta,Hf,Mo)O ₃ Films for Advanced Gate Stacks	Van Dung Nguyen	National Cheng Kung University	Kao-Shuo Chang
F-P-250	Effect of Current Density on Micro-Mechanical Characteristic of Electrodeposited Gold Evaluated from Cyanide Bath	Taro Omura	Tokyo Institute of Technology, Japan	Taro Omura
F-P-325	Laser Cladding of Al _{0.5} CoCrFeNi ₂ High-Entropy Alloy on Inconel 718 Substrate	Ping-Jui Chen	National Taipei University of Technology, Taiwan	J.K. Chen
F-P-342	Phase evolution, microstructure, and mechanical properties evaluation of VNbMoTaWTiAlN _x high entropy alloy coatings: nitrogen effect	Tzu-Yu Hung	Ming Chi University of Technology, Taiwan	Jyh-Wei Lee
F-P-379	Evaluation of microstructure and mechanical properties of AlCrNbSiTiN high entropy alloy nitride films: Al effect	Yu-Chan Lin	Ming Chi University of Technology, Taiwan	Jyh-Wei Lee
F-P-380	Property evaluation of TiZrNbTaFeB high entropy alloy coatings:	Fang-Rong Kan	Ming Chi University of	Jyh-Wei Lee

	Effect of Ti and B contents		Technology, Taiwan	
F-P-453	Investigation of Thermal Mechanical Properties of Cold-Sprayed Copper Coatings from Different-Fabricated Powders	Fu Jun Wei	National Cheng Kung University, Taiwan	Kuan Zong Fung
F-P-455	Influence of powder mechanical properties on adhesive strength of cold sprayed deposition	Fu Jun Wei	National Cheng Kung University, Taiwan	Kuan Zong Fung

Symposium G. Topical symposium: theory, simulation, and modelling; quantitative surface analysis

Poster number	Title	Presenter	Affiliation	Corresponding Author
G-P-012	3D Electromagnetic Simulation and VNA Measurements of Signal Transmission Loss for the Cu Interconnects with Different Surface Finishes	Chun-Jou Yu	Yuan Ze University	Cheng-En Ho
G-P-037	Chemical Vapor Deposition of Silicon Carbide with High Conversion Ratios using Methyltrichlorosilane as the Precursor	Bo-Sheng Lee	National Taiwan University of Science and Technology	Lu-Sheng Hong
G-P-077	First principles calculations and experimental studies of the band-gap of nanocrystalline SiC	Tsuneyoshi Ono	Meiji University	Hiroshi Katsumata
G-P-111	Analysis on nanoindentation responses of Bi ₂ Se ₃ /InP(111) thin films by using finite element method	Sheng-Rui Jian	I-Shou University	Sheng-Rui Jian
G-P-116	Study of stress relief mechanism in TiN/Ti bilayer thin film using energy balance model	Yi-Hsuan Wang	National Tsing Hua University	Jia-Hong Huang
G-P-285	Hydrogen as Reducing Agent of α -Fe ₂ O ₃ in Ironmaking Process: Density Functional Theory Study	Yan-Jia Huang	National Cheng-Kung University	Yen-Hsun Su
G-P-289	Adjusting the Band Gap Value of Zinc Oxide Thin Film by Combining Machine-Learning Prediction with Density Functional Theory (DFT)-1/2 Method	Wei-Che Tseng	National Cheng-Kung University	Yen-Hsun Su
G-P-290	Theoretical Studies of Skyrmion Phase Diagram on Nanoflake from First Principles Calculations to Micromagnetics	Dao-Jing Huang	National Cheng-Kung University	Yen-Hsun Su
G-P-327	An Investigation of EMI Shielding Effectiveness of 3D Printed Polymer Deposited with Multilayer Nano Film Material	Yen-Ting L	National Taipei University of Technology	Yin-Tung Sun

G-P-378	First-principles Study on Evaluating Coating Materials for High-Ni NMC Cathodes in Solid- and Liquid-states Li-ion Batteries	Yi-Tzu Wu	National Taiwan University of Science and Technology	Ping-Chun Tsai
G-P-425	The Characterization of Polyacrylic Acid Coating by Cyclonic Plasma-Induced Graft Polymerization	Shu-Mei Wang	Yuan Ze University	Chun Huang
G-P-468	The First principles study of carbon dioxide capture on defective MoSSe monolayer	Huei-Ru Fuh	Yuan Ze University	Huei-Ru Fuh