2014 IEEE Workshop on Advanced Research and Technology in Industry Applications

(WARTIA 2014)

Ottawa, Ontario, Canada
29-30 September 2014

Pages 1-708

IEEE

IEEE Catalog Number: CFP1451Y-POD
ISBN: 978-1-4799-6990-6

Table of Contents

New Analysis Techniques for Blood Pressure Biomedical Signals 1
Hayder J Essa, Issa Jaafar

New PLL Based Signal Conditioning Circuitry for Capacitive Sensors 7
ISSA JAAFAR, BO VINCENT WENGER

Quantifying Risk for Determining Optimal Joint Fires in Defence Planning 13
Manchun Fang

Removal of Cadmium ions by the fungus Auricularia polytricha from aqueous solution 20
X.QIAO,W.HUANG,J.LIU, Y.LIU,Y.B.BIAN

CFD to predict temperature profile for scale up of a new linear concentrating photovoltaic receiver 24
Xinyue Han,Yongjie Guo

Thermodynamic Calculation of Isobutane Dehydrogenation Reaction 28
Yingze Liu,Chengxue Wang

Wind power consumptive problem in the perspective of energy conservation and Emission Reduction 32
ZHANG JIANHUA,LIU FUCHAO,LEI YANXIA,ZHENG JINGJING

Feasibility analysis on the phase change thermal storage heating system of solar energy 36
Liang Pan

Research on air distribution of displacement ventilation system in large workshop 39
Liping Xiang,Hanqing Wang

Mechanism of Shaoyao Gancao Decoction on Anti-inflammatory and Analgesic Effects by Molecular Docking 43
Weiye Tao,Laiyou Wang

The Influence of Different Slopes of Defects on Ultrasonic Guided-wave in Flat Steel 47
Zhouquan Zhang,Hui ZHU,Xiaoqiu Li,Taotao Fan,Wenkai Xiao

Reliability Analysis of Highway and Transportation Network with Paths Failure 50
Shuchun Chang,Lixing Li

Exploration and Research Applications on New Material of Superabsorbent Resin 54
Jing Ning,Hao Ren,Zhen Li,Juan Wang

The New Type of Composite Board Water Turbine Sealing Ring 59
Xian Zhai,Wenkai Xiao,Taotao Fan,Li Zhu

The polution of Heavy Metals in Sediments from Beng river 62
Jicai Qiu

Test Research on Horizontal Shear Wave in Grounding Flat Steel 66
Zhouquan Zhang,Bo Jiang,Zhan Tu,DiKunqi Mu,Wenkai Xiao,Tan Yu
Sintering behavior of ceramic bodies from electric arc furnace slag 70
Tailin Yang,Yanbing Zong,Shaohua Li and Daqiang Cang
Structural and electronic distortions in hydrogenated single-walled zigzag carbon nanotubes 73
Lijun Pan,Weiguang Chen,Yanan Tang,Zigang Shen
The effect of Semen Euphorbiae cataplasm on mice model of trauma blood stasis 78
Mingsan Miao,Bolin Cheng,Ming Bai
Study on the Distribution of Phosphorus Forms in Wetland Sediments 81
Guosheng He,JicaiQiu
Strength Property and Structural Analysis of Material from fibers and Acrylic Emulsion Terpolymer 84
Haipeng Wu
Advantage of Higher Order Crack Tip Fields to Singular Fields for Physical Weak-Discontinuous Crack of FGMs Plates 88
Chong Xiao,Dai Yao
The Crack Tip Fields for Anti-plane Crack in Functionally Graded Piezoelectric Materials with Arbitrarily Gradient Direction 92
Chong Xiao,Dai Yao,Xue Chun-fang
The Wreck Analysis of Thunderbolt on the Ship 96
Xia Hui-cheng,Mao Jian-zhou
Rapid Precise Detection on Arc with Discrete Points Arbitrarily Distributed Based on the Coordinates 99
Li Xue-hao,Liu Qing-min,Huang Kai
Qualitative Analysis and Substitution of Bleaching Catalyst Promor 103
Cui Shuling
Effects of six pesticides on the growth of Chlorella vulgaris 106
Yan Cui,Dinan Li,Wen Lv
An Empirical Analysis of Earnings Management on Asset Valuation Perspective 110
Zhao Qingguo,Zhao Lirui
Discussion on the Situation and Development of Chinese Liquor Industry 116
Xu Guo,Yong-guang Huang
The Analysis of the Virtuality of Film and Television Animation Art 119
Wang Jian
Design and Implementation of Network Advertising Precise Marketing System Based on Parallel K-Means Algorithm 122
LIU jing
The Application Research of Multimedia Technology in Literature Chronicle System 125
YU Changchun

The Design and Implementation of Resource Information Management System Based on B/S 128
HE Dinghua
The Design and Implementation of Security Network System Based on Web 131
HUANG Zhikun
The College English Curriculum Design Based on Cloud Computing 134
XU Xiaodan
The Development and Utilization Research of Network Information Resources for English Learning 138
ZHU Xiaowei
Image Design of Computer Graphics and Visual Communication Design and Implementation 141
QI Lijun, XIONG Zhuang and ZHOU Guojun
Discovery of Topic Based on Mass Incidents and Research of User Roles 144
Xie FENG,Wanli ZUO
Study on the constructivism teaching mode of college English based on Multimedia Network Technology 147
Zhao Hui-Min
The Design of the International Settlement and Trade Finance System 150
YU Min
The Design of Interactive Multimedia System in Wireless Environment 153
SUN Liang
Study of the Application in the Whole Course of College Employment Guiding System in Employment Ability 157
Min CHEN,Qiang LI
Research of Dynamics and Process Simulation of Biological purification of Volatile Organic Waste Gas 160
GAO Enli, FU Xiaolan
Design and Implementation of Data Mining Platform Based on the Cloud Computing 163
ZHU Jia,ZHANG Ping
Emotion Penetration Analysis of Multimedia Technology in College Chinese Teaching 166
LIU Shiying
The Design and Implementation of Multimedia Teaching Platform in the Cloud Computing Environment 169
SUN Danpeng,JIANG Rui
Digital expression and inheritance of the intangible cultural heritage "Regong Art" 172
LIU Hongjiang
The Optimization and Management Research for Central Heating System 175
TENG Qiang,WANG Wenhuan

The P2P Communication Technology Research Based on Internet of Things 178
Xiaoyan CHENG,Guoqing DANG
Application of Wireless Sensor Network in Monitoring System Based on Zigbee 181
Guoqing DANG, Xiaoyan CHENG
The Research on Internet of Things Application Architecture Based on Web 184
Nan LIN,Weihang SHI
Research on Innovation Mechanism of Industrial Cluster under the Network Organizational Analysis Framework 188
ZHAO Peng, LUO Fuzhou
Risk evaluation of building contractors-based on Gray relational analysis 192
Wu Yunna,Peng Yan
A Topology Control Algorithm for Ribbon Wireless Sensor Network 195
JIANG Bing,XUE Xiao-qing,SHA Ting-ting
Design and Implementation of Student Management System of Educational Management System 199
Han Cuiping
Based on Slope-one Hybrid Recommendation 203
Zhao Zhengde,Li Jianjun
Managing RFID data in MongoDB 206
Jia Xinwei,Shen Guicheng
The Whole Scheme Design on 3D Model Retrieval 210
ZUOJUN LIU,LIHONG LI
Performance Analysis of Adaptive Access Mechanism in Non-Saturated Conditions 214
Shi Chun,Chen Caixia and Zhang Ying
The image positioning of the thick fog people trapped in Based on the improved median filter 219
Honghua Wang,Hui Zhang
A Safe and Energy-saving Traffic Attack Detection Protocol for WSN 222
Bi Jiana,E Xu
Attribute Based Access Control Constraint based on Subject Similarity 226
Nurmamat Helil, Kaysar Rahman
Feature Analysis of Atmosphere Laser Communication Channel under Rainy Condition Based on WFET 230
Wei Xiao,Yong Ai,Yonghong Dai,Yilan Tan
Investment risk evaluation of information technology projects China Communication Enterprises 234
Qiao Meihua,Bian Yijie,Li Jingqi
Design and Implementation of Instrument Transfer System based on Web Service 238
Fengwei wang,Zhihong xing
A Mobile Agent-based Task Seamless Migration Model for Mobile Cloud Computing 241

Niu Haichun,Liu Yong
Pumping dynamic load analog control system design and development 247
SUN Dong,LU Zhengtong,JIAO Yuxi, LI Wei,WANG Xiaodong,ZHOU Liang,LIU Xiangdong,XIAO Zhiyong, MA Kun
Time series regression and prediction based on boosting regression 251
Wen Gu,Baifeng Li,Baolong Niu,Wei Wei,Zhiming Zheng
Intersection Distance for Object Recognition 255
Yan Zhou and Jianning Liang
Research on Network Relationships and Innovation Performance of Industrial Cluster Based on SEM Model 260
ZHAO Peng,LUO Fuzhou
A Novel Medical Assistance System Based On Data Mining 264
Jingyuan Dai
The BER Performance Analysis and Simulation of Rake Receiver for UWB Systems 267
Kang Xiao-fei,Li Bai-ping
A Rule Model in Active Databases 270
Guizhen Wang
An Aggregate Method of Grey Connection Number based on Vague Linguistic Interval 274
WANG Wan-jun,YAN Yan
Implementation of Cloud Service Messaging Mechanism Based on XMPP 278
Lei Zhengrong,Ding Yunfei,Shi Yang
The Implementation of Dynamic Heteroskedasticity Convertible SVM Model in Financial Time series 281
Song Xiaohua,Zhang Yulin
Structural change and TFP Change in ChineseManufacturing 286
Liang YANG,Meng LI
Memory State Transfer Optimization for Pre-copy based Live VM Migration 290
Yi Zhong,Jian Xu,Qianmu Li,Hong Zhang,Fengyu Liu
Study on establishment of mathematical model to detect video speedometer 294
Yujun Shan,Kuihe Gao,Zhihong Xing
A Post-Seismic Relief Supply Allocation Model based on Risk Perception 297
Renqiao Rao,Huaidong Xie
Research On The Optimal Route Choice Based On Improved Dijkstra 303
Mingjun Wei,Yu Meng
A system dynamics model for medical staff allocation in post-Wenchuan earthquake relief 307
Huaidong Xie,Renqiao Rao
Research on domain knowledge graph based on the large scale online knowledge fragment 312

Lv Qingjie,Xu Lingyu,Yu Jie,Wang Lei,Xun Yunlan,Shi Suixiang,Liu Yang
Research on Communication Network Architecture of Energy Internet Based on SDN 316
Geng Zhang,Lan Su,Yang Wang,Xi Liu,Jie Li
A Fuzzy Random Bi-level Programming Model for Three-Stage Supply Chain with Dual Coordination Mechanism 320
Rui Wang,Shuang Zhao,Xifeng Li,Jiangyun Wang
Study on SAR Data Parallel Processing Using Computing Cluster 327
Yinghui Zhao,Xijuan Yue,Chunming Han
Group-based Sparse Coding Dictionary Learning for Object Recognition 331
Yanqin Zhao,Jinhua Li,Zhun Zhong
Analysis on Influence Factors of Garment Enterprises in the Entire E-commerce Development 335
LI Qing-Na,SHAN Hong-Zhong
QODM: A Query-Oriented Data Modeling Approach for NoSQL Databases 338
Xiang Li,Zhiyi Ma,Hongjie Chen
Research on Influencing Factors of University Library Readers' Satisfaction Based on Factor Analysis 346
LIU Feng,ZOU Ping,JIE Jun
The Design of Secure Embedded VPN Gateway 350
Kun Han,Junjie Liu,Demin Yang,Quan Yuan
Research on Compound Type Galvanometer Verification Device 354
Li Songyang,Liang Guoding,Li Nuo,Yang Li
Research of Electrical System Reform Based on Talyrond 73 Roundness Instrument 358
Yue WANG,Yu ZHANG,Yuehong JIN,Ming YANG
From the user experience to Optimization design in App development process 362
Shui Jin,Yanghua Wang
Typhoon Information inquiry-based WebGIS technology and management systems design and implementation 366
Xiaochun Liu,Jiangshui Zhang
Studying on variable speed limit for expressway based on Meteorological monitoring 370
Zhang Fangzhou,Lv Yang,Jiang Hui
Traffic Sign Segmentation in Natural Scenes Based on Color and Shape Features 374
Qiong Wang,Xinxin Liu
Video Surveillance in Simplex Wireless Channel Based on GStreamer 378
Ping Wang,Lei Zhang,Qiang Ge
Research on Ethical Issues of Micro-channel Interpersonal Indifference 383
Huaimin ZHANG,Jingjing SHANG
Design and Implementation of Campus Social Networking System 387
YAN Yan,XU Longzhe,YANG Renyuan,WANG Wanjun

Data Mining Techniques with its Application to the Dataset of Mental Health of College Students 391
Cui Yuan
Data Mining Method with its Application to Computer Assisted Test System 394
Cui Yuan
An improved Node Localization Algorithm in Wireless Sensor Network 398
HU Juan,JIANG Minlan
The State Estimation of UAV Based on UKF 402
Xu Wanli,Bao Shuo,Liu Zhun
Onset Detection Using Leared Dictionary By K-SVD 406
Wenming Gui,Xi Shao
Use Fractal Brown Random theory to enhance infrared image 410
Yu Tianhe,Yu Xiaoyang,Mao Yinhang,Dai Jingmin
The Structure Cost Issue of Interorganizational Information Systems: Theory and Application 414
ZHUANG Wei-qing
Robust Eye Openness and Head Pose Estimation Based on Multi Modal Camera 418
Yan Zhang,Jiguang Yue,Yanchao Dong,Zhencheng Hu
Research on Information Management System of University Students' Mental Health 423
Jiangbin Qu,Wei Liu
Pan Boolean PI Control of Grid-Tied Two-Level Inverter for wind Power Generation 427
Chen Jin,Wang Zhenhua
Design and Implementation of Multiwindow Multimedia Teaching Platform 431
Zuomin Luo,Zhu Liang,Haolu Hou
The Analysis of the technical progress effect of FDI in China 434
Yan Chen
The practical research of circumstance teaching in the major of logistics management at high vocational college 437
Jianqing Liu,Shuang Yu,Yaqing Deng
Research on the Development Strategy of Tourism Consulting Companies Based on SWOT Model 441
Yonggang An,Xiaoyan Ma,Wenwu Chen
Research on the Employee Performance Management of Tourism Planning Company in Beijing City 445
Yonggang An,Xiaoyan Ma,Wenwu Chen
The Design and Implement of Household Robot Based on Android Platform 449
Deng Zhi-Hui,Zhu Yun-hang
Study on the method of weak signals tracking using nonlinear filter 453
Zhu Yun-hang,Li Ping-an

The Control System Modeling of Low-Frequency Acoustic Energy to Reduce 457
Chaofeng Lan,Huan Chen,Fengchen Li,Meng Zhang,Guanzhong Yang
Remove The Melting Image Mosaic Effect By Using A Secondary Threshold Determination 461
CHEN Liang,YANG Tian-shu,LI Mei,MA Guan-nan
Study on Disaster Information Management System Compatible with VGI and Crowdsourcing 464
LIU Qiang,GAO Yuan,CHEN Ying
The research of LED intelligent lighting system based on the fractional order controller 469
Li Changsong,Dong Shuxia
Synthetic hydrochloric acid production and energy consumption process monitoring system 472
Zhang Yue,Qing Xiaoqu,Gao Yunju,Wu Yuhui
Detecting of LFM Synchronization Signal for Underwater Acoustic Communication with FPGA 476
Ye Zhonghui,Jiang Zhidi,Wang Kang
A Study on Bilingual Teaching Model of the Chinese-Foreign Cooperation in Running Schools 479
Liu Jiaying,Li Jiming
A Survey of the Use of Code-mixing Buzzwords among Chinese College Students 483
Dan Liu
Organizing competitions to improve comprehensive abilities of college students 487
Zhu Huaihong,Xia Lichun,Jin Hong
The Current Situation of Investment in China's International Student Education and Its Strategy Analysis 491
QIAN Mingcai
Development of Innovative Experiment Program for Biomedical Engineering and Research and Practice of the Practical Ability Cultivation for Undergraduates 495
YANG Lin,CUI Jingxuan,SUN Kaiji,LI Chengjie,ZHANG Song,YANG Yimin,LI Xuwen,HAO Dongmei
Application Research of Educational Animation in the Living Language Classroom Teaching about Children with Intellectual Disabilities 499
Zheng Zhiqun
Research on reliability evaluation and sensitivity analysis of domain software based on AHP method 502
Chen Qu,Bao Tie,Zheng wanbo,Lian Wei
Studies on the Cause of"Viscosity"of Industrial Transfer of Zhejiang and Solutions 506
Li Lingling,Liu Chunxiang,Zhu Liyuan
Research and degisn of Music Cognition Education Mode for Music Schools 510

Yumeng He
Education Matter-element Analysis and Extension Model for the Control of Higher Education Quality 514
Ping He
Curriculum teaching reform ideas of “Mechanical precision design and testing basis” 518
Quanying Sun,Yanqin Zhang,Xiaodong Yu,Wenming Tang
Research on Evaluation of Engineering Changes under Bill of Quantities Mode 521
Tao DING,Ling ZHANG and Zhenshui WANG
The Innovation Mechanism Research of the Coal Mine Safety Production Supervision 524
BO TAN,YIMENG SONG,WENDONG SHI
Teaching Method Reform of the Hydraulic and Pneumatic Course Based on Engineering Application Cases 528
Xiaoming Sheng,Xuewu Hu
Research and Practice on the Engineering education of University: Based on the Project of FSAE 532
Wang Taipeng,Sun Bo
The Design of FMCW Radar Liquid Level Measuring System Based on FPGA 536
Zhao Zeng-rong,Qiu Yao-hui
Role and Practice of Competition, Platform and Base in Mechanical Major 539
Guojin Chen
Oriented e-commerce purchasing analysis and optimization of automotive engine chain 543
Liu Rui
The Speech Evaluation Method of English Phoneme Mobile Learning System 546
XIAO Jing,LUO Yong
A Study of Chinese Culture Consumption Based on Co-words Analysis and Social Network 551
Liu Yanfang,Ding Nan
The Educational Information Resources Co-construction and Sharing Mechanism Based on Cloud Computing 555
Gang Zhao,Ye QiuXu,Yang JiHua,Chen LingYun
Nonlinear ANP Sorting Method Applying in Evaluation of Enterprise's Sustainable Innovation Capability 559
XU Guangyong,WANG Jingjing
The Reform of the Course Automobile Theory for Independent College Based on Control Theory with Numerical Analysis Software 563
Zhuo Yang,Shaojia Huang,GongRui Sun,Xiaojuan Lin
Research on the Application of Innovative “Order-oriented” Talent Cultivation 567

Mode in the Cultivation of Talents for Tropical Marine Sports Tourism of China
Tian Jianqiang,Lu Yan
The application-orientated measurement performance evaluation of the end-to-end available bandwidth 573
Zhang Xiaodan
The Optimized Processing System for Sci-tech Novelty Retrieval Based on Queuing Theory 578
JIANG Qi-yu, Liu Ju-hong
On the Policies of Mechanism Promotion of Ningbo Intelligent City Construction Based on Researched Analysis 583
Liming Zhao
Empirical Research on Work Values Structure of the New Generation of R&D Personnel 587
XIA Zheng-jing,ZHU Yong-yue
Automotive Engine Modelling Based on Online Time-Sequence Incremental and Decremental Least-Squares Support Vector Machines 591
Zhuo Yang,Shaojia Huang,GongRui Sun,Zhenyu Deng
Secondary vocational school professional backbone teachers provincial training work of analysis and research 594
Qiang Wang,Xianjun Du,Aimin An
Analysis and Optimization of Low Speed Electric Vehicles Frame 597
Zhuo Yang,Shaojia Huang, GongRui Sun,JianWen Cai
Research and Practice of Computer Major's Practice Teaching System in Application-oriented University 601
Wang Dong-xing,Ma Ying-rui,Wang Jian,Li Zi
Reflections on the Experimental Teaching of “Advanced Language Programme Design Visual Basic”Course 604
Sun Ping,Feng Qiao-e
Risks and Countermeasures of the Enterprise Informatization 608
Hanyan Huang
Humanism regression of college Chinese teaching design from the perspective of Computer information technology 611
He Guozheng
The effectiveness of the modern Computer information-technology-assisted of college Chinese teaching 615
Liu Shuzi
The Revelation of Rosenthal's Effect in Student Management 619
Zhu Cuiping
The Thoughts on Science and Technology Innovative Team Construction in Regional Universities and Colleges 622

Xinzhong Wang
APPLICATION OF BILINGUAL TEACHING TO STUDENT CULTIVATION 625
Li Hongrui,Chen Weiping
MONITORIAL SYSTEM AND CONNOTATIVE DEVELOPMENT OF HIGHER EDUCATION 628
Hongrui Li,Wenbo Zhang
Review of Power Network Planning Research Status 631
XUE Lei,WANG Li-bin,LI Chunhui,LI Qiang
Study on Informative Management of Enterprise Intellectual Property 634
Zhang Lei,Yang QingYu,Zhou Jinping,Li Mu
A correlated analysis of maize rootstock traits and lodging resistance 638
Liang Zhao
The Calculation Thinking Training System Research for C Program Based on B/S Mode 641
Jingye Qu
The Design of English Listening Learning System Based on Android Platform 644
Minjie LUO
Research on Application of Computer Database Technology in Information Management 648
Juan CAI
The Application of Multimedia and Modern Network for College Sports Curriculum Teaching 651
REN Yadong
The Design of Legal Risk Service System Based on SOA 654
DENG Chunlei
The Importance of Computer Network Technology in the Coal Quality Inspection 658
DING Yang,JING Jianzhong and ZHU Xiangying
The Research and Practice of Ubiquitous Learning Platform Based on Mobile Terminal 662
Jianhao XU
Application Analysis of the Drain Ditch Computer Design System 666
Wen-jian ZHANG,Wen-xu ZHANG
Research and Implementation of University Online Job Guidance and Service System Based on SNS Interactive Function 669
YANG Yun
Analysis of the Ecological Tourism Development Model based on SWOT 672
HE Xiufen
Application of Electric Car PV Charging System 675
ZHOU Qing
The Construction Research on Ideological and Political Education Information Management Platform 678

BAO Zhuo
The Network Promotion Research for Guangxi Rural Tourism Brand Under the Background of New Urbanization 681
CHEN Guiqiu,ZHAO Zhi
The Design and Implementation for Electrical Control System of the Modular Hydraulic Platform Transporter with Power 684
Yanmei KONG,Wandong XU and Yanhong LI
The Design of Teaching Management Information System Based on Oracle Security Audit Technology 687
XIA Sailian
The Research of Resource Sharing Platform for Universities Using Virtual Database 690
Ming YANG, Xiaoyun ZHANG
The Study on Source of Vibration and Acoustic Noise of Permanent Magnet Machines by Inverter 694
CHEN Jiaoying
Design of Enterprise Informatization Management System Based on B/S Mode 697
Ju WANG,Ping LIU,Chenggang WANG
The Discussion of the Financial Support System of Our Country's Industrial Policy 699
PAN Wei,ZHAO Liyang,YANG Xiaoyun,SUN Chuyi,LUO Mansi
International Trade E-commerce Based on Data Mining 703
DAI Ting
Application of Analytic Hierarchy Process in the Wetland Ecotourism Evaluation 706
HU Ping,Xiao Changrong
Enterprise Internal Control Optimization Research Based on the Accounting Information Perspective 709
Mei XING
Design and Implementation of Property Tax Grid Management System 712
WANG Jue
Constructing of Sports Information Management Theories And Developing Research of Application System 715
Ning QI,Le WANG
The Application Research of Electronic Evidence System Based on Analysis of User Correlative Behavior 718
Juan LUO,Wei XU
Research of the Theoretical Foundation of EIMN Sensor Network and Wireless Remote Image Monitoring System Technology 721
KE Junxiao
Complete Sets of Electrical Secondary Principle Aided Design Architecture and System Development Design 724
MO Wenhuo

Analysis of the influence factors of international trade flows based on the trade gravity model and the data of China's empirical 728
He HUANG
The Online English Learning System Design Based on B/S Structure 731
Anfeng XU,Wenshuai XU,Hong WU
The Research of Food Enterprise Credit Evaluation Method Based on Fuzzy Comprehensive Evaluation 734
DING Yicen,DU Ziping,LI Yang,ZHAO Ying
Pure Electric Vehicle Power System Parameters Matching and the Analysis of Vehicle Control 737
BAI Xiuxiu
The Design and Implementation of the Ecological Tourism Risk Management System in China 741
LIU Xi
The Wetland Landscape Ecological Research Based on RS and GIS Technology 744
BAI Mingchang
The Design and Implementation of Legal Work Management Information System 746
ZHAO Yan
The Discussion of New Digitization Application in Outdoor Media Design 749
XIAN Yan
Design and Actualization of Management System in Sports Teaching 752
Liang SONG
The Application Research on Household Design and Intelligent Household System 755
LU Jianjun
Research of Supply Chain Coordination In the Service Supply Chain Management of Ecological Tourism 758
WANG Ting
Rock and Soil Mechanics Model Parameter Inversion Method Based on Computational Intelligence 761
YU Rongchun
Design and Implementation of Network English Multimedia Teaching System 764
JIN Yanjie
The Design of Mobile Learning System for English Based on 3G platform 767
LIU Man
Design of Web-based English Learning Support System 771
WANG Rouhua
Analysis and Key Technology Research of Higher Mathematics Network Question Bank System Based on B/S Mode 774
CAI Pan
The English Learning System Design Based on the Android Platform 777
DENG Wei

Design of English Online Study system Based on B/S Structure 781
LI Zhaoying
Intelligent Low Power Portable Gas Detection Device Design 784
DENG Peng
The research on Data Flow Technology in Computer Network Security Monitoring 787
YIN XiaoHong
The Application of Computer Image Processing Technology in the Fine Arts Creation 790
ZHU Dezhen
A Secure Routing Algorithm in Wireless Sensor Networks 793
Zhi Hu,Ying-you Wen,Hong Zhao
Design of CNC System for Electrical Discharge Machining Based on DSP 797
Hanmin Ye and Qianting Sun
Design of On-Board Data Center for in-Vehicle Networkings 801
Yong Xu,Junjiang Liu
Primary study on physical properties of some vegetable seeds 806
Mi Tang,Jv-hong Zhu,Jian Ren,Xian-feng Shi,Jin-guang Peng
Design of Signal Processing Circuit of Giant Magneto-Impedance Sensor in Target Detection 809
Xiao Jing,Duan Xiusheng
A Configurable, Programmable and Software-Defined Network on Chip 813
Liu Cong,Wang Wen,Wang Zhiying
A Study on Connection of Simulating Public-Private Key Pairs and SCSI Disks 817
Liu Hailong
Economic Load Dispatch of Power Systems Based on Hysteretic Noisy Chaotic Neural Network 820
Ming Sun,Shaojie Cui,Yaoqun Xu
The Scheme for Improving the Efficiency of Block Cipher Algorithm 824
Zheng Ying,Bai Qinghai
Distributed finite-time tracking control of high-order multi-agent systems with delay-dependent communications 827
Xueliang Liu,Zhi Zhang,Xiuping Li and Qingtao Han
Design of the Oil Pump Temperature Monitoring System Based on Internet of Things 831
Dong-xing Wang,You-jun Xu,Zi Li,Yu-pu Zhu
Car networking application in vehicle safety 834
Beying Deng,Xufeng Zhang
Reactive Power Optimization by Genetic Algorithm Integrated with Reduced Gradient Method 838
Zhao Dongmei,Wang Pei and Zhang Xu

Design of γ Dose-rate Remote Monitoring System Based on Optical Fiber Communication 842
Zhao Jian-wei,Zhao Xin-hua,Hu Xiang-chao,Huang Xiao-fei
key-management scheme based on identity and cluster layer in wireless sensor network 846
Li Zheng,Wei Guoheng,Wang Ya
Hospital Digital Library based on Cloud Computing 850
Wang Li-ming,Wang Hui,Wang Hong
Evaluation method of steering column switches operating performance based on the gray correlation degree 853
Jinhe Chen,Cuidong Wang,Xia Wu,Xiao Zhou,Jianwen Li
Risk Analysis of Traffic Safety System Based on Non-optimum Category 857
Shulin He
A Noise-Tolerant System for Protocol Formats Extraction From Binary Data 862
Li Tong,Liu Yuan,Zhang Chun-rui,Meng Fan-zhi,Yue Yang
A Study of Camera Calibration in the Vision System of Soccer Robots 866
Guo Hui,Yu Qiushui,Fan Min
Inferring Protocol State Machine for Binary Communication Protocol 870
Fanzhi Meng,Yuan Liu,Chunrui Zhang,Tong Li,Yang Yue
Path Sensitive Analysis based on Dataflow Information and Program Slicing 875
Xi Guo
Study on Frequency Control Technology of Resonant Wireless Power Transmission System 878
Wenhua Ren,Ying Yuan
Analysis of Multi Scale Finite Element Method in Low Frequency 884
Li Zhang,Guizhen Lu
Strength Analysis and Optimization of Small Steel Railway Bridge Based on ANSYS 887
Wan Yi-pin,Liu Yan-feng,Song Xu-ding
An Efficient Compensation Method for ISAR Imaging Based on Short Time Adaptive Gaussian Chirplet Decomposition 891
Xianquan Luo,Chengjin Shan,GuiZhou Lv and JiuEn Yu
Decoupling Control Strategy for High Speed Permanent Magnet Synchronous Motor Based on Inversion System Method 895
Fang Jiancheng,He Yanzhao,Wang Zhenyan
Spectrum Analysis of Speech Signal Based on SPTool 899
Lingying Tu,Yifan Hu,BangminYang
Wide-Area Monitoring Protection and Control of Future Power System Networks 903
Jiaping Liao,Cheng He
MULTI-LAYERED RATE CONTROL FOR COLLABORATIVE MIMO IN 906

LTEADVANCED
Wang Hengyou,Wang Qian,Wang Dongyang,Wu Muqing
The Implementation of Literacy and Sign Language Learning System for Deaf Children Based on the Augmented Reality 911
Jie Jiang,Yang Kuang
Design of Embedded Video Surveillance System Based on Quantum Cryptography 914
Zhang Hongtao,Hu Shunxing,Xu Hui,Tu Lingying
Research on Info-net Security Controllable Technology 919
CHEN Xing-kai,LU Yu,LIU Yunlong,WANG Zengguang
Research on Beidou-based Inter-domain Identity Authentication for Mobile Object 923
YAN Jie, LU Yu, LIU Yunlong, CHEN Liyun
Robust Initial Alignment Algorithm for Platform Inertial Navigation System on Disturbance Base 927
GUO Zhibin,WANG Yuegang,SHAN Bin,HUANG Wuxing
Application of Adaptive Fuzzy Control in the Purification of High Temperature Gas from Glass Kiln 930
Gu Yanling,Chen Changzheng,Gu Xiaojiao
Design of real-time data analysis system based on Impala 934
Jingmin Li
A Novel Assessment Informatization Structure and its Application in Education 937
Yang Zeng,Shardrom Johnson,Gang Wang,Xubin Liu
Data Refining Model Based on Oil Refining Process 942
Lin Gu,Shardrom Johnson
The Approach to Teaching Quality Evaluation Based on Fuzzy Variable 946
Lin Xu,Huaqing Cao
PPC:A novel approach of Chinese text mining based on Projection pursuit model 950
Xinqing Geng,Zongmin Ma
Advantages and Demonstration of Gated-Mode Passive Quenching with Active Reset Circuit 953
Chong Hu,Teh-Hua Ju,Yong Yao
A Study Model With Spacing and Test Effect 957
Qing-Xian WANG,Wei An
Gray-level Image Watermarking with High Capacity Based on Spread Transform 962
Wu Chunxue,Zhang Yunyun,Xiao Jun
Energy Optimization of the Heat Supply System with Different Boilers 966
Fulai Yao,Chengyu Cao
The Research on Safe Reliability of Remote Control System of Relay Protection Device 971
Pingping Dong,Jian Guo
Research on 3D reconstruction for Robot based on SIFT feature 976
ZHONG Qiubo,ZHAO Jie

Research on turning motion for biped robot based on consumption 980
ZHONG Yingying,ZHONG Qiubo,ZHAO Jie
Infographics Applied in Design Education 984
Gao Ru,Zhang YaMing
Design of Car coating system based on PLC 987
Liu Yong-qiu,Liu Xiao-feng
Cloud Crime to Traditional Digital Forensic Legal and Technical Challenges and Countermeasures 990
Hai-Yan CHEN
Research on multifunction electric power platform for heavy equipment based on ultracapacitor technology 995
Yi Tao,Li Zhimei,Jianguo Wang,Liu Ping
Study on modeling and application of ultracapacitor 999
Yi Tao,ZhiMei Li
The Research and Application of Remote Sensing Technology in MaizeYield Estimation of Jilin 1003
Yu-xia Yao,Zhang Yun,Xiao Yan Liu,Hu Nan
Influence of ocean current on Hg content in the bay mouth of Jiaozhou Bay 1006
Dongfang Yang,Sixi Zhu,Fengyou Wang,Xiuqing Yang and Yunjie Wu
An Experimental Study in Computer Programming Class 1009
Yueling Zhao,Haiyan Han,Liying Cao,Guifen Chen
Study on the Cadmium in surface waters in Jiaozhou Bay 1012
Dongfang Yang,Sixi Zhu,Fengyou Wang,Youfu Wu and Huazhong He
The Research of Logistics Park Planning Method Based on GIS 1015
DONG Chong
Study on the Source of Cr in Jiaozhou Bay 1018
Dongfang Yang,Sixi Zhu,Fengyou Wang,Youfu Wu and Huazhong He
Application of Wavecluster to Fault Diagnosis in Aero-engine Rotor System 1021
Liu Xiaobo,Ding Weiming
Simulation of Inverse Gaussian Compound Gaussian distribution Sea Clutter Based on SIRP 1026
Lei Yi,Liang Ya,Ning Han
Research on the application of honeypot technology in Intrusion Detection System 1030
Xiangfeng Suo,Xue Han,Yunhui Gao
Estimating Hidden Network Topology Using Hop Matrix 1033
Yongcheng Wang,Liang He
A SURVEY ON IP GEOLOCATION 1039
Bin Zhu,Zhihong Tian,Wenliang Duan
Optimization of Ice-Storage Air Conditioning System With ASAGA 1042
Mingzhi Zhang,Yundong Gu
Widely Linear Estimation Technique Based on Circularity for I/Q Imbalance 1047

Compensation in Low-IF Receivers
Chun CHEN,Xiaomin SU,Chunhua LI
Image Synthesis for Sparse Representation based Multi-Pose Face Recognition 1051
Daming Zhang,Xueyong Zhang,Huayong Liu,Lu Li
Heat Treatment Process and Defect Analysis of the Aviation Piston Engine Crankshaft 1055
Fa-jun DING
NO2 gas sensor based on polyvinylpyrrolidone/reduced graphene oxide nanocomposite 1059
Junlong Huang,Guangzhong Xie,Yong Zhou,Tao Xie,Guangjin Yang
Evolving Gomoku Solver by Genetic Algorithm 1064
Junru Wang,Lan Huang
Low-Observable Target Detection in Sea Clutter based on Q-MMSPF 1068
SUN Kang,JIN Gang,WANG Chao-yu,MA Chao-wei,QIAN Wei-ping,GAO Mei-guo
Remote-sensing Images Fusion by Compressed Sensing in Contourlet Transform Domain 1072
Yang Senlin,Li Yuanyuan,Wan Guobin
The Study on Spatial Homogenization Parameters based upon Equivalence Theory 1076
Jin Ma,Zhibin Liu,Bingshu Wang,Xinhui Duan
Parameter Estimation Of Digital Communication Signal 1080
Chao Shen,Wei Gao,Zongxi Song,Tong Yao,Bin Li
Obstacle Avoidance Algorithm for a Finite-time Formation Control 1084
WU Guozheng, WANG Xingxuan
A Novel Inverter Frequency Dividing Droop Controller Based on Voltage-controlled Mode 1090
LIAN Jing-ru,QI Sheng-long,WANG Gang,ZHANG Chang-hua
The Calculation of DC Distribution in Hami AC Power Grid 1094
Qi Yang,Xi-shan Wen,Ting-ting Guo
Applying of Koch Island Fractal in Hi-Lo Impedance Line Low-pass Filter 1098
Chen JiaXi,Guan YaLin
Application of Koch Island Fractal on Dumbbell-shaped Defected Ground Structure Low-pass Filters 1101
Chen JiaXi,Guan YaLin
Study on the integrated system of stage management and stage equipment control 1105
Hui Ren,Jie-Hai Chen,Yu-Jian Jiang,Zhen Li
The Design of Two-layer Flat Lens 1108
Pei Li,Yalin Guan
Research of Two-Way Route Redistribution Based on Multi-Protocol 1111
Ye Hanmin,Sun Qianting,Song Zihang
Effect of Dynamic Disparity on Visual Comfort of Stereoscopic Video 1114
Hui Ren,Zhibin Su,Man Zhang,Xiang Tian,Liu Gao

Wind power and thermal power turbines performance replacement optimization model based on chance constrained programming 1118
Wei Wang,Daoxin Peng,Zhongfu Tan,Chao Qin
A Novel Low-dropout Regulator with Large Load Current and High Stability 1122
Zishen Li,Lenian He,Chen Chen
Research and Implementation of Wireless Home Network in Smart Home 1127
WANG Li-xia
Switch-SSD Cache Based XML Query Processing in Hadoop 1131
Changlong Zhou,Minghua Jiang,Feng Yu
Optimization for Scheduling Arrival Flights at Airport Based on Airline's Profit 1135
Zheng Xiang,Yu Tang
Object based video synopsis 1138
Tong Yao,Maosen Xiao,Caiwen Ma,Chao Shen,Peng Li
Research on Power Harmonic Detection System Based on STM32 1142
Limian Ren
Research on Air-to-ground Missiles Autonomous Recognizing Targets Online Based on Similar Competitive neural networks 1145
LAI Guiwang,XIAO Shuchen
Prediction of Temperature and Relative Humidity in Greenhouse Based on the Combination of DGM(1, 1) and Linear Model 1149
Yin Jingjing
The Implementation of NAPT Function of Border Gateway Based on Middleware 1153
Feng Liu,Xu Chen,Huafeng Liu
TE-optical Switch Based on Modification of Photonic Bandgaps in Photonic Crystals 1157
Guohua Wen,Mi Lin,Natesan Yogesh and Zhengbiao Ouyang
TM-optical Switch Based on Modification of Photonic Band Gaps in Photonic Crystals 1160
Guohua Wen,Mi Lin,Natesan Yogesh and Zhengbiao Ouyang
Critical Path Coverage Testing of Embedded Software Based on LCSAJ 1163
Xiao Zhi,Jianghua Zhang
Research and Simulation of Video Compression Rate-control based on Markov Decision Processes 1167
Yao Jun,Ma Xu-sheng
Study on On-line Insulation Monitoring for 500kV Submarine Cable 1171
Bo Zhu,Xinlao Wei,Bing Pang,Song Wang,Tong Liu,Ruihai Li
Users'Brands Preference Based On SVD++ In Recommender Systems 1175
Yancheng Jia,Changhua Zhang,Qinghua Lu,Peng Wang
Newton's Method Based Array Subscripts Dependence Test Framework 1179
Baoliang Li,Wenhua Dou,Jie Zhao
Insulation resistance precheck unit of low voltage circuit breaker based on 1183

piezoelectric ceramic transformer
Zhichao Li
Effect of different Reflective Surface and unequal Receiving Antenna Height on Channel Characteristics of Hexapolarized MIMO System 1187
Liyu Yang,Yi Mao
Software Process based on Workflow in Specific Areas 1191
Yunze Wang,Yuting Yang
Enhanced Bag-of-Features Model For Image classification 1195
RongAn Chen,Zhiyi Qu,JianPeng Qiu
Enhanced Stock Prediction using Social Network and Statistical Model 1199
Xiaotian Jin,Defeng Guo,Hongjian Liu
Diverse Social Networking Applications and Adaptive Mobile Networks 1204
Shunliang Zhang,Yi Wu,Ping Qiu
Design of a 6.25Gb/s Adaptive Decision Feedback Equalizer in 0.18 μ m CMOS Technology 1209
Xiao Wu,Qingsheng Hu
Uplink Performance in 3G Networks 1213
Yunjie Wan,Lei Zhang,Zemin Wu,Yan Tang
Queuing Theory Based Simulation and Optimization of Ticket Office 1217
Ying Huang,Fengjin Yao,Shouwen Ji
Realtime side-by-side to super multi view 3D Display 1220
Dongxiao Li,Dongning Zang,Shaojun Yao,ChengLiang Lin,LiangHao Wang,Ming Zhang
The Scheme based on Partial Channel State Information for the Physical Layer Security 1225
Lijie Zuo,Weijia Lei,Xianzhong Xie
Research of Network Interconnection based on Trust Evaluation 1229
Xiaochuan Yin,Yibo Liu,Yan Fang
Study on the causal feedback Relationship of regional logistics information platform service innovation factors based on system dynamics 1234
ShouWen Ji,QiuXing Feng
Research on the Online Remote Calibration Technology of the Digital Meter 1237
Feng Zhou,Yingying Cheng,Fang Wu,Ji Xiao,Jianming Hu
Research of Digital Metering System and Calibration Technology of Smart Substation 1240
Feng Zhou,Yingying Cheng,Ji Xiao,Jie Du
Research on High Voltage Measuring Transformer Configuration and Testing Technology 1243
Yingying Cheng,Ji Xiao,Jie Du,Feng Zhou
Design of an Embedded Communication Controller Based on CAN and Ethernet for Substation Automation System 1246

Liu Yan,Cao Ji-nan
The Relationship Study of Social Capital, Knowledge Management and Performance in Logistics Enterprises Based on SEM 1249
Wang Li,Han Jingjing
An Improved Forward/backward Spatial Smoothing Root-MUSIC Algorithm Based on Signal Decorrelation 1252
Shu Changgan,Liu Yumin
A Method for Assessing Norms of Chinese Character Based on K-Means Clustering and Hough Transformation 1256
Kunyu Wang,Zhiyi Qu,Jianfei Sun
Partial Gradient Based Cooperative Sensing in Distributed Cognitive Radio Ad-hoc Networks 1260
Lixin HAO,Liang TANG,Kai YU,Zhiyong BU
Design and Simulation of Driver Stage Power Amplifier 1265
Congjie Wu,Yalin Guan
A 10ps 500MS/s Two-channel Vernier TDC in 0.18um CMOS Technology 1268
Qianfeng Li,Qingsheng Hu
The Research of the Docking Application between Industrial Robot and Machine Tool 1272
Zhang Yanyan,Li Chengren,Xie Jihong
Path Loss Prediction over Lunar Surface with Obstacle Diffraction 1276
Huang Pan,Zhu Qiuming,Xue Cuiwei,Chen Xueqiang,Han Yu
From Source Code Analysis to Static Software Testing 1280
Wang Wei,Meng Yunxiu,Han Lilong,Bai He
Practice of airborne LiDAR point cloud filtering method based on triangulated irregular network 1284
Chen Jie
The Research and Application of Spare Parts Coding System 1287
LI Hongtao,Feng tianfeng
Optimal Location of Terminal Voltage Nonlinear Excitation Controller to Mitigate Small Signal Stability Problem 1290
Cheng Liu,Kaifeng Zhang,Xianzhong Dai,Lu Li,Jinwen Li
Predicting user requests in practical VoD systems 1294
Fei Long,Xingjun Wang
Combing Optimal Waveform Design with Parameter Selection for Radar/Sonar Systems 1298
Fengming Xin,Jinkuan Wang,Bin Wang,Xin Song
Responsive Web Design Mode and Application 1303
Wei Jiang,Meng Zhang,Bin Zhou,Yujian Jiang,Yingwei Zhang
Fingers'movement analysis based on Labanotation 1307
Liu Laiyang,Guo Junjun

Design and Realization of College Service Center System Based on MVC 1312
Jin Pan,Yao Jun
Design of 4-channel Analog Front-ends for Neural Signal Acquistion 1316
Hu Shaonan,Qu Ruoyuan,Yang Haidong
Modelling and Design of Wind Power Forecast Error Estimation System 1320
Guoqiang YANG,Hanyi CHEN,Kaifeng ZHANG,Ying WANG,Fan XU
Unit Commitment Considering Effect of Load and Wind Power Uncertainty 1324
Yurong Zhang,Bin Wang,Min Zhang,Yi Feng,Wenzhong Cao,Lin Zhang
Research on the Power Utilization Strategy of Smart Power Community Integrated with Micro-grid System 1329
Rui Huang,Hai-yuan Wang,Li-man Shen,Hao Chen
Design of fuze test system based on MCU and LabVIEW 1333
Zhipeng Hu,Xingchun Liu
Study on Control Method for the Grid-Connected Inverter with LCL Filter 1337
Cunping Wang and Jian Sun
Harmonic Analysis of the Grid-connected Wind Farm by Simulation and Calculation 1342
Tingting Liu,Jun Wen,Xixi Fu,Cheng Ji,Minxiao Han
Harmonic Analysis on Power Grid of Large Scale PV Grid-connected System 1346
Xixi Fu,Jun Wen,Tingting Liu,Cheng Ji
Design of Water Monitoring and Control System Based on Kinetis K60 1350
Dongjiang Li,Xichao Xin,Junhao Yu,Weipeng Zhao
An Interactive Authoring and Simulation System for Large-Scale Artistic Performances 1355
Hongsong Li,Ting Song,Gangyi Ding
The Optimal Allocation of D-SMES for Enhancing Transient Stability of Power System 1359
Shu Wang,Yuejin Tang,Jing Shi,Yajun Xia,Kang Gong
A Concept of Extending Spreadsheet Cell Functions for Web Application Development Based on a Cloud Platform 1362
Keiichi Shiohara,Xing Chen
Fast Encoding Method Using CU Depth for Quality Scalable HEVC 1366
GE Qingyang,HU Dong
An improved model for computing the scattering amplitude coefficient of the chaff cloud 1371
Chuan Yin,Yaming Bo
A New Inter Prediction Mode Decision Method Based on Temporal Correlation for HEVC Encoder 1375
XU Qiuping,HU Dong
Abnormal Event Detection Based on SVM in Video Surveillance 1379
Yingying Miao,Jianxin Song

Continuous Attribute Discretization Algorithm of Rough Set Based on K-means 1384
Xing Xiaoxue,Guan Xiuli,Shang Weiwei
Balancing cost analysis of large-scale integrated wind power 1388
Changsheng Chen,Kaifeng Zhang,Jinwei Wu,Tingwei Wu,Yaxian Zheng,Bike xue
Study on Orthogonal Tensor Sparse Neighborhood Preserving Embedding Algorithm for Dimension Reduction 1392
Mingming Qi,Yanqiu Zhang,Dongdong LV,Shuhan Yuan,Hai Lu,Xin Xi
Design of a Low Phase Noise Oscillator Based On High Q Tunable Dielectric Resonator 1397
FengPing Huang,XiaoWei Zhu,Jun-Fa Mao
An Improved Image Dehazing Algorithm Based on Dark Channel Prior 1401
Jiajie Liu,Jieying Zheng,Ziguan Cui,Guijin Tang,Feng Liu
An attribute reduction algorithm in the incomplete information system based on the attribute significance 1405
Chen Zhen,Xing Xiao Xue
The Servo Motor Status Monitor System of Measure and Control Antenna Based on Network Model 1408
Huasong JIN
A grey lock method to support once pre-freezing mechanism in IC card 1411
LAI Yu-yang,FU Qing-qin,ANG Zheng-quan
A mechanism for patching ROM smart card 1415
LIN Wei-bin,FU Qing-qin,ANG Zheng-quan
±1100kV DC System Impedance Analysis Under Various Operating Modes and Conditions 1418
Yunchao Wang,Zhangqing Yu,Shuiming Chen,Yani Wu,Cuixia Zhang,Jinliang He,Jun Hu
Test on Electromagnetic Transient in An Operating UHVDC Converter Station 1423
Wei Qiu,Yin Huang,Xiao Zhang,Zhanqing Yu,Jinliang He