

Session A1 (B2F Chung Kang Room): Computer

Chair: Prof. Rung-Shiang Cheng, Overseas Chinese University

Dec. 6 08:30-10:00	Paper No	Paper Title	Authors
	#1030	A Performance Optimization Scheme for Migrating Hive Data to Neo4j Database	Dan Liu, Ming Ming Li
	#1045	Driver Fatigue Expression Recognition Research Based on Convolutional Neural Network	Mengtao Huang, Yi Wang
	#1143	Extensive Instruction Code Profiling for Effective Function-Level Code Relocation	Hayeon Choi, Youngkyoung Koo, Sangsoo Park
	#1120	Beyond the Performance of Three-Tier Fat-Tree: Equality Topology with Low Diameter	Chi-Hsiu Liang, Chun-Ho Cheng, Hong-Lin Wu, Chao-Chin Li, Chun-Ming Chen, Po-Lin Huang, Sang-Lin Huang, Chi-Chuan Hwang
	#1129	Exploring Message Flow with VC++ Assemblies for Multithreading-Like Behavior	Gao-Wei Chang
	#1134	A Programming Model for Multithreading with Real-time Allocations of VC++ Controls	Gao-Wei Chang

Session A2 (B2F Chung Kang Room): Computer & Integrated Circuits

Chairs: Prof. Ruey-Maw Chen, Prof. Shao-Hui Shieh, National Chin-Yi University of Technology

Dec. 6 13:10-14:40	Paper No	Paper Title	Authors
	#1052	Share Price Trend Prediction Using CRNN with LSTM Structure	Shao En Gao, Bo Sheng Lin, Chuin-Mu Wang
	#1105	Automated GUI Testing for Android News Applications	Edward T.-H. Chu, Jun-Yan Lin
	#1106	MoBench: A Software Tool for Measuring Smoothness of Mobile Browsers	Edward T.-H. Chu, Chin-Hung Lin
	#1093	Effect of SOI LDMOS Epitaxial Layer Thickness on Breakdown Voltage	Cheng-Yen Wu, Hsin-Chiang You
	#1159	Influence of Parasitic Effects in Negative Differential Resistance Characteristics of Resonant Tunneling	Chih Chin Yang
	#1140	Injection-Locked Frequency Divider for EMI Reduction	Wen-Cheng Lai, Sheng-Lyang Jang, Jia Chi Weng, Miin-Horng Juang

Session A3 (B2F Chung Kang Room): Renewable Energy

Chair: Prof. Kuo-Ing Hwu, National Taipei University of Technology

Dec. 6 14:40-16:10	Paper No	Paper Title	Authors
	#1027	Implementation of High Power LED Driving Source with High Efficiency and High Power Factor for Indoor Illumination	Ming-Tang Chen, Sheng-Hsiung Lin, Dong-Jhen Lin
	#1051	Formulation of Low Voltage Ride-Through Curve Considering Offshore Wind Farms Integrated into an Islanding Power System-A Case Study in Taiwan	Shiue-Der Lu, Meng-Hui Wang, Chung-Ying Tai, Ming-Chang Tsou, Feng-Chang Gu
	#1080	Control Strategy of PV/Diesel/Battery Hybrid System for Island-based Microgrid	Chih-Ta Tsai, Ting-Wei Shen, Yi-Ping Chen, Ping-Hsuan Hsu
	#1130	High-Voltage Driver with Functions of ZVS and Over-Current Protection for Air Cleaner Applications	Jye-Chau Su, Cheng-Tao Tsai, Guan-Ting Hou
	#1039	Enhancement of System Stability Based on PWFEM	Kuo-Ing Hwu, C. W. Wang, Y. T. Yau
	#1037	A New Longitudinal Protection of Hybrid Bipolar DC Transmission Lines Using Transient Current	Shu-Ping Gao , Hangjian Zhu, Dan Niu, Baohui Zhang, Guobing Song

Session A4 (B2F Chung Kang Room): Multimedia & Intelligent Computing

Chairs: Prof. Jzau-Sheng Lin, Prof. Shih-Yen Huang, National Chin-Yi University of Technology

Dec. 6 16:30-18:00	Paper No	Paper Title	Authors
	#1021	The Effect of Distance Function for NN Classifier with Local Binary Pattern Descriptors	Yu-Pao Hsu, Keng-Chang Tu, Chih-Yu Hsiao, Shyr-Shen Yu
	#1034	A Segmentation and Mixing Strategy for Retinex Based Image Enhancement	Chun-Yi Sung, Shih-Yu Liu, Yan-Min Chen, Chin-Hsing Chen
	#1035	Supapixel Smoothing for Disparity Refinement in Stereo Matching	Chun-Yi Sung, Yu-Wen Tseng, Chin-Hsing Chen
	#1036	Prosthetic Arm Control by Human Brain	Orgil Chinbat, Jzau-Sheng Lin
	#1113	Efficient Recurrent Detection for Visual Tracking	Hung-Wei Hsu, Jian-Jiun Ding
	#1088	Goose Farm Egg Production Analysis System	Min-Yen Tsai, Shih-Yen Huang, Jzau-Sheng Lin

Session B1 (B2F Wen Hsin Room): Smart Microgrid and Smart Grid Communications

Chair: Prof. Peng Liu, North China Electric Power University

Dec. 6 08:30-10:00	Paper No	Paper Title	Authors
	#1162	PAPR Reduction Method Based on Pilot-Assisted FBMC in Broadband Power Line Communication	Jianqiang Wang, Song Liu
	#1166	Overview of Free Space Optical Communication Technology	Mitsuji Matsumoto
	#1169	Autonomous Micro Grid combining Sustainable Energy and Gas Co-generation with high Efficiency in Yangzhong	Jiang Liu
	#1168	Implementation of Digital Inertia (Virtual Synchronous Generator) for Large Scale Installation of Sustainable Energy in Local Areas	Kaoru Koyamagi
	#1160	Energy Management System of a Smart Railway Station Considering Stochastic Behaviour of ESS and PV Generation	Qingbo Cheng
	#1163	Proposed Model Employing ARIMA and RELM in Urban Energy Consumption Prediction	Yaze Ma, Peng Liu, Yaming Cui, Song Liu

Session B2 (B2F Wen Hsin Room): Digital Signal Processing

Chairs: Prof. Shiue-Der Lu, Prof. Feng-Chang Gu, National Chin-Yi University of Technology

Dec. 6 13:10-14:40	Paper No	Paper Title	Authors
	#1010	Closed-Form Designs of Frequency-Selective Graph Filters Using Polynomial Approximations	Chien-Cheng Tseng, Su-Ling Lee
	#1011	Designs of Bipartite Graph Filter Bank Using Graph Fourier Transform and Digital Filter Bank	Chien-Cheng Tseng, Su-Ling Lee
	#1013	Automated Screening of Multiple Cardiac Arrhythmias Using Perceptual Color Representation-based Intelligent Classifier	Chia-Hung Lin, Chung-Dann Kan, Pi-Yun Chen, Hsiang-Yueh Lai, Wei-Ling Chen, Ying-Che Kuo
	#1031	Rotor Fault Identification of Induction Motor Based on Discrete Fractional Fourier Transform	Feng-Chang Gu, Jian-Yong Bian, Chun-Liang Hsu, Hung-Cheng Chen, Shiue-Der Lu
	#1086	Research on Key Regions Subtraction Monitoring Technique Based on Fringe Projection Contour	Qian Zhao, Fangrui Guo
	#1067	Sensorless Air-Gap Flux Vector Control Induction Motor Drive Based on Particle Swarm Optimization Algorithm Flux Observer	Yung-Chang Luo, Yu-Hsiang Chen, Wen-Cheng Pu

Session B3 (B2F Wen Hsin Room): Power Quality Analysis and Remedial Strategy

Chairs: Prof. Cheng-I Chen, National Central University; Prof. Yeong-Chin Chen, Asia University

Dec. 6 14:40-16:10	Paper No	Paper Title	Authors
	#1012	A Smart Meter Design Implemented with IOT Technology	Chang-Pei Yi, Hsin-Hong Chen, Yeong-Chin Chen
	#1064	Intelligent Controlled Distributed Generator System for P-Q Control and Islanding Detection	Kuang-Hsiung Tan, Chien-Wu Lan, Yung-Ruei Chang, Yih-Der Lee, Li-Yuan Liu
	#1071	P2P Image Transmission Realize with a Resource Limited Microcontroller	Hao-Cheng Yang, Yeong-Chin Chen
	#1095	ADALINE-Based Shunt Active Power Filter for Power Quality Modification of Power System	Cheng-I Chen, Chen-Lin Hsu, Chuang Hsien Chen
	#1096	Mitigation of Voltage Fluctuation Problem for a Steel Plant Feeder by Using PV-STATCOM	Yu-Jen Liu, Yi-Fon Pai, Yuan-Hsin Cheng, Yung-Ruei Chang, Yih-Der Lee
	#1101	An Impedance Circle Algorithm for Faulty Line Selection in Distribution Networks	Li Lei, Mei Wang, Hejing Ji, Pan Hongguang

Session B4 (B2F Wen Hsin Room): Cloud Systems, Control Circuit & Service Innovations

Chair: Prof. Cheng-Yu Peng, National Chin-Yi University of Technology

Dec. 6 16:30-18:30	Paper No	Paper Title	Authors
	#1148	On Identification of Coal and Rock Images	Zhang Shi Ru, Miyang Zhang
	#1104	Wheelchair Control Method Based on Combination of SSVEP and Intention	Niu Qin, Mei Wang
	#1110	3D Reconstruction of Underground Tunnel Using Kinect Camera	Ning-Bo Jing, Xian-Min Ma, Wei Guo
	#1122	The Optimization Algorithm for the Auxiliary Anode System of Grounding Grid Base on Simulated Annealing	Chunfeng Song, Yuanbin Hou, Jingyi Du
	#1126	A Constant Current Output System for ICPT without Complex Control	Mengran You, Shulin Liu, Shitong Tao
	#1158	Study on Trace Detection Method of Ammonia Escape Based on TDLAS	Weifeng Wang, Zheyuan Zhang
	#1029	Statistical Analysis of Leader's Impression Management and Employees' Emotional Attachment	Qinglan Luo, Jingyi Han
	#1033	Research and Development of NC Intelligent Online Teaching System	Mei Tian

Session C1 (B2F Han Kou Room): Telecommunication, Signal Processing & Computing

Chair: Prof. Guo-Shing Huang, National Chin-Yi University of Technology

Dec. 6 08:30-10:00	Paper No	Paper Title	Authors
	#1125	Smart Plug Control System Development with MySQL Database and MQTT Protocol	Narakorn Songkittirote, Worajit Setthapun, Hathaithip Sintuya
	#1040	Analysis and Comparison of Permutation Entropy, Approximate Entropy and Sample Entropy	Hong Zhang, Sha-Sha He
	#1115	Pulse Signal Analysis for Pneumoconiosis Detection with SVM	Shiru Zhang, Yixuan Wu, Mou Wang
	#1094	Analysis of the Accuracy of Resting Heart Rate with the Standing Electronic Weight Scale by Ballistocardiogram	Chih-Ching Tsai, Hsueh-Kuan Lu, Lee-Ping Chu, Chih-Chung Ting, Kuen-Chang Hsieh, Chung-Liang Lai
	#1112	Highly Robust Dolphin Detection Algorithm in Occluded Cases	Hung-Wei Hsu, Yih-Cherng Lee, Jian-Jiun Ding, Ronald Y. Chang
	#1056	WGAN based Edge Preserved De-Blurring Using Perceptual Style Similarity	Minsoo Hong, Yoonsik Choe

Session C2 (B2F Han Kou Room): Soft Computing and its Applications

Chair: Prof. Chen-Kun Tsung, National Chin-Yi University of Technology

Dec. 6 13:10-14:40	Paper No	Paper Title	Authors
	#1057	An Online Filter Clog Rate Signal Detection Mechanism in an Air Conditioning System	Hsi-Yuan Chang, Chi-Yuan Lin, Chin-Hsing Chen, Ching-Chin Chan
	#1058	An Agricultural Data Gathering Platform Based on Internet of Things and Big Data	Hsi-Yuan Chang, Jyun-Jie Wang, Chi-Yuan Lin, Chin-Hsing Chen
	#1074	Using a Type-2 Neural Fuzzy Controller for Navigation Control of Evolutionary Robots	Cheng-Jian Lin, Hsueh-Yi Lin, Cheng-Yi Yu
	#1075	System Identification Using Self-Adaptive Group Particle Swarm Optimization	Chun-Hui Lin, Chin Ling Lee, Cheng-Jian Lin
	#1079	Key Character Detection Based on Deep Neural Network for Document Images	Jia-Cheng Tu, Guo-Shiang Lin, Chao-Chuan Chang, Kuan-Cheng Huang, Ming-Hsien Tasi, Mutia Fadhillah
	#1089	Digital Image Processing Based on Ordering System	Shih-Chun Chen, Hsiu-Mi Yu, Sheng-Chih Yang

Session C3 (B2F Han Kou Room): Innovative Applications & Data Analysis for Internet of Thing

Chairs: Dr. Hendry Hendry, Prof. Rung-Ching Chen, Chaoyang University of Technology

Dec. 6 14:40-16:10	Paper No	Paper Title	Authors
	#1070	A Study of NoSQL Database for Enterprises	Jeang-Kuo Chen, Wei-Zhe Lee
	#1092	Improvement on the Interpersonal Relationship of the Elderly with Mild Cognitive Impairment by Using Speaker Recognition	Tan-Hsu Tan, Fu-Rong Jean, Chia-Jung Lin, Tsung-Yu Liu, Yung-Fa Huang, Shing-Horng Liu
	#1127	Indoor Positioning with Reference Nodes Selection in Wireless Networks	Yung-Fa Huang, Wen Huang, You-Ting Jheng, Jong-Shin Chen, Chuan-Bi Lin, Yao-Jen Cheng, Ching-Chuang Wei
	#1128	Using Random Forest Algorithm for Breast Cancer Diagnosis	Bin Dai, Rung-Ching Chen, Shun-Zhi Zhu, Wei-Wei Zhang
	#1149	K-Means Clustering with Feature Selection for Stream Data	Xiao-Dong Wang, Rung-Ching Chen, Fei Yan, Hendry Hendry
	#1069	The Selection and Reduction of Fuzzy Rules Based on the Least Angle Regression Algorithm	Huiqin Jiang, Rung-Ching Chen

Session C4 (B2F Han Kou Room): Renewable energy & Smart Microgrid

Chair: Dr. Hathaithip Sintuya, Chiang Mai Rajabhat University

Dec. 6 16:30-18:00	Paper No	Paper Title	Authors
	#1102	Operating Power Stage Management for Efficient Energy Harvesting System	Youngkyoung Koo, Sangsoo Park
	#1141	Electromagnetic Transient Equivalent Modelling Method for Offshore Wind Farm	Li-Nan Qu, Ning Chen, Kuei-Hsiang Chao, Guang-Lei Li, Ling-Ling Li
	#1142	Short-term Wind Power Prediction Based on Improved Chicken Algorithm and Support Vector Machine	Hao-Ran Xue, Ling-Ling Li, Kuei-Hsiang Chao, Chao Fu
	#1164	Electric Vehicle Charging Network Development Characteristics and Policy Suggestions	Jing Zhang, Hui Yan, Ning Ding, Jian Zhang, Taoyong Li, Shu Su
	#1165	Research On Real-time Charging Price Of EV	Xudong Wang, Xiufan Ma, Jian Zhang, Sijia Zhu
	#1167	Autonomous Clustered Micro Grid by Effective Use of Sustainable Energy for Asian Countries and Islands	Ryuichi Yokoyama

Session D1 (B2F Laurel Salon I): Disaster Risk Management Technologies

Chairs: Prof. Lany L. Maceda, Prof. Jocelyn E. Serrano, Bicol University

Dec. 6 08:30-10:00	Paper No	Paper Title	Authors
	#1111	Determining Resource Capacity in Disaster Relief through a Model-driven Decision Support System	Lea D. Austero, Michael Angelo D. Brogada, Rommel Evan J. Paje
	#1116	Categorization of Earthquake-Related Tweets Using Machine Learning Approaches	Lany Maceda, Jennifer Llovido, Arlene Satuito
	#1117	SMS Classification Method for Disaster Response Using Naïve Bayes Algorithm	Aris Ordonez, Rommel Evan Paje, Rodel Naz
	#1118	Determining Disaster Risk Management Priorities Through a Neural Network-Based Text Classifier	Mary Joy Canon, Arlene Satuito, Christian Sy
	#1119	Discovering Themes from Online News Articles on the 2018 Mt. Mayon Eruption	Mary Joy Canon, Christian Sy, Lea Austero
	#1121	System Design for Disaster Risk Damage Assessment	Lany Maceda, Jennifer Llovido, Jocelyn Serrano

Session D2 (B2F Laurel Salon I): Healthcare System and Intelligent Multimedia Data Analysis

Chair: Prof. Chia-Yen Lee, National United University

Dec. 6 13:10-14:40	Paper No	Paper Title	Authors
	#1090	Study of In Vitro Diagnostic Preconcentration Technique via Surface Acoustic Wave Modified With the 54 MHz Communication Chip	Ming-Hung Chien, S.H. Chiang, Ching-Cheng Chuang, Jung-Chih Chen
	#1061	Deep Learning-Based Weather Image Recognition	Li-Wei Kang, Ke-Lin Chou, Ru-Hong Fu
	#1062	Learning to Detect Fake Face Images in the Wild	Chih-Chung Hsu, Chia-Yen Lee, Yi-Xiu Zhuang
	#1103	Mutual Image Compression Based on Iteration-Free Fractal Mating Coding	Chih-Chung Hsu
	#1108	A Preliminary Study of Virtual Travel Software Development for Seniors	Chia-Yen Lee, Tien-Fu Lai, Hui-Min Zhang, Nien-Shiang Chou
	#1156	A Multi-DoF Ultrasonic Receiving Device for Indoor Positioning of AGV System	Yan Zhang, Hsiung-Cheng Lin, Jiang Zhao, Zewen Ma, Zichao Ye, Hexu Sun

Session D3 (B2F Laurel Salon I): Intelligence Algorithm Applications & Consumer Electronics

Chair: Prof. Shun-Yuan Wang, National Taipei University of Technology

Dec. 6 14:40-16:10	Paper No	Paper Title	Authors
	#1157	Intelligent Gait Recognition System Based on the Bezier Curve Fitting	Ze-Feng Luo, Hua Li, Hsiung-Cheng Lin, Chao Fu, Ling-ling Li
	#1024	Design of the Adaptive Sliding Recurrent Cerebellar Model Articulation Controller for Vector Control Systems of Induction Motor	Shun-Yuan Wang, Chuan-Min Lin, Jen-Hsiang Chou, Foun-Yuan Liu
	#1025	Emotion Inference of Game Users with Heart Rate Wristbands and Artificial Neural Networks	Chun-Chieh Hsiao, Wen-Dian Zheng, Ren-Guey Lee, Robert Lin
	#1063	Lidar-Based Precision Vehicle localization with Movable Region Constraints	Chih-Ming Hsu, Chung-Wei Shiu
	#1100	Environment Monitoring System Based on Architecture of IoT by Wireless Sensor Network	Wen-Tsai Sung, Chun-Wei Sung, Chung-Yen Hsiao
	#1109	Implementing a Mobile Web Server with the Features of Cross-platform and High-efficiency Based on WOT with an Innovative Approach	Yun-Jung Hsu, Sung-Jung Hsiao, Shun-Yuan Wang

Session D4 (B2F Laurel Salon I): Cloud Brain Systems and Intelligent Control Circuit

Chair: Prof. Yung-Fa Huang, Chaoyang University of Technology

Dec. 6 16:30-18:00	Paper No	Paper Title	Authors
	#1028	Aerial Handwriting Recognition Based on SVM	Hongyang Zan, Mei Wang, Min Sun
	#1043	Dust Explosion Characteristic Mechanisms Analysis Based on Information Identification	Zheng Wang, Mei Wang
	#1077	Development of Parkour Game System Using EEG Control	Pai Wang, Ying Yang, Jiaqing Li
	#1084	Image Reconstruction and Simulation of Fluid Flow Patterns in Pipeline Based on Electrical Impedance Tomography Algorithm	Xuebin Qin, Chenchen Ji, Zhuo Wang, Pai Wang
	#1085	A Semi-Supervised Novel Recommendation Algorithm	Yan Fu, Ze Han, Ou Ye, Guimin Li
	#1087	Research on SVM Multi-Classification Based on Particle Swarm Algorithm	Li Zhu, Yan Fu, Gui-ming Li

Session E1 (B2F Laurel Salon II): Control Systems & Green Energy and Electric Vehicles

Chair: Prof. Sung-Jung Hsiao, National Taipei University of Technology

Dec. 6 08:30-10:00	Paper No	Paper Title	Authors
	#1081	Achieving Fast Boot Time and Efficient I/O Multiplexing for Image grabber in Embedded Linux System	Shiuh-Ku Weng, Yen-Ju Lin
	#1132	Intelligent Classification and Environment Monitoring System Combined with LoRa Wireless Transmission Technology	Chun-Yen Chung, I-Ting Peng, Yeh Jong-Chao
	#1009	Short-Primary Linear Induction Motor Modeling with End Effects for Electric Transportation Systems	Hyeun-Tae Cho, Yu-Chen Liu, Katherine A. Kim
	#1068	Application of Particle Swarm Optimization to Design Control Strategy Parameters of Parallel Hybrid Electric Vehicle with Fuel Economy and Low Emission	Yu-Huei Cheng, Ching-Ming Lai, Jiashen Teh
	#1154	Realization of Fluid Flow Control System for Vertical Recycling Aquatic System (VRAS)	Seunghun Gong, Amarnathvarma Angani, Kyoo Jae Shin
	#1155	Realization of IoT Based Fish Farm Control Using Mobile App	Yuhwan Kim, Namgu Lee, Byeongjun Kim, Kyoojae Shin

Session E2 (B2F Laurel Salon II): Systems and Control

Chair:Dr. Jen-Hsiang Chou, National Taipei University of Technology

Dec. 6 13:10-14:40	Paper No	Paper Title	Authors
	#1053	Design of the Adaptive Sliding Self-Organizing Cerebellar Model Articulation Controller for Switched Reluctance Motors	Shun-Yuan Wang, Chuan-Min Lin, Jen-Hsiang Chou, Foun-Yuan Liu
	#1059	Integrating Blockchain Technology for Data Collection and Analysis in Wireless Sensor Networks with an Innovative Implementation	Shun-Yuan Wang, Yun-Jung Hsu, Sung-Jung Hsiao
	#1133	Based on RFID Positioning System with Wireless Medical Care Environment Simulation	Chun-Yen Chung, I-Ting Peng
	#1144	Control System Laboratory with Arduino	Jen-Hsing Li
	#1098	Indoor Thermal Comfort Environment Monitoring System Based on Architecture of IoT	Wen-Tsai Sung, Jing-An Shih
	#1099	Smart Warehouse Management Based on IoT Architecture	Wen-Tsai Sung, Cheng-Yen Lu

Session E3 (B2F Laurel Salon II): Control Systems, Green Energy & Electric Vehicles

Chair: Prof. Ching-Ming Lai, National Taipei University of Technology

Dec. 6 14:40-16:10	Paper No	Paper Title	Authors
	#1014	Digital Power Control with Single-Comparator ADC	Y. T. Yau, Kuo-Ing Hwu, C.W. Wang
	#1073	Neural Network Learning to Identify Airport Runway Taxiway Numbers	Zhi-Hao Chen, Jyh-Ching Juang
	#1083	Design of Intelligent Electric Scooter with a Cloud Monitoring System	Cheng-Han Lin, Shu-Yuan Ye
	#1078	A Bidirectional Converter with Hybrid Energy Sources for Light Electric Vehicle (LEV)	Ching-Ming Lai, Yuan-Chih Lin, Yu-Huei Cheng, Jiashen The
	#1097	An Implementation of Voice Recognition and Control System for Electric Equipment	Wen-Chung Tsai, Yu-Ruei Lian, Shih-Hung Hsu, Qi-Xun Zheng, Yu-Chen Su, Jia-Xian Chen
	#1082	Impact of Demand Side Management and Dynamic Thermal Rating System on the Reliability of Power Systems	Jiashen Teh, Yu-Huei Cheng, Ching-Ming Lai

Session E4 (B2F Laurel Salon II): Service Innovations Based on Big Data

Chair: Prof. Chih-Chung Hsu, National Pingtung University of Science and Technology

Dec. 6 16:30-18:00	Paper No	Paper Title	Authors
	#1048	Design and Implementation of a UPS System Based on DSP	Liyan Zhao
	#1046	Design of Analog Modulation System Based on LabVIEW Language	Heng Fan, Chuanjun Wang
	#1047	Design of Motor Speed Measurement System Based on Single Chip Microcomputer	Shu Qing Ma, Li Juan Zhang
	#1049	The Analysis of Agricultural Products Consumers' Purchase Behavior under the Background of Big Data	Xu Chen, Hua Fang
	#1066	Research on the Application of Big Data in Community Smart Service	Li Dong
	#1137	Research on the Protection of Personal Privacy of Tourism Consumers in the Era of Big Data	Chunyan Wang

Session TP1-1 (B2F Chung Kang Room): Artificial Intelligence

Chair : Prof. Feng-Chang Gu

	Paper NO	Paper Title	Authors
Dce.7 09:00-10:20	#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 TP1-2 (B2F Wen Hsin Room): Automation in Biotechnology,
Micro/Precision/Ultraprecision Manufacturing Systems**

Chair : Prof. Chih-Chen Chen

	Paper NO	Paper Title	Authors
Dce.7 09:00-10:20	#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 TP1-3 (B2F Han Kou Room): Internet of Things

Chair : Prof. Chung-Wen Hung

	Paper NO	Paper Title	Authors
Dec.7 09:00-10:20	#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 TP1-4 (B2F Laurel Salon I): Machinery and Mechanical Systems for Automation, Industry 4.0

Chair : Prof. Po-Wen Hsueh

	Paper NO	Paper Title	Authors
Dce.7 09:00-10:20	#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 TP1-5 (B2F Laurel Salon II): CAD/CAM/CIM, Intelligent Manufacturing Systems and Industrial Information Technology

Chair : Prof. Yen-Liang Yeh

	Paper NO	Paper Title	Authors
Dce.7 09:00 -10:20	#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 Andreat

Session TP2-1 (B2F Chung Kang Room): Devices and Equipment for Automation

Chair : Prof. Chao-Chung Peng

	Paper NO	Paper Title	Authors
Dce.7 10:30-12:00	#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 TP2-2 (B2F Wen Hsin Room): Automatic Measurement and Control Technology(I)

Chair : Prof. Chih-Keng Chen

	Paper NO	Paper Title	Authors
Dce.7 10:30-12:00	#1016	Roller Mold Fabrication Based on Digital Light Processing and Optical 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 TP2-3 (B2F Han Kou Room): Automatic Measurement and Control Technology(II)

Chair : Prof. Wen-Tsai Sung

	Paper NO	Paper Title	Authors
Dce.7 10:30-12:00	#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
	#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 TP2-4 (B2F Laurel Salon I): Signal and Image Processing, Robotics

Chair : Prof. Shiue-Der Lu

	Paper NO	Paper Title	Authors
Dec.7 10:30-12:00	#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 TP2-5 (B2F Laurel Salon II): Intelligent Manufacturing Systems

Session Chair : Prof. Shiuh-Jer Huang

	Paper NO	Paper Title	Authors
Dce.7 10:30-12:00	#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,
	#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, Hsiao-Yeh 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 TP3-1 (B2F Chung Kang Room): MEMS, Nanotechnology and Sensor Networks,
Micro/Precision/Ultraprecision Manufacturing Systems**

Chair : Prof. Yi-Kuang Yen

	Paper NO	Paper Title	Authors
Dce.7 13:00-14:30	#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 TP3-2 (B2F Wen Hsin Room): Mechatronics and Opto-Mechatronics, Renewable Energy

Chair : Dr. Worajit Setthapun

	Paper NO	Paper Title	Authors
Dce.7 13:00-14:30	#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. Lin
	#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 TP3-3 (B2F Han Kou Room): Automation Application Technology for High-Tech Industry, Service Automation and Innovation, System Integration Technology

Chair : Prof. Ming-Jong Tsai

	Paper NO	Paper Title	Authors
Dce.7 13:00-14:30	#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 TP3-4 (B2F Laurel Salon I): Automatic Measurement and Control Technology,
System Integration Technology**

Chair : Prof. Hsiung-Cheng Lin

	Paper NO	Paper Title	Authors
Dce.7 13:00-14:30	#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	Kun-Tien Li, 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 TP3-5 (B2F Laurel Salon II): Robotics

Chair : Prof. Chih-Jer Lin

	Paper NO	Paper Title	Authors
Dce.7 13:00-14:30	#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 SP1-1 (B2F Chung Kang Room): Robotics and cyber-physical systems

Chair : Prof. Chung-Hsien Kuo

	Paper NO	Paper Title	Authors
Dce.7 14:30-15:50	#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 SP1-2 (B2F Wen Hsin Room): Smart Machine Project Plan(I)

Chair : Prof. Yuan-Chen Yu

	Paper NO	Paper Title	Authors
Dce.7 14:30-15:50	#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 SP1-3 (B2F Han Kou Room): Development of Wireless Stent Heating System

Chair : Prof. Yao-Joe Yang

	Paper NO	Paper Title	Authors
Dce.7 14:30-15:50	#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 SP2-1 (B2F Chung Kang Room): Smart Spindle Incorporated with SkyMars

Chair : Prof. Guan-Shyong Hwang

	Paper NO	Paper Title	Authors
Dce.7 16:00-18:00	#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 SP2-2 (B2F Wen Hsin Room): Biomechanics and Artificial Cornea

Chair : Prof. Jia-Yush Yen

	Paper NO	Paper Title	Authors
Dce.7 16:00-18:00	#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 SP2-3 (B2F Han Kou Room): Smart Machine Project Plan(II)

Chair : Prof. Hau-Wei Lee

	Paper NO	Paper Title	Authors
Dce.7 16:00-18:00	#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 SP2-4 (B2F Laurel Salon I): Development of Peripheral Intelligent Technology for country-made Lathe Machine Tool Spindles

Chair : Prof. Her-Terng Yau

	Paper NO	Paper Title	Authors
Dce.7 16:00-18:00	#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 Houn, Her-Terng Yau
	#1144	Optimization of cutting parameters of lathe based on the Taguchi methods for quality engineering	Li Wei Wu, Her-Terng Yau