

## Table of Contents

**Development and Implementation of Visual Exposure Indicator for Residential Development 1**

*KyungJin An, Hoon Ko, and Choong Sik Kim*

~~**Experimental Exploration of RSSI Model for the Vehicle Intelligent Position System 11**~~

*Zhichao Cao, ZhenzhouYuan and Silin Zhang*  
*The paper was removed because it was already published in Journal of Industrial Engineering.*

**High-Gain and Low-Power Power Amplifier for 24-GHz Automotive Radars 27**

*Shin-Gon Kim, Habib Rastegar, Min Yoon, Chul-Woo Park, Kyoungyong Park, Sookyong Joung and Jee-Youl Ryu*

**Prediction on Hourly Cooling Load of Buildings Based on Neural Networks 35**

*Hu Chaowen and Wei Dong*

**Fuzzy Fractional Order Sliding Mode Control for Automatic Clutch of Vehicle AMT 53**

*Yingchun Long and Lifu Li*

**A 2D-DCT Image Processing in Matlab and Voice Informatics Based Remote Home Monitoring and Security System 69**

*Md. Biplob Hossain and M. Saifur Rahman*

**Simulation Model of Pedestrian Evacuation in High-Rise Building: Considering Group Behaviors and Real-Time Fire 81**

*Jiang Xueling*

**Web Service Definition and Validation, and Performance Analysis and Implementation of Control Tower for CCTV Sites** **93**

*YoungWook Cha and ChoonHee Kim*

**Research and Design of the Modular Robot Fuzzy Control Based on ZigBee** **105**

*Zhao Dan and Xin Yi*

**Evaluations of Hardware and Software-Based Context Switching Methods in Cortex-M3 for Embedded Applications** **111**

*Hayeon Choi and Sangsoo Park*

**Parking Lot Optimal Routing Based on Grey Entropy Relation Grade Multi-Attribute Decision Making** **123**

*Zhang Yuru, Zhao Wuchen, Li Hui, Su Xiaodong and Zhao Ming*

**WBS-based Hierarchical Classification and its DB Modeling of All Construction Information for Apartment House** **133**

*Hong- Tae Park and Boo- Hyung Lee*

**An Enumeration Method Applied in Intelligent Transportation System** **143**

*Shengnan Lu, Huansheng Song and Xiaojuan Xu*

**An Analysis of the Economic Effects of Network Industry by Applying Household Endogenous Model** **151**

*Woo-Soo Jeong, Mijeong Han, Seung-Woan Chai and Kyoung-Sik Min*

**Research on the Electronic Commerce Market Survey Based on Normalization Kernel Principal Component Analysis** **159**

*Cao Lijun and Liu Xiyin*

**Augmented Reality Fashion Apparel Simulation using a Magic Mirror** **169**

*Miri Kim and Kim Cheeyong*

**Modeling and Simulation of Discharging Characteristics of External Melt Ice-on Coil Storage System** **179**

*Wang Yi and Wei Dong*

**X3D Nodes for Representing and Rendering Real Characters in 3D Virtual Environments** **193**

*In-Kwon Kim, Sin-Ae Kwon, Mihye Kim, Kwan-Hee Yoo*

**Intelligent Monitoring System for Home Based on FRBF Neural Network** **207**

*Dezhong Zheng, Yang Wang and Yan Wang*

**Analysis and Evaluation of Holistic Energy Saving for Modern Buildings** **219**

*Zhuolun Chen and Xiaowei Wu*

**Dynamic Allocation of Random Access Opportunity for Machine-Type Communication in LTE-Advanced** **231**

*Peng Li, Yun-jian Jia, Ming-jun Feng<sup>1</sup>, Fei Chen, Pei-hua He and Guo-jun Li*

**Simulation Experiment on Acoustic Emission of Pipeline Leakage** **243**

*Wang Xin-hua, Yang Jie, Jiao Yu-lin and Niu Yong-chao*

**An Intelligent Managing System of Electric Energy Based on ST7538** **253**

*Qiu-xia Liu*

**A Vibration Signal Envelope Extract Method Based on Wavelet**      **265**

*Guoxi Sun, Qinghua Zhang, Aisong Qing, Hu Qing, He Jun*