

Agenda

ICCPE&ICI For All MNHTE Workshop SPINTECH

Day 1: Friday, September 30th, 2016

15:00 – Registration

18:30  Howard Beach Resort 2F Center


18:30 – Welcome Reception

20:00  Howard Beach Resort 1F Formosa Restaurant


Day 2: Saturday, October 1st, 2016

08:00 – Registration – ICCPE / ICI / SPINTECH / MNHTE Workshop

 Howard Beach Resort 2F Center

08:20 – MNHTE Workshop – **Keynote Speech**  M105

09:00 Speaker: Prof. Chin Pan Chair: Prof. Ming-Tsang Lee

09:00 – MNHTE Workshop – **Keynote Speech**  M105

09:40 Speaker: Prof. Che-Wun Hong Chair: Prof. Ming-Chang Lu

11:00 – Opening Ceremony

11:30  Howard Beach Resort 1F Howard Hall

Plenary Speech I  Howard Beach Resort 1F Howard Hall


11:30 – Title: Ultrasensitive superresolution microscopy

12:10 Speaker: Prof. Takayoshi Kobayashi

Chair: Prof. Chien-Hung Liu

12:10 – Lunch

13:30  Howard Beach Resort 1F Champs Elysees

ICCPE/MNHTE Workshop – **Invited Speech**  M105

Title: Metal particle manipulation by laser irradiation in glasses

Speaker: Prof. Hirofumi Hidai

13:30 – Chair: Professor Yu-Bin Chen

14:30

Session A1

 M101

Poster 1

 Corridor

SPINTECH – Competition for
College Student & Implementation

 Corridor

SPINTECH –
Thesis Competition

 M102  M103  M104

Agenda

ICCPE&ICI For All MNHTE Workshop SPINTECH

14:30 – 15:30	Session A1 📍 M101	Poster 2 📍 Corridor	SPINTECH – Competition for College Student & Implementation 📍 Corridor	SPINTECH – Thesis Competition 📍 M102 📍 M103 📍 M104
15:30 – 15:45	Tea Break 📍 Rainbow Hall			
	Plenary Speech II 📍 Howard Beach Resort 1F Howard Hall Title: Microgrid Technologies – Research Projects and Challenges in Maritime Power Systems 15:45 – Speaker: Prof. Josep M. Guerrero 16:25 – Chair: Prof. Cheng-Chi Wang			
	ICCPE/MNHTE Workshop –Keynote Speech 📍 M105 Speaker: Prof. Oronzio Manca Chair: Prof. Hui-Chu Weng			
	Invited Speech 📍 Howard Beach Resort 1F Howard Hall 16:25 – Title: Questions to Ask Yourself before Starting a Business 16:55 – Speaker: Ms. Sara Liu, Senior Consultant, Atelligent Global Consulting Chair: Dr. Hau-wei Lee			
16:55 – 17:20	Group Photo 📍 Howard Beach Resort 1F Howard Hall			
18:30 – 20:00	Banquet & SPINTECH Award Ceremony 📍 Howard Beach Resort 1F Howard Hall			

Day 3: Sunday, October 2nd , 2016

09:00 – 12:00	Session A1 📍 M101	Session B1 📍 M102	Session C1 📍 M103	Session D1 📍 M104	Poster 1 📍 Corridor	Session E1 MNHTE Workshop 📍 M105
12:00 – 13:30	Lunch 📍 Howard Beach Resort 1F Champs Elysees					
13:30 – 16:30	Session A2 📍 M101	Session B2 📍 M102	Session C2 📍 M103	Session D2 📍 M104	Poster 2 📍 Corridor	MNHTE Workshop Meeting 📍 M105

Agenda

ICCPE&ICI For All MNHTE Workshop SPINTECH

Day 4: Monday, October 3rd, 2016

09:00 –
18:00 Technical visit & Communication

Guidelines

1. Official Language

The official language of ICCPE2016&ICI2016 is English. All presentations including Q&A will be delivered in English.

2. Guideline for Participants

2.1. Conference Venue

Kenting Howard Beach Resort Hotel (<http://kenting.howard-hotels.com/>)

2.2. Registration

Time of Registration: 15:00PM ~ 18:30PM, Friday, Sep. 30th, 2016 (2F- Center)

2.3. Internet Service and International Telephone

Computers with Internet Service at Conference Center are provided by Kenting Howard Beach Resort Hotel. Wireless is also free to use around the hotel.

2.4. Conference Kit

Conference kit, which contains final program, name badge, tickets for lunches, banquet and official receipt, will be provided to participants during check-in at the Registration/Information Desk on Friday, Sep. 30th.

3. Guideline for Presenters

- [1] The presenters and session chairs are asked to keep to the paper sequence as shown in the Final Program. By following this predefined schedule, participants can switch between sessions without missing the particular papers of interest.
- [2] The presentation time for each presenter is 15 minutes including Q&A. The session chairs should allow the presenter for a 12minutes presentation and leave 3 minutes for discussions. All presenters are requested to report their attendance to the session chair 10 minutes before the session begins. If there are only 4-5 presenters in a session, then the session chair should allow the presenter for a 15minutes presentation and leave 3minutes for discussions.
- [3] Notebook PCs and LCD projectors will be available in every session room. Presenters are encouraged to prepare their files in MS PowerPoint format on a USB and copy into the PC at session room before the session begins. Our session aids will assist the presenters to copy the file. If you wish to use your own notebook PC, please open the file before your presentation.
- [4] For unexpected events that cannot be handled on the spot, you may request through session chairs, session aids or make a direct notification to the Conference Secretary Desk.

4. Guideline for Posters

Standard Poster Size: 50 cm (width) X 90 cm (length)

Schedule-at-a-Glance

September 30th (Fri.)	
15:00~18:30	Registration
18:30~	Welcome Reception

October 1st (Sat.)		October 2nd (Sun.)	
8:00 ~ 11:00	Registration	9:00~12:00	Session A1-E1
11:00~11:30	Opening	12:00~13:30	Lunch Break
11:30~12:10	Plenary Speech I	13:30~16:30	Session A2-B2
12:10~13:30	Lunch Break		
13:30~15:30	Session A1		
	Poster 1 & Poster 2		
	SPINTECH Technology -Thesis Award		
15:30~15:45	Tea Break		
15:45~16:25	Plenary Speech II		
16:25~16:55	Invited Speech		
16:55~17:20	Group Photo		
18:30~20:00	Banquet & SPINTECH Award Ceremony		

Social Event October 2nd (Sun.)	
9:30~11:30	Kenting National Park
12:00~13:30	Lunch
13:30~15:00	Kenting National Park

- **Time for each presentation** (Including the question-and-answer period)
- ✓ Keynote Speech: 40 mins
 - ✓ Presentation: 15 mins

Saturday, October 1st

Oral Session A1 📍 M101

13:30-15:30

5. Dimension Measurement & Metrology Technology

Chairman: Hau-Wei Lee

-Industrial Technology Research Institute

A1-1. 13:30

5-347. Concept for an Optical CMM Probing System Development Based on Sphere Reflective Michelson Interferometry

Hau-Wei Lee, Jr-Rung Chen

A1-2. 13:45

5-348. FPGA based Absolute Distance Measurement by Dual Free-Running Mode-Locked Fiber Lasers

Tze-An Liu, Yuh-Chuan Cheng, Hau-Wei Lee, Jin-Long Peng

A1-3. 14:00

5-349. Influence on ISO 230-2/-6 Test Results for Squareness of Machine Tools Using a LaserTRACER

Jr-Rung Chen, Hau-Wei Lee, Po-Er Hsu, Shan-Peng Pan

A1-4. 14:15

5-350. Self-developed Evaluation System on Spindle Error Motion Analysis

Kuang-I Chang, Sheng-Hang Wang, Tsung-Hsien Tu, Jr-Rung Chen

A1-5. 14:30

5-351. Performance Investigation for the Scanning and Single Point Probing Measurement Modes of the Coordinate Measuring Machine

Po-Er Hsu, Jr-Rung Chen, Hau-Wei Lee

A1-6. 14:45

5-352. Using Spectral Reflectometry to measure the depth of high aspect ratio Through Silicon Via

Hsiang-Chun Wei, Chih-Shang Liu, Zhong-Lun Guo

A1-7. 15:00

5-297. Local thermochemical reaction by selective heating for manufacturing microscale sensors

Habeom Lee, Seung Hwan Ko

Saturday, October 1st

SPINTECH Session

♥M102 ♥M103 ♥M104

13:30-15:30

**A. SPINTECH Technology Thesis
Awards Section**

A-370. Shearing interference microscope for
step-height measurements

*Hung-Xuân Trìn, Shyh-Tsong Lin,
Liang-Chia Chen, Sheng-Lih Yeh*

A-392. A Miniature Automatic Feeding
System for Microfluidic Samples Based On
Piezoelectric Actuator and Position-Sensing
IC

*Yi-Bin Jiang, Yu-Jen Wang, Guan-Long Lin,
Jian-Lun Huang*

A-394. The Design and Implementation of a
Spindle Motor Drive

Tze-Yee Ho, Jun-Gu Lin, Ting-Yu Jian

A-395. Angel Eye System of Vehicular Driver
*Da-Huei Lee, Wan-Jung Chang, Cheng-Chin
Kuo, Yi-Zhan Qiu, Ruei-Zhe Liou*

A-396. System design of ultrahigh-speed
spindle induction motor drive

Ming-Jheng Wu

A-401. Study of the Tribological Performance
Improvement by Nano-Diamond Additive and
the Multiscale Entropy Analysis of the
Vibration Signals of the Toggle Bearing Tests
Guan-Lin Chen , Hsiao-Yeh Chu

A-402. Effect of Al addition on mechanical
properties and fracture behavior of Cu-Zr-Al
bulk metallic glasses

Tao-Hsing Chen, Yang-Chi Luo

A-403. Temperature Control Approach for a
High Speed Spindle Cooler with Eco-friendly
Refrigerant

Wei-Ming Chiang, F.J. Wang, Y.C. Lin

A-406. Magnetometer Calibration of
Smartphone for Accuracy Improvement of
Pedestrian Indoor Positioning

*Kai-Wei Chiang, Pei-Ching Hsu,
Kuan-Yu Chou*

A-7891. A Study of Mixed-gas
Electrochemical Micro Jet Machining
Chou Jung Hung, Jheng Hong Liu

A-7904. A New Meshfree Method for Solving
Steady-state Modified Burgers's
Equation in Transport Problems
*Chih-Wen Chang, Jin-Huang Huang,
Chi-Chang Wang*

A-7912. Flexible Two-in-One Microsensor for Real-Time Monitoring of Charge and Discharge Conditions of Vanadium Redox Flow Battery
Chi-Yuan Lee, Chin-Lung Hsieh, Chia-Hung Chen, Kin-Fu Lin, Shyong Lee, Yun-Min Liu, Yen-Pu Huang, Chong-An Jiang

A-7926. Combined with Wavelet Transform and Edge Detector to Generate a Depth Map from a Single Image
Der-Feng Huang, Yu-Hsiang Chen Chen, Ting-Wen Huang

A-7930. Development of the Technology of Micro-diagnosis of the Internal State of the PEM Water Electrolysis System
Chi-Yuan Lee, Chia-Hung Chen, Guo-Bin Jung, Yu-Chun Chiang, Shyong Lee, Yen-Ting Huang, Shih-Chun Li

A-7948. Thermal analysis of motorized spindles and design of heat sink.
Chi-Hung Cheng, Chi-Chang Wang, Kai-Chun Chan

A-7989. Study of the Predictive Analysis and Molding Properties on PA66 Composites Backing Plate Molded Parts
Hsin-Shu Peng, Po-Wei Huang, Kai-Fu Liew, Pai-Cheng Chien, Wei-Jie Su, Guan-Yu Chen

A-8026. Development of an intelligent manufacturing quality and fault detecting system
Ying-Chih Lai, Po-Yuan Yu

Sunday, October 2nd

Oral Session A1 📍 M101

09:00-12:00

B. Computational and Mathematical Sciences

E. Advanced analysis, design and manufacturing technology for precision Engineering

F. Control and Automation Technology, Mechatronics, Robotics for Manufacture and Industry

G. Sensing and Automation System

L. Vibroengineering of dynamical systems

D. Inventions/innovation in manufacturing technology and processes

Chairman: Dyi-Cheng Chen

-National Changhua University of Education

Chairman: Jui-Hung Liu

-Southern Taiwan University of Science and Technology

A1-1. 09:00

B-293. A Uniform Model for Triadic Association Rules

Eung-Hee Kim, Hong-Gee Kim, Suk-Hyung Hwang

A1-2. 09:15

E-267. Application of Ductile Fracture Criterion for Tensile Test of Zirconium Alloy 702

Dyi-Cheng Chen, Dong-Yao Chang, Fei-Hsiang Chen, Tsung-Ying Kuo

A1-3. 09:30

E-283. Rotary Ultrasonic-Assisted Milling of Hardened Stainless Mold Steel

M.Y. Tsai, C. T. Chang, J.H. Yang

A1-4. 09:45

F-258. Comparisons of position control of valve-controlled and pump-controlled two-degree-of-freedom electro-hydraulic parallel robots

Ray-Hwa Wong, Wei-Heng Wong

A1-5. 10:00

F-270. Cooperative Output Regulation for a Class of Nonlinear Multi-Agent Systems subject to Jointly Connected Switching Networks without Knowing the Control Directions

Tao Liu, Jie Huang

A1-6. 10:15

F-271. Wind Turbine Operation under High-Turbulent Wind Flow

Jui-Hung Liu, Rong-Mao Lee, Chia-Ming Chang, Jien-Chen Chen, Meng-Ru Wu, Chih-Hsun Peng

A1-7. 10:30

F-325. Development of a robot for storage tank bottom floor inspection using magnetic flux leakage technique

Ho Chang, Chou-Wei Lan, Yu-Ting Hsieh

A1-8. 10:45

G-338. Low-Contrast Defect Detection for Anti-Reflective Glass

Chin-Sheng Chen, Chi-Min Weng, Chien-Chuan Tseng

A1-9. 11:00

G-346. Establishment of Analytical Platform for Precision Machinery Using History of Power Consumption

Wei-Huan Tsao, Chih-Chieh Lin

A1-10. 11:15

G-404. Novel Edge Detection And Reconstruction For Accurate 3-D Surface Profilometry Using Digital Image Correlation

*Liang-Chia Chen, Ching-Wen Liang,
Dinh-Cuong Hoang, Shyh-Tsong Lin*

A1-11. 11:30

D-7973. Robust Extended Backstepping Sliding Controller Design and its Application for Servo Motor Control

*Li-Hsin Chen, Chao-Chung Peng,
Chung-Yung Wu*

A1-12. 11:45

D-8213. Particle swarm optimization method for spindle nose vibration simulation and measurement

Yu-Ting Tsai

Sunday, October 2nd

Oral Session B1 📍M102
09:00-12:00

C. Modeling, numerical simulation and optimization

Chairman: Thien-M Vo

-Ho Chi Minh City University of Technology

Chairman: Shy-Leh Chen

-National Chung Cheng University

B1-1. 09:00

C-265. Measuring the Minimum Circumscribed Cone with an Innovative Computer Graphics Method

Wei-Fang Chen

B1-2. 09:15

C-268. A Research of Optimal Polygon Turning

Wei-Fang Chen, Zhi-Zhe Pan

B1-3. 09:30

C-277. Operation optimization of burners' operation style in coal-fired utility boilers by numerical simulation

Fang-qin Li, Liang-fei Luo, Jian-xing Ren, He-nan Li

B1-4. 09:45

C-278. Performance analysis of a Concentric Tube Heat Exchanger using genetic algorithm approach

M.C. Lin, C.W. Su, C.K. Yang

B1-5. 10:00

C-285. Modeling and Control of an Unbalanced Mass Bearingless Motor with 3-Pole Active Magnetic Bearing

Shy-Leh Chen, Pei-Hua Lee

B1-6. 10:15

C-289. A node-based Smoothed Finite Element Method (NS-FEM) for Stability Analysis of Dual Square Tunnels in Cohesive-frictional Soil

Thien-M Vo, An-N Chau, Tam-M Nguyen, Hoang-C Nguyen

B1-7. 10:30

C-330. Effect of Notch Size on Nanocrystalline Au under Tensile Deformation at Low Temperature

Wan-Chun Chuang, Wei-Long Chen, Ben Tsai, Josh Su

B1-8. 10:45

C-339. Micro-channel Deep Drawing Process Analysis of Pin-type bipolar plates

Tsung-Chia Chen, Jiang-Cheng Lin

B1-9. 11:00

C-382. A Study on Design and Analysis of Hydraulic System of Lattice Boom Crane

Ji-Hye Kim, Gwi-Nam Kim, Chang-Kweon Jeong, Yong-Hwan Yoon, Young-Ju Kim, Yong-Gil Jung, Sun-Chul Huh

Sunday, October 2nd

Oral Session C1 ♥ M103

09:00-12:00

3. Advanced Materials and Manufacturing Technology
4. Advanced Modeling and Control Technology in Mechatronic and Energy Systems
H. Energy and Thermal/Fluidic Science
B. Patent Based Inventions in Applied Science and Engineering
F. Inventions/Innovation in Energy and Thermal/Fluidic Science
G. Invention/Innovations in Biotechnology/Materials

Chairman: Shih-Chen Shi

-National Cheng Kung University

Chairman: Jenn-Kun Kuo

-National University of Tainan

C1-1. 09:00

3-269. Self-healing materials for ecotribology
Shih-Chen Shi, Teng-Feng Huang

C1-2. 09:15

3-282. Railway Continuous Prestressed Concrete Bridge Design in Ballastless Track Turnout Zone
Wen-Kuei Hsu, Neng-Hao Shih, Yu-Lin Lee

C1-3. 09:30

3-295. The Characteristics for Porous Oxide Layer of Aluminum Alloy T6061 after Anodizing by Oxalic Acid
Wen-Shih Lin, Tsung-Chieh Cheng, Chang-Chun Lee, Tsung-Han Hsieh

C1-4. 09:45

3-304. Thermal Behavior of The Biodegradable Poly(L-lactic acid)/Amorphous Silica Nanocomposites
Shu-Chuan Liao, Cheng-Fu Yang and Chean-Cheng Su

C1-5. 10:00

3-305. Effect of Fabrication Parameters of Nanosphere Lithography Method on the Results of Deposition Ag Nanoparticle Arrays for Localized Surface Plasmon Resonance
Jing Liu, Haoyuan Cai, Chaoyang Chen, Guangsong Yang, Cheng-Fu Yang

C1-6. 10:15

4-274. Symmetrical Valve Controlled Asymmetrical Cylinder Based on Wavelet Neural Network
Haitao Qi, Zilong Liu, Yan Lang

C1-7. 10:30

H-296. Modeling and Modal Analysis of the 9E Gas Turbine Blade
Yanru Zhang, Rui Zhu, Jianxing Ren, Qingpeng Han, Xiaoxi Ma, Sumin Wang, Qunkai Niu

C1-8. 10:45

H-299. Numerical investigation into heat transfer performance of LED heat sink
Jenn-Kun Kuo

C1-9. 11:00

F-8006. Operational Temperature Effect on the Positioning Accuracy of a Single Axial Moving Carrier Utilizing Environmental Control Technology
Win-Jet Luo, Zheng-Jun Huang, Kun-Ying Li, Zhan-Yong Chao

C1-10. 11:15

G-7915. Innovation of New Occlusion Devices for Cancers

Han-Yu Lee, Chien-Erh Lin, Tzu-Yuan Lin, Shu-Wei Hsu, Chih-Han Yang, Hao-Ming Hsiao

C1-11. 11:30

G-8003. Crystal structure effect on the luminescent properties of Tb^{3+} , Ce^{3+} co-doped $NaSrPO_4$ Phosphor prepared using microwave sintering

Kun-Hsien Chen, Min-Hang Weng, Cheng-Tang Pan, Ru-Yuan Yang

Sunday, October 2nd

Oral Session D1 📍 M104
09:00-12:00

1. Applied Modelling, Numerical Simulation, Computation and Optimization

I. Inventions/innovation in design/modeling/computing methods

Chairman: Sung-Hua Wu

- National Kaohsiung First University of Science and Technology

Chairman: Shyh-Kuang Ueng

- National Taiwan Ocean University

D1-1. 09:00

1-263. Computational Modeling of Fiber Reinforced Concrete Structural Walls under Earthquakes

Chung-Chan Hung

D1-2. 09:15

1-272. Overall Cutting Efficiency by Single Band-Saw Blade Coating-Layer Processing
Cheng-En Jhou, Sung-Hua Wu, Chin-Chung Wei

D1-3. 09:30

1-300. Application of an Indoor Environmental System with Intelligent Control Technique
Cong-Hui Huang, Heng-Yau Pan, Xin-Rong Qiu, Tzu-Yuan Wang

D1-4. 09:45

1-301. Stability Analysis and Control of Distributed Generation Microgrids by Hybrid Neural Network Control
Cong-Hui Huang, Chih-Ming Hong, Kuan-Chen Lin, Xin-Rong Qiu, Yu-Tang Su

D1-5. 10:00

1-306. Scattering Reduction Using Bumps and Tapering Effect

Shyh-Kuang Ueng, Yu-Wei Chen

D1-6. 10:15

1-316. Vibration Control Design for a Structure with Electrorheological Sandwiches Using Interval Type-2 Fuzzy System

Chih-Jer Lin, Chun-Ying Lee, Ying Liu

D1-7. 10:30

1-381. The Inspection and Reconstruction of Metal-roof Deformation under Wind Pressure Based on the flex sensor

Liman Yang, Langfu Cui, Chao An, Yunhua Li

D1-8. 10:45

I-7986. Positivity Creation and its Effect on Idea Patentability: A Case of a New Faucet Invention

Chi-Hua Wu, Ding-Bang Luh

Sunday, October 2nd

Oral & Poster Session E1

MNHTE 2016 ♦ M105

09:00-12:00

2. Micro & Nanoscale Heat Transfer and Energy

Chairman: Yu-Bin Chen

- National Tsing Hua University

Chairman: Ming-Chang Lu

- National Chiao Tung University

E1-1.

2-315. Influence of Magnetic Forces on the Pendant Drop Surface Tension of Magnetic Fluids

Huei Chu Weng, Jun-Yu Zhang

E1-2.

2-335. Transport analysis and nanowire enhancement for microscale porous thin plate drying with solar energy

Abdoul Karim Sekone, Yu-Bin Chen, Ming-Chang Lu, Ming-Tsang Lee

E1-3.

2-355. Tunable Endothermic Plateau Obtained Using Binary Metal Alloy Particles

Chih-Chung Lai, Shih-Ming Lin, Yuan-Da Chu, Chun-Che Chang, Yu-Lun Chueh, Ming-Chang Lu

E1-4.

2-364. Die-bonding materials for light-emitting diode application

Li-Chin Cheng, Tzu-Hao Wang, Chih-Ming Chen

E1-5.

2-368. Thermal characteristics and

management of high power LED module

Kai Shing Yang, Chih-Ting Yeh, Shih-Kuo Wu, Chih-Yung Tseng, Ming-Tsang Lee

E1-6.

2-377. Dynamic Behaviors of H₂S Nano-spray at Extremely Low Temperature

Pei-Hsing Huang, Chung-Han Shieh, Cheng-Chen Pan, Jheng-Yu Luo

E1-7.

2-378. Performance of Direct Formic Acid Microfluidic Fuel Cells with Different Pd/C Ratios

Jin-Cherng Shyu, Po-Yan Wang

E1-8.

2-386. Experimentally study on jet noise characteristics

Weiwei Xu, Qiang Li

E1-9.

2-387. The Study on Gas-liquid Two-equation turbulence Model for Small Bubbly Flow

Xinyue Duan, Liang Gong, Runjie Shen, Minghai Xu

E1-10.

2-388. The Development and Transport Phenomena Analysis of Laser Direct Synthesis and Patterning Microfabrication Technology

Song-Ling Tsai, Chen-Jui Lan, Yi-Kai Liu, Chia-Feng Lin, Ming-Tsang Lee

E1-11.

2.389. An experimental and analytical study of the thermal deformation of a 3-axis machining center spindle head

Chia-An Liu, Chih-Cherng Ho, Yu-Chi Liu, Hung-An Kao and Ming-Tsang Lee

Sunday, October 2nd

Oral Session A2 📍 M101

13:30-16:30

K. Others

**N. Electrical Engineering/
Energy/Communications**

**K. Inventions and Innovation in
Electrical Engineering/
Energy/Communications**

Chairman: Shang-Yuan Chen

- Feng Chia University

A2-1. 13:30

K-262. Characteristics of hair cuticles after hair oil treatments

Chia-Ling Chang, Tsung-Han Ho, Te-Hua Fang

A2-2. 13:45

K-329. Effects of regular exercise on functional fitness of community elderly

Tsui-Er Lee

A2-3. 14:00

K-374. A fast learning prognostics and health management system for organic light-emitting diode manufacturing process

Yu-Tsung Hsiao, Hung-An Kao, Yi-Hung Liu, Shiuuan Huang, Sung-Hua Yu

A2-4. 14:15

N-326. Up-to-N Write: An energy efficient write scheme for Phase Change Memory

Yao-Hua Chen

A2-5. 14:30

N-383. Stability-Considered Density-Adaptive

Routing Protocol with an Optimum Angle Value in Wireless Sensor Networks

Young-Long Chen, Yu-Ling Zeng, Yan-Hao Ling

A2-6. 14:45

K-8001. Intelligent Maintenance Scheduling System for Maximum Performance of Solar Energy Generating System

Chung-Chi Huang, Sheng-Fong Yang

A2-7. 15:00

K-8077. Smart Grid -based Home Energy Aware System

Shang-Yuan Chen, Zhen Lun Hu

A2-8. 15:15

K-8092. A Geometry Classification Method and Device for Femtocell Positioning Networks

Jeich Mar, Tsung Yu Chang, Yu Jie Wang

Sunday, October 2nd

Oral Session B2 📍 M103

13:30-16:30

C. Inventions/innovation in devices, sensors and actuators

E. Inventions/innovation in sensing and automation System

L. Others related to Inventions

Chairman: Shao-Ming Yang

-Asia university

Chairman: Hao-Ting Lin

-Feng Chia University

B2-1. 13:30

C-7974. Sensitivity study of polysilicon nanowire based on scattering and quantum mechanics models

Aanand, Gene Sheu, Syed Sarwar Imam, Shao Wei Lu, Shao-Ming Yang, Ming Jen Fan

B2-2. 13:45

C-7975. Analysis of Anti-JFET for 600V VDMOS and HCI Reliability

Shao-Ming Yang, Gene Sheu, Chiu-Chung Lai, Ravi Deivasigmani

B2-3. 14:00

C-7988. An Innovated 80V-100V High-Side Side-Isolated N-LDMOS Device

Shao-Ming Yang, Gene Sheu, Ting-Yao Chien, Chieh-Chih Wu, Tzu-Chieh Lee, Ching-Yuan Wu, Chiu-Chung Lai

B2-4. 14:15

C-7990. Design of a low on resistance novel high side 120V 3D NLD MOS with side isolation based on 0.35um BCD Process Technology

Shao-Ming Yang, Gene Sheu, Tzu-Chieh Lee, Ting-Yao Chien, Chieh-Chih Wu, Yun-Jung Lin

B2-5. 14:30

C-7995. 80-100V Low Side LDMOS device with Sided Isolation of 0.35um CMOS compatible Process

Ravi DeivaSigamani, Gene Sheu, S. Selvendran, S. Krishna Sai, Chirag Aryadeep, Shao-Ming Yang

B2-6. 14:45

C-7997. 120V Low Side LDMOS device with Sided Isolation of 0.35um CMOS compatible Process

Ravi DeivaSigamani, Gene Sheu, Chirag Aryadeep, S. Krishna Sai, S. Selvendran, Shao-Ming Yang

B2-7. 15:00

C-8004. Study of HCI Reliability for PLDMOS

Ravi DeivaSigamani, Gene Sheu, Aanand, Shao-Wei Lu, Syed Sarwar Imam, Chiu-Chung Lai, Shao-Ming Yang

B2-8. 15:15

E-7966. The Real-time Path Tracking Servo Control of a Rod-less Pneumatic Cylinder System with an Asymmetrical Load by the Fourier Series-based Adaptive Sliding-mode Controller with H-inf Tracking Performance

Hao-Ting Lin

B2-9. 15:30

E-8588. Robust Sliding Mode Observer Design
for State Estimation and Unknown Input
Reconstruction

Chao-Chung Peng

B2-9. 15:30

E-8390. Automated Defect Detection of
composites by Infrared Thermography and
Image Processing

*Terry Yuan-Fang Chen, Guan-Yu Lin, Jian-Lun
Chen*

B2-10. 15:45

L-7969. The Novel Industrial and Business
Models of Industry 4.0

Hao-Ting Lin

Saturday, October 1st

Poster 1 📍 Corridor

13:30-14:30

Poster 1-1.

E-254. Material Property Assessment of Thermoplastic by Fused Deposition Modeling

Kai-Hsiang Yen, Carl Wang

Poster 1-2.

1-259. PSO-Based Voltage Control Strategy for Loadability Enhancement in Smart Power Grids

Heng-Yi Su, Yu-Liang Hsu, Yi-Chung Chen

Poster 1-3.

4-279. The Effect of CNC Controller Gains on Rigid Tapping

Chen Shao-Hsien, Liu Zhi-Xin, Lin Jian-Cheng, Lin Meng-Ying

Poster 1-4.

B-280. Nonlinear Modeling of Electrically-Actuated Circular Clamped Micro-Plate in presence of Squeeze-Film Effect

Chin-Chia Liu

Poster 1-5.

F-286. Fuzzy Control Design for Wheeled Mobile Robot with Laser-Range-Finder Localization

Chung-Hsun Sun, Yin-Tien Wang, Sheng-Kai Huang, Cheng-Wei Ye

Poster 1-6.

G-288. The Control System for Volatile Organic Compounds Catalytic Reduction Performance Analysis

Ming-Sen Hu, Liang-Hsiu Chen

Poster 1-7.

3-290. Investigation of process parameters on the structural, optical and electrical properties of Mo doped ZnO on PI flexible substrate

Tao-Hsing Chen, Bo-Luen Jiang

Poster 1-8.

C-292. Nonlinear Dynamic Performance Analysis of Cutting Vibration System

Chin-Tsung Hsieh, Her-Terng Yau, Zhen-Hong Liao, Cheng-Chi Wang

Poster 1-9.

3-298. Effect of Sintering Temperature on Microstructures and Microwave Dielectric Properties of Ba₂CaWO₆ Ceramics

Yih-Chien Chen, Ruei-Yang Syu, Xiang-Fu Ding

Poster 1-10.

3-303. Stress-Induced Failure Estimation of Embedded Carrier Utilized in 3D-ICs Integrations

Chang-Chun Lee

Poster 1-11.

J-311. Highly Transparent and Conductive Multilayer IGZO/Ag/IGZO Films Deposited by Sputtering

Cheng-Fu Yang, Jing Liu, Chia-Ching, Chao-Ming Hsu, Yu-Hsin Chen

Poster 1-12.

N-312. Effect of Eu_2O_3 Concentration on the Properties of the $\text{Sr}_{2-x}\text{Ca}_x\text{SiO}_4$ Fluorescent Materials

Kun-Neng Chen, Chia-Ching Wu, Chien-Chen Diao, Cheng-Fu Yang, Lan-Sin Liou

Poster 1-13.

C-314. Analysis of Wafer Level Chip Scale Package Subjected to Uniform Pressure

Cheng-Da Wu, Hsing-Wei Tsai

Poster 1-14.

J-317. Resonance Wavelength Dependence of the Absorbance in infrared on Anisotropic Metamaterials

Bo-Hung Chen, Yu-Bin Chen, Ting-Xuan Huang

Poster 1-15.

J-318. The designing methods of energy saving glass

Fu-Yuan Shih, Yu-Bin Chen, Mao-Chuan Cheng

Poster 1-16.

H-323. Transitions of natural convection flows in a differentially heated square cavity filled with nanofluids

Chuan-Chieh Liao

Poster 1-17.

F-324. Swirling gas jet assisted laser percussion drilling for galvanometer scanned CO_2 laser

Chao-Ching Ho, Ke-Ying Shen, Yuan-Jen Chang, Jin-Chen Hsu, Chia-Lung Kuo

Poster 1-18.

I-327. Immunosensing for Bladder Cancer Cell Lysate in a Nanofluidic Preconcentrator

Meng-Syuan Wu, Pin-Hsuan Chen, Ting-Feng Wu, Cheng-Hsin Chuang, Chun-Ping Jen

Poster 1-19.

H-332. A study on the Solid-Liquid Rotating Flow in an Inclined Annulus

Sang-mok Han, Nam-sub Woo, Young-ju Kim

Poster 1-20.

N-333. None Operational Amplifier (OPA) Based: Design of Bandgap Reference Voltage

Hao-Ping Chan, Yu-Cherng Hung

Poster 1-21.

C-340. Control Analysis for the influence of Toxin Producing Phytoplankton on the Aquatic System

Cheng-Chi Wang, Tsui-Er Lee, Rong-Lin Horng

Poster 1-22.

H-353. The Cooling Effect of Heat Sink on LED's Optical Properties

Tzer-Ming Jeng, Sheng-Chung Tzeng, Ya-Jing Liu

Saturday, October 1st

Poster 2 📍 Corridor

14:30-15:30

Poster 2-1.

H-354. Technique Development and Performance Test of LED Finned Heat Sinks with Piezoelectric Blades

Sheng-Chung Tzeng

Poster 2-2.

G-356. Automatic People Counting System Based on Face Detection in Video Surveillance

Chien-Hao Tseng, Chung I Huang, Fang-Pang Lin, Tso-Chung Sung

Poster 2-3.

E-358. A Preliminary 2-D Finite Element Analysis of an Involute Flex Spline

Yi-Cheng Chen, Yun-Hao Cheng, Jui-Tang Tseng, Kun-Ju Hsieh

Poster 2-4.

E-359. Effect of Bearing Preload on the Temperature Rises and Dynamic Characteristics of the Spindle Tool System

Jui-Pui Hung, Yong-Run Chen, Shen-He Tsui, Kung-Da Wu

Poster 2-5.

B-385. A new algorithm of global tightly coupled transient heat transfer based on quasi-steady flow for conjugate heat transfer problem

MENG Fanchao, DONG Sujun, JIANG Hongsheng, WANG Jun

Poster 2-6.

C-405. Study on UV LED Exposure system for Wafer-Level Camera Lenses

Kuo-Tsai Wu, Sheng-Jye Hwang, Huei-Huang Lee

Poster 2-7.

B-7516. RP-Checker for Six-Axis Industrial Robot Arm Joints Angle Measurement

Hau-Wei Lee, Chien-Hung Liu

Poster 2-8.

F-7879. Prototype development of a low-temperature fuel cell stack with four inner sensing function

Chi-Yuan Lee, Chia-Hung Chen, Shyong Lee, Ten-Lom Chen, Ti-Ju Lee

Poster 2-9.

F-7880. Development of internal real-time wireless microscopic diagnosis tool for thin fuel cell stack and its application on electric motorcycle range extender

Chi-Yuan Lee, Chia-Hung Chen, Shyong Lee, Jyun-Ting Lin

Poster 2-10.

C-7881. Application of real-time remote microscopic diagnostic technique for thin fuel cell stack performance decay and aging analysis to unmanned aerial vehicles

Chi-Yuan Lee, Chia-Hung Chen, Shyong Lee, Chao-Hsuan Tsai, Yi-Chang Shiu

Poster 2-11.

K-7959. Hybrid organic-inorganic thiocyanate-based pseudohalide perovskite solar cells

Yu-Hsien Chiang, Ming-Hsien Li, Peter Chen

Poster 2-12.

B-8005. Expert-System Based Path Planning for Self-Moving Robots

Chun-Chieh Wang, Zhan-Xian Ye

Poster 2-13.

D-8035. Study on Machining Parameters of the Gear Hobbing

Chuang-Kai Chang, Ruei-Hung Hsu

Poster 2-14.

G-8393. Innovative Y211F-Modified Iron Oxide Nanoparticles for Photothermally-Triggered Peptide Release and Therapy

Ping-Shan Lai, Wei-Jhe Syu, Jo-Hua Hsu

Poster 2-15.

G-8412. Application of Mesoporous Silica Nanoparticles on Photothermally-Triggered Doxorubicin Release to Overcome Drug-Resistant MCF-7/ADR cells and Ultrasound Contrast Imaging

You-Sin Jian, Chun-Wei Chen, Ping-Shan Lai

Poster 2-16.

G-8506. Enhanced In Vitro and In Vivo Photodynamic Therapy by Targetable C225-Conjugated Polymeric Micelles

Chin-Ling Pai, Ying-Chen Chen, Hsiu-Ping Yu, Hsuan-Ying Chen, Chia-Yen Hsu, Hong-Lin Su, Alexander J. MacRobert, Ping-Shan Lai

Poster 2-16.

K-8476. Analyses and Control of Chaotic Behavior in DC-DC Convertors

Kuo-Nan Yu, Her-Terng Yau, Yi-Hung Lin

Poster 2-17.

C-361. Modeling Method of Pump Geometry in the 2 stage Mixed Flow Pump for Seawater Lifting

Nam-Sub Woo, Sang-Mok Han, Young-Ju Kim

Poster 2-18.

C-362. A Study on the Structural Analysis of Umbilical Winch for ROV LARS(Launch and Recovery System)

Nam-sub Woo, Sang-mok Han, Hyun-Ji Kim, Young-ju Kim, Sun-Chul Huh