

Winners of Awards at PRESM2019

July 10(Wed) – July 13(Sat), 2019, The Nalod Da Nang Hotel, Vietnam

Winners of Best Paper Award (2019)

Thickness Determination of a Solid Oxide Fuel Cell Blocking Layer Deposited by Atomic Layer Deposition Considering the Non-Uniform Surface

by Sanghoon Ji (Korea Institute of Civil Engineering and Building Technology)

Study on Cutting Force and Chip Shrinkage Coefficient during Thermal – assisted Machining by Induction Heating of SKD11 Steel

by Mac Thi-Bich (Hanoi University of Science and Technology), Tien-Long Banh (Hanoi University of Science and Technology), Duc-Toan Nguyen (Hanoi University of Science and Technology)

Effects of Elemental Alloying on Surface Integrity in Joining of Composite Powders with Heterogeneous Titanium Substrates Using Selective Laser Melting

by Chunliang Kuo (National Taiwan University of Science and Technology), Pinxian Ye (National Taiwan University of Science and Technology), Jhihjie Liu (National Taiwan University of Science and Technology)

Winners of Young Researcher Award (2019)

Chang-Lae Kim (Chosun University, Korea)

Yongho Jeon (Ajou University, Korea)

Hoon-Hee Lee (Kyungpook National University, Korea)

Mac Thi-Bich (Hung Yen University of Technology and Education, Vietnam)

Winners of Outstanding Presenter Award

Study on Reactive Electrophoretic Diamond Wire Sawing Process of Silicon Substrates for Solar Cell Application

by Ajay Gupta(National Taiwan University of Science and Technology), Chao-Chang Arthur Chen(National Taiwan University of Science and Technology), Guan-Lin Chen(National Taiwan University of Science and Technology)

Layer Formations when Turning FGI and CGI Bars and Their Impact in Machinability

by Dinh Nguyen(Michigan State University), Ryan Khawarizmi(Michigan State University), Kyung-Hee Park(Korea Institute of Industrial Technology, Patrick Kwon(Michigan State University)

Design of Production Systems for Scheduling in Smart Factory

by Ping Chong Chua(Nanyang Technological University), Seung Ki Moon(Nanyang Technological University), Byung Jun Joo(Singapore Institute of Manufacturing

Real Time Error Compensation of a Dual Absolute Encoder System for Improved Accuracy and Extended Measuring Range

by Kyung-min Lee(Chungnam National University), Taehyeong Gu(University of Texas Health Science Center at Houston), Young-bong Bang(Advanced Institute of Convergence Technology)

Fabrication of Woven Kevlar Fiber Composite for Personal Thermal Management

by Ankita Hazarika(Ulsan National Institute of Science and Technology), Biplab Deka(Ulsan National Institute of Science and Technology), Do Young Kim(Ulsan National Institute of Science and Technology), Young-Bin Park(Ulsan National Institute of Science and Technology, Hyung Wook Park(Ulsan National Institute of Science and Technology)

Investigation of Multilayer Coatings for Wear Reduction

by Mahdi Khadem(Yonsei University), Dae-Eun Kim(Yonsei University)

The Effect of Pre-Strain and Subsequent Electrically Assisted Annealing on the Mechanical Behavior of Aluminum Alloy

by Kieu-Anh Dinh(University of Ulsan), Sung-Tae Hong(University of Ulsan), Moon-Jo Kim(Korea Institute of Industrial Technology), Heung-Nam Han(Seoul National University)

Nanomanufacturing and Nanofluidics of Atomically Thin Orifices of Porous Graphene

by Hyung Gyu Park(Pohang University of Science and Technology)

Fabrication of Solar Modules by Direct Layup Process of Solar Cells

by Dong-Youn Shin(Pukyong National University), Jong Rok Lim(Korea Institute of Energy Research), Yong-Seong Kim(Korea Institute of Energy Research), Sungeun Park(Korea Institute of Energy Research), Jeong In Lee(Korea Institute of Energy Research), Min Gu Kang(Korea Institute of Energy Research), Hee-eun Song(Korea Institute of Energy Research), Gi-Hwan Kang(Korea Institute of Energy Research)

Design of Fluid Type Balloon Nucleus Pulposus Replacement for Human Lumbar Spine Discs Restoration

by Taekyeong Lee(Korea University), Soonmoon Jung(Korea University), Jaemin Kim(Korea University), Youngho Lee(Korea University), Hunhee Kim(Korea University), Junghwa Hong(Korea University)

Laser Induced Graphene Electronics

by Young-Jin Kim(Nanyang Technological University)

Large Stretchable Structural Color Based Strain Sensor Using Nanoimprinting with Focused Ion Beam Nanopatterning Process

by Yingjun Quan(Seoul National University), Min-Soo Kim(Seoul National University), Younggyun Kim(Seoul National University), Sung-Hoon Ahn(Seoul National University)

Application of Cohesive Zone Model to Prediction of Fracture at Interface in Hybrid Composite Part

by Yong-Hun Jung(Pusan National University), Jeong-Min Lee(Pusan National University), Chan-Joo Lee(Korea Institute of Industrial Technology), Dong-Hwan Kim(International University of Korea), Byung-Min Kim(Pusan National University), Dae-Cheol Ko(Pusan National University)

Simulation of Sweeping Motion with BPM and Analysis of Residual Sand by Discrete Element Method

by Jaehee Lyu(Kumoh National Institute of Technology), Jinsu Nam(Kumoh National Institute of Technology), Junyoung Park(Kumoh National Institute of Technology)

A Study on the Laser Power and Specific Cutting Energy in Laser Assisted Machining

by Won-Jung Oh(Changwon National University), Choon-Man Lee(Changwon National University)

Winners of Best Poster Award

Tool Wear Analysis of CFRP Routing Tool Using Vision Based On-machine Measurement System

by Tae-Gon Kim(Korea Institute of Industrial Technology), Kangwoo Shin(Korea Institute of Industrial Technology), Jung-Soo Nam(Korea Institute of Industrial Technology), Hyo-Young Kim(Korea Institute of Industrial Technology), Seok-Woo Lee(Korea Institute of Industrial Technology)

Electrochemical Oxidation Assisted Machining Using Conductive Tool

by Hyunho Jo(Yonsei University), Eunseok Nam(Korea Institute of Industrial Technology), Jaesang Park(Yonsei University), Myeong Gu Gang(Yonsei University), Gyuhoo Kim(Yonsei University), Byung-Kwon Min(Yonsei University)

Control of Temperature Profile and Improvement of Polishing Uniformity by Controlling the Flow Rate of Multiple Spray Nozzles

by Kihun Lee(Pusan National University), Haedo Jeong(Pusan National University), Donghwan Lee(Pusan National University), Somin Shin(Pusan National University), Dasol Lee(Pusan National University)

Structural Rigidity of Robot Machining Systems Depending on Machining Processes

by Seong Hyeon Kim(Yonsei University), Byung-Kwon Min(Yonsei University)

The Prediction Model of Time Series Cutting Forces in End Milling Based on the Machine Learning Algorithm

by Hyein Kim(Korea Institute of Industrial Technology), Dongil Kim(Chungnam National University), Jeongin Koo(Korea Institute of Industrial Technology)

Inspection of Machined Metal Surfaces using Image Processing

by Daegwon Koh(Gwangju Institute of Science and Technology), Dinuka Ravimal(Gwangju Institute of Science and Technology), Hanul Kim(Gwangju Institute of Science and Technology), Sun-Kyu Lee(Gwangju Institute of Science and Technology)

A Fully Portable Pneumatic Ankle Foot Orthosis (AFO) for Drop-foot Correction

by Sangjoon Kim(Korea Advanced Institute of Science and Technology), Jung Kim(Korea Advanced Institute of Science and Technology), Handdeut Chang(Korea Advanced Institute of Science and Technology), Junghoon Park(Korea Advanced Institute of Science and Technology)

Automation System Design for Plastic Recycling Machine

by Khanh Nguyen(Vietnamese German University), Zarni Lynn(Vietnamese German University), Ho Hin Hein(Vietnamese German University), Loc Phan(Vietnamese German University)

Effect of CaCO₃ on the Mechanical Properties of Poly(Ethylene Terephthalate)/ Polypropylene Blends

by Nga Pham Thi Hong(University of Technology and Education Ho Chi Minh City)

Determination of Specimen Shape for Accurate Measurement of Tensile Properties Using SHTB Apparatus

by Yo-Han Yoo(Agency for Defense Development), Khac-Ha Nguyen(Seoul National University of Science and Technology), Hyeon Jun Jung(Seoul National University of Science and Technology), Taek Jin Jang(Seoul National University of Science and Technology), Chang-Whan Lee(Seoul National University of Science and Technology), Jong-Bong Kim(Seoul National University of Science and Technology), Hyunho Shin(Gangneung-Wonju National University)

Effect of Hydrogen Peroxide on Machining Results in Abrasive Fluidized CMP

by Taekyoung Kim(Tongmyong University), Junyoung Seo(Tongmyong University), Jungyu Son(Tongmyong University), Hyunseop Lee(Tongmyong University)

Plasmon-Enhanced Infrared Spectroscopy Based on Metamaterial Absorber with Vertical Nanogap

by Joo-Yun Jung(Korea Institute of Machinery and Materials), Jun-Hyuk Choi(Korea Institute of Machinery & Materials), Jihye Lee(Korea Institute of Machinery & Materials), Jun-Ho Jeong(Korea Institute of Machinery & Materials)

Development and Analysis of a Flexible Surface Electromyography(sEMG) Sensor

by Hwayeong Jeong(Korea Advanced Institute of Science and Technology), Jirou Feng(Korea Advanced Institute of Science and Technology), Jung Kim(Korea Advanced Institute of Science and Technology)

A Roller-Bearing Structured Self-Powered Angle Measurement Sensor Based on Triboelectric Nanogenerator

by Jungho Choe(Korea University), Seong Gu Kang(Korea University), Young-Man Choi(Ajou University), Jaehwa Jeong(Korea University)

Transparent Thermo-Electrochemical Cells for the Use of Energy Harvesting Window

by Ju Hwan Lee(Inha University), Ju Hyeon Kim(Inha University), Jae Yun Baek(Inha University), Tae June Kang(Inha University)

Evaluation on Energy Benefits from an Advanced Control Method for the Radiant Floor Heating System

by Gyuhan Yeom(Hanbat National University), Dong Eun Jung(Hanbat National University), Hyoungchul Kang(SungHan Co., Ltd.), Sung Lok Do(Hanbat National University)

Investigation on Microstructure and Mechanical Behavior of Hastelloy X Obtained by Direct Energy Deposition(DED) Process

by Yoon Sun Lee(Korea Institute of Industrial Technology), Ji Hyun Sung(Korea Institute of Industrial Technology), Da Hye Kim(Korea Institute of Industrial Technology), Kyoung Je Cha(Korea Institute of Industrial Technology), Young Joo Kim(KEPCO Plant Service and Engineering Co., Ltd.), Ki Hyun Cho(KEPCO Plant Service and Engineering Co., Ltd.), Nak Jeom Kim(KEPCO Plant Service and Engineering Co., Ltd.)

Development of Stitching Interferometer Using Fizeau Interferometer for X-ray Mirror Measurement

by Jangwoo Kim(Pohang Accelerator Laboratory), Hyo-Yun Kim(Pohang Accelerator Laboratory), Jun Lim(Pohang Accelerator Laboratory), Jong Hyun Kim(Pohang Accelerator Laboratory), Seungyu Rah(Pohang Accelerator Laboratory)

Optimization of a Mist Spraying Machine Operation for the Effective Dust Suppression in Construction Sites

by Seolha Kim(Kumoh National Institute of Technology), Baeksuk Chu(Kumoh National Institute of Technology)

A Study on the Structural Analysis of the Special Chuck for Ball Screw Nut Grinding Machining

by Ho-In Jeong(Changwon National University), Choon-Man Lee(Changwon National University)