Table of Contents

Learning Reliability Evaluation Models of Power Communication Network Equipments with Capsule Networks	1
Haiyang Wu, Xiao Lu, Dawei Su, Weiwei Miao, Li Zhang, Qi Sun	
A New Kind of Integral Cryptanalysis for the Round-reduced AES	6
Tongfei Xia, Ziyan Zhao, Wei Li, Hengshan Fan, Can Cao	
Dynamic Routing Programming for Power Communication Networks by Recurrent Neural Networks based Reliability Prediction and Particle Swarm Optimization	10
Haiyang Wu, Xiao Lu, Dawei Su, Weiwei Miao, Li Zhang, Qi Sun	
Design and Implementation of the CRM Campus Management System Based on Java	15
Lian Ruimei	
A Nosql-Based Data Sharing Capability Mechanism in Smart Grid	19
Yue Zhao, Chao Huang, Zhongbao Ge, Tianzeng Liang, Peipei Li	
A Novel Power Supplies Network Method Based on Topology Logic Model	23
Zhen Wang, Chao Huang, Pei Li, Yue Zhao, Guang Zhao	
Research on Contact Simulation of Strands in Large Cross-Section ACSR	27
Qin Jian, Wan Jiancheng, Qiao Liang, Liu Chen	
Simulation of Continuous Tension Stringing Process of Conductor with Bending Stiffness Model	31
Chen Liu, Jian Qin, Jiancheng Wan	
Temporal and Spatial Feature Extraction of Events Based on LTP	35
Jiang Gaoyu, Pan Jingchang	

Reliability Analysis of Power Optical Transmission Network Based on Evidence Cloud Droplets Model	39
Yuanchun Tang	
Improving Cross-View Gait Recognition With Generative Adversarial Networks	43
Rui Zhang, Dong Yin, Zhipeng Zhou, Zhi Cao, Fanjun Meng, Bin Hu	
A review of glowworm swarm optimization algorithm	48
Yuefeng Tang, Ning Wang, Shuyi He, Xiangqian Liu	
RSA algorithm of EON based on coloring theory	55
Bingsen Xia, Duanyun Chen, and Yuanchun Tang	
A study on association rules-based mining of consumer product accident information	60
Yingcheng Xu, Xiuli Ning, Ya Li	
Multi-thread Weak Deterministic Method Based on Cache Optimization	63
Kaiyu Wang, Zhenzhou Ji	
A Novel Spinning Reserve Decision-Making Model for Power System with Considering Prediction Accuracy	67
Ruixin Tang, Lei Zhu, Jiejun Chen, Zihan Li, Haotian Zhang, Runbin Chen, Fangyuan Xu, Fei Zhao, Xin Liang	
An assumption for laser zone refining applied in the lunar	73
Liping Wang, Guangshi Li, Lang Che, Hongwei Cheng, Xingli Zou, Qian Xu, Xionggang Lu	
Recommend Driving Area-Route Based on Taxi Trajectory Experience	78
Lei Du, Hongyuan Yang	
The Usability of Campus Card Transfer Machine Research Based on Service Design	82

Yuan He, Liang Chen, Xiaoming Zhang, Yue Han

Prediction and Simulation Research on Temperature Field of Computer Room Based on Proper Orthogonal Decomposition	87
Ha Xinnan, Zhang Lizhong, Wang Ye, Wang Jianlei, Hu Feihu, Ma Qianli	
Implementation of Dual-server Switching for Shipborne ACU Under Dynamic Tracking Condition	92
Zhang Hao, Tao Min	
Simulation of Maglev Train Safety Braking Operation	96
Zhaoyi Qian, Wenbo Ni, Xiaoxu Huang, Xuemei Wang	
Study on Driving Safety Influence of Rampway Length	101
Jinjian Xiao, Yingna Xie	
A Novel Path Planning Algorithm Based on Q-learning and Adaptive Exploration Strategy	105
Ting Li, Ying Li	
Secure Software Updates for Intelligent Connected Vehicles	109
Yunshui Zhou, Xinkai Wu, Pengcheng Wang	
System Dynamics Modeling and Simulation of Vapor Cloud Fire and Explosion Accidents in Liquor Storage Tanks	113
Yu Chenglong, Shi Xunxian, Sun Enji, Zhang Xingkai	
A pricing strategy for sharing autonomous vehicle system	119
Ming Li, Xiang Huo	
Establishment of AHP-Fuzzy Model for Risk Assessment of High-tech Start-ups	123
Xiaofeng Li, Qisheng Chen	
The Research and Application of Cloud Printing Platform Based on Improved AES-RSA Encryption Algorithm	127
Yalin MIAO, Huanhuan JIA, Xuemin LIU, Yang ZHANG, Weihao TAN	
A classification method based on linear discriminant analysis and multivariate adaptive spline	132

Zhihui Li, Jiaxin Liu, Yufei, Huang, Jia Xu

A Classification Method of Circular Objects Based on Gray Level Statistical Features	136
Hanxu Liu, Mianshu Chen	
A Compressive Sensing Scheme Based on Zadoff-Chu Measurement Matrix	140
Zhongpeng Wang, Shoufa Chen, Linpeng Ye	
Implementation method of Single Point Fault of Computer Equipment in Electric Power Monitoring System	144
Liu Yi, Rao Guo-hui, Shao Rui-bo, Huang Hao-ran	
Low Complexity High Performance Non-Binary QC-LDPC Decoding System	147
Sun shulong, Lin min	
A Privacy Protection Method for Social Networks Based on Node Importance	152
CUI Haitao, LI Lingjuan	
Overlapping Community Discovery Algorithm Based on Label Propagation	156
Zhang Meng, Li Lingjuan	
Electric Field Simulation Analysis of 126kV Vacuum Interrupter	160
REN Yunying, WANG Ning, Dong Huajun, Ma Liting	
The real-time monitoring technology of air quantity based on the optimization of air velocity sensors location in mine ventilation network	164
Junhong Si, Shao He, Genyin Cheng, Tingxiang Chu	
Hotspot Detection and Trend Analysis in the Field of Power Measurement and Data Acquisition	170
Xiong Li, Jiahong Jin, Shaocheng Liao, Min Yu, Lei Han, Ziyan Chen	
Building Efficient Event-driven Networks from Frame-driven Networks with FIT	175
Yang Zhao, Haibo Wang, Yang Yang	
Encrypted Data Search Method Based on Keyword Semantic Relation Extension	180

Junfeng Lv, Yang Liu

Random Forest-based Handheld Operation and Maintenance of Hospital Information Systems via WeChat MiniProgram	184
Zhou ying, Hu Shan-shan, Chen Min-lian, Hu Wai-guang	
AHP-Based Software Quality Risk Assessment Method for Information System	189
Mao Yujun, Li Lingli, Dong Shuaijun, Lan Guofeng	
Analysis of Passengers' Tickets Pre-booking Behavior in High-speed Railway Based on Market Segmentation	194
Yantao Gong, Lei Nie, Huiling Fu, Zhenhuan He	
MTCNN: A Deep Neural Network for Recognizing Stochastic Phase Shifted Time Series Data	201
Junpeng BAO, Xinyi LI, Yu GAO	
Monitoring of Data-center-platform Service Operation in Power Grid Based on Link Tracking Technology	207

Fenggang Lai, Pan Zhang, Jing Du, Haiyan Hou