ISBN: 978-981-14-2136-5

Table of Content

Research on the theory of Fault Tolerance in Chinese Character Design Based on Eye Movement Test **1**

Huang Zhixiong, Zhang Yamin

The improvement of a piezoelectric thin film measuring instrument **5**

Da-Long Cheng, Yu-Che Wang, Kuo-Sheng Kao, Chia-Lin Chen, Wei-Tsai Chang

Localized surface plasmon resonance modulated double F-P resonance cavities to improve the absorption of perovskite solar cells **9**

Chun-Ping Xiang, Yu Jin

Multi-level Security Task Scheduling Scheme Based on Task Priority **13**

Li Li, Shi Guozhen, Li Xuemei, Wang Xuan

The Preliminary Study on Spatial Correlation of Ocean Sound Field **19**

Jin-bao Weng, Yan-ming Yang

The Preliminary Study on Fluctuation of Ocean Sound Field **23**

Jin-bao Weng, Yan-ming Yang

Automatic Search and Analysis on Sinusoidal Whistle Signal of Captive Bottlenose Dolphins **27**

ShengChen, Fuqiangniu, Weiliu

Conflict-Free Path Planning of AGV based on Improved A-star Algorithm **31**

Yuanyuan Cui, Dan-Peng Ma, Yang Fang, Zhibin Lei

Total-ionizing-dose-induced body shielding effect in 130 nm T-gate PDSOI I/O nMOSFETs **35**

Xin Xie, Dawei Bi, Zhiuyuan Hu, Zhengxuan Zhang, Shichang Zou

Design of Electronic Wallet Based on Block Chain **39**

Chih-Cheng Chen, Guang-Song Yang

The Degradation Induced by Hot-Carrier Injection in 130-nm Partially Depleted SOI pMOSFETs Fabricated on Modified Wafer **43**

Huilong Zhu, Dawei Bi, Zhiyuan Hu, Xin Xie, Zhengxuan Zhang, Shichang Zou

Research of Electromagnetic Wave Energy-Harvesting Technology on Free Space **47**

Zhong-Hua Ma, Chih-Cheng Chen, Chang-Bing Huang, Guang-Song Yang

DC Voltage Adaptive Droop Control Strategy for Hybrid Multi-Terminal HVDC System **51**

Yingpei Liu, La Zhang, Haiping Liang, Zhengping Wang, Wei Zhao, Zhikun Xing

Mapping Shallow Sea Depth From Spot-5 Satellite **55**

Luo Kai, Chen Benqing

Exploring the Charm Factors of Microfilm Creation "Living with Medicine and Mercy" **59**

Xiao-Jing Yu

Study on the benefit of solar optoelectronic policy in Kaohsiung **63**
Tsai Chang-Chang, Kao Kuo-Sheng, Huang Chi-Ming, Li Yen-Yi, Chiang Chun-Chang, Liu Chung-Ang, Yu Chun-Ming, Chung Po-Ren, Lin Chia-Shiung

Research on the Effect of Price Character on Price Overall Perception **67**
Chang Xue

Worst case analysis of random circuits using Taylor models and Bernstein polynomials techniques **71**
Yuchao Guo, Jingyi Cao, Xiaoxu Wang, Tongyu Ding, Liang Zhang

Development of Controlling System to Indoor Appliances using Mobile Device **75**
Wan-Shing Yang, Wen-Kuei Hsieh, Yi-Sheng Yu, Yao-Lin Huang, Wen-Hsu Hsieh, Yu-Ying Lin

Combined Bicycle and Google Street View Development of Virtual Street View system **79**
Huan-Sheng Wang, Wan-Shing Yang, Li-Ming Hu, Yu-Ying Lin, Tsai-Hua Kang, Wen-Kuei Hsieh

Integrating gamification into website design to facilitate users' experiences- A case study on three museum websites **83**
Hsieh Hsiu-Ching, Lin Yi-Yu

Analysis on Innovation Ability of Huaihe River Economic Belt **87**
Xu Hai-Ying, Weng Yao

Research on Spatial Structure of Urban Innovation Performance in Huaihe Economic Belt **91**
Xu Hai-Ying, Chen Ming-Zhe

Interactive Instructional Device **95**
Paul Juinn Bing Tan, Ming-Hung Hsu

Using the Cloud-based Creative Services to Study and Design Q-Version Comic System **99**
Shang-Te Tsai, Guo-Bin You, Cheng-Fu Yang

An Estimating Floor Region Algorithm based on Image Segmentation using FPGA for Smart Rovers **103**
Chi-Chia Sun, Nian-Jyun Yang

Zero phase error filtering method based on diffusion equation **107**
Lianyou Lai, Weijian Xu

Using Interconnection Network for Constructing Multi-Channels to Integrate and Improve Market of the Tea Industry **111**
Tian-Jia You, Shang-Te Tsai, Cheng-Fu Yang

A New Research Tendency for Online Marketing Using User-Generated Content of Online Platforms **115**
Wei Deng, Shang-Te Tsai, Cheng-Fu Yang

A Study on Dual-Polarization Broadband Antenna Array Covered with EM Wave Absorber **119**
Wen-Yu Lee, Hsin-Piao Lin, Ding-Bing Lin

Analysis the influence of a mesoscale cold eddy on underwater sound propagation in the east of Luzon Strait **123**
Hai-Lin Ruan, Yan-Ming Yang, Hong-Tao Wen, Xin Xie, Fu-Qiang Niu

Study on automatic extraction of bottlenose dolphin whistles from the background of ocean noise **127**

Xue Rui-chao, Niu Fu-qiang, Yang Yan-ming, Huang Yue-kun, Liu Wei

A Secure and Efficient Authentication Scheme for Personal Health Care System **131**

Chin-Ling Chen, Po-Tsun Huang, Yong-Yuan Deng

The electrical performance of different channel thicknesses for IGZO thin film transistors **135**

Kao-Peng Min, Yu-Rong Lin, Shih-Chang Shei

Grid-connected Control Strategy of PV Battery-energy Storage Hybrid Power System with Electric vehicle **139**

Haiping Liang, Yan Li, Yingpei Liu, Jia He, Hanyang Cui

A review on Carbon Nanotube Field Effect Transistors **143**

Zhenqin Du, Eric Choi, Bowen Duanmu, Justin Warner

A Convolutional Neural Network Face Recognition Algorithm Based on Data Augmentation **147**

Changyu Cao, Yang Wang, Chih Cheng Chen, Jiachun Zheng

An Effectiveness Study on the Class Lecture in An ePUB3 eBook-based Flip Blended Learning Model **151**

Tina Pingting Tsai, Jyhjong Lin, Lendy Chaoyu Lin, Yihsiu Chen, Jingting Liu

Construction of an Interdisciplinary Innovative Teaching Model– an Example of Digital Village and Interactive e-book in MingDao University **155**

Wang shu-Huei

Learning Outcomes of Mobile and Tablet Application Courses for Taiwanese Older Adults **159**

Jen-Yi Chao, Hsiao-Chi Kao, Yi-Hsin Yeh

Intuitive Thinking And Methodological Creation In Design **163**

Hui-Ping Lu, Hui-Jiun Hu

The Methods and Applications of Creative Teaching in Design **167**

Ya-Kuan Chou, Ruey-Sen Chiu, Ping-Yeh Li, Yun-Ju Chen

The Role of Museum to Promote STEM Education and Teacher Interdisciplinary Training: Introducing the Experience of National Science and Technology Museum **171**

Jian-Liang Lin, Kuo-Hung Hsiao, Li-Chun Lin

The Research of the University's Core Competitiveness Based on the Quality of Talent Training **175**

Liu Xia, Zou Jiancheng

The Design and Discussion of Elite Education in College Mathematics **179**

Yuyang Sun, Qingzhong Li

Study on the Applications of Planer Tool to the Decorative Line Patterns of Door Leaves in Taipei Story House **183**
Ten-Li Chen, Ting-Chun Hsu

The Study of teaching equipment needs for design thinking activities **187**
Ten-Li Chen, Chih-Yuan Cheng, Ya-Kuan Chou

Scientific Principles behind 2017 World Universiade Torch **191**
Wei-Long Chen, Fang-Lin Chao, Syuan-Lan Shih

Practice of Teaching Reform on Case Based Teaching of Chemical Technology Facilitated by Production Practice **195**
Xiao-ling Zhao, Yu-qi Wang

The Influence of learners' creativity by Gamification Teaching System **199**
Pei-Fen Wu, Li-Shu Lu, Kuang-Yi Fan

Author Index **204**