# Winners of Awards at PRESM2018

July 3(Tue) – July 7(Sat) Sapporo Convention Center Sapporo, Japan, 2018

# Winners of Best Paper Award

#### On-Machine Measurement for Surface Flatness of A Flexible Substrate in Laser Ablation Process

by HyungTae Kim(Korea Institute of Industrial Technology), Yoon Jae Moon(Korea Institute of Industrial Technology), Heuiseok Kang(Korea Institute of Industrial Technology), Jun Young Hwan(Korea Institute of Industrial Technology)

# **Enhancement of Electric Power from New Liquid Media-based TEG Device**

by Hakjae Lee(The Univertsity of Tokyo), Dai Kobayasi(The Univertsity of Tokyo), Nobuyuki Takama(The Univertsity of Tokyo), Beomjoon Kim(The Univertsity of Tokyo)

#### Winners of Young Researcher Award

Tae June Kang (Inha University, Korea)
Taehyun Park (Soongsil University, Korea)
Donghun Lee (Soongsil University, Korea)

Moonkyu Kwak (Kyungpook National University, Korea) Naohiro Nishikawa (Iwate University, Japan)

Chunhui Chung (National Taiwan University of Science and Technology, Taiwan)

Young-Jun KIM (Nanyang Technological University)

# **Winners of Outstanding Presenter Award**

## MoS<sub>2</sub>-Graphene Hybrid Supercapacitor Prepared by Dry Spray Coating

by Mohaned Mohammed Mahmoud Mohammed (University of Ulsan), Doo-Man Chun (University of Ulsan)

#### **Design and Fabrication of Photothermally Driven Microscale Robot**

by Min-Soo Kim(Seoul National University), Sung-Hoon Ahn(Seoul National University), Hyun-Taek Lee(Seoul National University), Kang-In Lee(Seoul National University)

#### **R&D Challenges to Promote Product Remanufacturing**

by Mitsutaka Matsumoto(National Institute of Advanced Industrial Science and Technology), Yasunari Matsuno(Chiba University), Masao Hayakawa(National Institute for Materials Science), Kenichi Nakajima(National Institute for Environmental Studies), Hideyuki Murakami(National Institute for Materials Science), Shingo Hirose(National Institute of Advanced Industrial Science and Technology)

## A Study on Laser-induced Fabrication of Multiscale Textured Silicon Pattern

by Seunghyun Back(Kumoh National Institute of Technology), Bongchul Kang(Kumoh National Institute of Technology), Seongbeom Kim(Kangwon National University),
Seune-Gab Kwon(Kumoh National Institute of Technology). Liyana Hazwani Zamri(Kumoh National Institute of Technology)

## Raman Spectroscopy for Tool Wear Analysis in Nano-crystalline Diamond Coated Cutting Tools

by Kil-dong Sung(Daegu Mechatronics & Materials Institute), Sung-kyu Choi(Daegu Mechatronics & Materials Institute), Dong-gyu Kim(Daegu Mechatronics & Materials Institute), Ik-soo Kang(Daegu Mechatronics & Materials Institute), Yun-chul Jung(Daegu Mechatronics & Materials Institute)

## **Winners of Best Poster Award**

## Micro Drilling of Fused Silica and Prevention of Edge Chipping

by Pyeong An Lee(Soongsil University), Bo Hyun Kim(Soongsil University), Yung Na(Soongsil University)

# Chemical Activation Using Minimum Quantity Slurry Mist in Cu CMP

by Dasol Lee(Pusan National University), Haedo Jeong(Pusan National University), Seonho Jeong(Pusan National University), Hyunjin Kim(Pusan National University),
Byeoneiun Pak(Pusan National University)

## Evaluation of the Effective Properties of Discontinuous Carbon Fiber-reinforced Composites with Different Compression Ratios in Gas Diffusion Layer

by Ki-won Kang(Kunsan National University), Haksung Lee(Korea Institute of Carbon Convergence Technology), Chanwoong Choi(Korea Institute of Carbon Convergence Technology), Mongyoung Huh(Korea Institute of Carbon Convergence Technology), Ji-won Jin(Jeonbuk Institute of Automotive Convergence Technology)

# Fabrication of Fiber/Hydrogel Hybrid Scaffold Using Electrospinning

by Jeong Hwa Kim(Kyungpook National University), Young Hun Jeong(Kyungpook National University)

# The Influence of Crowd Velocity Distribution and Exit Angle Change for FIS Effects on Psychological Discrete Element Method

 $by \ \ \textit{JAEGIL LEE}(\textit{Kumoh National Institute of Technology}), \textit{Junyoung Park}(\textit{Kumoh National Institute of Technology}), \textit{Chulho Yang}(\textit{Oklahoma State University})$ 

#### **Hybrid Laser-Polishing System For Machining Ceramics**

by Mincheol Kim(Seoul National University), Sung-Hoon Ahn(Seoul National University), Dong-Hyeon Kim(Seoul National University), Hyun-Taek Lee(Seoul National University)

# Stretching Process of Cellulose Nanofiber Filament in Wet State to Improve the Mechanical Properties

by Ji Yun Lee(Inha University), Jaehwan Kim(Inha University), Hyun Chan Kim(Inha University), Sunanda Roy(Inha University), Jin Mo Kang(Inha University)

#### Experimental Study on Curing Process of Carbon/Epoxy Composite Using Microwave Heating

by Eu-Treum Park(Pusan National University), Woojin Song(Pusan National University), Youngheon Lee(Pusan National University), Jeong Kim(Pusan National University), Beom-Soo Kang(Pusan National University)

## Coating of Electrolyte Layer in Solid Oxide Fuel Cells Through Slot-die Coating in Roll-to-roll Continuous Process

by Seongyong Kim(Changwon National University), Changwoo Lee(Changwon National University)

#### Study on Thermal Error Compensation and Heat Genaeration Control System of Ball Screw Machine Tool

by SungKi Lyu(Gyeongsang National University), Dongseon Kim(Gyeongsang National University), Zhen Qin(Gyeongsang National University), Hyunkyung Kim(Gyeongsang National University), Jaeung Cho(Kongju National University), Yongho Jeong(Gyeongsang National University)