AUTO 2018 PROGRAM SCHEDULE

■ Session Name: Artificial Intelligence

Room：Chung Kang Room Time：09:00-10:20 Dec. 07, 2018		Session Chair： Prof. Feng-Chang Gu	TP1-1
Paper ID	**Paper Title**	**Author(s)**	**Page No**
#1078	Low Cost Eye Tracking and Gaze Estimation Techniques for Wearable Headsets	Yen-Lin Chen, Ko-Feng Lee, Chao-Wei Yu, Cheng-Han Wu	
#1084	Development of Pressure Sensing Keyboard and Eextended Password Application	Jia-Chen Hong, Hsu-Feng Chang, Shyang-Jye Chang,	
#1086	Using deep learning method for classifying EEG motor imagery signals	Yu-Chuan Hung, Yu-Hao Lan, You-Yin Chen, Uyen Thi Kim Nguyen, Shih-Hung Yang	
#1094	Automatic Sudoku Puzzle Solver based on Machine Learning	Shi-Hao Dong, Yu-Tzu Chang, Xueying Zhang, Han-Pang Huang	
#1102	Adaptive Frequency–Voltage Servo–Controller for Extracorporeal Supporting Flow Regulation in an Extracorporeal Membrane Oxygenation System	Chia Hung Lin, Chung-Dann Kan, Wei-Ling Chen, Ping-Tzan Huang	

■ Session Name: Automation in Biotechnology, Micro/Precision/Ultraprecision Manufacturing Systems

Room：Wen Hsin Room Time：09:00 -10:20 Dec. 07, 2018		Session Chair： Prof. Chih-Chen Chen	TP1-2
Paper ID	**Paper Title**	**Author(s)**	**Page No**
#1052	Creating pore-gradient gels in a single casting for sorting nanoparticles	L.F. Chen, C Chen	
#1124	Analysis of HaCaT cell confluency with the phase-contrast time-lapse images	Wen-Jun Jie, Chi-Hsiang Lien	
#1134	On the development of a low-salt soya sauce fermentation system	Ching-Hua Ting, Sophia Ferng, Cheng-Kuang Hsu, Robin Yih-Yuan Chiou, Chuan-Chou Lee, Sih-Han Chen	
#1110	A study on the quality improvement of drilling holes in quartz glass by electrochemical discharge machining	Winghing Yau, Jia-Chang Chen, You-An Lin, Chia-Lung Kuo, Chao-Ching Ho	

■Session Name: Internet of Things

Room：Han Kou Room Time：09:00 -10:20 Dec. 07, 2018		Session Chair： Prof. Chung-Wen Hung	TP1-3
Paper ID	**Paper Title**	**Author(s)**	**Page No**
#1026	A Fuzzy-Based Adaptive Data Rate Control of Ultra-Low Power WSN IoT	Chung-Wen Hung, Kuo-Hsien Hsia, Po-Yun Shih, Hao-Jun Zhang	
#1034	Smart fire alarm system based on Bluetooth 4.0 indoor positioning	Jung-Tang Huang, You-Sheng Lin	
#1047	Study of Aquaponics System Based on Wireless Sensors Network Technology	Wen-Tsai Sung, Sung-Chun Huang	
#1015	Application of Smart Machinery for Mobile Crime Scene Surveillance	Yi Chang Wu, Chang En Pu, Hung Yu Feng, YouLing Lin	

■Session Name: Machinery and Mechanical Systems for Automation, Industry 4.0

Room：Laurel Salon I Time：09:00 -10:20 Dec. 07, 2018		Session Chair： Prof. Po-Wen Hsueh	TP1-4
Paper ID	**Paper Title**	**Author(s)**	**Page No**
#1017	Dynamic Analysis of Opposed Air Bearing System	Cheng-Chi Wang, Tsui-Er Lee	
#1096	Power-Assisted Redundancy Design of Power-Assisted Bike for Torque Sensor Failure	Po-Wen Hsueh, Wu-Sung Yao	
#1067	Degradation assessment of cutting tools for structuralsteel machining center using self-organizing map	Tsung-Ren Huang, Hao-Ting Chen, Min-Chun Pan	
#1131	Toward A Machining Quality Estimator for Milling:Correlating Surface Roughness with Cutting Forces	Jhy-Cherng Tsai, Shih-Yu Chang	

■Session Name: CAD/CAM/CIM, Intelligent Manufacturing Systems and Industrial Information Technology

	Room：Evergreen Salon II Time：09:00 -10:20 Dec. 07, 2018		Session Chair： Prof. Yen-Liang Yeh	TP1-5
Paper ID	Paper Title		Author(s)	Page No
#1018	The simply supported Plate Vibration Using the Barycentric Lagrange Interpolation		Yen-Liang Yeh	
#1027	Electrostatic simulation and design of an ultra thin capacitive touch panel		Ying-Jia Lin, Ying-Cheng Su, Paul C.-P. Chao, Chih-Chia Chang	
#1033	Development for Feasibility Evaluation and Support Structure Design by Topology Optimization for Additive Manufacturing of Integrally formed Bar Linkage		Rong-Shean Lee, Yi-Jen Lai, Po-Chih Lin, Tzu-Yi Hung, Yu-Chen Wang, Ching Yu, Cheng-Feng Liao	
#1137	Process Optimization and Microstructure Characterization for Direct Energy Deposition 3D Printing SS316L Material		Pei-Yi Lin, Kuo-Tsai Wu, Hsiu-Chen Wang, Huei-Huang Lee, Sheng-Jye Hwang	
#1075	Thermal effects on ballscrew deformation and backlash on the feed drive system		Shao Hsien Chen, Kiki Andrean	

■Session Name: Devices and Equipment for Automation

	Room：Chung Kang Room Time：10:30 -12:00 Dec. 07, 2018		Session Chair： Prof. Chao-Chung Peng	TP2-1
Paper ID	Paper Title		Author(s)	Page No
#1038	Developments of a Low Cost Portable IMU Calibration System: Design and Realization		Chao-Chung Peng, Jing-Jie Huang, Ho-Yuang Lee	
#1055	Measurement module for the cross-sectional profile		Hung Ta Shih, Yung-Cheng Wang, Pi-Cheng Tung, Lih horng Shyu, Chung-Ping Chang, Jhen-Ling Huang	
#1098	A Smart Variable-Resistance Leg Extension Machine Using Magneto-rheological Technology		Yaojung Shiao, Edwin Santillan	
#1100	The Optimization Analysis of Thin Piezoelectric Loading-Force Sensor Using Taguchi Design Method		Yi-Wei Shen, Ming-Jin Liu, Sheng-He Wang	
#1119	The RSS-Based Estimation of Direction of Arrival Using Multiple Directional Antennas		Yi-Che Yu, Kuan-Tzu Chen, Yao-Chiang Kan	

■Session Name: Automatic Measurement and Control Technology(I)

Room Wen Hsin Room Time：10:30 -12:00 Dec. 07, 2018		Session Chair： Prof. Chih-Keng Chen	TP2-2
Paper ID	**Paper Title**	**Author(s)**	**Page No**
#1016	Roller Mold Fabrication Based on Digital Light Processing andOptical Fiber Arrays	Shan Yang, Chun-Ting Lin, Yung-Chun Lee	
#1022	Heterogeneous Motors Drive System Based on Multi Channel PK Modulation	Wen-Cheng Pu,Cheng-Hao Bi, Yung-Chang Luo	
#1025	MPC Control of an Active Stabilizing Assistant System for a Bicycle Turning	Chih-Keng Chen, Trung-Dung Chu	
#1036	A Serial Communication Method to Improve the Performance of V-Command CNC Controller	Bruno Shang, K.C. Shang, W. J. Wu	
#1037	Novel Laser Encoder System for X-Y Positioning Stage	Chung-Ping Chang, Hung Ta Shih, Syuan-Chen Chang, Yung-Cheng Wang	
#1044	Semiconductor Communication Protocol SECS/GEM Applied to Traditional Integrated Vertical Manufacturing Systems	Neng-Sheng Pai, Guo-Shin Zhang	

■Session Name: Automatic Measurement and Control Technology(II)

Room：Han Kou Room Time：10:30 -12:00 Dec. 07, 2018		Session Chair： Prof. Wen-Tsai Sung	TP2-3
Paper ID	**Paper Title**	**Author(s)**	**Page No**
#1046	Using Extension Theory to Coordination and Discussion on Temperature and Lightness of IOT Smart House	Wen-Tsai Sung, Song-Ting Hsieh	
#1050	Online-Offline Integrated Learning Method of the Neural Network Control	Masakazu Morita, Qingjiu Huang, Minpei Morishita	
#1061	Chaotic Synchronization Systems with Twofish Encryption Algorithm Scheme	Feng Hsiag Hsiao, Po-Han Lin	
#1062	Cutting Force Validation and Volumetric Errors Compensation of Thin Workpieces with Sensory Tool Holder	Yu-Wen Chen, Kuo-Tsai Wu, Syu-Sheng Li, Sheng-Jye Hwang, Huei-Huang Lee	
#1065	Tension Control in Square-Shaped Thin Wire High Speed Winding System	Yuan Chen YU, Kun-Tien Li	
#1070	A Study of 3D Thermal Imaging for a Stereovision-Based Video Surveillance System with Multi-Lens	Kuan-Yu Chen,Pei-Yuan Hung, Heng-Wei Hsu	

■**Session Name: Signal and Image Processing, Robotics**

| | Room：Laurel Salon I
Time: 10:30 -12:00 Dec. 07, 2018 | Session Chair：
Prof. Shiue-Der Lu | TP2-4 |

Paper ID	Paper Title	Author(s)	Page No
#1007	Virtual-Reality Double Catheter Simulator System in Atrial Septal Defect Surgical Procedure with Haptic and Visual Feedback Manipulation	Guan-Chun Chen, Chia-Hung Lin, Chung-Dann Kan, Wei-Ling Chen, Ying-Che Kuo	
#1030	Application of Chaos and Extension Theory to Fault Diagnosis of Three-Phase Synchronous Generators	Shiue-Der Lu, Meng Hui Wang, Shih Kai Chen	
#1048	Based on low-rank and sparse matrix method to obtain the best focus length of night vision goggles	Bo-Lin Jian, Wen-Lin Chu, Yu-Chung Li	
#1071	Automatic Multi-Exposure Image Fusion Based on Visual Saliency Map	Ting-Chi Liu, Yung-Yao Chen	
#1091	CAD-Based Robot Arm 3D Printing Utilizing Null Space Control	Zhi-Hao Kang, De-Hui Zhang, Han-Pang Huang	

■**Session Name: Intelligent Manufacturing Systems**

| | Room：Evergreen Salon II
Time: 10:30 -12:00 Dec. 07, 2018 | Session Chair：
Prof. Shiuh-Jer Huang | TP2-5 |

Paper ID	Paper Title	Author(s)	Page No
#1053	Application of deep learning for object image recognition and robot automatic grasping	Shiuh-Jer Huang, Chen-Zon Yan, C. K. Huang, Chun-Chien Ting, Chun-Hoa Chen	
#1060	Adaptive Process Control of the Changeover Point for Injection Molding Process	Yi-Sheng Chen, Kuo-Tsai Wu, Ming-Hong Tsai, Sheng-Jye Hwang, Huei-Huang Lee, Hsin-Shu Peng, Hsiao-Yeh Chu	
#1066	Development of AE Monitoring System for Hard Polishing Process of Silicon Carbide	Po-Chun Chi, Hong-Chang Chen, Chun-Wei Liu, Tsu-Te Hao, Shih-Chieh Lin	
#1080	Development of a Visual Presentation Platform for Machine Tool Exhibition and Maintenance	Chung Shuo Lee, Yung-Chou Kao	
#1088	Shot Quality Classification of Plastic Injection Moulding Process with Vibration Signal Analysis	Wani Jamaal Morgan, Guan-Lin Chen, Ping-Hsueh Tsai, HsiaoYeh Chu, Sheng-Jye Hwang, Hsin-Shu Peng	
#1099	Automated Construction Scheme of Python-based Cloud Manufacturing Services	Min-Hsiung Hung, Pei-Chen Lee, Yu-Chuan Lin, Chao-Chun Chen, Fan-Tien Cheng, Haw-Ching Yang	

■Session Name: MEMS, Nanotechnology and Sensor Networks, Micro/Precision/Ultraprecision Manufacturing Systems

	Room：Chung Kang Room Time: 13:00 -14:30 Dec. 07, 2018		Session Chair： Prof. Yi-Kuang Yen	TP3-1
Paper ID	Paper Title		Author(s)	Page No
#1072	Phenytoin Drug Monitoring by using a CMOS-MEMS Based Piezoresistive Membrane-Bridge Biosensor		Chao-Yuan Chiu, Yi-Kuang Yen	
#1089	A High Performance Pulse Wave Piezoelectric Energy Harvester for Skin Patches Applications		Bo-Song Yao, Wei-Hao Tang, Yu-Heng Yang, Jui-Ta Chien, Chao-Ting Chen, Shun-Chiu Lin, Wen-Jong Wu	
#1120	Non-Contact Current Measurement with Field-Modulated Spin-Valve GMR Sensor		Xuan-Thang Trinh, Jen-Tzong Jeng, Chih-Hsien Hung, Chih-Cheng Lu	
#1112	Three Dimensional Maskless Ultraviolet Exposure System Based on Digital Light Processing		Hung-Liang Chien, Cong-Wei Yang, Yung-Chun Lee	
#1130	Design of a low-cost and high-accuracy micro machine tool with co-plane-driving mechanism		Shih-Ming Wang, Zhe-Zhi Ye, Hariyanto Gunawan	

■ Session Name: Mechatronics and Opto-Mechatronics, Renewable Energy

	Room：Wen Hsin Room Time：13:00 -14:30 Dec. 07, 2018		Session Chair： Dr. Worajit Setthapun	TP3-2
Paper ID	Paper Title		Author(s)	Page No
#1008	A new Lie-group method for solving Tzitzeica–Dodd–Bullough equation in nonlinear optics problems		Chih-Wen Chang, Chien-Hung Liu, Cheng-Chi Wang	
#1020	Speed Estimation Direct Torque Control Induction Motor Drive Based on Stator Flux Observer		Yung-Chang Luo, Chien-Hua Liao, Wen-Cheng Pu	
#1035	An all-wheel-driven electric vehicle with an articulated body		S.-T. Wu, J.-J. Jhang, J.-S. Lin, W.-C. Chen, Y.-M. Chen, L.-H. Jhang, W.-C. Liao, Y.-C. Liu	
#1103	The image recognition system based on LabVIEW interface for the integrated robot arm system		Pin-Gao Hunag, Yi-Xuan Chen, Guan-Ru Xiao, Zong-Hong Chen, Chi-Hsiang Lien	
#1095	Design of low-frequency Wireless Power Transmission		Yean-Der Kuan, C. Bambang Dwi Kuncoro , Frank-Ming Sung	
#1106	The preparation of well head vibration sensor based on the flexible lithium niobate film		David T.W.Lin, Chun-Ping Jen, Yi Chun Du, Kun Dar Li, Ng Choon Wei, Chi Ying Chang	

■ **Session Name: Automation Application Technology for High-Tech Industry, Service Automation and Innovation, System Integration Technology**

	Room：Han Kou Room Time：13:00 -14:30 Dec. 07, 2018	Session Chair： Prof. Ming-Jong Tsai	TP3-3
Paper ID	**Paper Title**	**Author(s)**	**Page No**
#1049	Fabrication of Invisible Digital Aligned Braces by using Desk-top LCD Based Additive Manufacturing System	Zheng-Yu Chen, Kai-Wei Chen, Shu Hao Zhuang, Ming-Jong Tsai, Yuan-Min Lin	
#1076	3D Object Pose Estimation Using the Hybrid Mask-RCNN and Iterative Closest Point Approach	Wen-Hui Chen, Han-Yang Kuo, Chien-Yung Chung, Chuan-Cho Chiang, Kuo-Feng Hung, Cheng-Han Tsai	
#1105	A Binder Jetting Based 3D Printing Technology for Sand Mold by using Multiple Piezoelectric Heads	Kun-Hong Li, Kai Wei Chen, Ming-Jong Tsai, Freeman Chen, Yin-Lin Cheng	
#1031	Design of Unmanned Surface Vehicle and its system for water quality inspection and sample capturing in the water reservoir in Taiwan	C.M. Kuo,H.C. Li, W.J. Liang, T.C. Yang, C.Y. Kuang,P.S. Hsieh, W.J. Liang, K.J. Peng,K.C. Peng, S.H. Hsiung, C.H. Kuo	
#1032	Vector thrust multi-rotor copter in application in agriculture – a study and hardware realisation	C.H. Kuo, K.J. Peng, K.C. Peng, S.H. Hsiung, C.M. Kuo	
#1093	Gesture Recognition for Quadcopter Control	Yu-Ming Lu, Chih-Chia Kuo, Yen-Lun Chen	

■ **Session Name: Automatic Measurement and Control Technology, System Integration Technology**

	Room：Laurel Salon I Time: 13:00 -14:30 Dec. 07, 2018	Session Chair： Prof. Hsiung-Cheng Lin	TP3-4
Paper ID	**Paper Title**	**Author(s)**	**Page No**
#1097	Biaxial Servomechanism Based on Internal Model Control for Performance Improvement	Y. H. Huang, Y. H. Huang, S. Y. Lee, C. L. Chen,M. C. Tsai	
#1116	Robot Arm with Automatic Positioning Control Based on Smart Motor	Wen-Cheng Pu, Wun Bin Tu	
#1125	Tension Control in Square-Shaped Thin Wire High Speed Winding System	Yuan-Chen Yu, Kun Tien Li	
#1132	Dispenser Control with Coil Motor	Bui Van-Hung, Ming-Hong Tsai, Tran Minh-Sang,Sheng-Jye Hwang, Huei-Huang Lee	
#1136	Novel Frequency Feedback Control for Atomic Force Microscopy Systems	Peter I-Tsyuen Chang, Z.-C. Hsu	
#1090	Design of Automatic Copper Wire Elongation System	Hsiung-Cheng Lin, Hsuan-Chu Chen, Chung-Hao Cheng	

■Session Name: Robotics

	Room：Evergreen Salon II Time：13:00 -14:30 Dec. 07, 2018		Session Chair： Prof. Chih-Jer Lin	TP3-5
Paper ID	**Paper Title**		**Author(s)**	**Page No**
#1045	Path planning of a Redundant robot for obstacle avoidance using Artificial potential field and GA		Chih-Jer Lin, Hau-Yuan Cheng, Ting-Yi Hsieh	
#1063	Motion control of a planar 3-DOF parallel manipulator		Yong-Lin Kuo, Shih-Chien Tang	
#1081	CPS-based Real-time multi-obstacles avoidance using repulsive summation vector for 6-DOF robot manipulator		Chin-Sheng Chen, Shih-Kang Chen, Paul Tumbaco, Yu-Hsin Lin	
#1085	An artificial skin that detects pressure and shear and distinguishes between humans or objects		Tsung Ying Kuo, Jung Tang Huang	
#1023	Development of Five-axis MRI- Compatible Robot System for Stereotactic Neurosurgery		Huang-Lin Chen, Bing-Lin Ho, Chih-Yuan Huang, Chou-Ching K. Lin, Ming-Shaung Ju	
#1122	The study of Image Tracking Robot Assisting 3D Printing on Curved Layer Surface Construction		Pi-Ying Cheng, Jian-Mu Lai	

■Session Name: Robotics and cyber-physical systems

	Room：Chung Kang Room Time：14:30 -15:50 Dec. 07, 2018		Session Chair： Prof. Chung-Hsien Kuo	SP1-1
Paper ID	**Paper Title**		**Author(s)**	**Page No**
#1133	Design of a Universal Testing Machine with a Whole-Field Optical Extensometer		Wei-chen Lee, Frank Laufer	
#1135	Mechatronic Design and Control of a Powered Prosthesis Knee Prototype		Chung-Hsien Kuo, I Wayan Dani Pranata, Chun-Ju Wu, Yu-Cheng Kuo, Kuo-Ho Su	
#1138	Fusion of Current and Vibration Signatures for the Fault Diagnosis of Induction Machines		Meng-Kun Liu, Peng-Yi Weng	
#1121	Developing an energy consumption monitoring system with graphics programming software		Shuhao Liang	

■Session Name: Smart Machine Project Plan(I)

	Room：Wen Hsin Room Time：14:30 -15:50 Dec. 07, 2018		Session Chair： Prof. Yuan-Chen Yu	SP1-2
Paper ID	Paper Title		Author(s)	Page No
#1019	Temperature Modeling and Compensation for the Thermal Deformation in a Triaxial CNC Microscopic Machine Tool		Yuan-Chen Yu, Jun-Teng Zheng	
#1051	A Study on Improving the Productivity of Scrolls		Yi-Tsung Lin, Der-Min Tsay, Guan-Shyong Hwang, BorJeng Lin	
#1069	Synthesis and Analysis of a Cam Mechanism with a Long-stroke Constant velocity Follower Motion for Nut Tapping		Tsung-Chun Lin, Guan-Shong Hwang, Der-Min Tsay, Jao-Hwa Kuang, Jian-Lin Chen	
#1077	Research on improving Estimation of EDM Precision with Automatic Feature Selection		Yen-Chen Yueh, Haw-Ching Yang, Qing-Yi Xie	
#1079	Failure Detection Model for Highly Couple Signals of Progressive Punch Process		Tsung-Liang Wu, Yu-Chun Huang, Sirada Saengsaen	
#1082	Estimation of Cutting Tool Wear in CNC Machining Processing		Zhi-An Shen, Chun-Liang Lin	

■Session Name: Development of Wireless Stent Heating System

	Room：Han Kou Room Time：14:30 -15:50 Dec. 07, 2018		Session Chair： Prof. Yao-Joe Yang	SP1-3
Paper ID	Paper Title		Author(s)	Page No
#1087	Development of key technologies for robot arm based autonomous object operation and inspection		Chyi-Yeu Lin, Yao-Nien Tsai, Joel Vidal, Rudi Gunawan	
#1117	A Preliminary Study on Active Fault Detection Of the 3-Axis Robot Arm System		Meng-Kun Liu, Shou-Min Hong, Chen-Yang Lan	
#1147	Development of an inverter system for a gallium nitride power module		Shyr-Long Jeng, Ping-Cheng Han, Kai-Chen Syu, Ting-Wei Chien, Wei-Hua Chieng, Stone Cheng, Edward Yi Chang	
#1014	Characteristics of Shape Memory Ribbons for Actuation Applications		Nian-Hu Lu, Chih-Hsuan Chen	
#1043	The Reasearch and Development of Wireless Stent Heating and Temperature monitoring		Wen-Cheng Kuo, Jia-Cyuan Fan	
#1064	A Parylene-based Passive Wireless Pressure Sensor for Biomedical Applications		Shao-Hsiang Lo, Chao-Chi Yeh, Ming-Xin Xu, Zhe-Wei Lin, Hsuan-Yu Chen, Yao-Joe Yang	

■Session Name: Smart Spindle Incorporated with SkyMars

	Room：Chung Kang Room Time：16:00 -18:00 Dec. 07, 2018		Session Chair： Prof. Guan-Shyong Hwang	SP2-1
Paper ID	Paper Title		Author(s)	Page No
#1021	Microwave Wireless Power Transfer (MWPT) and Communication Module for Smart Spindle		Yo-Sheng Lin, Kai-siang Lan	
#1054	Displacement Sensor for Smart Spindle Incorporated with SkyMars		Jung Tang Huang, Guan Yu Chuang, Shih Jie Lin	
#1107	Chatter modelling with variable delay and semi-discretization method		Yung-Chen Yao, Yu-Hsuan Chen, Wen-Pin Shih, Chien-Hao Liu	
#1108	A Bluetooth Smart Tool Holder with Force Sensing Capability		Jia-Ming Jang, Yuh-Chung Hu, Pei Zen Chang	
#1126	A total solution to the thermo-feature identification of a machine tool spindle		Yuh-Chung Hu, Ping-Jung Chen, Pei-Zen Chang	

■Session Name: Biomechanics and Artificial Cornea

	Room：Wen Hsin Room Time：16:00 -18:00 Dec. 07, 2018		Session Chair： Prof. Jia-Yush Yen	SP2-2
Paper ID	Paper Title		Author(s)	Page No
#1109	Corneal stress measured by application of photoelasticity		Shan-Chien Cheng, Hsuan-Chi Sung, Po-Jen Shih, Jia-Yush Yen, Wen-Pen Shih	
#1111	Property Analysis of 3D Printed Biocompatible Artificial Cornea		Jun-Ji Lin, Ching-Jen Chen, Weng, Wen-Pin, Li-Chun Huang, Hsi-Yun Tai, Jia-Yush Yen, Chi-An Dai	
#1118	Effects of Shape of Artificial Cornea on Imaging and Wavefront Aberration		Chang-Tsung Hsieh, Jia-Hong Jian, Chi-An Dai, Jia-Han Li	
#1123	Design and Fabrication of Biocompatible Artificial Corneal Hydrogel by Additive Manufacturing		Yu-Ping Lee, Jia-kuan Qin, Leng-Rong Yu, Po-An Chou, Chi-An Dai	
#1146	3D Model Construction for Bio-Printing of Artificial Cornea from Cornea Topographe		Tien-Tung Chung, Cheng-Kai Yuan	

■Session Name: Smart Machine Project Plan(II)

	Room：Han Kou Room Time：16:00 -18:00 Dec. 07, 2018		Session Chair： Prof. Hau-Wei Lee	SP2-3
Paper ID	Paper Title		Author(s)	Page No
#1092	A Study on the Flexible Configuration and Generic Control for the TFT-LCD Module Production Line		Yuan-Chen Yu, Tzuo-Ren Wang	
#1104	Characteristics of Clamping Force Measurement and Its Effect on Qualities of Injection Molded Parts		Wei-Jie Su, Hsin-Shu Peng, Wei-Huang Choong, Sheng-Jye Hwang, Hsiao Yeh Chu	
#1113	Intelligent Decision of Filling-to-Packing Switchover Point for Injection Molding		Jian-Yu Chen, Shih-Chih Nian, Ming-Shyan Huang, Chun-Ying Liu, Kuo-Yang Tu	
#1115	A Novel Intelligent Mold Testing Method Developed for IC-Tray Fabrication		Shih-Chih Nian, Ming-Shyan Huang, Yung-Chin Fang	
#1127	Improvement of a Commercial 3D Probe for Nano-Scale Resolution and Wireless Data Transmission		Hau-Wei Lee, Chieh-Hung Liu, Chun-Kai Lan	
#1145	Intelligent Image Inspection Technology Applied for a Large Scraped Surface on Machine Tools		Ming-Fei Chen, Wen-Tse Hsiao, Guan-Ting Lin	

■Session Name: Development of Peripheral Intelligent Technology for country-made Lathe Machine Tool Spindles

	Room：Laurel Salon I Time：16:00 -18:00 Dec. 07, 2018		Session Chair： Prof. Her-Terng Yau	SP2-4
Paper ID	Paper Title		Author(s)	Page No
#1141	An integrated and monitoring system using Skymars and the peripheral lathe equipment.		Yu-Siung Guo, Her-Terng Yau	
#1142	Research and development of the image vision and automatic calibration system based on the UR robotic arm		Chi Shiuan Tsai, Ying-Che Kuo, Her-Terng Yau	
#1143	Prediction and monitoring of the heat and temperature rise on the spindle, based on the application of Comsol		Mao Chin Houng, Her-Terng Yau	
#1144	Optimization of cutting parameters of lathe based on the Taguchi methods for quality engineering		Li Wei Wu, Her-Terng Yau	

POST

Room：aisle of Evergreen Ballroom Time：14:30-15:50 Dec. 07, 2018			FP4-P
Paper ID	**Paper Title**	**Author(s)**	**Post No**
#1114	The biocompatibility of 3D printing artificial cornea	Chien-Fan Fong	No.26
#1115	A Novel Intelligent Mold Testing Method Developed for IC-Tray Fabrication	Shih-Chih Nian, Ming-Shyan Huang, Yung-Chin Fang	No.27
#1145	Intelligent Image Inspection Technology Applied for a Large Scraped Surface on Machine Tools	Ming-Fei Chen, Wen-Tse Hsiao, Guan-Ting Lin	No.28