

Table of Contents

Using TRIZ Theory to Design and Analyze the Forest Environmental Factors Monitoring Platform	1
---	----------

Li Dan, Zhang Yu, Zhang Naiqi and Yin Yu

Parking Site Selection In Downtown of Khabarovsk City Using GIS	15
--	-----------

Irina Kulinich and Heewon Lee

Development of Data Monitoring Based on Virtual Instrument	25
---	-----------

Yanyi Xu and Yongshun Zhang

V2I Based Intersection Scheduling Algorithm	33
--	-----------

Dan Shao, Jianan Wu and Chao Fu

Optimization Approach for Energy Saving and Comfortable Space Using ACO in Building	47
--	-----------

Azzaya Galbazar, Safdar Ali and DoHyeun Kim

A Technique for Reducing Power Consumption in IC by Test Vector Ordering	57
---	-----------

Shuanghua Huang and Xiaomin Li

Boolean Control Network Based Modeling for Context-Aware System in Smart Home	65
--	-----------

M. Humayun Kabir, M. Robiul Hoque, Hyungyu Seo and Sung-Hyun Yang

The Design of a Guide Device with Multi-Function to Aid Travel for Blind Person **77**

Jiayin Song, Wenlong Song, Yupeng Cheng and Xuefu Cao

Hardware Implementation of Two-level Scheduling Algorithm in μ C/OS-II **87**

Guangwu Zhang, Yan Li, Yidong Chen, Huaiguo Dong, Huanhuan Chi, Min Shi and Junfeng Gao

A Comprehensive Review of BeagleBone Technology: Smart Board Powered by ARM **95**

Anand Nayyar and Vikram Puri

Design of Switching System Based on FC-AE-1553 Bus **109**

Chen Jin-qiang and Zhang Shan-cong

Applying Multifractal Formalism Combined with Wavelet Transform to Wood Defects Detection **119**

Hai ming Ni, Da wei Qi and Hongbo Mu

Threshold Selection for 60 GHz TOA Estimation Based on Skewness and Kurtosis Analysis **129**

Xiao-Lin Liang, Hao Zhang, Ting-Ting Lu and T. Aaron. Gulliver

Production Rate Determination for Linear Construction Projects Based on Linear Scheduling Method **143**

Liqiang Liu, Yisheng Liu and Yuanjie Tang

PSpice Implementation of a New Esaki Tunnel Diode Macro-Model **153**

Messaadi Lotfi and Dibi Zohir

A Novel Non-Line of Sight Identification Algorithm in the60GHz Wireless Communication Systems **167**

Xiaolin Liang, Hao Zhang, Tingting Lu, XuerongCui and T. Aaron. Gulliver

Investigation on the Trajectory Planning of Spray Gun of Spray Robot and Its Spraying Effect **183**

Hong Min and Shuai Li

Demand Bidding and Real-Time Pricing-Based Optimal Operation of Multi-Microgrids **193**

Van-Hai Bui, Akhtar Hussain and Hak-Man Kim

Wireless Smart Home System Based On Zigbee **209**

Yajing Pang and Sujuan Jia

Research on College Students' Recognition and Practice of Socialist Core Values Based on Online Questionnaire **221**

Min Wu

Polishing Path Planning of Complex Curved Surfaces and the Realization of Automatic Control **233**

Zhang Su and Zheng Ying

A Temperature Control System Design Based on 51 SCM **241**

Xiaoying Yang, Wanli Zhang and Qixiang Song

**A Study on the Prefab Greenhouse on the Rooftop for the Neighborhood
Regeneration in Seoul, South Korea** **253**

Haeyeon Yoo

**Research on the Customer Satisfaction in Electronic Business Environment
based on DEA Method: An Empirical Analysis** **267**

Lu Qiuping

**Dynamic Assessment of Human Resource Management on Organizational
Effectiveness based on Network Platform** **279**

Yingjun Han and Hongjun Lian

Green IoT Agriculture and Healthcare Application (GAHA) **289**

Chandra Sukanya Nandyala and Haeng-Kon Kim

**Performance Evaluation of Public Cultural Services in the Context of
Information Technology: A Government Perspective** **301**

Lin Zhang

**Integration of RFID Network Planning with Xbee Network: A New
Approach** **325**

*Khalid Hasnan, Aftab Ahmed, Badrul-aisham, Qadir Bakhsh,
Kamran Latif and Kashif Hussain*

**Empirical Analysis of New Agricultural Operators based on Scale
Management: a Perspective of Farmer Household 335**

Liang Xiao

