Table of Contents

Seasonal Agricultural Products Distribution and Traceability System Based on the RFID Internet of Things

Zhang Hongbo and Gao Wei

Improvement of Fire Alarm Systems: With a Focus on Apartment

Ha-Sung Kong

15

39

Optimal Scheduling Algorithm for Residential Energy Consumption Considering the Wind - Photovoltaic Power and the Electricity Price of Purchase/Selling Electricity 25

Zhen Liu, Wen-zhu Li and Xin Liu

Trust Based Service Selection in Cloud Computing Environment

Xiaohui Li, Hongxing Liang and Xing Zhang

Performance Evaluation Depending on Separation Distance Between Skylight and Light Shelf: Focusing on Variation of Distance of Indoor Space 51

Jiun Her, Hangwoo Lee and Yongseong Kim

Design of High Concentration Environmental Sensor Based on MEMS Chip 61

Buqu Zeng and Tao Kuang

A Resource-Efficient System Architecture for Processing Various Sensor Data in Smart home Environment 69

Changmin Lee, Changhyun Byun and Hyeonjeong Shin

Price Learning Based Load Distribution Strategies for Demand Response Management in Smart Grid 79

Qiang Tang, Ming-zhong Xie, Kun Yang, Yuan-sheng Luo and Ping Li

Uncertainty Sampling Based Posterior Probability Extreme Learning Machine for Human Activity Recognition 95

Xiaopeng Niu, Zhiliang Wang, Wendong Xiao and Zhigeng Pan

The Fire Prevention System Using Thermal Imaging Camera in Connection with CCTV 109

Kim Hee Chul

Smart Home Education and Teaching Effect of Multimedia Network Teaching Platform in Piano Music Education 119

Minghui Li

Research of Short-Term Load Forecasting Using DWT and LSSVM Optimized by QDE 133

Wei Sun and Jingyi Sun

Concentration Building System for Children with Attention Deficit Hyperactivity Disorder 147

Pushpa Kotipalli and Murali Krishna Doma

Design of Remote Fire Automatic Alarm System Based on Zigbee Technology and TC35i Module 157

Ling-jieKong

Research on Influence of Multimedia Network Teaching Platform and Effective Interaction on Physical Education Curriculum Based on Smart Classroom

165

Liwei Sun

Design SPARTAN FPGA-Based PD Controller for FOD Systems 177

Amirzubir Sahamijoo, Farzin Piltan, Hootan Ghiasi, Mohammad Reza Avazpour, Mohammad Hadi Mazloom and Nasri B. Sulaiman

Pedestrian Detection Method Based on Convolution Nerve Network 197

Jiang Yingjun, Wang Jianxin and Guo Kehua

Design of the Smart City Planning System based on the Internet of Things 207

Fang Li and Bofu Zheng

The Research of Multiple Regression Analysis in Rural-Urban Income Disparity 219

Jian Li and Xiangyu Guo