

Session A: Advanced Manufacturing Science and Technology

1-1 Smart Manufacturing

1-2 3D Printing/Additive Manufacturing

1-3 Sensors

1-4 Advanced Vehicle

1-5 Robot

October 4 (Thursday) / Venue : E1305				
Time	ID	Speaker	Title	Page
14:30 – 14:50	A-I-01	Prof. Toshihiro MORIGA	Eco-Friendly Preparation of Oxynitride Pigments and Phosphors from Nonstoichiometric Mixture of Starting Materials Department of Applied Chemistry, Tokushima University, Japan	A-01
14:50 – 15:10	A-I-02	Prof. Thanh Phuong NGUYEN	A Study On Single Phase 9 Levels Inverter Institute of engineering, Ho Chi Minh City University of Technology, Vietnam	A-02
15:10 – 15:30	A-I-03	Prof. Ngoc-Bich LE	T-Shirt Auto-Dimensioning Utilizing Image Processing School of Engineering, Eastern International University, Vietnam	A-03
15:30 – 16:00	A-O-01	<u>Po-Chun CHEN</u> , Sheng-Chang WANG, Lung- Hao HU	Low-dimensional material molybdenum sulfide coating on the surface of nano-porous aluminum alloy for high anti-wearing Southern Taiwan University of Science and Technology, Taiwan	A-09
	A-O-02	<u>R. MINATO</u> , K. HATAI, Y. OTANI, X. LIU, K. MURAI, T. MORIGA, M. MORI	Verification of structure change from pyrochlore to fluorite in $Ce_{1-x}La_xO_{2-\delta}$ ($0 \leq x$ ≤ 0.5) Tokushima University, Japan	A-10

	A-O-03	Cheng-Hao HUANG, <u>Zi- Quen</u> CHEN, Bing-Hao CHEN	Improved method on modelling vehicle contact force Southern Taiwan University of Science and Technology, Taiwan	A-11
16:00 – 16:30	<u>Coffee Break</u>			
16:30 – 17:00	A-O-04	<u>Yu-Kai</u> WANG, Sheng-Chang WANG, Lung- Hao HU	Study the hydrolysis reaction of preceramic polysilazane precursor on aluminum nitride surface film Southern Taiwan University of Science and Technology, Taiwan	A-12
	A-O-05	C.S. CHIEN, S.M. SYU, <u>Z.W. LIN</u> , T.Y. KUO	Formation of Ta ₂ O ₅ doped coating on the surface of titanium within HF containing electrolyte by micro arc oxidation Southern Taiwan University of Science and Technology, Taiwan	A-13
	A-O-06	<u>M. MATSUMURA</u> , S. TORII	Experimental Study of Heat Transfer Coefficient Enhancement Effect by Graphene Oxide Nanofluid Kumamoto University, Japan	A-14
17:00 – 17:30	A-O-07	<u>Taiki</u> <u>ISHIMOTO</u> , Shuichi TORII	Study on electric boiler by a direct sending of electricity and its visualization Kumamoto University, Japan	A-15
	A-O-08	<u>Keishi</u> <u>NAKAMURA</u> , Shuichi TORII	Experimental study of heat transfer coefficient enhancement effect by graphene oxide nanofluid Kumamoto University, Japan	A-16
	A-O-09	<u>Lobo P.</u> <u>ISAMARA</u> , Wei-Chin CHANG	Initial analysis of the flight performance of a quadcopter powered by a hydrogen proton exchange membrane fuel cell Southern Taiwan University of Science and Technology, Taiwan	A-17
17:30 – 18:00	A-O-10	<u>Yuki</u> <u>KOTOOKA</u> , Shuichi TORII	Study on heat transfer promotion mechanism of nanofluid by using Al ₂ O ₃ nanofluid Kumamoto University, Japan	A-18

	A-O-11	<u>Kohei</u> <u>HAMAHATA</u> , Shuichi TORII, Shigeru TANAKA	Enhancement of pool boiling heat transfer by diamond particles coated on heating surface Kumamoto University, Japan	A-19
	A-O-12	<u>Manchala</u> <u>Gopala</u> <u>KRISHNA</u> , Wei-Chin CHANG	Simulation of driving strategy for electric car running in Suzuka circuit Southern Taiwan University of Science and Technology, Taiwan	A-20

October 5 (Friday) / Venue : E1305

Time	ID	Speaker	Title	Page
09:00 – 09:20	A-I-04	Prof. Shuichi TORII	Effect of injection velocity ratio on thermal-fluid jet diffusion produced by annular channel Kumamoto University, Japan	A-04
09:20 – 09:40	A-I-05	Prof. Tomohiro YAMAGUCHI	Growth of Cu ₃ N Films by mist Chemical Vapor Deposition Kogakuin university, Japan	A-05
09:40 – 10:00	A-I-06	Prof. Hiroki NAGAI	Super-hydrophilicity of an amorphous thin film fabricated by UV-irradiation to a molecular precursor film involving a Ti(IV) complex Kogakuin university, Japan	A-06
10:00 – 10:20	<u>Coffee Break</u>			
10:20 – 10:40	A-I-07	Prof. Ri-ichi MURAKAMI	Effect of Moisture on Mechanical Properties and Electric Magnetic Wave Shielding of Carbon Fiber Reinforced Bioplastic Composites National Taiwan University of Science and Technology, Taiwan	A-07

10:40 – 11:00	A-I-08	Prof. Kei-ichiro MURAI	The Effect of Sintering Aid on Negative Thermal Expansion of Ti-doped $Zr_2W_2O_{12}$ Department of Applied Chemistry, Tokushima University, Japan	A-08
11:00 – 11:30	A-O-13	Yi-Zhen WANG, <u>Swapnil SHINDE</u> , Keh-moh LIN	Fabrication and characterization of flexible hybrid transparent electrodes based on metal and metal oxide stacked layers Southern Taiwan University of Science and Technology, Taiwan	A-21
	A-O-14	<u>Zhi-Kai WU</u> , Pei-Chung CHEN, Xin Chien TEH	Using back-propagation neural networks to diagnose a gasoline engine symptoms Southern Taiwan University of Science and Technology, Taiwan	A-22
	A-O-15	Cheng-Hao HUANG, <u>Bing-Hao CHEN</u> , Zi-Quen CHEN	Performance and effectiveness of rail pad stiffness on vibration isolation Southern Taiwan University of Science and Technology, Taiwan	A-23