

Contents

A Battery Equalizing Scheme Using Flyback Converter and PhotoMOS Switch	1
Wen-Hui Li, Feng Ran, Yuan Ji, Jia-Qi Qin and Hao Xu	
A Chord Curvature Model for Silhouette Curvature Calculation	11
Bi-Tao Fu	
A Low-Complexity Decoding Algorithm for Quasi-orthogonal Space-Time Block Codes	19
Xiao-Ping Jin, You-Ming Li, Zheng-Quan Li and Ning Jin	
A MAC Protocol for Medical Emergency Monitoring of Wireless Body Area Networks	27
Chong-Qing Zhang, Ying-Long Wang, Yong-Quan Liang, Ming-Lei Shu, Chang-Fang Chen, Huan-Qing Cui and Sheng Fang	
A New Method to Generate Semantic Templates Based on Multilayer Perceptron	35
Ya-Li Qi, Guo-Shan Zhang and Ye-Li Li	
A Novel Thermal Protection Circuit Based on Bandgap Voltage Reference	43
Wei Ding, Yong Xu, Rui Min, Zheng Sun and Yuan-Liang Wu	
A Real-Time 106 Mbit/S Visible Light Communication System Design Using General Lighting LED with Analog Pre-emphasis	51
Xiu-Qin Yang, Min Zhang, Da-Hai Han, Peng-Fei Luo, Zabih Ghassemlooy and Qing-Yuan Huo	
GNSS Receiver Anti-spoofing Techniques: A Review and Future Prospects	59
Ling Xiao, Peng-Cheng Ma, Xiao-Mei Tang and Guang-Fu Sun	

Adaptive Energy-Efficient Design of Cooperative Spectrum Sensing in Cognitive Radio Networks.	69
Jing-Wei Liang, Jian-Xin Dai, Yi-Chen Liu, Xing-Zhou Zhou and Man Xu	
An Adaptive Spatial-Temporal Error Concealment Scheme Based on H.264/AVC	79
Dan Yang, Tao Liu, San-Min Liu and Fu-Chun Chen	
An Autonomous Vehicle Navigation System Based on Hough Transform and Fuzzy Logic	89
Sheng-Zhi Du and Chun-Ling Tu	
An Efficient Study on Large and Complex Network Modeling	97
Jun-Chun Ma, Min Li, Shan Chen and Wei Zhang	
An Improved SVM-Based Motion Detection Algorithm Using an Accelerometer	109
Xu-Kang Wu, Xu-Guang Yang, Zheng-Guo Cai and Shan-Shan Luo	
Analysis and Estimation of Vertical Beam Characteristic Parameters for Phased Array Radar	119
Long Xiang, Jian-Jiang Ding, Xiao-Wei Shi and Zhi-Fang Zuo	
Blind Image Quality Assessment Based on Mutual Information	127
Bao Liu, Li-Xiong Liu, Hong-Ping Dong and Yong-Gang Lin	
Compressive Tracking via Weighted Classification Boosted by Feature Selection	137
Li Zhang, Hanzhun Chen and Yuanyuan Hu	
Deep Representation Based on Multilayer Extreme Learning Machine	147
Ya-Li Qi and Ye-Li Li	
Design and Implementation of ZLL-DALI Gateway for Home Lighting	153
Shu-Yan Sun, Jian-Guo Shi and Jun-Sheng Yu	
Design of a Gysel Power Divider/Combiner with Harmonic Suppression Using Cross-Shaped Transmission Line.	161
Jin Guan, Yong Zhu, Xian-Rong Zhang and Ran Zhang	
Design of a High Performance Low Voltage Differential Signal Receiver	169
Kai-Xin Fan, Guang-Hui Xu, Yong Xu, Kai-Li Zhang and Ying-Cai Xiao	
Design of a Multifunctional CAN Bus Controller for a Ground Source Heat Pump System	177
Hui Li, Pei-Yong Duan and Chen-Guang Ning	

Detecting Communities Based on Edge-Fitness and Node-Similarity in Social Networks	187
Cheng Yang and Wencai Du	
Energy-Efficient Algorithm for CDMA Uplink Based on Nash Bargaining Solution	195
Chuan-Chao Wang, Jin-He Zhou and Yuan Zhang	
Enhanced Simulation-Based Verification and Validation of Automotive Electronic Control Units	203
Thomas Herpel, Thomas Hoiss and Jan Schroeder	
Feature Extraction for Color Images	215
Zhen-Yu Han, Dong-Hua Gu and Qing-E Wu	
Human Gait Classification Using Doppler Motion Feature Analysis	223
Xi Wang, Jia-Wu He, Zhuo Chen and Gang Zhu	
Large Predispersion for Reduction of Intrachannel Nonlinear Impairments in Strongly Dispersion-Managed Transmissions	229
Wen-Hua Cao	
Modeling of Networked Control Systems Based on Multiple Communication Channels with Event-Triggering	241
Li-Ying Zhao, Qian Li and Jun Wang	
Modeling of Spatial-Temporal Associations on a Mobile Trajectory	251
Xiang Ren, Rong Xie, Juan Du and Xiang-Yi He	
Moving Vehicle Detection in Dynamic Traffic Contexts.	263
Chun-Ling Tu and Sheng-Zhi Du	
Natural Image-Orientated Hybrid Filter Using Pulse Coupled Neural Network	271
Yun-Dong Li and Jia-Hao Pan	
Novel DDS-Based Method to Realize OFDM Baseband Signals.	279
San-jun Liu, Meng Ma, Zi-jun Zhao, Chang Liu and Bing-li Jiao	
Observer-Based Controller Design for a Discrete Networked Control System with Random Delays.	289
Xue Cheng and Li-Ying Zhao	
Performance Analysis of Optical Balanced Coherent Detection Based on an Acousto-Optic Deflection System	297
Hong-Yan Jiang, Ning He and Xin Liao	

Performance Evaluation of a Two-Dimensional Savitzky-Golay Filter for Image Smoothing Applications	309
Jeong-Hwan Kim, Gyeo-Wun Jeung, Jun-Woo Lee and Kyeong-Seop Kim	
Research on a Credit Reservation Mechanism for Concurrent Multi-services	317
Jun-Qiang Guo, Ren-Yuan Zhang, Guo-Zhao Wei and Jin-Liang Yang	
Research on Data Recording and Playback Systems for a Virtual Testing Framework.	325
Qing-Jun Qu, Yi-Ping Yao, Huai Wang and Lai-Bin Yan	
Robust Generalized Fault Diagnosis Observer Design for Nonlinear Systems with External Disturbances	333
Zhen-Duo Fu, Rui Wang, Dian-Xi Jiang and Yu Song	
Selective Weighting PTS PAPR Reduction Scheme in OFDM Systems	343
Ling-Yin Wang, Hua Yuan and Li-Guo Liu	
Single-User MIMO Systems for Simultaneous Wireless Information and Power Transfer.	351
Jun Zhou, Jian-Xin Dai, Jing-Wei Liang, Jie Qi and Shuai Liu	
Study on Nonlinear Dynamic Behavior in a Linear-Mode Switched-Capacitor DC-DC Converter.	359
Xian-Rui Li, Yong-Gang Zhao, Yan-Li Zhu and Rui Shen	
Synchronization Algorithms Applied to Code Division Multiplexing Link Based on the Walsh Code of Ground Based Beamforming	367
Wei Wan, Le Tang and Hang Tu	
The Application of FPGA in Optical Fiber Sensing and Communication Technology	377
Yan-Bing Li, Sheng-Peng Wan, Hao-Liang Lu and Qiang Gong	
The Influence Analysis of Pseudorandom Number Generators and Low Discrepancy Sequences for the Family of Compact Genetic Algorithms: Search Behavior Research from Outside Causes to Internal Causes	385
Hong-Guang Zhang, Bi-Hua Tang and Kai-Ming Liu	
TLS Channel Implementation for ONOS's East/West-Bound Communication	397
Jun Huy Lam, Sang-Gon Lee, Hoon-Jae Lee and Yustus Eko Oktian	
Towards Load Balance and Maintenance in a Structured P2P Network for Locality Sensitive Hashing	405
Da-Wei Liu and Zhi-Hua Yu	

Water Monitoring System Based on Recognition of Fish Behavior	411
Cong-Ren Lin, Ye Chen, Xi-Zhou Lin, Fei Yuan and Yi Zhu	
Weighted Modularity on a k-Path Graph.	421
Ying-Hong Ma and Wen-Qian Wang	

Electronics, Communications and Networks V
Proceedings of the 5th International Conference on
Electronics, Communications and Networks (CECNet
2015)

Hussain, A. (Ed.)

2016, IX, 426 p. 187 illus., 95 illus. in color., Hardcover

ISBN: 978-981-10-0738-5