

Winners of Best Paper Award

Numerical Modeling of Hybrid Composite (CFRP/TI) Cutting under Different Cutting-sequence Strategies

by Jinyang Xu, Mohamed El Mansori (Arts et Métiers Paris Tech.)

Design of a Grid-Typed Die for Hot Spherical-Curvature Forming Process of Al Thick Plate

by In-Kyu Lee, Sung-Yun Lee, Myeong-Sik Jeong, Jae-Wook Lee, Young-Jae Cho, Dae-Hye Kim, Sang-Kon Lee (Korea Inst. of Industrial Tech.)

Winners of Best Poster Award

Modeling and Fabrication of Functionally Graded P21/Cu Structures using Laser-aided Direct Metal Tooling

by Ki-Hoon Shin (Seoul National University of Science and Technology), Jong-Seol Jeong (ACE Machinery Co), Tae-Hyeon Heo (Seoul National University)

Design of Grid Type Die Using DA Method for Hot Spherical Forming of Al Plate

by In-Kyu Lee (Korea Institute of Industrial Technology), Sang-Kon Lee, Sung-Yun Lee (Korea Institute of Industrial Technology), Myeong-Sik Jeong (Korea Institute of Industrial Technology), Jae-Wook Lee (Korea Institute of Industrial Technology), Young-Jae Cho (Korea Institute of Industrial Technology), Dae-Hye Kim (Korea Institute of Industrial Technology)

Twisting Motion Test of Shape Memory Alloy-Micro Wire with Focused Ion Beam and Nanomanipulation System

by Hyun-Taek Lee (Seoul National University), Sung-Hoon Ahn (Seoul National University), Ki-Hwan Jang (Seoul National University), Ho-Jin Kim (Seoul National University), Chung-Soo Kim (Massachusetts Institute of Technology)

Hybrid Process Characteristics of Gas in EDM with Ultrasonic Vibration

by Yan-Cherng Lin (Nan Kai University of Technology), Jung-Chou Hung (Feng Chia University), A-Cheng Wang (Chien Hsin University of Science and Technology), Han-Ming Chow (Nan Kai University of Technology), Jyun-Ting Chen (Feng Chia University)

Determination of the Coordinate Transformation Angle of NC Data for the Minimum Cutting Energy

by Chan-Hong Lee (Korea Institute of Machinery and Materials)

Preparation of Porous PLGA Microfiber in Microfluidic Device using Pore Template

by Chul Min Kim, Gyu Man Kim (Kyungpook National University)

Fracture Toughness of Equivalent Stress Gradient Specimen under Dynamic Loading Conditions

by Byungwoo Moon, Chang-Sung Seok, Jae-Mean Koo, Sang-Young Kim, JaeGu Choi, Nam-Su Huh (Sungkyunkwan University)

Experimental Investigation on Oil and Water Mixture Slurry for Polishing by Solid and Liquid States

by Hsin-Min Lee (Army Academy), A-Cheng Wang (Chien Hsin University of Science and Technology), Yan-Cherng Lin (Nan Kai University of Technology)

A Study of In-Process Ultrasonic-Wave Dressing Characteristics of Grinding Process

by Su Young Kim, Hon-Zong Choi, Yun-Hyuck Hong, Young-Jae Choi (Korea Institute of Industrial Technology)

Experimental Study on Shape Control of Micro-scale Wavy Structures and their Replication using PDMS Mold

by Zhijun Zhao, Sanghu Park, Jaehyun Yu (Pusan National University)

Fungus Growth on Superhydrophobic and Superhydrophilic Surfaces

by Yeongae Kim (Pohang University of Science and Technology), Woonbong Hwang (Pohang University of Science and Technology), Guojie Liu (China Academy of Machinery Science & Technology), Zhang Zhen (China Academy of Machinery Science & Technology), Peixin Qiao (China Academy of Machinery Science & Technology), Zhongde Shan (China Academy of Machinery Science & Technology)

Effect of Corrosion on the Fatigue Life of Aged EMU under Fatigue Loading

by Hyun Kyu Jun, Jung-Won Seo, Seok-Jin Kwon, Dong-Hyung Lee, Sung-Hyuk Park (Korea Railroad Research Institute)

Empirical Analysis of the Relationship between Energy Consumption and Material Removal Rate for Milling

by Oscar Velasquez (Korea Institute of Industrial Technology), Dong Yoon Lee (Korea Institute of Industrial Technology), Jae Hyeok Kim (Korea Institute of Industrial Technology), Eun Young Heo (Sogang University), Dong-Won Kim (Chonbuk National University)

Winners of Outstanding Presenter Award

Evaluation of Machinability in Laser Assisted Milling of Hard-to-machine Materials

by Dong-Hyeon Kim, Choon-Man Lee (Changwon National University)

Air-bridge Enhanced Capacitor for Mediator-free Glucose Sensor by Complex Permittivity Characterization

by Rajendra Dhakal, Nam-Young Kim, Kishor Kumar Adhikari, Gyan Raj Koirala, Eun-Seong Kim, Zorigt Chuluunbaatar, Cong Wang, Bhanu Shrestha (Kwangwoon

Triboelectric Nanogenerators with Soft Substrates based on Cam Structure for Harvesting Rotational Energy

by Younghoon Lee, Dukhyun Choi (Kyung Hee University)

Investigation of Surface Texture Effects in Sapphire Tool Cutting

by Yuan Wei (University of Calgary), Simon Park (University of Calgary), Chaneel Park (University of Calgary), Mi-ru Kim (Pusan National University), Deug-woo Lee (Pusan National University)

Design and Analysis of Ultrasonic Horn for Polymer Sheet Forming

by Keun Park, Ho-Jin Bae (Seoul National University of Science and Technology)

A Bistable Mechanism using Residual Stress for Morphing Structures

by Seung-Won Kim, Kyu-Jin Cho, Jun-Young Lee (Seoul National University)

Compact Bake Hardening of Complex Phase Ultra-high Strength Steels using Electroplasticity

by Trung Thien Nguyen (University of Ulsan), Sung-Tae Hong (University of Ulsan), Viet Tien Luu (University of Ulsan), Moon-Jo Kim (Seoul National University), Heung Nam Han (Seoul National University), Dae-Ho Yang (MS-Autotech Company), Hyun-Woo Lee (MS-Autotech Company), Hong-Kyo Jin (MS-Autotech Company)

Registration of Point Cloud Data using Coarse-to-fine Approach

by Upendra Mani Tuladhar, Seok-Young Ahn (Pusan National University)

Design and Control of Wrist-like Smart Soft Composite Actuator

by Hugo Rodrigue, Sung-Hoon Ahn, Wei Wang, Min-Woo Han (Seoul National University)

Comparison of Experimental and Numerical Results using Flexibly-reconfigurable Roll Forming for 3D Curved Sheet

by Jun-Seok Yoon, Beom-Soo Kang, Hyeong-Ho Kim, Jeong Kim, Ji-Woo Park (Pusan National University)

The Vulnerability Assessment of Ground Combat Vehicles Using Target Functional model and FTA

by Chul Yoo, Kang Park, Sang Yeong Choi (Myongji University)

Modeling of Customized ELV Dismantling Plant for Different Countries

by Hwa-Cho Yi (Yeungnam University), Jung-Whan Park (Yeungnam University), Myon-Woong Park (Korea Institute of Science and Technology), Young-Tae Sohn (Korea Institute of Science and Technology), Howon Jeong (AutoEco Co.Ltd.), Sungsu Park (Yeungnam University)

Multi-objective Optimization of an Axial-flow Pump Impeller Shape by using an Evolutionary Algorithm

by Fuqing Miao (University of Ulsan), Hong-Seok Park (University of Ulsan), Seokyoung Ahn (Pusan National University), Cholmin Kim (Pusan National University)

A Modularization Method of MES Functions for Gradual Implementation

by Hwaseop Lee, Kwangyeol Ryu (Pusan National University)

Hybrid Deburring Process of the Patterned Metal Masks using the Large Pulsed Electron Beam

by Hyung Wook Park, Jisoo Kim (Ulsan National Institute of Science and Technology)

Quick & Low-cost Prototyping Method of Contacts Metallization

by Amir Abidov, Yong Bae Kim, Sungjin Kim (Kumoh National Institute of Technology)

Evaluation of Plastic Limit Loads for Compact Pipe Specimen in Various Load Ratio

by Keontae Park, Chang-Sung Seok, Ik Hyun Kim, Tao Shen, Sang Young Kim, Jae-Mean Koo (Sungkyunkwan University)

Analysis and Comparison of Power Management Strategies for Hybrid Electric Vehicle

by Heeyun Lee (Seoul National University), Suk Won Cha (Seoul National University), Jongdai Choi (Seoul National University), Kiyoung Kim (Seoul National University), Hyunsup Kim (Hyundai Motor Company), Seok-joon Kim (Hyundai Motor Company), Yeong-il Park (Seoul National University of Science and Technology)

TBC Delamination Life Prediction Considering Al-diffusion Process of Bond Coat

by Yongseok Kim, Chang-Sung Seok, Jeong-Min Lee, Hyunwoo Song, Junghan Yun, Jungin Byun, Jae-Mean Koo (SungkyunKwan University)

Winners of Young Researcher Award

Sujatha Kesavan (Dr. M.G.R Educational & Research Institute, India)

Hyunseop Lee (Tongmyong University, Korea)

TaeWon Seo (Yeungnam University, Korea)

Won-Shik Chu (Seoul National University, Korea)

Winner of Kahp-Yang Suh Award

Inkyu Park (KAIST, Korea)