ICAM2016 Full Paper & Poster Show

Sunday, December 18th

Full Paper Show Session A1 • Room A

- A. Advanced Machining and Forming Processes Measurement
- H. Additive Manufacturing Technology
- I. Smart Manufacturing Technology for Industry 4.0

09:30-11:30

A-9185. Study on Grain Coarsening in Aluminum Alloy 6061 by Using Ring Compression Test *Kuang-Jau Fann, Chun-Chi Chen*

H-8559. The Development of Tank Swapping for Powder Bed Additive Manufacturing *Jia-Chang Wang, Chia-Chen Wang, Wei-An Tsai*

H-8560. Development of a customized assistive bite-pen for disabled people by using additive manufacturing

Jia-Chang Wang, Hsiang Hsieh, Yen-Hsun Lin

H-8562. The Development of Hybrid Manufacturing Systems for Skeleton Surface Object *Jia-Chang Wang, Mon-Lin Wu, Shao-Wei Chen*

14:30-15:30

H-8563. The development of Slurry-based Ceramic Additive Manufacturing system with no solvent

Jia-Chang Wang, Yi-Min Jiang, Tsung-Han Wu

H-8567. The Design and Implementation of a FDM Type Additive Manufacturing System *Jia-Chang Wang, Ming-Qian Jiang, Sih-Hao Lin*

H-8656. Ontology-Based Service Process and Patent Informatics for Collaborative Service Innovation: The Case of Orthodontic 3D Printing

Amy J.C. Trappey, Tong-Mei Wang, Charles V. Trappey, Jasmine T.C. Tung, Mark Y.L. Tang

H-9137. Fabrication of Zirconia Ceramic parts using Solvent Based Slurry by Stereolithography & Sintering process

Jia-Chang Wang, Hitesh Dommati

Sunday, December 18th

Full Paper Show Session B1 • Room B

F. Precision Engineering Measurement

K. Others

L. Military-civilian dual-use technologies (invited session)

09:30-11:30

F-8457. Channel Parameter Measurements of Indoor LTE System for the Industrial Internet of Things

Jeich Mar, Guan-Yi Liu, Tsung-Yu Chang, Yu-Jie Wang, Yung-Chun Chiang

F-9820. Development of image processing setup for an auto-scraping machine

Szu-Lin Liu, Chun-Yuan Yeh, Po-Chun Chi, Shih-Chieh Lin

K-8952. A new method of finding stress solutions in plastically compressible solids

Sergei Alexandrov

K-9093. Multi Power Bank

Wei Bin Yang, Guan-Yu Chen

K-9124. A parameter identification method for structural systems using moving window Fourier Transform

Wenlung Li, Kuo-Ching Liu, You-Rong Lin

14:30-15:30

K-9734. An Adjustable Liquid-Liquid Extraction device for the Extraction of Pharmaceutical Compounds

Yu-Lung Chang, Chen-Han Chuang, Ya-Yu Chiang

L-8461. Applications of energy storage for family and community

Chih-Hsien Chung, Gwo-Huei You, Kuo-Sheng Fu, Kuo-Kuang Jen, Chien-Hao Chen, Chi-Sheng Wu, Shu-Hsien Wen, Wei-Min Hsiao, Tsung-Jung Wu, King Chen, Chen-Ho Huang

L-8485. Synthesis of Egg-shell Pd catalyst supported on Al₂O₃

Shu-Jen Chiang, Yu-Wen Chen

L-8551. Material analysis and electrical properties of nanostructured vanadium oxide (VOx) thin films for microbolometer

Hsin-Chang Chen

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Full Paper Show Session C1 • Room C

- B. Micro- and Nano-Fabrication
- C. Tribology for Manufacturing
- E. Bio-medical Manufacturing
- G. Robotics and Automation

09:30-11:30

B-8540. Accelerated-Lifetime-Soak-Test of flexible 3D wireless implantable biomedical system Wen-Cheng Kuo, Huei-Jun Wang, Wei-Ching Wang, Kuan-Chiao Cheng

B-8700. Maskless Lithography Realized by Digital Projection Optics and Point Array Oblique Scanning Method

Hung-Liang Chien, Yung-Chun Lee

B-9041. Structural coloration polymer labels based on photonic crystal grating

Chang-Yi Peng, Ching-Wen Li, Che-Wei Hsu, Chien-Chung Jeng, Cheng-Chung Chang, Gou-Jen Wang

B-9953. Fabrication of floating image devices using a 3-D printer

Cheng-Yu Li, Hsi-Fu Shih

C-8570. Discharge Coating on Mold Steel Surface through Wire-EDM by Nickel-coated Wire and Conventional Brass Wir

Albert Wen-Jeng Hsue, Sheng-Hsuan Chiu, Yang-Lei Lin

14:30-15:30

C-9954. Friction Characteristics for Sliding Blocks with Micro Grooves

Hsin-Chih Wang, Jhy-Cherng Tsai, Pin-Lun Huang, Jhy-Ming Chen

E-8608. Study on Brain phantom in Surgical Training

Kuan-Ting Liu, Fu-Ren Xiao, Hong-Tsu Young, Chao-Yang Huang

G-8602. Robotic Surgical Assistant for minimally invasive cranial surgery

Ding-Yuan Chen, Fu-Ren Xiao, Hong-Tsu Young, Chao-Yang Huang

E-8932. Surface Treatment on Physical Properties and Biocompatibility of Orthodontic Power Chains

H. C. Cheng, W. T. Lin, Y. K. Shen, Y. H. Wang n

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Poster Show 1 09:30-11:30 • 3F Assembly Hall

Poster 1-1.	Poster 1-9.
L-8131. The multi functional kitchenware	H-8538. Impact test of 3D-printing
with integrated wireless networking	photopolymer specimens
technology	F.C. Hsieh, P.H. Lin, H.P. Pan, C.S. Yu, C.M.
Ming-Hung Lin, Tsung-Hao Yang, Jung-	Chang
Chieh Chang	
Poster 1-2.	Poster 1-10.
A-8200. Production of Stainless Steel 316L	I-8541. Intelligent Coil Leveling System based
Powder for Additive Manufacturing by Gas	on Deep Learning methods
Atomization Processes	Sung-Yu Tsai, Jen-Yuan (James) Chang
M. R. Wang, K. L. Lail, W. C. Tseng	
Poster 1-3.	Poster 1-11.
L-8466. Application of Vacuum Assisted	F-8543. The development and optimization of
Resin Transfer Molding in Highly Loaded	an optical autofocusing system by adopting the
Structures of Composite Bridge	dual-confocal configuration
Kuo-Wei Wu, Chih-Chia Chen, Tseng-Chung	Chien-Sheng Liu, Chia-Ming Jan, Jyun-Yi Yang
Ко	
Poster 1-4.	Poster 1-12.
L-8475. The thermal reliability analysis of	B-8547. Self-Adjusting Blade Coating for
metallized AlN substrate	Large-Sized Polymeric Light Emitting Diode
C. T. Wu, Y. K. Kuo, P. S. Huang, C. H. Lin,	Lighting
M. Y. Tsai	JW. John Cheng, Yo-Han Wu, Tzu-Ching
	Yang, Chuang-Hung Chiu, Yen-Yu Huang, Yeh-
	Min Lin, Chang-Pen Chen
Poster 1-5.	Poster 1-13.
F-8480. Measuring and Compensating	A-8590. An Investigation on Vibration-Assisted
Methods for Spatial Positioning Accuracy of	Glass Cutting
a Six-Axis Industrial Robot	Jhy-Cherng Tsai, Yuan-Hung Tsai
Chien-Hung Liu	
Poster 1-6.	Poster 1-14.
G-8502. Investigations of the Force and	I-8625. Smart Manufacturing Study of the
Contour Tracking Control of the Robot Arm	Innovative Mushroom Production Line
in Polishing Operations	Rong-Yuan Jou, Trung-Hung Nguyen
Liang-Kuang Chen, Ssu-Hsien Kuo	

Poster 1-7.	Poster 1-15.
I-8514. IEC 61499 Application in Leveling	H-8646. Evaluation of the physico-mechanical
Production Line	properties of activated-carbon enhanced
Yi-Chih Fan, Cheng-Chen Yang, Jen-Yuan	recycled polyethylene/polypropylene filament
(James) Chang	for 3D printing
	Siewhui Chong, Guan-Ting Pan, Thomas CK.
	Yang, Yi-Fan Chen, Jaron Keng
Poster 1-8.	Poster 1-16.
I-8522. Intelligent Coil Leveling Machine	B-8688. Fabrication of Transparent Thin Film
Development through Cyber-Physical	Transistor with Zinc Indium Tin Oxide Channel
Systems Integration	Layer
Brian Chen, Jen-Yuan (James) Chang	Sheng-Po Chang, Yi-Shiang Hsiao, Wen-Chen
	Hua, Jun-Yi Li

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Poster Show 2 14:30-15:30 • 3F Assembly Hall

Poster 2-1.	Poster 2-9.
A-8885. Sidewall Curl Reduction Using	A-9193. Countersunk Studs Hot Forged in
Active Drawbead with Advanced High	Core-Shell Type Metal Composite
Strength Steel	Kuang-Jau Fann, Wei-Ang Lai
Yu-Ting Yeh, Sin-Liang Lin, Kai-Chieh Hsu,	
Kuan-Ming Li, Fuh-Kuo Chen, Yi-Kai Lin	
Poster 2-2.	Poster 2-10.
B-8913. Performances of nanostructures	K-9254. Development of a Safe and Energy
within InGaN-based Multiquantum-well	Efficiency Water Heater by Induction Heating
Light-emitting Devices	Huy-Tien Bui, Sheng-Jye Hwang, Huei-
Ya-Fen Wu, Jiunn-Chyi Lee	Huang Lee, Durn-Yuan Huang, Zen-Jie Wang
Poster 2-3.	Poster 2-11.
K-8976. Impact Deformation Behaviour and	A-9303. Reduction of Sidewall Curl in Sheet
Microstructural Evolution of AZ80	Metal Forming of Advanced High Strength
Magnesium Alloy under Different	Steels via Blank Holder Force
Temperatures	Meng-Chieh Wang, Sin-Liang Lin, Chun-Kai
Woei-Shyan Lee, Cheng-Wen Chou, Ming-Chi	Hsu, Kuan-Ming Li, Fuh-Kuo Chen, Yi-Kai
Lu	Lin

Poster 2-4.	Poster 2-12.
K-8982. Wireless Power Collection Using	F-9426. Development of A Computer-Aided
Radio Frequency Identification System	Analysis System for Assembly Precision of A
Chun-Hsi Su, Shih-I Huang	Machine Tool
	Zing-Ping Liu, Jhy-Cherng Tsai, Chun-Jung
	Su
Poster 2-5.	Poster 2-13.
D-9076. A Study on Maximum Effective Face	K-9510. Tolerance and Motion Analysis of
Width without Tooth Pointing of Curvilinear	Antenna Mast
Gears Generated by Male Fly Cutters	Jau-Liang Chen, Ming-Hong Shih, Chen-
Yi-Cheng Chen, Zhi-Wei Li, Chien-Cheng Lo,	Yang Hong, Xun-Yao Lin, Chih-Wei Chao,
Zhi-Gen Wang, Chien-Sheng Liu	Jhy-Cherng Tsai, Chi-Hang Lin
Poster 2-6.	Poster 2-14.
K-9095. Optimum Design of Bipod Flexures	F-9714. Fiber Bragg Grating Interrogation
on a Spaceborn Primary Mirror under	System for Angular Velocity Measurement
Different Conditions	Ming-Chang Shih, Ying-Hong Lin, Ying-Hong
Chia-Yen Chan, Shenq-Tsong Chang, Yi-Kai	Lin, Ming-Chang Shih
Huang, Ting-Ming Huang	
Poster 2-7.	Poster 2-15.
A-9106. The optimal blank shape of the oil	K-9740. EEG Coherence of Recognition
pan deep drawing	Memory: Inter Hemispheric Connectivity
Yen-Liang Yeh, Hsien-Jung Hsu, Ming-Jyi	Analysis
Jang, Hung-Pu Yeh	Li-Pen Chao, Jiin-Po Wu
Poster 2-8.	Poster 2-16.
E-9190. The Study of Optimal Parameters on	K-9744. Simulation on Geological CO ₂
Metal Surgical Guide Tubes Structure Design	Storage in the Western Taiwan Basin
for Spinal Fusion Surgery	Neng-Chuan Tien, Cai Li, Keni Zhang, Chun-
Chia-Hung Yeh, Fuh-Yu Chang, Yi-Tse Chang,	Ping Jen
Hong-Tsu Young	Poster 2-17.
	I-9053. Analysis of Workpiece-Clamp AE
	Signals for Tool Wear Monitoring System in
	the Milling of Inconel 718
	Chen-Yu Liang, Ming-Chyuan Lu