



Poster I

Date	Time	No.	7F - Edatorium Foyer
16 <sup>th</sup> Nov. (Sat.)	09:00   09:50	1	<b>A9003</b> <b>Analysis of Tracking Tests on Polymeric Insulating Materials</b> <i>Kai-Hsiang Yen, Carl Wang</i>
		2	<b>A9004</b> <b>Hardware-in-the-Loop Simulations of Hole/Crack Identification in a Composite Plate</b> <i>Yen-Chu Liang, Yun-Ping Sun</i>
		3	<b>SH9002</b> <b>Mechanical and Electrochemical Properties of Zr Based Bulk Metallic Glasses with Alloy Addition</b> <i>Tao-Hsing Chen, Jian-Yu Wang</i>
		4	<b>B9001</b> <b>Structural Design and Gait research of a New Bionic Quadruped Robot</b> <i>Jiu-Peng Chen, Hong-Jun San, Xing Wu, Ming-Fang Chen, Xue-Jun Wang, Hai-Bo Wu</i>
		5	<b>B9003</b> <b>Design of Vector Field Path-Following for A Small Unmanned Ground Vehicle with Kalman Filter Estimation</b> <i>Yun-Ping Sun, Yen-Chu Liang</i>
		6	<b>C9004</b> <b>Resistive Bridge Sensor Readout IC with Fully Differential Current Feedback Instrumentation Amplifier</b> <i>Hyungseup Kim, Yongsu Kwon, Jaesung Kim, Kwonsang Han, Donggeun You, Hyunwoo Heo, Dong-il "Dan" Cho, Hyoungho Ko</i>
		7	<b>C9005</b> <b>Low Noise Chopper Stabilized Multi-Path Operational Amplifier with Nested Miller Compensation for High Precision Sensors</b> <i>Jaesung Kim, Hyungseup Kim, Kwonsang Han, Donggeun You, Hyunwoo Heo, Yongsu Kwon, Dong-il "Dan" Cho, Hyoungho Ko</i>
		8	<b>C9006</b> <b>Low Noise Multimodal Reconfigurable Sensor Readout Circuit for Voltage/Current/Resistive/Capacitive Microsensors</b> <i>Donggeun You, Hyungseup Kim, Jaesung Kim, Kwonsang Han, Hyunwoo Heo, Yongsu Kwon Gyungtae Kim, Woo Suk Sul, Jong Won Lee, Boung Ju Lee, Hyoungho Ko</i>
		9	<b>C9007</b> <b>A 4-Channel Low-Noise Readout IC for Sap Flow Measurement in 0.18 <math>\mu\text{m}</math> CMOS Technology</b> <i>Kwonsang Han, Hyungseup Kim, Jaesung Kim, Donggeun You, Hyunwoo Heo, Yongsu Kwon, Junghoon Lee, Hyoungho Ko</i>
		10	<b>C9008</b> <b>Secure IC with Countermeasure to Unpowered Physical Attack Using On-Chip Photodiode and Charge Pump</b> <i>Hyunwoo Heo, Hyungseup Kim, Jaesung Kim, Kwonsang Han, Donggeun Yoo, Yongsu Kwon, Dong Kyue Kim, Byong-Deok Choi, Ji-Hoon Kim, Hyoungho Ko</i>
		11	<b>C9009</b> <b>Implantable ECG Acquisition Analog Front-End for Leadless Pacemaker</b> <i>Yongsu Kwon, Hyungseup Kim, Jaesung Kim, Kwonsang Han, Donggeun You, Hyunwoo Heo, Hyoungho Ko</i>

Poster I (Continued)

Date	Time	No.	7F - Edatorium Foyer
16 <sup>th</sup> Nov. (Sat.)	09:00   09:50	12	<b>C9014</b> <b>Design of Home Precision Power Factor Adjuster</b> <i>Van-Tsai Liu, Sung-Kai Wang, Hong-Yi Lu</i>
		13	<b>C9015</b> <b>A Stretchable, Patch-Type, Wireless 6-Axis IMU for Real-Time Gait and Posture Analysis</b> <i>Jae-Keun Lee, Kangil Kim, Seung-Ju Han, Do-Hyung Kim, Sangmin Lee</i>
		14	<b>C9016</b> <b>A Novel Top-Down Fabrication Process for Vertically-Aligned Silicon Nanowire Array</b> <i>Kangil Kim, Jae-Keun Lee, Seung-Ju Han, Do-Hyung Kim, Sangmin Lee</i>
		15	<b>E9003</b> <b>Virtual Keyboard Recognition with E-Textile Sensors</b> <i>Eun-Ji Ahn, Sang-Ho Han, Mun-Ho Ryu, Je-Nam Kim</i>
		16	<b>E9004</b> <b>The Environment Feedback of Bio-Mimic Collagen II-g-Hyaluronic Acid Copolymers on Chondrocyte</b> <i>Kuan-Wei Lee, Lain-Chyr Hwang, Shwu-Jen Chang</i>
		17	<b>F9011</b> <b>A Machine Learning Based Indoor Positioning System Design Using BLE</b> <i>Yu-Bin Fang, Yu-Ching Lin, Wei-Chih Su, Chi-Feng Lin</i>
		18	<b>F9013</b> <b>Deep Learning - Based Parking Occupancy Method for Smart Streetlight Control System</b> <i>Lun-Chi Chen, Wen-Yi Peng, Ruey-Kai Sheu, Jyh-Horng Wu, Chien-Hao Tseng</i>
		19	<b>SY9020</b> <b>Construction of Forest Spatial Information for Efficient Forest Investigation</b> <i>Jong-Sin Lee, Dooyong Cho</i>
		20	<b>G9005</b> <b>Determination of Optimal Evacuation Routes in Underground Space Considering Flood Risk</b> <i>Hee-Soo Chung, Eun-Taek Shin, Tae-Soo Eum, Chang-Geun Song</i>
		21	<b>H9004</b> <b>An Intelligent Optimization System for the FMM Photolithography Process</b> <i>Wen-Chin Chen, Kuan-Ming Lin, Tai-Hao Chen, Yun-Ru Chang, An-Xuan Ngo</i>
22	<b>I9001</b> <b>Adaptive Levitation Control of Maglev Vehicles Subject to Uncertain Time-Delay and Disturbances: Design and Hardware Experimentation</b> <i>You-Gang Sun, Jun-Qi Xu, Guo-Bin Lin, Fei Ni</i>		



Poster II

Date	Time	No.	7F - Edatorium Foyer
16 <sup>th</sup> Nov. (Sat.)	10:00   10:50	1	<b>I9002</b> <b>Generalized Disturbance Observer-Based Robust Control for Suspension Active Magnetic Bearing System</b> <i>Van-Nam Giap, Shyh-Chour Huang</i>
		2	<b>J9030</b> <b>The Kinematic Design of Mold Clamping Mechanism with Minimal Maximum Acceleration</b> <i>Long-Chang Hsieh, Tzu-Hsia Chen</i>
		3	<b>J9003</b> <b>Fault Diagnose of Bearing Signals Based on Dynamic Mode Decomposition, Multiscale Permutation Entropy and Recursive Analysis</b> <i>Zhang Dang, Qin Fan, Yong Lv, Yourong Li</i>
		4	<b>J9011</b> <b>Application of Micro Force Sensor in Flow Meters</b> <i>Sheau-Shi Pan, Ta-Chang Yu, Sheng-Jui Chen</i>
		5	<b>SQ9001</b> <b>Colorimetric Characterization of Color Image Sensors Based on U-Net Modeling</b> <i>Po-Tong Wang</i>
		6	<b>STC9005</b> <b>The Classification Algorithm Evaluation for Human Body Activity Recognition by Machine Learning-Based Method</b> <i>Chih-Ta Yen, Jia-De Lin</i>
		7	<b>D9001</b> <b>The Multimedia Experiment of Random AWG/Optical Switch-based Wavelength Hopping over Secure Wireless WDM Network</b> <i>Yao-Tang Chang</i>
		8	<b>D9002</b> <b>Phase Map Improvement using Multi-Exposure Images</b> <i>Bing-Lin Ho, Jing-Feng Weng, Po-Er Hsu, Hao-Yuan Lin, Ju-Yi Lee</i>
		9	<b>J9024</b> <b>Design of Non-Contact Measuring Device for Rail Irregularity</b> <i>Jing-Feng Weng, Jr-Rung Chen, Wei-Chen Chang, Chin-Lung Tsai, Po-Er Hsu, Wen-Jen Chen</i>
		10	<b>WB9002</b> <b>Co-Activation and Activity of Muscles of Lower-Limb Depending on Mechanical Stimulation during Stair Climbing</b> <i>Dongwook Kim, Kiyoung Kwak, Huigyun Kim, Seunghun Ko</i>
		11	<b>SE9001</b> <b>Adaptive-Uniform-Experimental-Design-Based Fractional-Order Particle Swarm Optimizer with Non-Linear Time-Varying Evolution</b> <i>Po-Yuan Yang, Fu-I Chou, Jinn-Tsong Tsai, Jyh-Horng Chou</i>

Poster II (Continued)

Date	Time	No.	7F - Edatorium Foyer
16 <sup>th</sup> Nov. (Sat.)	10:00   10:50	12	<b>SE9002</b> <b>Classification of Human Electrocardiogram Using Multi-Layer Convolutional Neural Network plus Parameter Optimization</b> <i>Yao-Mei Chen, Jinn-Tsong Tsai, Wen-Hsien Ho, Yen-Ming J. Chen</i>
		13	<b>SE9003</b> <b>Estimating Temperature Map in Body-Mattress Contact from Few Thermostats to Monitor Circulation and Prevent Decubitus</b> <i>Wen-Hsien Ho, Yenming J. Chen, Jinn-Tsong Tsai</i>
		14	<b>SE9004</b> <b>Epidemic Prediction of Dengue Fever Based On Vector Compartment Model and Adaptive Markov Chain Monte Carlo Method</b> <i>Chien-Hung Lee, Yao-Mei Chen, Yenming J. Chen, Wen-Hsien Ho, Jinn-Tsong Tsai</i>
		15	<b>SE9007</b> <b>Gagné-Based Learning Hierarchy Approach to Developing Mathematics Skills Assessment Systems for Diagnosing Student Learning Problems</b> <i>Wei-Ling Tang, Ching-Ying Huang, Jinn-Tsong Tsai</i>
		16	<b>SE9009</b> <b>Influence Analysis of ECG P-Wave Morphology Parameters for Atrial Fibrillation Based on Data Mining Technology</b> <i>Yen-Ming J. Chen, Jinn-Tsong Tsai, Yiu-Jen Chang, Yuan-Chih Ho, Wen-Hsien Ho</i>
		17	<b>SE9010</b> <b>Diversity Optimization by Two-Stage Collaborative Filtering Mechanism in Recommender System</b> <i>Liang Zhang, Wen-Hsien Ho, Quanshen Wei, Lei Zhang</i>
		18	<b>SE9011</b> <b>Secure Access and Transmission in Modular Cloud Computing System</b> <i>I-Te Chen, Han-Chun Liao, Jer-Min Tsai, Wen-Hsien Ho</i>
		19	<b>SE9012</b> <b>Applying Artificial Immune System to Perform the Screening Task in an Intrusion Detection System</b> <i>Fu-I Chou, Wen-Hsien Ho, Jinn-Tsong Tsai, Chia-Wen Chang, Yenming J. Chen</i>
		20	<b>SF9003</b> <b>Data Communication and Interlligence in Traffic Simulation Environments: Simulation Time and Performance Experiments</b> <i>Young-Joo Lee, Hyun Woong Cho, Jung In Kim, Joonho Ko, Hyunmyung Kim, Wonho Suh</i>
		21	<b>SF9004</b> <b>Intelligence in Traffic Simulation Model: Modeling Congested Newtork</b> <i>Joonho Ko, Hyun Woong Cho, Jung In Kim, Hyunmyung Kim, Young-Joo Lee, Wonho Suh</i>
		22	<b>SF9005</b> <b>Development of a structural monitoring system for cable bridges by using seismic accelerometers</b> <i>Seong-Hoon Jeong, Won-Seok Jang, Jin-Won Nam, Hyo-Hyun An, Dae-Jin Kim</i>



Poster III

Date	Time	No.	7F - Edatorium Foyer
16 <sup>th</sup> Nov. (Sat.)	11:00   11:50	1	<b>SU9001</b> <b>Nanoresonator IC with Motional Resistance Sensing for Continuous Blood Glucose Monitoring</b> <i>Hyunwoo Heo, Kwonsang Han, Hyungseup Kim, Jaesung Kim, Donggeun Yoo, Yongsu Kwon, Hyunjoong Lee, Hyoungho Ko</i>
		2	<b>SY9006</b> <b>Reconstruction of Indoor Geometry from Architectural Floor Plans</b> <i>Jung-Ok Kim, Jae-Kang Lee, Yoon-Seuk Oh</i>
		3	<b>SY9008</b> <b>DMB Based Precise Control for Compaction in Road Construction Site</b> <i>Jae-Kang Lee, Chang-Ho Choi, Jin-Young Kim</i>
		4	<b>SY9009</b> <b>A Study on the Measurement of Soil Degree of Compaction Using Smart Shoes</b> <i>Jin-Young Kim, Jae-Kang Lee, Chang-Ho Choi</i>
		5	<b>SY9011</b> <b>Development of Productivity Analysis Method of Sewage Treatment Plant Using Malmquist Productivity Index (MPI)</b> <i>Sang-Hyuk Park, Ja-Yong Koo</i>
		6	<b>SY9012</b> <b>Performance Comparison of BEIDOU and GLONASS GNSS Systems in High-Rise Building Areas</b> <i>Seung-Jun Lee, Tae-Yun Kim, Hong-Sik Yun</i>
		7	<b>SY9013</b> <b>Relationship Analysis of Geothermal Power Plant and Pohang Earthquake Based on Geodetic Techniques</b> <i>Seung-Jun Lee, Tasliman Michael</i>
		8	<b>SY9014</b> <b>Accuracy Evaluation of Geoidal Heights in National Control Points of South Korea Using High Degree Geopotential Model</b> <i>Kwang-Bae Kim, Hong-Sik Yun, Ha-Jung Choi</i>
		9	<b>SY9018</b> <b>Accuracy Evaluation of UAV Image for Mapping Based on Low-Cost RTK</b> <i>Sang-Soo Lee, Tri Dev Acharya, Chang-Min Lee, Seok-Hun Hwang, Dong-Ha Lee</i>
		10	<b>SY9021</b> <b>A Study on Agricultural Drought Monitoring Using Drone and Satellite Imagery</b> <i>Kyoung-Ho Bae, Geon-Woo Ham, Jung-Min Lee, Han-Sol Kim</i>
		11	<b>WA9001</b> <b>The Association between the Use of Efavirenz and the Occurrence of Depressive Disorders among HIV-Treated Patients: an Application of Bayesian Cox Regression</b> <i>Yi-Horng Lai</i>

Poster III (Continued)

Date	Time	No.	7F - Edatorium Foyer
16 <sup>th</sup> Nov. (Sat.)	11:00   11:50	12	<b>WA9002</b> <b>Research on Simple Method for Detecting Diabetic Retinopathy Using Deep Learning</b> <i>Ping-Nan Chen, Ke-Feng Lin</i>
		13	<b>WC9002</b> <b>Deep Convolutional Neural Networks for Human Movement Detection Using Wireless Signals</b> <i>Chien-Cheng Lee, Xiu-Chi Huang</i>
		14	<b>WC9003</b> <b>Role of CXCR4 in Branching Morphogenesis in Developing Epithelial Organ</b> <i>Junchul Kim, Sang-Woo Lee, Kyungpyo Park</i>
		15	<b>WD9003</b> <b>A Health Care Device with a Modified Test Strip</b> <i>Yen-Pei Lu, Jo-Wen Huang, Jen-Tsung Yang, I-Neng Lee, Rui-Cian Weng, Shih-Jie Chou, Chia-Wei Chang</i>
		16	<b>STB9001</b> <b>Deep Learning Model-Based Human Emotion Recognition by 3D Image Sensor Information of Hand Gesture Actions</b> <i>Ing-Jr Ding, Meng-Chuan Hsieh</i>
		17	<b>WF9001</b> <b>Design and Parameter Optimization of Variable Frequency Controlled LCC Resonant Converter in Current Continuous Mode</b> <i>Gang Rao, Wei Wang, Dongheng Yang</i>
		18	<b>TA9002</b> <b>Construction and Numerical Realization of Magnetization Model for a Magnetostrictive Actuator Based On Smith Free Energy</b> <i>Zhen Yu, Chen-yang Zhang, Jing-xian Yu, Zhang Dang, Min Zhou</i>
		19	<b>TB9001</b> <b>Importance of Pore Structure and Surface Chemistry in Carbon Dioxide Adsorption on Electrospun Carbon Nanofibers</b> <i>Yu-Chun Chiang, Shang-Tse Lee, Yu-Chun Chen</i>
		20	<b>TC9003</b> <b>Evaluation of Condition of Concrete Structures Using Ultrasonic Pulse Velocity Method</b> <i>Seong-Uk Hong, Sang-Ki Yoon, Jong-Hyun Kim, Chang-Jong Lee, Seung-Hun Kim, Yong-Taeg Lee</i>
		21	<b>TC9004</b> <b>Size Estimation of Concrete Structures Using Impact Echo Method</b> <i>Seong-Uk Hong, Sang-Ki Yoon, Yong-Taeg Lee, Seung-Hun Kim</i>
22	<b>SJ9001</b> <b>Device and Method for Recognizing and Automatically Connecting Thunderbolt/USB Interface of Host Computer</b> <i>So-Ki Jung</i>		



Poster IV

Date	Time	No.	7F - Edatorium Foyer
17 <sup>th</sup> Nov. (Sun.)	09:00   09:50	1	<b>C9001</b> <b>Maximum Power Point Tracking Based On Fuzzy Controller for Small Wind Turbine without Sensor</b> <i>Cheng-Shion Shieh</i>
		2	<b>C9002</b> <b>Digital Tracking Control of the Boost Converter: Prediction-Based Digital Redesign Approach</b> <i>Cheng-Shion Shieh</i>
		3	<b>J9026</b> <b>Diagnosis of the Hollow Ball Screw Preload and Pretension Classification Using Support Vector Machine</b> <i>Yi-Cheng Huang, Chi-Hsuan Kao, Chih-Hsiang Chang</i>
		4	<b>J9012</b> <b>Backstepping Sliding Mode Control for Magnetic Suspension System of Maglev Train with Parameter Perturbations and External Disturbance</b> <i>Ding-Gang Gao, Shi-Hui Luo, Wen-Yue Zhang, Wen Ji</i>
		5	<b>J9013</b> <b>Flow Characteristics and Heat Transfer Performances of the Multi-Layer Winding Hose System: Theory and Experimentation</b> <i>Haiyan Qiang, Wanli Li, Junqi Xu, Yanran Wang, Guanyuan Li</i>
		6	<b>J9014</b> <b>Effect of Results Due to Pivot Change during Torque Calibration</b> <i>Chiu-Hsien Chen, Sheau-Shi Pan</i>
		7	<b>J9015</b> <b>Verification of Structural Integrity and Cooling Performance of DRCS Cabinet in Power Plant</b> <i>Seung-Hoon Song, Jong-Rae Cho, Jin-Seong Park</i>
		8	<b>J9016</b> <b>Reduction of Structure-Borne Noise in Hydraulic Power Unit with Elastic Mounting by Evaluation of Structural Acceleration Level</b> <i>Sung-Yong Park, Jong-Rae Cho, Sang-Hyun Park</i>
		9	<b>J9019</b> <b>Research on the Coupling Mechanism between Ballastless Bed and Loose Track Structure of High-Speed Railway</b> <i>Xue-Jun Wang, Jiang-Hua Pu</i>
		10	<b>J9020</b> <b>Test Study on the Accumulated Settlement Characteristics of Ballasted Bed under High Speed Cyclic Loading</b> <i>Xue-Jun Wang, Jiang-Hua Pu, Hong-Jun San, Ming-Fang Chen, Hai-Bo Wu</i>
		11	<b>J9022</b> <b>A New Geometric Errors Measurement of a Rotary Table by LaserTRACER</b> <i>Yu-Ta Chen, Tsung-Han Hsieh, Jr-Rung Chen, Po-Er Hsu, Bing-Lin Ho</i>

Poster IV (Continued)

Date	Time	No.	7F - Edatorium Foyer
17 <sup>th</sup> Nov. (Sun.)	09:00   09:50	12	<b>J9023</b> <b>Errors Model of a Rotary Axis by Using Multiple Optical Readers</b> <i>Tsung-Han Hsieh, Jr-Rung Chen, Yu-Ta Chen, Po-Er Hsu</i>
		13	<b>J9025</b> <b>Effects of Surface Roughness on Transient Squeeze EHL Motion of Circular Contacts with Micropolar Fluids</b> <i>Li-Ming Chu, Yuh-Ping Chang, Hsiang-Chen Hsu</i>
		14	<b>L9001</b> <b>Frailty Health Status with Quality of Life among Community-Dwelling People</b> <i>Shu-Fang Chang</i>
		15	<b>L9003</b> <b>Different Plastic-Bag Type Photobioreactor for Biomass Production of Chlorella Species</b> <i>Yu-Pei Chen, Yao-Hsin Huang, Hsiang-Chin Huang</i>
		16	<b>L9004</b> <b>Characterization and Overexpression of Esterases-Encoding Lip900 and Lip3954 through Metagenomic Sequencing of Paddy Soil</b> <i>Yu-Pei Chen, Pei-Chi Lee, Hong-Tan Wu, Guey-Horng Wang, Chai-Fang Tsai, Chiu-Chung Young</i>
		17	<b>M9002</b> <b>Using Fuzzy Set Qualitative Comparative Analysis for Evaluating the Effectiveness of Relationship Marketing and Innovation in 3D Printing Medical Market</b> <i>Cheng-Feng Cheng, Ta-Cheng Chen</i>
		18	<b>N9002</b> <b>Artificial Intelligence Algorithms for Open-Shop Scheduling Problems with Multiple Machines and Multiple Sequential Operations</b> <i>Yi-Chih Hsieh, Kuei-Cheng Su</i>
		19	<b>N9003</b> <b>Operator Based and User Based Rebalancing Strategy for Bike-Sharing Systems</b> <i>Peng-Sheng You</i>
		20	<b>O9003</b> <b>Solving Forest Harvesting Problem with Artificial Intelligence Approaches</b> <i>Yi-Chih Hsieh, Hao-Chun Chuang</i>
		21	<b>G9001</b> <b>Investigation of Strain of Steel Reinforcement of Modular Flexural Member at Discontinuity Interface</b> <i>Jongho Park, Hae-Kyun Lee, Jinwoong Choi, Sungnam Hong, Sun-Kyu Park</i>
22	<b>WE9006</b> <b>Fast Descriptor Generation Study for a Real-Time Retinal Fundus Image Matching</b> <i>Seung-Bong Lee, Ga-Young Kim, Jae-Hoon Jeong, Sung-Min Kim</i>		





Poster V

Date	Time	No.	7F - Edatorium Foyer
17 <sup>th</sup> Nov. (Sun.)	10:00   10:50	1	<b>SF9006</b> <b>Derivation of Seismic Fragility Curves for RC Bridges in Korea Considering Variations of the Representative Analytical Model</b> <i>Seong-Hoon Jeong, Hyo-Joon An, Soobong Shin</i>
		2	
		3	<b>SH9001</b> <b>Investigation of High Strain Rate Mechanical Behavior of Aluminum Alloy with Scandium</b> <i>Chi-Feng Lin, Wei-Chi Su</i>
		4	<b>SI9001</b> <b>Effect of Nanoparticle Additive on the Load Capacity of Hydroxypropyl Methylcellulose Composite</b> <i>Shih-Chen Shi, Xiao-Ning Tsai</i>
		5	<b>SI9002</b> <b>Tribology Behavior of Atmospheric Pressure Plasma Modified Zirconia in Collagen/HPMC Hybrid Lubricant</b> <i>Shih-Chen Shi, Ting-Wei Chang</i>
		6	<b>SI9003</b> <b>Effect of Salt-Spray Aging on Compressive Performance of Solid Cylindrical Rubber Fender</b> <i>Yung-Chuan Chiou, Chia-Chin Wu, Chao-Wei Mao, Ming-Yang Shen</i>
		7	<b>SI9007</b> <b>Synergistic Effect of Adding Carbon Nanotubes and Graphene Nanoplatelets in the Matrix on the Fatigue Strength of Carbon Fiber Reinforced Epoxy Composites</b> <i>Yi-Ming Jen, Yu-Ching Huang</i>
		8	<b>J9031</b> <b>Dynamic Analysis of a Helical Geared Rotor System with Oil-Film Bearing</b> <i>Wen-Cheng Lu, Ying-Chung Chen, Siu-Tong Choi</i>
		9	<b>SL9006</b> <b>The Design and Development of an Automatic Transmission Solenoid Tester for Wheel Vehicles</b> <i>Ming-Sen Hu</i>
		10	<b>SM9001</b> <b>Investigation of Auxiliary Force for Intelligent Wearable Device by Fuzzy-Neural Network Control based on Bayesian Backpropagation Algorithm</b> <i>Bor-Jiunn Wen, Chia-Hung Kao</i>
		11	<b>SM9002</b> <b>A Study on an Accurate Underwater Location of Hybrid Underwater Gliders Using Machine Learning</b> <i>Sang-Ki Jeong, Hyeung-Sik Choi, Dae-Hyung Ji, Jin-il Kang</i>

Poster V (Continued)

Date	Time	No.	7F - Edatorium Foyer
17 <sup>th</sup> Nov. (Sun.)	10:00   10:50	12	<b>SN9001</b> <b>A Novel Environmental Monitoring Strategy for Industrial Safety and Disaster Prevention Management Applications</b> <i>Zong-Yi Yang, Chih-Wei Chou, Wei-Cheng Lin, Wei-Chun Chen, Chi-Min Shu</i>
		13	<b>SN9002</b> <b>IoT Based Intelligent Farming System Using NodeMCU and Blynk App</b> <i>Yung-Chien Lin, Yung-Chin Lin</i>
		14	<b>SN9003</b> <b>Monitoring and Control of Smart Home Using NodeMCU and Blynk App</b> <i>Yung-Chien Lin, Yung-Chin Lin</i>
		15	<b>SN9004</b> <b>Development of a Robot Platform Based on myRIO Controller</b> <i>Bo-Jun Yang, Kuo-Hsien Hsia, Sheng-Chieh Liu, Kuo-Lan Su</i>
		16	<b>SN9005</b> <b>Develop a Dynamic Encryption Method IoT Module and a General-Purpose SCADA Application System</b> <i>Jr. Hung Guo, Kuo-Lan Su</i>
		17	<b>SN9006</b> <b>Development of the Teaching Material for NI roboRIO Based Mobile Robot</b> <i>Jr. Hung Guo, Tzu-Yu Chung, Ze-Yu Huang, Kuo-Lan Su</i>
		18	<b>SN9007</b> <b>Development of the Teaching Materials for ROS Based Mobile Robot</b> <i>Bo-Jun Yang, Kuo-Hsien Hsia, Chang-Sheng Siao, Kuo-Lan Su</i>
		19	<b>SO9001</b> <b>Fingerprint Quality Assessment Based on Texture and Geometric Features</b> <i>Ching-Han Chen, Chen-Shuo An, Ching-Yi Chen</i>
		20	<b>SQ9002</b> <b>Self-Organizing-Map Based Object Segmentation Hardware Accelerator for Real-Time Stereo Vision</b> <i>Ching-Han Chen, Yen-Hsiang Huang, Ching-Yi Chen</i>
		21	<b>SQ9003</b> <b>Manipulator System Design for Drawing Random Objects through Point Cloud Posture Estimation</b> <i>Ching-Chang Wong, Hsuan-Ming Feng, Yu-Cheng Lai, Hsiang-Yun Chen, Si-Yao Syu</i>
		22	<b>A9007</b> <b>Hydroxyapatite as a Sacrificial Material of Core Catcher in Severe Nuclear Accident</b> <i>Sung-Wook Moon, Il-GoK Hong, Byeong-Woo Lee</i>



Poster VI

Date	Time	No.	7F - Edatorium Foyer
17 <sup>th</sup> Nov. (Sun.)	11:00   11:50	1	<b>O9006</b> <b>Study on Flow Field Characteristics of Hybrid Synthetic Jet Flow Device</b> <i>Chia-Wei Hsu, Uzu-Kuei Hsu, Chih-Huang Chiang, Cheng-Chiang Hsu</i>
		2	<b>O9017</b> <b>Developing Programable Robot for K9 STEAM Education</b> <i>Cheng-Tiao Hsieh</i>
		3	<b>O9021</b> <b>The Development of Thin Film Thickness Measurement System by Combining with X-ray Reflectivity and X-ray Fluorescence</b> <i>Guo-Dung Chen, Chun-Ting Liu, Bo-Ching He, Wei-En Fu, Wen-Li Wu</i>
		4	<b>C9017</b> <b>Overview of Photovoltaic Generation System with On-Site Datas Analysis in Taiwan</b> <i>Ming-Wang Chen</i>
		5	<b>N9008</b> <b>Artificial Intelligence in Nylon Fabric Dyeing Recipe Prediction Algorithm Design</b> <i>Hsiao-Wu Lai, Chih-An Chen, Min-Yan Dong, Jing-Wen Tang, Ping-Yang Chen, Kuang-Hung Chen, Shun-Chieh Lin</i>
		6	<b>SB9005</b> <b>Study on the Path Planning for Underwater Vehicle Considering Ocean Currents Using Rapidly-Exploring Random Trees Algorithm</b> <i>Mai The Vu, Hyeung-Sik Choi, Seo-Kang Kim, Hyun Joon Cho</i>
		7	<b>SB9006</b> <b>Dynamics Modeling and Control Design of Ray-Type Hybrid Underwater Glider with a Dual-Buoyancy Engine</b> <i>Ngoc-Duc Nguyen, Hyeung-Sik Choi, Sung-Wook Lee, Sang-Ki Jeong, Dae-Hyeong Ji</i>
		8	<b>SB9007</b> <b>An Enhanced Sliding Mode Control Method for Wave Compensation System of Ship-Mounted Cranes with Roll Motions and Uncertain Parameters</b> <i>You-Gang Sun, Zhi-Qiang Xu, Jun-Qi Xu, Guo-Bin Lin</i>
		9	<b>SC9004</b> <b>Performance Improvement of SAONOS Device as UV TD Nonvolatile Sensor with Al<sub>2</sub>O<sub>3</sub>/HTO Bi-Layer Blocking Oxide</b> <i>Wen-Ching Hsieh, Fuh-Cheng Jong, Wei-Ting Zeng</i>
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		11	

Poster VI (Continued)

Date	Time	No.	7F - Edatorium Foyer
17 <sup>th</sup> Nov. (Sun.)	11:00   11:50	12	
		13	<b>SS9002</b> <b>Artificial Neural Network Base on Grey Relational Analysis Estimate Displacement of Bridge-Type Amplifier</b> <i>Quang Phuoc Tran, Ngoc-Thai Huynh, Shyh-Chour Huang</i>
		14	<b>ST9001</b> <b>Numerical Simulation of Surface Properties in Laser Remelting</b> <i>You-Ren Lu, Shyang-Jye Chang</i>
		15	<b>ST9003</b> <b>Development of Magnetic Gear Differentials</b> <i>Yi-Chang Wu, Hao-Pin Wu, Chien-Chin Huang</i>
		16	<b>ST9004</b> <b>Design, Fabrication and Testing of a Modular Two-Input Power Device for Wheelchairs</b> <i>Yi-Chang Wu, Tsung-Yi Lin, Hung-Wei Chen</i>
		17	<b>ST9005</b> <b>Design of Five-Speed Transmissions with Magnetic Gear Mechanisms</b> <i>Yi-Chang Wu, Mi-Ching Tsai, Guei-Hua Huang</i>
		18	<b>STA9001</b> <b>Prediction of Atrial Fibrillation Using Machine Learning Models</b> <i>Cai Wu, Maxwell Hwang, Yiu-Jen Chang, Tsung-Han Ho, Yen-Ming J. Chen, Kao-Shing Hwang, Wen-Hsien Ho, Jian Huang</i>
		19	<b>STA9002</b> <b>Mitosis Detection for Breast Cancer Histology Images by an Attention Model</b> <i>Maxwell Hwang, Cai Wu, Jian Huang, Wei-Cheng Jaing, Kefeng Ding, Kao-Shing Hwang</i>
		20	<b>SI9005</b> <b>The Effect of Polyolefin Elastomer Toughening for Glass Fiber Reinforced Polyamide Composite</b> <i>Chin-Hsing Chen, Chia-Hui Lin, Chin-Lung Chiang, Ming-Yuan Shen</i>
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