2011 IEEE International Conference on Computer Science and Automation Engineering

(CSAE 2011)

Shanghai, China
10-12 June 2011

Volume 1
Pages 1-737

IEEE Catalog Number: CFP1138L-PRT
ISBN: 978-1-4244-8727-1

TABLE OF CONTENTS VOL01

1-0001-10013 **A EQUATION FOR ENUMERATING LOOPLESS UNICURSAL MAPS** **1**
ZhangYongli, LiuYanpei,CaiJunliang

1-0002-10017 **RESEARCH ON DISTRICT COLLABORATIVE DESIGN BASED ON RELATION EXPRESSION** **5**
Ma Jun

1-0003-10019 **ANALYSIS OF LANDING IMPACT PERFORMANCE FOR LUNAR LANDER BASED ON FLEXIBLE BODY** **10**
XU Lei, NIE Hong, WAN Junlin, LIN Qing, CHEN Jinbao

1-0004-10049 **SHORT-TERM POWER SYSTEM LOAD FORECASTING BASED ON IMPROVED BP ARTIFICIAL NEURAL NETWORK** **14**
Zhang Xinbo, Chen Jinsai

1-0005-10053 **AN INCREMENTAL ALGORITHM OF SUPPORT VECTOR MACHINE BASED ON DISTANCE RATIO AND K NEAREST NEIGHBOR** **18**
Liu Bing-xiang, Cheng Xiang

1-0006-10075 **A CONSTRUCTION OF DE-DISJUNCT MATRICES WITH SYMPLECTIC SPACE** **21**
Xu Juan, Zhao Ping

1-0007-10077 **TWO KINDS OF COONS-LIKE PATCH WITH SHAPE PARAMETERS** **24**
Juncheng LI, Bingjun LI, Lian YANG, Juncheng LI

1-0008-10082 **INTEGRATIVE TACTICAL DECISION-MAKING OF INFORMATION-BASED COOPERATIVE AIR COMBAT WITH AMELIORATIVE LANCHESTER EQUATIONS** **28**
Kaifang Wan, Xiaoguang Gao

1-0009-10094 **CONSTRUCTION P2P FIREWALL - HTTP-BOTNET DEFENSE MECHANIS** **33**
Tung-Ming Koo, Hung-Chang Chang, Guo-Quan Wei

1-0010-10106 **A NEW MODEL REDUCTION STRATEGY FOR NONLINEAR DISTRIBUTED PARAMETER SYSTEMS** **40**
Mian Jiang, Hua Deng

1-0011-10107 **A NEW SECURE TOKEN FOR ENHANCING WEB SERVICE SECURITY** **45**
Chi Po Cheong, Chris Chatwin,Rupert Young

1-0012-10108 **CONTINUOUS CORE/PERIPHERY ARCHITECTURE FEATURES OF C2 ORGANIZATIONS ANALYSIS BASED ON SOCIAL NETWORK ANALYSIS** **49**
Chang Shuchun, Li Lixing

1-0013-10133 **ADAPTIVE AND AUTOMATED FAULT-TOLERANCE FOR MULTI-AGENT SYSTEMS** **53**
Aarti Singh, Dimple Juneja, A.K.Sharma

1-0014-10134 **AN IMPROVED GENETIC ALGORITHM FOR COMBINATORIAL OPTIMIZATION** **58**
DING hua-fu, LIU xiao-lu, LIU xue

1-0015-10135 **A MUSEUM VISITORS GUIDE WITH THE A* PATHFINDING ALGORITHM** **62**
Zhiguang Xu, Michael Van Doren

1-0016-10138 **RESEARCH ON RAIL PRESSURE CONTROL OF DIESEL ENGINE BASED ON GENETIC ALGORITHM NONLINEAR PID** **67**
WeiJun REN, XianXin SHI, ShengJie JIAO, ChangJian ZHU, Qiong ZHANG

1-0017-10143 **PARTICLE SWARM OPTIMIZATION BASED ON ADAPTIVE MANY MUTATION AND DISCRETE DEGREE** **72**
Jia Song-hao, Yang Cai, Tian Yan, Zhang Hai-yu

1-0018-10145 **HOW TO REDUCE COSTS OF BUSINESS LOGIC MAINTENANCE** **77**
Tomas Cerny, Michael J. Donahoo

1-0019-10147 **DYNAMIC ANALYSIS OF THE SPACECRAFT STRUCTURE ON ORBIT MADE UP OF HONEYCOMB SANDWICH PLATES** **83**
Luo Hao, Liu Geng, Ma Shangjun, Liu Wenbin

1-0020-10158 **NON-UNIFORM HYPERBOLIC BLENDING B-SPLINE CURVES** **88**
Zhu Ping, Wang Guozhao

1-0021-10162 **LOCATION CLOAKING ALGORITHMS BASED ON REGIONAL CHARACTERISTICS** **93**
Lei Yang, Lei Wei, Hongzhou Shi, Qinming Liu, Dexing Yang

1-0022-10164 **HUMAN-COMPUTER INTERACTION (HCI): AN OVERVIEW** **99**
Alex Roney Mathew, Aayad Al Hajj, Ahmed Al Abri

1-0023-10169 **DESIGN OF BOOTLOADER IN VIDEO ANALYSIS PLATFORM BASED ON DM6446** **101**
Zhang Qi-gui, Shen Hai-chao

1-0024-10170 **TWO KINDS OF NUMERICAL VALUE SIMULATION FOR CONTROLLING CHAOS IN PERMANENT MAGNET SYNCHRONOUS MOTOR** **104**
YAO Qi-guo

1-0025-10171 **MODELING OF C3I COMMUNICATION NETWORK BASED ON REAL-TIME QUEUING THEORY** **109**
Yu Liu,Yong Wu,Jiangdong Zhang

1-0026-10175 **THE RESEARCH ON COOPERATIVE E-GOVERNMENT IN GRID ENVIRONMENT** **113**
WANG Hong-xia

1-0027-10176 **A NEW METHOD OF CAD DRAWING MANAGEMENT BASED ON CONTENT PIECES** **119**
Yao Zhiying, Cao Haiqing,Yu Mingxin

1-0028-10180 **RESEARCH ON SUPPLIER SELECTION METHOD** **123**

Shizhen Bai,Ying Ma, Hong Huo

1-0029-10182 **RESEARCH AND DEVELOPMENT OF THE DIGITAL ENGINE SIMULATION PLATFORM** **127**
Diming Lou,Yanjuan Zhu, Aimin Du,Yubiao Du

1-0030-10184 **COMPUTER SIMULATION FOR IMPROVING THE LIQUID CRYSTAL DISPLAYS OPTICAL PERFORMANCE** **132**
Yali Gao, Yuyan Wang

1-0031-10185 **CULTURAL ALGORITHM BASED LONG-TERM OPTIMIZATION SCHEDULING OF CASCADED HYDRO-PLANT** **136**
Fan-nie Kong, Yan Li

1-0032-10186 **INDIRECT ADAPTIVE NEURO FUZZY CONTROLLER FOR A CLASS OF NON-LINEAR SYSTEMS** **140**
Amineh Baberi, Maryam Zekri, Saeid Hosseiniea

1-0033-10187 **EXPERIMENTAL INVESTIGATIONS AND CFD VALIDATION ON THE OPEN-WATER PERFORMANCE OF PODED PROPULSOR** **145**
SHENG Li, XIONG Ying, WANG Song

1-0034-10189 **SPEECH ENHANCEMENT USING HARMONIC REGENERATION** **150**
Hou Xuchu, Zhu Xiaojing

1-0035-10193 **FUZZY WAVELET NEURAL NETWORKS WITH HYBRID ALGORITHM IN NONLINEAR SYSTEM IDENTIFICATION** **153**
Mehrnoosh Davanipoor, Maryam Zekri, Farid Sheikholeslam

1-0036-10194 **HMM-BASED STATE PREDICTION FOR INTERNET HOT TOPIC** **157**
Ruifang Liu, Wenbin Guo

1-0037-10206 **A PIPELINED BEAMFORMING DELAY CALCULATION ARCHITECTURE IN ULTRASOUND IMAGING SYSTEM** **162**
Zhanxiang Zhao, Tian Xiang, Ming Gao, Chenghao He, Xin Zhang, Xi Jin

1-0038-10207 **RELIABILITY ESTIMATION OF NEURAL NETWORKS WITH HUMAN FACTORS UNDER EMERGENCY OF NUCLEAR POWER PLANT** **167**
Li Zhang, Jian-jun Jiang, Yi-qun Wang, Kun Zhang, ling-ling Gu, Yu-yuan Peng, Cheng Zhou, ling-ling Gu

1-0039-10209 **PROGRAM DESIGN OF AN ONLINE DYNAMIC BALANCING SYSTEM FOR GRINDING-WHEEL AND SPINDLE** **173**
Fan Hongwei, Jing Minqing, Liu Heng

1-0040-10211 **EXTENSION OF THE QUADRATIC BÉZIER CURVES BASED ON THE LINEAR COMBINATION OF BASIC FUNCTIONS** **178**
Zou Jing, Liang Xikun

1-0041-10212 **RESEARCH ON ADAPTIVE DISTRIBUTED INTRUSION DETECTION SYSTEM MODEL BASED ON MULTI-AGENT** **182**
Dong Huailin, Xu Tianmao, Wu Qingfeng, Liu Yangbin

1-0042-10217 **A ROBUST BLIND SOURCE SEPARATION ALGORITHM BASED ON GENERALIZED VARIANCE** **186**
Huagang Yu, Gaoming Huang, Jun Gao

1-0043-10219 **TWO PARAMETERS EXTENSION OF QUARTIC BÉZIER CURVE AND ITS APPLICATIONS** **191**
Hang Houjun

1-0044-10220 **RESEARCH AND SIMULATION OF ROLLING MISSILE'S CONTROL SYSTEM** **195**
FAN Shi-peng, LIN De-fu, LU Yu-long, Zhang Hong

1-0045-10240 **DESIGN OF CAMPUS CLOUD MODEL BASED ON TELECOM PUBLIC SERVICE PLATFORM** **199**
Xin Lu, Mao-Quan Zhang

1-0046-10241 **MOVING TARGET DETECTION UNDER COMPLEX BACKGROUND BASED ON CODE BOOK** **203**
Ruohong Huan, Zhehu Wang, Xiaomei Tang, Qingzhang Chen

1-0047-10242 **DESIGN OF SOFTWARE TO SEARCH WEBPAGE TROJAN HORSE IN IIS SERVER** **208**
Xu Ming Kun, Chen Ming, Hu Yan

1-0048-10244 **PERFORMANCE INVESTIGATION OF MULTIPULSE CONVERTER FOR LOW VOLTAGE HIGH CURRENT APPLICATIONS** **211**
Rakesh Maurya, Pramod Agarwal and S.P.Srivastava

1-0049-10245 **THE SIMULATION STUDY BASED ON THE SPACE VECTOR MODULATION METHOD FOR PMSM CONTROL SYSTEM** **217**
ZHAO Gang, WU Fozhu,

1-0050-10247 **QUANTITATIVE THREAT ASSESSMENT OF DENIAL OF SERVICE ATTACKS ON SERVICE AVAILABILITY** **220**
Xiuzhen Chen, Shenghong Li, Jin Ma, Jianhua Li

1-0051-10256 **A THINNING METHOD FOR FINGERPRINT IMAGE BASED ON HIT-MISS TRANSFORMATION** **225**
Chunyou WEN, Guangwu AO, Ying TIAN

1-0052-10257 **THE IMPLEMENTATION OF MSK BASED ON DSP AND COMPLEX ANALYTIC BANDPASS FILTER** **229**
Kuifu Wang, Juming Cheng

1-0053-10265 **THE CHARGE PATTERN FOR CHENG-MIAN-LE PASSENGER TRANSPORTATION LINE** **233**
YAN Guang-yin

1-0054-10270 **TEXTURE SYNTHESIS BASED ON THE FACE SMOOTHNESS AND NORMAL** **238**
LingHu Yong-fang, Shu Heng

1-0055-10273 **THE AUTOMATON MODELING OF TYPICAL NETWORK ATTACKS** **243**
Shi Zhicai

1-0056-10275 **HASH-CHAIN BASED PUBLIC KEY MANAGEMENT ALGORITHM OF MOBILE AD HOC NETWORK** **247**
Qiuyuan Huang, Renzhi Cao, Bobin Deng, Xingfu Wang

1-0057-10279 **LOW-POWER DESIGN OF IMPEDANCE MEASUREMENT SYSTEM BASED ON MSP430F149** **252**
Lin Yan, Liu Wen Ding

1-0058-10282 **TUNING OF PID CONTROLLERS WITH CMAC-BASED GENETIC ALGORITHM** **255**
Ming-Feng Yeh, Min-Shyang Leu, Ti-Hung Chen

1-0059-10285 **NEW NONLINEAR IDENTIFICATION METHOD OF PLATINUM RESISTANCE SENSOR BASED ON IPSO-RBFNN** **260**
Shaoyi Xu, Wei Li, Aiguo Hu

1-0060-10286 **STUDY AND IMPROVEMENT ON VIRTUAL ARRAY METHOD OF BEAM FORMING** **265**
DONG Shu-min, LIANG Guo-long, FU Jin, DONG Shu-min

1-0061-10290 **AN NEW ESTIMATOR FOR DOPPLER PARAMETERS BASED ON IMPROVED WIGNER HOUGH TRANSFORM** **269**
LI Zhi, XU Can, SHI Lei

1-0062-10291 **DESIGN OF MINING EQUIPMENT HEALTH DIAGNOSTIC SYSTEM (4M SYSTEM)** **273**
Cheng Xiaohan, Meng Guoying, Li Wei, He Xiao

1-0063-10292 **RESEARCH ON DECISION-MAKING METHODOLOGY IN MANUFACTURING TECHNOLOGIES BASED ON FUZZY LOGIC** **277**
Yanwei Xu, Tancheng Xie

1-0064-10297 **DESIGN OF A DATABASE MIDDLEWARE BASED ON TCP/IP PROTOCOL** **281**
Deng Shiyang

1-0065-10299 **FUZZY IMMUNE PID CONTROL OF PH VALUE IN CHEMICAL INDUSTRY PROCESS** **285**
Xie Shihong, Gong Wenzhan

1-0066-10303 **THE ANALYSIS OF M/M/1 QUEUE MODEL WITH N POLICY FOR DAMAGED NODES IN MANET** **289**
Xia Wen-jie, Yan Han, Liu Feng-yu

1-0067-10306 **AN IMPROVED GRADIENT-BASED NICHING GENETIC ALGORITHM AND ITS APPLICATION** **295**
Jia Yuge, Nie Ru

1-0068-10312 **ULTRA-WIDEBAND IMPLEMENTATION OF PRINTED RECTANGULAR MONOPOLE ANTENNA** **300**
Zuosheng Xie, Weiwen Li, Yong Liu, Baiqiang You

1-0069-10313 **AN APPROACH OF SLIP PREVENTION BASED ON LMI FOR ELECTRIC VEHICLES** **304**
Qiao-ling Wang, Yu-ping Yang

1-0070-10314 **OPTIMUM RELAY LOCATION IN COOPERATIVE COMMUNICATION NETWORKS WITH SINGLE DF RELAY** **309**
XU Lei, ZHANG Hong-wei, LI Xiao-hui, WU Xian-liang

1-0071-10315 **RESEARCH OF AN SPACECRAFT AUTOMATIC TEST SYSTEM** **314**
Li Xianjun, Li Zhongwen, Ye Gang, Ma Shilong

1-0072-10319 **THE RESEARCH OF WATERMARK TECHNOLOGY IN DIGITAL RIGHT MANAGEMENT** **318**
Yan-Feng ZHAO, Yang-Xia LUO

1-0073-10320 **RESEARCH ON THE METHOD OF RAPID DESIGN BASED ON INFORMATION INTEGRATION** **322**
Hu Wenchao

1-0074-10323 **A CONTROL ALGORITHM OF GENERAL 6R MECHANIC ARM BASED ON INVERSE KINEMATICS** **327**
Baida Qu, Baoguo Xu

1-0075-10324 **A MODEL OF TASK COLLABORATION WITH SIMULATION FOR IOT** **331**
Deng Sui, Cao Hongbing, Shen Jie, Liu Haitao

1-0076-10328 **A NEW ALGORITHM FOR REMOVING COMPRESSION ARTIFACTS OF WAVELET-BASED IMAGE** **336**
Ke Du, Haiyun Han, Gang Wang

1-0077-10331 **THE IMPROVEMENT OF S-MAC BASED ON DYNAMIC DUTY CYCLE IN WIRELESS SENSOR NETWORK** **341**
Haigang Hu, Jie Min, Xiaodong Wang, Yu Zhou

1-0078-10333 **GLOBAL DYNAMICS OF THE PERIODIC SEIR EPIDEMIC MODEL** **346**
Xinli Hu, Junli Liu

1-0079-10335 **E-GOVERNANCE CHALLENGES AND CLOUD BENEFITS** **351**
Aprna Tripathi, Bhawana Parihar

1-0080-10337 **A BST-BASED APPROACH TO DICTIONARY STRUCTURE FOR CHINESE WORD SEGMENTATION** **355**
Chang Ge, Ningjing Ma and Xudong Chen

1-0081-10340 **FACE EXTRACTION FROM VIDEO SEQUENCES BY K-MEANS CLUSTERING AND FUSION** **358**
Luping Ji, Xiaorong Pu, Ming Ye, Peng Qihua

1-0082-10342 **AN ERROR CONCEALMENT APPROACH FOR COMPENSATION OF ENTIRE LOST FRAME** **362**
Raju M.Tugnayat, Ankit R. Tugnayat, N.K. choudhari

1-0083-10343 **FRONTO-PARTIAL LOBE ACTIVATION DURING STABLE BOOLEAN CALCULATION** **366**
Xiuzhen Wang, Weiquan Gu

1-0084-10344 **THE APPLICATION OF ISOLATED NICHE GENETIC ALGORITHM IN POWER SYSTEM REACTIVE POWER OPTIMIZATION** **371**
Cai Chang-chun, Wu Min, Wang Bin

1-0085-10345 **HIGH QUALITY GRIDS GENERATION AND NUMERICAL SIMULATION OF THE FLOW FIELD AROUND WING-BODY CONFIGURATION** **375**
Zhanke Li, Meng Wu

1-0086-10347 **STUDY ON WSN TOPOLOGY DIVISION AND LIFETIME** **380**
XU Jiu-qiang, WANG Hong-chuan, LANG Feng-gao, WANG Ping, HOU Zhen-peng

1-0087-10350 **A LOW LATENCY HIGH THROUGHPUT ROUTER FOR ON-CHIP INTERCONNECT NETWORKS** **385**
Jinwen Li, Shubo Qi

1-0088-10351 **INTELLIGENT FUZZY CONTROLLER DESIGN OF PRESSURE BALL DRYING SYSTEM** **389**
Linglong Wang, Manchen Xiong, He Wang, Hongqing Chang

1-0089-10354 **WV-SVM WITH GENETIC ALGORITHMS FOR GAS LOAD FORECASTING** **393**
Zhaolin Lai, XiaoZhong Xu

1-0090-10355 **APPLICATION OF AUTOMATIC GAUGING TECHNOLOGY OF ROD PUMP DYNAMOMETER CARD IN THE OILFIELD** **399**
Tianjian Sun, Junfeng Shi, Mingjian Dai, Lei Xu,Yahui Wang, Fang lan Jin

1-0091-10356 **EXTRACTION OF SHAPE FEATURE FOR IMAGE AUTHENTICATION** **404**
Yan Zhao, Weimin Wei

1-0092-10357 **ON SOLVING THE GALBRUN EQUATION VIA SEM** **409**
Dong QU, Jing YANG, Yubo YANG

1-0093-10358 **RESEARCH ON ATTRIBUTE REDUCTION BASED ON VARIABLE PRECISION ROUGH SETS MODEL** **413**
Xiaoyan Wang, Sichun Yang,Bin Ji

1-0094-10359 **WAVELET ANALYSIS WITH TIME-SYNCHRONOUS AVERAGING OF PLANETARY GEARBOX VIBRATION DATA FOR FAULT DETECTION AND DIAGNOSTICS** **417**
Jing Yu, Viliam Makis

1-0095-10360 **FAST CONVERGENT GAUSSIAN MIXTURE MODEL IN MOVING OBJECTS DETECTION** **422**
Jiao Bo, Yan Liao-liao, Li Wei

1-0096-10361 **RESEARCH ON GRID CONNECTION CONTROL FOR DOUBLY-FED WIND POWER SYSTEM** **426**
TAN Guojun, LIU Yi, LI Yuan, CHEN Yuan

1-0097-10362 **A NEW ENERGY-EFFICIENT UNEQUAL CLUSTERING ALGORITHM FOR WIRELESS SENSOR NETWORKS** **431**
Huiyong Yuan, Yongyi Liu, Jianping Yu

1-0098-10364 **MODELING AND VIRTUAL PROTOTYPE SIMULATION OF ACTIVE VIBRATION ISOLATION PLATFORM FOR OPTICAL DEVICES ON VEHICLE** **435**
Changchun Gao, Mengwei Zhang

1-0099-10365 **SINGLE MACHINE PROBLEM WITH A MINIMAX CRITERIA AND PREEMPTION PENALTIES** **440**
Emran Mohammadi, Mehdi Heydari

1-0100-10366 **A MODEL FOR COMBINING TOPOLOGICAL AND DIRECTIONAL RELATIONS** **445**
Sun Wei, Ouyang Jihong, Ma Tingxin

1-0101-10372 **PARAMETER ESTIMATIONS WITH GAMMA DISTRIBUTION BASED ON PROGRESSIVE TYPE-I INTERVAL CENSORING** **449**
Peng Xiuyun, Yan Zaizai

1-0102-10373 **THE MULTILEVEL MODEL AND SAS PROGRAMS** **454**
Xiaodong Wang, Jun Tian

1-0103-10375 **RDIBP: REDUNDANCY IDENTIFICATION ON BOOLEAN FUNCTIONS WITH PATHS** **459**
HUANG Yue, CHAI Zhilei, XU Wenbo

1-0104-10378 **AN EMERGENCY ROUTING MODEL BASED ON FUZZY ROAD CONNECTIVITY** **465**
SHI Liuhong, YANG Bin

1-0105-10380 **CONCURRENT-SECURE ANONYMOUS FINGERPRINTING SCHEME SUPPORTING BATCH VERIFICATION** **470**
Liu Xin

1-0106-10384 **DYNAMIC REQUIREMENTS EXPLORATION METHOD USING GREY THEORY OPERATIONS FOR FLEXIBILE PLATFORM DESIGN** **475**
Zhongkai Li, Rui Wang

1-0107-10386 **PERSONALIZED ANONYMITY IN SOCIAL NETWORKS DATA PUBLICATION** **479**
Lihui Lan, Hua Jin, Yang Lu

1-0108-10388 **A HIERARCHICAL HYBRID STRUCTURE FOR BOTNET CONTROL AND COMMAND** **483**
Zhiqi Zhang, Baochen Lu, Peng Liao, Chaoge Liu, Xiang Cui

1-0109-10390 **APPLICATION OF SERIALIZATION ENHANCED SSO SYSTEM** **490**
Guanhua Wang

1-0110-10395 **ESTIMATES FOR CONVERGENCE RATE OF NESTED ITERATIVE METHODS** **495**

FANG CAI, JIE XIAO, ZHAO-HONG XIANG

1-0111-10399 **3D TYPE-SELECTION AND DESIGN OF EPICYCLIC GEAR TRAIN** **499**
Huiwu Wang, Miao Liu, Hongjiang Wang, Haiyuan Zhang

1-0112-10403 **APPLICATION OF CAID IN SYSTEMATICAL INDUSTRIAL DESIGN** **503**
Minning Zhou, Weimin Guo

1-0113-10408 **A SIMPLE MOTION HEURISTIC FOR CONTROLLING MOBILE SINKS IN DELAY TOLERANT SENSOR NETWORKS** **508**
Samer Hanoun, Saeid Nahavandi

1-0114-10411 **AN INSIGHT INTO THE PARAMETRIC MULTICHANNEL WIENER FORMULATION** **513**
Siow Yong Low, Sven Nordholm

1-0115-10412 **LIFTING DYADIC WAVELETS AND DESIGN OF DECOMPOSITION FILTERS WITH SHORT LENGTH** **517**
Turghunjan Abdukirim, Aireti Abulikemu, Taxpulat Eziz, Zhang haiying

1-0116-10414 **ON PINNING SYNCHRONIZATION OF COMPLEX DYNAMICAL NETWORKS BY A SINGLE IMPULSIVE CONTROLLER** **521**
Quanjun Wu, Li Xu, Hua Zhang, Jin Zhou

1-0117-10415 **RESEARCH AND REALIZATION OF MULTIDISCIPLINARY CO-SIMULATION BASED ON HLA** **526**
Hu HAN

1-0118-10416 **THE LEADER AND EXTREMIST IN THE BOUNDED CONFIDENCE MODEL ON FLOCKING MOVEMENT WORLD** **531**
Shusong LI, Shiyong ZHANG

1-0119-10417 **DESIGN OF GREENHOUSE REMOTE MONITORING SYSTEM BASED ON LABVIEW** **536**
Junlong Fang, Fulu Wang

1-0120-10420 **A ROBUST ILLUMINATION CLASSIFIER USING ROUGH SETS** **540**
K. R. Singh, M. A. Zaveri, M.M. Raghuwanshi

1-0121-10422 **MULTI-OBJECTIVE OPTIMIZATION CONTROL IN MONITORING SYSTEM FOR FACILITY AGRICULTURE BASED ON WIRELESS SENSOR NETWORK** **545**
Antai Han, Jianfeng Li, Hui Peng, Zhiqiang Chen, Zhong Liao

1-0122-10425 **TEXTURE IMAGE SEGMENTATION BASED ON SPECTRAL CLUSTERING ENSEMBLE VIA MARKOV RANDOM FIELD** **550**
Bingxiang Liu, Jianhua Jia

1-0123-10430 **CARDIOPULMONARY AUSCULTATION SIMULATION TEACHING SYSTEM** **555**
Zi-Ming Zhang, Wang Lu, Yuan-Zheng Shi, Tinglei Yang, Shuli Liang

1-0124-10431 **OVERVIEW OF 3D TEXTILE DYNAMIC SIMULATION RESEARCH** **558**
Bao Xiaomin, Ni Xiaoqing, Wang Yaming, Zhu Hanyu

1-0125-10432 **THE ANALYSIS OF INTELLECTUAL CAPITAL INTEGRATION FACTORS BASED ON DEMATEL IN M & A ENTERPRISES** **563**
Jing Yang, De Guo

1-0126-10433 **DESIGN OF REMOTE CONTROL FOR MULTIPLE STEPS TEMPERATURE SYSTEM** **568**
Cai-hong Liu, Jin-shui Ji, Ya-ting Xue

1-0127-10434 **DESIGN OF CONTROL MODULE FOR ADC BASED ON FPGA** **571**
Xiu-ping Chen

1-0128-10435 **ALGORITHM FOR GEOMAGNETIC NAVIGATION AND ITS VALIDITY EVALUATION** **573**
Guo CaifaLi Anliang, Cai Hong, Yang Huabo

1-0129-10442 **A NEW SIMPLE HUMAN ABNORMAL ACTION DETECTION BASED ON STATIC IMAGES** **578**
Yang Liu, Qing Wang

1-0130-10443 **THE EXPONENTIAL STABILITY CRITERIA OF IMPULSIVE SWITCHED NEURAL NETWORKS WITH TIME-INVARIANT DELAYS** **582**
Xianmin Zhang, Xiyue Huang, Zuohua Liu

1-0131-10445 **THE RESEARCH OF INDIRECT TRANSFER PREDICTION TECHNOLOGY BASED ON INFORMATION FEEDBACK** **587**
CHEN Qiao, JIANG Lie-hui, DONG Wei-yu, XU Jin-long

1-0132-10446 **STUDY ON PURIFICATION AND CHARACTERIZATION OF LIPOPROTEIN LIPASE FROM CANDIDA RUGOSA** **592**
ZHAO Xing-xiu, HE Yi-guo, FANG Chun-yu, DENG Jing

1-0133-10448 **REGION-BASED COLOR IMAGE SEGMENTATION OF FISHES WITH COMPLEX BACKGROUND IN WATER** **596**
Peizhe Zhang, Canping Li

1-0134-10450 **NOVEL DESIGN OF A THREE DEGREES OF FREEDOM HIP EXOSKELETON BASED ON BIOMIMETIC PARALLEL STRUCTURE** **601**
Min Pan, Dan Zhang, Zhen Gao

1-0135-10451 **ROTATION INVARIANT TEXTURE CLASSIFICATION WITH DOMINANT ORIENTATION ESTIMATION BASED ON GABOR FILTERS** **606**
Jiuwen Zhang, Xiaoyun Mai, Xiguang Wu

1-0136-10452 **EXTENDED STATE FEEDBACK CONTROL FOR ACTIVE POWER FILTER** **610**
Wang Xiaogang, Shu Hua

1-0137-10453 **A NEW METHOD OF LOOP PERFORMANCE ANALYSIS** **615**
HAO Yun-long, ZHAO Rong-cai, HAN Lin, ZHU Jia-feng

1-0138-10457 **MATHEMATICAL MODELING AND MODAL ANALYSIS ABOUT DOUBLE-CIRCULAR-ARC MODIFIED CYCLOID GEARS BASED ON UG** **620**
Jianing He, Wei Zhang, Rong Tan, Qiang Li Yong Gao

1-0139-10461 **A NEW IMAGE ENHANCEMENT ALGORITHM FOR LOW ILLUMINATION ENVIROMENT** 625
Yanqin Zhao, Xihui Fu, Zhenchong Wang, Guoliang Fan

1-0140-10467 **THE EFFECTS OF OVERCONFIDENCE ON THE INDEX OF DISCRIMINATION ABILITY AND THE JUDGMENT CRITERION IN INVESTMENT DECISION AN EXPERIMENT BASED ON SIGNAL DETECTION THEORY** 628
Ruxin Wu, Jianbai Huang, Xuehong Zhu

1-0141-10472 **DECREMENTAL MULTI-OUTPUT LEAST SQUARE SVR LEARNING** 636
Wei Zhang, Xianhui Liu, Deming Shi, Weidong Wang

1-0142-10474 **STRUCTURE DYNAMIC OPTIOMAL STUDY OF THE OILLESS AIR COMPRESSOR MUFFLER** 640
Xinxiang Zhou, Suying Hu, Yu Cui, Shujun Guo, Rongliang Tian, Yanling Tang

1-0143-10475 **CUSTOMIZED PROGRAM PROTECTION FOR A USER CUSTOMIZED DATA PROTECTION FRAMEWORK** 643
Kenichi Takahashi, Takanori Matsuzaki, Tsunenori Mine and Kouichi Sakurai

1-0144-10478 **RESEARCH ON TCPW IMPROVEMENT IN HYBRID NETWORK** 650
MENG Xiao-jing, LIU Jin, WANG Li-li

1-0145-10479 **CROSS-CORRELATION PROPERTIES OF SOME PERFECT BINARY SEQUENCES** 654
Jinfeng Chong, Zepeng Zhuo

1-0146-10480 **RANGE IMAGE RECOGNITION BASED ON BAYESIAN DECISION RULE** 658
Yu Zhang, Liting Wu, Lubin Weng, Yuan Tian, Yiping Yang

1-0147-10485 **PARALLEL ROW OPERATION ALGORITHM FOR BANDED LINEAR SYSTEMS** 662
Zhijian Duan Yong Yang, Xinrong Ma

1-0148-10486 **FAST ADAPTIVE OPTIMAL BASIS SEARCH ALGORITHM FOR PAPR REDUCTION** 666
Li Jiao-jun,Li Heng, Su Li-yun

1-0149-10493 **OPTIMIZING AREA UNDER THE ROC CURVE USING GENETIC ALGORITHM** 672
Yang Zhi, Guo-en Xia, Wei-dong Jin

1-0150-10494 **A NEW DATA FUSION ROUTING ALGORITHM FOR WIRELESS SENSOR NETWORKS** 676
Xinbing Yao, Xiangdong Wang, Shujiang Li

1-0151-10499 **COTTON TOP FEATURE IDENTIFICATION BASED ON MACHINE VISION& IMAGE PROCESSING** 681
Weixin Wang, Duanyang Qu, Benxue Ma, Yage Wang

1-0152-10503 **RBPF-BASED TRACKER WITH ADAPTIVE PARAMETER MODEL FOR MANEUVERING TRACKING** **686**
Ming Lei, Christophe Baehr

1-0153-10506 **DEVELOPMENT OF AUTOMATION PATH SELECTION SYSTEM FOR VEHICLE** **693**
Yunfeng Lou, Xin Zhao, Harutoshi Ogai

1-0154-10510 **ROLL CHARACTERISTIC ANALYSIS OF DUMP TRUCK UNLOADING BASED ON VIRTUAL PROTOTYPING** **697**
Rongchao Jiang, Dawei Liu and Huanming Chen, Zhengguo Gao

1-0155-10511 **SOLVING COMPLEX CHEMICAL EQUATION ROOT BASED ON IMPROVED EVOLUTION STRATEGY** **701**
Guo De-long, Yang Nan, Zhou Yong-quan

1-0156-10514 **OPTIMIZATION OF PID PARAMETERS FOR COAL GAS MONITORED CONTROL SYSTEM BASED ON ARTIFICIAL IMMUNE ALGORITHM** **705**
Ma Xian-Min, Wen Chen

1-0157-10517 **A NEW WIDEBAND DOPPLER FILTER BANK ARCHITECTURE FOR SYNTHETIC RANGE PROFILE** **709**
Wei Peng, Guozhu He, Bin Tang, Hongang Wu

1-0158-10520 **ADAPTIVE STATISTIC PROCESS MONITORING WITH A MODIFIED PCA** **713**
Liu Yiqi, Huang Daoping, Li Yan

1-0159-10522 **A NEW MODEL TO IMPROVE CREDIT RATING UNDER INCIDENCE RELATION** **717**
Fei Xue , Xin Zhao, Bingwu Liu, Shaohua Tan

1-0160-10523 **THE INFLUENCE OF CONDUCTIVITY PERTURBATIONS ON MIT SENSITIVITY FIELD** **722**
Yuyan Chen, Xu Wang, Dan Yang, Yi Lv, Yuyan Chen

1-0161-10526 **CRYPTANALYSIS OF EFFICIENT THRESHOLD PROXY SIGNATURE PROTOCOL FOR MOBILE AGENTS** **726**
Xiao-Qiu Cai, Shu-Yu Wang

1-0162-10528 **A NEW SUPPRESSER FOR IMPULSE NOISE BASED ON ADAPTIVE GROWTH** **729**
Wangsheng Yu, Zhiqiang Hou, Jianjun Song

1-0163-11520 **ANALYSIS AND DESIGN OF BTT AUTOPILOT WITH STABLE YAW RATE** **734**
Wang Lei , Di Jing-yu ,Guo Tao

2011 IEEE International Conference on Computer Science and Automation Engineering

(CSAE 2011)

Shanghai, China
10-12 June 2011

Volume 2
Pages 1-782

IEEE Catalog Number: CFP1138L-PRT
ISBN: 978-1-4244-8727-1

TABLE OF CONTENTS VOL 02

2-0001-10529 **A QUASI-LOCAL ALGORITHM FOR CHECKING BISIMILARITY** **1**
Wenjie Du, Yuxin Deng

2-0002-10534 **FUZZY PREDICTIVE R2R CONTROL TO CMP PROCESS** **6**
Liang Wang, Jingtao HU

2-0003-10536 **AN ADAPTIVE FINITE ELEMENT MESH GENERATION ALGORITHM FOR MICROSTRUCTURE OF COMPOSITE MATERIALS** **11**
Ma Chang-bing, Qiang Hong-fu

2-0004-10537 **IMAGE ANALYSIS BASED ON FRACTIONAL BROWNIAN MOTION DIMENSION** **15**
Yang Yancong, Peng Ruidong

2-0005-10541 **TOPOLOGICAL ALGORITHM FOR LINEAR MULTI-PORT NETWORK FUNCTIONS DETERMINATION** **20**
Horia Andrei, Oana Marin, Fanica Spinei, Cosin Cepisca, Paul C. Andrei

2-0006-10542 **METRICS-BASED ANALYSIS OF THREAD BEHAVIOR USING AN ASPECT-ORIENTED PROGRAMMING APPROACH** **25**
Oral Alan, Nadia Erdoğan

2-0007-10543 **A HIERARCHICAL SOURCE ADDRESS VALIDATION TECHNIQUE BASED ON CRYPTOGRAPHICALLY GENERATED ADDRESS** **33**
Pengxu Tan, Yue Chen, Hongyong Jia, Jiangdong Mao

2-0008-10546 **AUTOMATIC GENERATION OF TEST DATA FOR PATH TESTING BY ADAPTIVE GENETIC SIMULATED ANNEALING ALGORITHM** **38**
Bo Zhang, Chen Wang

2-0009-10548 **UNDERSTANDING TABLETOP COLLABORATIVE INTERACTION USING HIERARCHY MODEL** **43**
Zhang Guohua, Heng Xiang'an, Lao Songyang, Yan Houyi

2-0010-10549 **SENSOR SITUATION BASED ON THE MULTIPLE LINEAR REGRESSION FORECAST** **47**
Jiange Zhang, Yingying Li, Jing Cao

2-0011-10550 **INFRARED FACE RECOGNITION BASED ON COMPRESSIVE SENSING AND PCA** **51**
Zhang Lin, Zhang Wenrui, Sun Li, Fang Zhijun

2-0012-10552 **ADAPTATION OF CANADIAN FOREST FIRE WEATHER INDEX SYSTEM AND IT'S APPLICATION** **55**
Guang Yang, Xueying Di

2-0013-10555 **AN ALGORITHM FOR THE CONSTRUCTION OF M-BAND SYMMETRIC ORTHOGONAL MULTI-BAND WAVELETS** **59**
Su Juan, Dong Xinhan, Quan Hongyue

2-0014-10556 **LINE SIMPLIFICATION ALGORITHM IMPLEMENTATION AND ERROR ANALYSIS** **64**
LIU Yan-hua, CHEN Wei-qing

2-0015-10559 **DESIGNING AND IMPLEMENTING A WI-FI ENABLED MOBILE ROBOT** **69**
Lenin Gopal, Andrew Wong Wei Loong

2-0016-10562 **OPTIMIZATION FOR DISCRETE BALANCE WEIGHTS BASED ON HYBRID GENETIC ALGORITHM** **76**
YANG Xun, ZHANG Can

2-0017-10565 **A HIGH-TAMPER LOCALIZATION CAPABILITY OF IMAGE AUTHENTICATION ALGORITHM** **80**
Liu Yang, Mei Liang, Liu Quan, Jiang Xuemei

2-0018-10566 **FAULT DETECTION ALGORITHM OF INVERTER BASED ON SINGULAR VALUE DECOMPOSITION NONLINEAR FILTERING** **85**
Chen Peng, Zhao ying, Dong Enzeng, Li Xin

2-0019-10568 **RESEARCH OF EFFICIENCY OPTIMIZATION CONTROL OF INDUCTION MOTORS BASED EMD-EKF** **90**
Chen Peng, Li Lian, Dong Enzeng, Li Xin

2-0020-10570 **AN IMPROVED CONCURRENCY CONTROL METHOD FOR R/W TRANSACTION** **95**
Xin Li

2-0021-10571 **FAST CAPSULE IMAGE SEGMENTATION BASED ON LINEAR REGION GROWING** **99**
Zhu Zhengtao, Yu Xiongyi, Huang Liuqian, Wu De

2-0022-10573 **A NEW METHOD RESEARCH OF FUZZY DTC BASED ON FULL-ORDER STATE OBSERVER FOR STATOR FLUX LINKAGE** **104**
GAO Ya, LIU Weiguo

2-0023-10575 **DESIGN AND RESEARCH ON AIRFLOW SYSTEM OF CLOSED-TYPE COTTON PICKER** **109**
Wang Weixin, Liu Keyi, Ye Wei, Wang Yage, Ding Zhingfeng, Ma Qingliang

2-0024-10580 **GEO AND TEMPORAL INTENT DISCOVERY OF WEB SEARCH** **113**
Dan Yang, Linlin Li

2-0025-10581 **A PREDICTION-BASED ENERGY-CONSERVING APPROXIMATE STORAGE AND QUERY PROCESSING SCHEMA IN OBJECT-TRACKING SENSOR NETWORKS** **117**
XIE Yi, XIAO Weidong, TANG Daquan, TANG Jiuyang, TANG Guoming

2-0026-10585 **THE RECONSTRUCTION OF GENE REGULATORY NETWORK BASED ON MULTI-AGENT SYSTEM BY FUSING MULTIPLE DATA SOURCES** **126**
Tao Yang, Ying-Fei Sun

2-0027-10586 **DETERMINATING THE CENTER OF THE ELLIPSES BASE ON EXTRACTING EDGES WITH SUBPIXEL ACCURACY** 131
TianYe, Lu Dunmin

2-0028-10588 **ANALYTICAL EXPRESSION OF T-VC DEPENDENCE IN STANDARD ISO 3685 FOR SINTERED CARBIDE** 135
Anton Panda, Ján Duplák, Jozef Jurko

2-0029-10589 **NLSSVM: LEAST SQUARE SUPPORT VECTOR MACHINE BASED ON NEWTON OPTIMIZATION** 140
XIONG Fu-Song

2-0030-10590 **DESIGN OF GENERAL AUTOMATIC TEST SYSTEM FOR AIRBORNE RADIO EQUIPMENT BASED ON HYBRID BUS ARCHITECTURE** 145
Cao Naisen, Sun Yawei

2-0031-10591 **AN IMPROVED QUANTUM GENETIC ALGORITHM FOR TEST SUITE REDUCTION** 149
Yi-kun ZHANG, Ji-ceng LIU, Ying-an CUI, Xin-hong HEI, Ming-hui ZHANG

2-0032-10594 **FUZZY PID CONTROL FOR BOOM ENERGY RECOVERY ON HYBRID HYDRAULIC EXCAVATOR** 154
Xin Dai, Chengning Zhang, Siguang Li

2-0033-10598 **ANALYZING TWO CONNECTIVITIES IN UAV-GROUND MOBILE AD HOC NETWORKS** 158
Zanxin Xu, Jinhai Huo, Yue Wang, Jian Yuan, Xiuming Shan, Zhenming Feng

2-0034-10600 **SIMULATION OF CROWD BEHAVIORS BASED ON EVENT REACTION** 163
Libo Sun, Wenhu Qin

2-0035-10604 **DEVELOPMENT OF DIAGNOSIS SYSTEM FOR HV MOTOR INSULATION BASED ON MULTI-PARAMETER FUSION** 168
Jiancheng Song, Jingyu Mu, Bingni Qu

2-0036-10605 **MODELING AND ANALYSIS OF GRINDING FORCE IN SURFACE GRINDING** 175
Heran Yang, Lei Zhang, Daqi Li, Tongzhan Li

2-0037-10608 **THE USE OF VLSI TO GENERATE VISION IN BLIND PEOPLE USING A SUITABLE NEUROPROSTHESIS IMPLANT OF BIOMEMS IN BRAIN** 179
Suraj.H, BhavyaBhushan Yadav.A.V

2-0038-10612 **A NEW SCHEME TO SYNCHRONIZATION OF THE FRACTIONAL-ORDER CHAOTIC SYSTEMS AND SIMULATION** 184
Sun fengyun, Li qin

2-0039-10614 **A PETRI-NET MODEL OF NETWORK SECURITY TESTING** 188
Jun-long YAN M, Ming-xin HE, Tie-yuan LI

2-0040-10615 **OPTIMAL SCANNING STRATEGY FOR VEHICULAR WI-FI** 193
Chunlei Liu, Jin Wang

2-0041-10616 **IMPROVED RANDOM WALK ALGORITHM FOR POWER SUPPLY NOISE ANALYSIS** 198
Guo Jun, Cui Jiao, Liu Weiming, Fan xunli

2-0042-10617 **QDFS: A QUALITY-AWARE DISTRIBUTED FILE STORAGE SERVICE BASED ON HDFS** 203
SONG Guang-hua, CHUAI Jun-na, YANG Bo-wei, ZHENG Yao

2-0043-10619 **STATIC ANALYSIS OF RUN-TIME INTER-THREAD INTERFERENCES IN SHARED CACHE MULTI-CORE ARCHITECTURES BASED ON INSTRUCTION FETCHING TIMING** 208
Fangyuan Chen, Dongsong Zhang, Zhiying Wang

2-0044-10620 **MODELING AND SIMULING POWER ACTIVE FILTER USING METHOD OF GENERALIZED REACTIVE POWER THEORY** 213
Marcu Marius, Popescu Florin, Samoila-Brana Liliana

2-0045-10621 **4H-SIC SOI-MESFET WITH A STEP IN BURIED OXIDE FOR IMPROVING ELECTRICAL PERFORMANCE** 219
Hamid Amini Moghadam, Ali A. Orouji, S. E. Jamali Mahabadi

2-0046-10623 **IMAGE CRYPTOGRAPHY: THE GENETIC ALGORITHM APPROACH** 223
Sandeep Bhowmik, Sriyankar Acharyya

2-0047-10625 **SPATIAL DISTANCE JOIN QUERY ESTIMATION WITHOUT DATA ACCESS** 228
Ye Wu, Wei Xiong, Ning Jing, Hongsheng Chen

2-0048-10627 **DESIGN AND REALIZATION OF THE HIGH ACCURACY ATTITUDE AND ORBIT CONTROL REAL-TIME SIMULATION PLATFORM FOR SPACECRAFT** 233
Gao Yudong, Hu Min, Zeng Guoqiang

2-0049-10628 **A VARIANT BELTRAMI FLOW FOR MULTIPLICATIVE NOISE REMOVAL** 237
Fang Li, Ruihua Liu

2-0050-10629 **STUDY ON DIGITAL COMPREHENSIVE PROTECTION SYSTEM BASED ON DOUBLE CPU FOR UNDERGROUND HIGH-VOLTAGE DISTRIBUTION NETWORKS** 242
Liang Yilong, Liu Bin

2-0051-10632 **MECHANISM AND DYNAMICS OF ACTIVE AND PASSIVE KNEE JOINT OF ABOVE KNEE PROSTHESIS** 246
Lu Dunmin, Gao Daoxiang, Tian Ye, Xiao Aiping

2-0052-10634 **CONSTRUCTION OF INDEPENDENT SPANNING TREES ON TWISTED-CUBES** 250
Yan Wang, Jianxi Fan, Yuejuan Han

2-0053-10635 **IMPROVED RSSI INDOOR LOCATION SYSTEM BASED ON FUZZY ALGORITHM** 255
Deng Chen, Fang YiYuan

2-0054-10636 **RESEARCH OF DYNAMICS OF DC SPEED REGULATOR OF FLYWHEEL DOUBLE CLOSED LOOP BASED ON IMMUNE PRINCIPLE** **259**
Lifang Xu, Shouda Jiang

2-0055-10639 **THE SEGMENTATION OF LIVER AND VESSELS IN CT IMAGES USING 3D HIERARCHICAL SEEDED REGION GROWING** **264**
HUANG Zhan-Peng ,YI Fa-Ling, JIANG Shi-Zhong, Zhao Jie, BAO Su-Su

2-0056-10640 **A LEARNING-BASED TEXT DETECTION METHOD IN CAMERA IMAGES** **270**
Kai Chen, Yi Zhou, Chenxuan Li, Li Song, Xiaokang Yang

2-0057-10642 **COMPUTER SIMULATION OF THE CHLORINE LEAKAGE BASED ON MATLAB** **275**
Dehong Zhou

2-0058-10643 **CONTROL FOR PHYSICAL HUMAN-ROBOT INTERACTION BASED ON ONLINE UPDATE OF DYNAMICS** **280**
Guanghui Xie, Mina Jin, Deming Wu, Minoru HASHIMOTO

2-0059-10644 **IDMS: AN INFORMATION DISCOVERY AND MONITORING SYSTEM FOR WEB SERVICES ON GRID** **285**
Lifeng Dong, Bin Jia, Jianwei Wang, Wen Zhang, Yingjun Xiao

2-0060-10647 **SOLVING THE CURSE OF DIMENSIONALITY UTILIZING ACTION-DEPENDENT HEURISTIC DYNAMIC PROGRAMMING** **289**
Zhi-jian Huang, Jie Ma, Zhi-jian Huang

2-0061-10648 **A COOL PACKAGING TECHNOLOGY FOR POWER CONVERSION APPLICATION** **293**
Xiao Fu, M Jin

2-0062-10649 **A SIMULATION METHOD OF CRASHWORTHY TRAIN SET** **297**
Wenbin Wang, Markus Hecht, Hechao Zhou, Lihui Ren, Honglun Zhao

2-0063-10652 **THE APPLICATION OF THE ADAPTIVE SLIDING MODE CONTROL WITH AN INTEGRAL-OPERATION SWITCHING SURFACE IN THE PARALLEL ROBOT** **302**
Guoqin Gao, Wenjuan Xia, Qing Song

2-0064-10653 **RESEARCH ON P2P ROUTING MODEL BASED ON CLUSTERING AND POSITION OF NODES** **307**
Ma Hui, Yange Chen

2-0065-10655 **A REMOTE USABILITY TESTING PLATFORM FOR MOBILE PHONES** **312**
Huakun Liang, Hongzhi Song, Yi Fu, Xu Cai, Zichao Zhang

2-0066-10656 **ID-BASED PROXY RE-SIGNCRYPTION SCHEME** **317**
Wang Huige, Wang Caifen, Cao Hao

2-0067-10660 **DESIGN AND IMPLEMENTATION OF A CHINESE CHARACTER TEACHING SYSTEM BASED-ON AUGMENTED REALITY INTERACTION TECHNOLOGY** **322**

LI Qi-ming, CHEN Yi-min, MA De-yi, HUANG Chen, XU Sheng, LU Ren-miao, LIU Yan, WANG Xi-chen

2-0068-10664 **MODIFIED MVDR ALGORITHM FOR DOA ESTIMATION USING ACOUSTIC VECTOR HYDROPHONE** **327**
LIANG Guo-long, ZHANG Kai, FU Jin, ZHANG Guang-pu

2-0069-10665 **THE RESEARCH OF WORKFLOW DYNAMIC FORMS BASED ON XML** **331**
Yin Xu

2-0070-10666 **A NOVEL CONFIGURABLE BOUNDARY-SCAN CIRCUIT DESIGN OF SRAM-BASED FPGA** **335**
Chenguang Guo, Yanlong Zhang, Zhiping Wen, Lei Chen, Xuewu Li, Zengrong Liu, Min Wang

2-0071-10667 **DISTRIBUTED INTELLIGENT CONTROL SYSTEM OF THE INJECTION MOLDING MACHINE BASED ON ARM CONTROLLER** **339**
Zhilei Cui, Jine Wang

2-0072-10668 **THE DESIGNATION OF A T-S FUZZY CONTROLLER BASED SINGLE INPUT** **343**
Li-li GAO

2-0073-10669 **FEATURE GRANULARITY FOR CARDIAC DATASETS USING ROUGH SET** **346**
Noor Suhana Sulaiman, Siti Mariyam Hj Shamsuddin

2-0074-10670 **THE THEORY OF SELECTING WEIGHT ITERATION BASED ON LS-TLS APPLIED IN ROAD LINE TYPE IDENTIFICATION** **353**
Wu Weiying, Kang Chuanli

2-0075-10671 **DESIGN AND SIMULATION OF DDS BASED ON QUARTUS II** **357**
FANG Yi-yuan CHEN Xue-jun

2-0076-10672 **THE INFORMATION INTEGRATION SCHEME OF INTELLIGENT SUBSTATION** **361**
Chen Xue, Xiaoqing Huang, Zhenfu Zhang

2-0077-10673 **RESEARCH ON BRANCH AND BOUND FOR PEDESTRIAN DETECTION** **366**
YE Zhi-qin, SU Song-zhi, LI Shao-zi

2-0078-10674 **TORQUE DISTRIBUTION CONTROL FOR ELECTRIC VEHICLE BASED ON TRACTION FORCE OBSERVER** **371**
Yinghui Ge, CS Chang

2-0079-10675 **USE OF A COLD MIRROR SYSTEM FOR CITRUS FRUIT IDENTIFICATION** **376**
Peilin Li, Sang-Heon Lee, Hung-Yao Hsu

2-0080-10676 **IDENTITY-BASED AUTHENTICATED KEY AGREEMENT PROTOCOLS IN MULTIPLE PKG ENVIRONMENTS IN THE STANDARD MODEL** **382**
Juan You, Song Xia Junquan Li

2-0081-10677 **STUDY ON PATTERN RECOGNITION MODEL BASED ON PRINCIPAL COMPONENT ANALYSIS AND RADIUS BASIS FUNCTION NEURAL NETWORK** **388**

Enyong Hu, Hui Wang, Jianhua Wang, Song Lu, Lei Tian

2-0082-10679 **T-ROUGHNESS IN SEMIGROUPS** **391**
Qimei Xiao

2-0083-10681 **BASE-UTILIZATION PARTITIONING FOR MULTIPROCESSORS** **395**
Huang Shujuan, Zhu yi'an

2-0084-10682 **AN ALGORITHM FOR SELECTING PROGRAMME SLOTS TO BROADCAST ADVERTISEMENTS IN PARALLEL IN DIFFERENT TELEVISION CHANNELS** **399**
Sumana Bandyopadhyay, Rajat Kumar Pal

2-0085-10684 **CLOUD COMPUTING AND ITS KEY TECHNIQUES** **404**
Xu Wang, Beizhan Wang, Jing Huang

2-0086-10689 **A GENERALIZED ALGORITHM FOR SOLVING N COINS PROBLEM** **411**
Joydeb Ghosh, Papiya Senmajumdar, Srijoni Maitra, Debasis Dhal, Rajat Kumar Pal

2-0087-10690 **AN EXACT BOUND ON REGULAR LOOP SUBDIVISION SURFACE** **416**
Guorong Zhou, Yuhua Zhang, Mingming Shan, Youzhi Wang, Yaohan Zhang, Xiao-Ming Zeng

2-0088-10691 **NUMERICAL SIMULATION OF ROCK MASS DEFORMATION AND MOVEMENT BY MINING UNDER BUILDING AND ROAD** **420**
ZHOU Zong-hong, HOU Ke-peng

2-0089-10693 **LUNAR SOFT LANDING TRAJECTORY OPTIMIZATION BY A CHEBYSHEV PSEUDOSPECTRAL METHOD** **425**
Zhang Jianhui, PENG Qi-bo

2-0090-10694 **AN ALGORITHM OF REAL-TIME SOLVING DEADLOCK FOR JOB-SHOP SCHEDULE** **431**
XU Yu-long, TANG Guoliang, Liu Zhongyong

2-0091-10695 **A GENERAL COLLABORATIVE EDITING PLATFORM BASED ON FILE LOCKING MECHANISM** **436**
Hongzhi Song, Yu Qi, Zhaoming Ou, Yueming Hu, Zichao Zhang, Shang Ye

2-0092-10696 **SILHOUETTE SHAPE AND DETAIL TEXTURE BASED GARMENT STYLE RECOGNITION** **441**
Suqin QIAN, Lifeng JIANG, Aihua DONG

2-0093-10698 **RESEARCH ON TIME REGISTRATION ALGORITHMS OF MULTI-SENSOR FUSION SYSTEM** **446**
Yang Wenjing, Cui Fan, Li Xun, Liu Jianping

2-0094-10699 **THE RESEARCH AND DESIGN OF A NEW TYPE SMART SOLAR AUTOMATIC CONTROL SYSTEM** **450**
Rongcun Wang, Xiang Tang, Kaisheng Xu

2-0095-10701 **DESIGN OF A POSITIVE AND NEGATIVE ELECTRONICALLY TUNABLE RESISTOR WITH LINEAR AND NONLINEAR CHARACTERISTICS** **456**
Roshanak Alavi Fard, Mohammad Pooyan

2-0096-10702 **IMAGE INFORMATION HIDING TECHNIQUE BASED ON FREQUENCY HOPPING AND 2D-DWT** **461**
Zhang Yongping

2-0097-10703 **IMAGE SEGMENTATION AND MAJOR APPROACHES** **465**
Qiaowei Li, Shuangyuan Yang, Senxing Zhu

2-0098-10707 **APPLICATION OF IMPROVED DBD ALGORITHM BASED BP NEURAL NETWORK ON FAULT DIAGNOSIS FOR FUEL SUPPLY SYSTEM IN A CERTAIN DIESEL ENGINE** **469**
FENG Fuzhou, SI Aiwei, XING Wei

2-0099-10708 **META-HEURISTIC APPROACHES FOR SOLVING RESOURCE CONSTRAINED PROJECT SCHEDULING PROBLEM: A COMPARATIVE STUDY** **474**
Partha Pratim Das, Sriyankar Acharyya

2-0100-10709 **AUTOCORRELATION PERFORMANCE IMPROVEMENT OF KAWAKAMI HYPERCHAOS SEQUENCE BASED ON APAS THEOREM** **479**
Bin Chen

2-0101-10710 **RESEARCH ON 2-OUT-OF-2 MULTIPLYING 2 REDUNDANCY SYSTEM USED IN HIGH-SPEED TRAIN** **483**
Dai Shenghua, Li Yishi

2-0102-10715 **PARAMETER ADAPTATION SENSORLESS CONTROL OF INDUCTION MOTOR BASED ON STRONG TRACK FILTER** **487**
Ke Lu, Jian Xiao

2-0103-10716 **SAT APPROACHES FOR SOLVING THE STAFF TRANSFER PROBLEM** **492**
Sriyankar Acharyya, Amitava Bagchi

2-0104-10718 **UD-CACHE: AN EFFICIENT XML CACHE SYSTEM WITH UPWARD-VALIDATION AND DOWNWARD-EVALUATION** **497**
Bo Zhang, Ziyun Zhuang

2-0105-10720 **FRACTIONAL ORDER PROPORTIONAL INTEGRAL (FOPI) CONTROLLER DESIGN FOR NETWORK CONGESTION CONTROL** **502**
Hu Wenkui, Qian Yanping1, Lin Xiangze, Wang Bing

2-0106-10721 **USING NON-RIGID IMAGE REGISTRATION AND THIN-PLATE SPLINE WARPING FOR LUNG CANCER PROGRESSION ASSESSMENT** **506**
Dawood M. S. Almasslawi, Ehsanollah Kabir

2-0107-10724 **AUTOMATIC GENERATION AND VERIFICATION OF INTERLOCKING TABLES BASED ON DOMAIN SPECIFIC LANGUAGE FOR COMPUTER BASED INTERLOCKING SYSTEMS (DSL-CBI)** **511**
Yan Cao, Tianhua Xu, Tao Tang, Haifeng Wang, Lin Zhao

2-0108-10727 **IMPROVEMENT OF REAL-TIME PROCESS MONITOR TECHNOLOGY ON LINUX BASED ON MANDATORY RUNNING CONTROL** **516**

Wei Li, Long Chen, Hongjiang Ji, Tong Zhang

2-0109-10728 **REGISTRATION WITH LINEAR REGRESSION MODEL IN AUGMENTED REALITY** **520**
MA De-yi, CHEN Yi-min, LI Qi-ming, HUANG Chen, XU Sheng, ZOU Yi-bo

2-0110-10730 **CHANNEL ASSIGNMENT FOR MULTICAST IN WIRELESS MESH NETWORKS WITH CONSIDERING FORWARDING WEIGHT AND DISTANCE** **524**
Jenn-Wei Lin, Shian-Min Lin

2-0111-10733 **BUILDING VIRTUAL LABORATORY ENVIRONMENT FOR MICROCOMPUTER PRINCIPLE & INTERFACE TECHNOLOGY CURRICULUM** **529**
Ling Li-jun, Hu Ning-ya

2-0112-10734 **A FLEXIBLE POLICY-BASED ACCESS CONTROL MODEL FOR WORKFLOW MANAGEMENT SYSTEMS** **533**
Gang Ma, Kehe Wu, Tong Zhang, Wei Li

2-0113-10736 **ON SELECTION DEVICE ABOUT INDIRECT-GROUNDED FAULT SYSTEM OF LOW-VOLTAGE NETWORK BASED ON DSP IN MINING** **538**
SUN Xia

2-0114-10737 **ASYMPTOTIC STATISTICAL ANALYSIS OF PSEUDO RANDOM NUMBERS** **542**
Alexandra L.Wang, Zhiguang Xu, Charles J. Kicey

2-0115-10738 **ADAPTIVE AND COORDINATED POWER MANAGEMENT FOR TARGET TRACKING IN WIRELESS SENSOR NETWORK** **546**
Feng Juan, Zhao Hongwei

2-0116-10739 **TRANSITION-BASED TESTABILITY ANALYSIS FOR REACTIVE SYSTEMS** **551**
NGUYEN Thanh Binh, Michel DELAUNAY, Chantal ROBACH

2-0117-10741 **A RECURSIVE DESIGN METHOD OF CONTROLLER FOR THE STABILIZATION OF THE TRANSLATIONAL OSCILLATOR WITH A ROTATIONAL ACTUATOR SYSTEM** **558**
Wang Yiqing, Li Sheng, Chen Qingwei

2-0118-10742 **BIMATRIX GAMES ON NECESSITY SPACE** **562**
LI Cun-lin

2-0119-10743 **THE FAST VITERBI ALGORITHM CACHING PROFILE HIDDEN MARKOV MODELS ON GRAPHIC PROCESSING UNITS** **567**
Jun Li, Yanhui Li, Shuangping Chen

2-0120-10745 **OPERATIONAL TRANSFORMATION ALGORITHM WITH CONFLICT DETECTION AND AWARENESS METHODS FOR REAL-TIME COLLABORATIVE EDITING IN P2P ENVIRONMENTS** **571**
Hongzhi Song, Zhaoming Ou, Yi Fu, Xiangxin Lin, Lei Yang

2-0121-10750 **A NEW CONTOUR TRACING AUTOMATON IN BINARY IMAGE** **577**
Liu Yan, Zhu Min

2-0122-10751 **EQUIPMENT DESIGNED TO CONTROL A SOLID FUEL HEATING STATION** **582**
Samoila Brana-Liliana, Marcu Marius, Demian Octavian-Daniel

2-0123-10752 **OFF-LINE PROGRAMMING AND REMOTE CONTROL FOR A PALLETIZING ROBOT** **586**
Haixiang Yu, Junfeng Shan, and Xuejun Zhu

2-0124-10756 **IMPROVING RELIABILITY OF ROUTING IN WIRELESS BODY AREA SENSOR NETWORKS USING GENETIC ALGORITHM** **590**
S. Hassan pour, B. Asadi, Y. Vejdanparast, P. Zargar

2-0125-10759 **OVER THE AIR PROVISIONING OF INDUSTRIAL WIRELESS DEVICES USING ELLIPTIC CURVE CRYPTOGRAPHY** **594**
Deji Chen, Mark Nixon, Thomas Lin, Song Han, Roger Xu, Julia Deng, An Liu

2-0126-10762 **SENSITIVITY ANALYSIS OF THE HYBRID ELECTRICAL VEHICLE POWER SYSTEM PARAMETERS** **601**
Zheng Yanping, He Haibo, Xu Xiaomei, Jiang Yuanguang

2-0127-10764 **ON-CHIP DEBUG ARCHITECTURE FOR MCU-DSP CORE BASED SYSTEM-ON-CHIP** **605**
Wang Gang, Zhang Shengbing

2-0128-10766 **DEVELOPMENT OF A WEB BASED FAULT DIAGNOSIS INSTRUMENT SYSTEM** **609**
Lei Chen, Jie Han, Liya Wang, Wenping Lei, Hong Chen

2-0129-10767 **A DESIGN METHOD OF GENERAL TRAIN OPERATION CONTROL SYSTEM'S ON-BOARD DMI BASED ON MEEGO** **614**
Shenghua DAI, Xiaoyong LI

2-0130-10768 **HLLC RIEMANN SOLVER BASED ON HIGH-ORDER RECONSTRUCTION FOR UNSTEADY INVISCID COMPRESSIBLE FLOWS** **618**
Li XU Quanjun Wu, Peifen Weng and Baoliang Zhang

2-0131-10769 **RESEARCH ON KEY TECHNOLOGIES OF FPGA BASED POWER QUALITY MONITORING SYSTEM** **623**
Wang Liang, Lu Da

2-0132-10770 **NEW APPROACH TO THE REALIZATION OF PID CONTROLLER PARAMETER STABLE REGIONS** **627**
Bin Fang, Jianshou Kong

2-0133-10771 **THE MODIFIED BALANCE METHOD BASED ON PRECESSION DECOMPOSITION** **632**
Wen-ping Lei, Jie Han, Hong Chen, Xiao-yun Gong

2-0134-10772 **VISUAL GROUP IDENTIFICATION METHOD OF TECHNICAL COMPETITORS USING LINLOG GRAPH CLUSTERING ALGORITHM** **637**
HAN Hong-qi, AN Xiaomi, ZHU Donghua, WANG Xuefeng

2-0135-10775 **AN IMPROVED SEGMENTATION ALGORITHM OF COLOR IMAGE IN COMPLEX BACKGROUND BASED ON GRAPH CUTS** **642**
Hanyu Hong, Xiangyun Guo, Xiuhua Zhang

2-0136-10781 **UWB WAVEFORM DESIGN METHOD FOR NARROWBAND INTERFERENCE SUPPRESSION BASED ON RAISED COSINE PULSE** **646**
Xiaolin SHI

2-0137-10785 **IMPLEMENTATION OF INTRA PREDICTION IN H.264 BASED ON A NOVEL DESGIN METHODOLOGY** **650**
Ziyi Hu, Jianhong Peng, Xu Zhang, Lei Zhao, Xin'an Wang

2-0138-10786 **ASSESSING LUXURY BRANDS AND EWOM USING ONLINE REVIEWS: HOSPITALITY MANAGEMENT ON THE EDGE** **656**
Wei Yan, María José Álvarez Gil

2-0139-10787 **EFFICIENT AND SECURE GROUP KEY MANAGEMENT BASED ON EBS AND ATTRIBUTE ENCRYPTION** **661**
Yanli Chen, Geng Yang

2-0140-10790 **GLOBAL EDF-BASED ONLINE, ENERGY-EFFICIENT REAL-TIME SCHEDULING IN MULTI-CORE PLATFORM** **666**
Dongsong Zhang, Fangyuan Chen, Shiyao Jin

2-0141-10791 **DATA ACQUISITION SYSTEM FOR PNEUMATIC ACTUATOR OF THE TOMATO COLOR SORTER BASED ON VIRTUAL INSTRUMENT** **671**
Yu Jie, Kan Za, Zhang Ruoyu, Sun Xiaoli, Hu Wanchao,Yin Zhangtao, Liu Yang

2-0142-10792 **HIGH PERFORMANCE CONTROL OF HYDRAULIC EXCAVATOR BASED ON FUZZY-PI SOFT-SWITCH CONTROLLER** **676**
Li Bo, Yan Jun, Guo Gang, Zeng Yonghua, Luo Wenxing

2-0143-10798 **AN INSTRUCTION-LEVEL SOFTWARE SIMULATION APPROACH TO RESISTANCE EVALUATION OF CRYPTOGRAPHIC IMPLEMENTATIONS AGAINST POWER ANALYSIS ATTACKS** **680**
Jiantang Li, Yongbin Zhou, Jiye Liu, Hailong Zhang

2-0144-10801 **FAULT DIAGNOSIS ANALYSIS OF MATCHING COMPOSITION NETWORKS** **687**
Shuming Zhou

2-0145-10802 **ON MIN-MAX FEASIBLE COOPERATION-BASED DISTRIBUTED MODEL PREDICTIVE CONTROL** **692**
Guoqi ZHONG, Zhiyuan LIU, Hong CHEN

2-0146-10803 **USING HIDDEN MARKOV MODEL TO IMPROVE THE ACCURACY OF PUNJABI POS TAGGER** **697**
Sanjeev Kumar Sharma, Gurpreet Singh Lehal

2-0147-10805 **EFFICIENT SIMILARITY SEARCH ON MASSIVE GENE DATA BASED ON CLOUD COMPUTING** **702**
Zhiqiong Wang, Hao Chen, Yalu Huang, Yu Xu, Longwei Yang, Jingjing Xiao

2-0148-10806 **A KIND OF IMPROVED ATTRIBUTE REDUCTION ALGORITHM IN INTRUSION DETECTION APPLICATION RESEARCH BASED ON ROUGH SETS THEORY** **707**
Chen Lian, Yang Wenbing

2-0149-10809 **ROBUST SHEET METAL BEND SEQUENCING METHOD BASED ON A-STAR ALGORITHM** **711**
Zhang Lichao, Zhou Qiang, Zhang Yi, He Fafu

2-0150-10813 **A VISUAL NAVIGATION ALGORITHM FOR MOBILE ROBOT IN SEMI-STRUCTURED ENVIRONMENT** **716**
Yong Zhu, Changguo Sun, Zhixin Han, Chaofa Yu

2-0151-10819 **VISUAL TRACKING WITH ADAPTIVE LAYERED-OPTIMIZING PARTICLES IN MULTIFEATURE PARTICLE FILTERING FRAMEWORK** **722**
ZOU Wei-jun, YING Ming-feng, Bo Yu-ming

2-0152-10820 **RESEARCH FOR NAVIGATION TECHNOLOGY OF UNDERWATER ROBOT BASED ON UKF FEDERATED FILTER** **729**
Zhang Aijun, Liu Yashu

2-0153-10821 **INTERNET MARKETING BASED ON ELECTRONIC COMMERCE** **734**
Li-Fu Hsu

2-0154-10822 **STUDY ON SATISFACTION EVALUATION OF TEACHING MANAGEMENT SYSTEM IN UNIVERSITIES BASED ON GREY THEORY** **738**
Chen Tong

2-0155-10823 **TRANSIENT FLOW OVER GENERIC REAR VIEW MIRROR USING COMPUTATIONAL FLUID DYNAMICS** **742**
Qiliang Li, Zhigang Yang

2-0156-10825 **PWISEGEN: GENERATING TEST CASES FOR PAIRWISE TESTING USING GENETIC ALGORITHMS** **747**
Pedro Flores, Yoonsik Cheon

2-0157-10826 **BILLET CHARACTERS LOCATION IN THE COMPLEX SCENE** **753**
Hanyu Hong, Yijun Yang, Xiuhua Zhang

2-0158-10827 **TENNIS VIDEO SHOT CLASSIFICATION BASED ON SUPPORT VECTOR MACHINE** **757**
Hui Jiang, Ming Zhang

2-0159-10828 **AN IMMUNE ALGORITHM FOR DYNAMIC RESOURCE CONFIGURATION OF MACHINERY GROUP INTELLIGENT** **762**
Ying Tian

2-0160-10829 **THE DOMAIN DECOMPOSITION METHOD BASED ON WEIGHTED AVERAGE** **766**
Jianhui Shi, Ying Liu, Wenbo Zhou

2-0161-10835 **SPATIAL SHAPE PREDICTION OF MULTI-BENDS METAL TUBE BENDING** **770**

Jia Meihui, Tang Chengtong, Wang Wengang

2-0162-10836 **HYBRID MULTI-OBJECTIVE OPTIMIZATION WITH PARTICLE SWARM OPTIMIZATION AND EXTREMAL OPTIMIZATION FOR ENGINEERING DESIGN** **776**

Chen-Long Yu, Yong-Zai Lu, Jian Chu

2011 IEEE International Conference on Computer Science and Automation Engineering

(CSAE 2011)

Shanghai, China
10-12 June 2011

Volume 3
Pages 1-763

IEEE Catalog Number: CFP1138L-PRT
ISBN: 978-1-4244-8727-1

TABLE OF CONTENTS VOL0 3

3-0001-10837 **AN ALGORITHM OF REAL-TIME RENDERING EARTH WITH ATMOSPHERE FROM THE VIEWPOINT NEAR GROUND** 1
Liqiang Zhang, Chao Li, Changwen Zheng, Xiaohui Hu, Pin Lv

3-0002-10841 **USAGE OF ENTERPRISE ARCHITECTURAL FRAMEWORK FOR INFORMATION SECURITY MANAGEMENT IN A HOLOSTIC APPROACH** 6
Sanaz Golshan pour Nezami, Reza Azmi

3-0003-10842 **THE IMPROVED PARAMETER ESTIMATION METHOD BASED ON FRACTIONAL FOURIER TRANSFORM** 11
Chunjie Zhang, Lili Ren, Na Li

3-0004-10843 **MOVING SHADOW DETECTION BASED ON SUSAN ALGORITHM** 16
Huang Si-ming, Liu Bing-han, Wang Wei-zhi

3-0005-10844 **ACCELERATING IMAGE LOCAL INVARIANT FEATURES MATCHING USING CLOUD COMPUTING PLATFORM** 21
Han-Bing Yan, Peng Li, Chun-Ge Zhu, Yue-Jin Du, Gang Cui

3-0006-10846 **STEREOSCOPIC IMAGE TRANSFORMS TO AUTOSTEREOSCOPIC MULTIPLEXED IMAGE** 26
Wei-Ming Chen, Chi-Hao Chiou, Sheng-Hao Jhang

3-0007-10847 **AN IMPROVED STATE ESTIMATOR IN DISTRIBUTION SYSTEMS** 30
Hui Li

3-0008-10849 **LOW ROTATING LOSS 2-POLE RADIAL MAGNETIC BEARING BIASED WITH PERMANENT MAGNET** 35
Wang Xi, Fang Jiancheng, Wei Tong, Tang Enqiong, Fan Yahong, Han Bangcheng, Wang Chune

3-0009-10850 **ACCURACY ANALYSIS OF SCARA INDUSTRIAL ROBOT BASED ON SCREW THEORY** 40
Zhao Liang, Su Meng, Diao Changkun

3-0010-10867 **STUDY OF PREDICTIVE MODELING OF MACHINING SPEED IN CERAMICS GRINDING** 47
Jianzhong Li, Rongcheng Shan, Yuhui Zhao, Zuyuan Yu

3-0011-10868 **RESEARCH ON SELF-SIMILARITY NETWORK GROUP** 52
Yaguang Xuan, Shaohua Tao

3-0012-10869 **A NEW METHOD FOR IMPROVING BREAKDOWN VOLTAGE IN PSOI MOSFETS USING VARIABLE DRIFT REGION DOPING CONCENTRATION** 57
S. E. Jamali Mahabadi, Ali A. Orouji, Hamid Amini Moghadam, Parviz Keshavarzi

3-0013-10871 **A GRAPH BASED ALGORITHM TO MINIMIZE TOTAL WIRE LENGTH IN VLSI CHANNEL ROUTING** 61
Swagata Saha Sau, Achira Pal, Tarak N. Mandal, Alak K. Datta, Rajat K. Pal, and Atal Chaudhuri

3-0014-10873 **INTEGRATED SIMULATION MODELING OF TRANSFER ALIGNMENT WITH AIRBORNE WEAPON** **66**
Xiaming Yuan Jihong Zhu, Yonggang Wang

3-0015-10874 **FOREST PRUNING BASED ON TREE-NODE ORDER** **71**
Huaping Guo, Ming Fan and Yangdong Ye

3-0016-10877 **BUILDING INFORMATION MODELING AND SIMULATION FOR THE MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS** **77**
Haiyan Xie, James Michael Tramel, Wei Shi

3-0017-10878 **A MACHINE VISION BASED NAVIGATION SYSTEM FOR THE BLIND** **81**
Shang Wenqin, Jiang Wei, Chu Jian

3-0018-10879 **THE METHODS OF FPGA SOFTWARE VERIFICATION** **86**
Ding Zheng, Wang Yichen, Zou Xueyi

3-0019-10880 **RECOGNITION OF MANIPULATED POSTS BASED ON SVM CLASSIFICATION ON BULLETIN BOARD SYSTEM** **90**
Biao Wang, Qian Gao, Yueqin Liu, Yuhong Guo, Yang Wu

3-0020-10881 **LARGE SCALE PROJECT ORGANIZATION NETWORK AND OPERATIONAL MECHANISM** **95**
YANG Jing, CHEN Sen, CHEN Yingwu

3-0021-10882 **CONSISTENT MAP BUILDING BY A MOBILE ROBOT EUIPPED WITH STEREO SENSOR AND LRF** **100**
Xiuzhi Li, Songmin Jia, Wei Cui, Jinhui Fan, Jinbo Sheng

3-0022-10885 **DIGITAL LOGIC SIMULATION WITH COMPRESSED BDDS** **105**
Raimund Ubar, Dmitri Mironov, Sergei Devadze, Jaan Raik, Artur Jutman

3-0023-10890 **AN IMPROVED SIB ALGORITHM FOR DOCUMENT CLUSTERING USING COMBINATION WEIGHTING MEASURES** **110**
Bo Ji, Yangdong Ye

3-0024-10893 **NEW TRAVELLING WAVE SOLUTIONS FOR THE LOLTKA-VOLTERRA DIFFUSION EQUATIONS** **115**
Jiang Song, Luo Yong

3-0025-10894 **A VIRTUAL LAB FOR MECHANICAL EXPERIMENT BASED ON VIRTOOLS** **119**
Yuchuan Chen, Qingni Hu, Hong Shu

3-0026-10895 **ALIGNING MICRO-GRIPPER TO RING OBJECT IN HIGH PRECISION WITH MICROSCOPE VISION** **123**
Juan Zhang, Zhengtao Zhang, De Xu, Wensheng Zhang

3-0027-10896 **A PRIME IMPLICATES-BASED FORMULAE FORGETTING** **128**
Dai Xu, Zuoquan Lin

3-0028-10897 **A NEW FRAMEWORK OF M-CHANNELS LIFTING WAVELET FILTER IN IMAGE PROCESSING** **133**

Lin Zhenxian

3-0029-10903 **A NEW LIVENESS CHARACTERIZATION FOR S3 PGR2** **137**
Daniel Y. Chao, Jiun-Ting Chen

3-0030-10904 **AN AGGREGATION SEARCH ENGINE BASED ON RESTFUL SERVICE AND MASHUP** **142**
Bing Pan, Kaifa Liang

3-0031-10906 **RESEARCH ON OBJECT ASSESSMENT FOR MANDARIN PROFICIENCY TEST** **147**
Chunting Yang, Jing Yu

3-0032-10909 **A PRIORITY QUEUE-BASED HIERARCHICAL PHOTO CLUSTERING METHOD USING PHOTO TIMESTAMPS** **152**
Dong-Sung Ryu, Sun-Young Park, KwangHwi Kim, Hwan-Gue Cho

3-0033-10910 **A FULLY CONFIGURABLE MONITORING SYSTEM ARCHITECTURES BASED ON EMBEDDED WEB SERVER USING AJAX-CGI** **157**
Shi Daguang, An Baixiu, Cao Jinglong, Xu Jia

3-0034-10911 **THE NEW DETECTION SYSTEM FOR MISSING BEARING'S ROLLING ELEMENTS IN DOUBLE ROW BALL BEARING** **162**
XU Qiaoyu, PENG Ping

3-0035-10912 **AUTOMATIC BACKWARD COMPATIBILITY ANALYSIS OF SOFTWARE COMPONENT BINARY INTERFACES** **167**
Andrey Ponomarenko, Vladimir Rubanov

3-0036-10915 **AUDIT REPLICATION IN STOCK TRADING SYSTEM** **174**
Yinfei Huang, Jianfeng Wu, Bo Wang, Shuo Bai

3-0037-10916 **A SINGLE NEURON PID CONTROLLER FOR TENSION CONTROL BASED ON RBF NN IDENTIFICATION** **178**
Wang Yu, Qian Xiao-yao, Zhu Jiang

3-0038-10917 **A NEW HEAT FLUX COUPLED COMBUSTION MODEL OF SANDWICH PROPELLANT WITH COMPLEX GAS REACTION KINETICS** **183**
Zhou Zhi-qing, Yang Yue-cheng

3-0039-10919 **A NOVEL POST-PROCESSING METHOD FOR STREET TEXTS RECOGNITION USING GPS INFORMATION AND STRING ALIGNMENT** **188**
SeonYeong Kim, Sung-Hwan Kim, Hwan-Gue Cho

3-0040-10922 **DESIGN OF AN FPGA-BASED OFDM TRANSCEIVER FOR DVB-T STANDARD** **193**
Lenin Gopal, Daniel Wong Sing Tze, Nur Zawanah Ishak

3-0041-10923 **PARALLEL COMPUTING FOR SRM NUMERICAL SIMULATION USING A PARTITIONED METHOD** **198**
Gao Shuang-wu, Qiang Hong-fu

3-0042-10924 **A NEW COMBINATION RULE OF D-S THEORY** **202**

Meng Chen, Xin Xia

3-0043-10926 **AN AUTOMATIC GUI ADJUSTMENT METHOD FOR MOBILE COMPUTING** **206**
HaiTao Song, HuanYu Liu, Dongyi Chen

3-0044-10928 **DESIGN AND IMPLEMENTATION OF EMBEDDED NETWORK VIDEO MONITORING TERMINAL** **211**
Wang Kechao, Ren Xiangmin, Wang Zhifei, Jia Zongfu, Yu Jingwei

3-0045-10931 **FAILURE MANAGEMENT FOR RELIABLE AUTOMOTIVE START UP PROCESS** **215**
Suguna Thanagasundram, Mark Amor Segan, Ross McMurran, R. Peter Jones

3-0046-10932 **POLYNOMIAL PHASE-PORTRAIT REACHABLE SET APPROXIMATION FOR HYBRID AUTOMATA** **220**
Liu Baoluo, Peng Huiling, Nie Yalin

3-0047-10933 **LOGIC DATA PARTITION FOR SHARED-STORAGE DATABASE CLUSTER** **224**
SUI Xin-zheng, CHENG Ren-hong

3-0048-10934 **DEVELOPMENT AND ERROR COMPENSATION OF A LOW-COST DIGITAL COMPASS FOR MUAV APPLICATIONS** **228**
Zhang Lijie, Chang Ji

3-0049-10936 **ACTIVE LEARNING METHOD OF BAYESIAN NETWORKS CLASSIFIER BASED ON COST-SENSITIVE SAMPLING** **233**
Yanfang Gao, Jiwei Wang

3-0050-10938 **MULTIPLE TEMPLATE AUTO EXPOSURE CONTROL BASED ON LUMINANCE HISTOGRAM FOR ON-BOARD CAMERA** **237**
Tao Jiang, K.-D. Kuhnert, Duong Nguyen, Lars Kuhnert

3-0051-10940 **DESIGN OF A FUZZY SYSTEM TO CONTROL A SMALL ELECTRIC TRAIN USING MICROCHIP PIC32 WITH THE AID OF MATLAB BLOCKSETS** **242**
Mostefa Ghassoul

3-0052-10941 **A PRIVACY-PRESERVING ACCESS CONTROL IN OUTSOURCED STORAGE SERVICES** **247**
Dai Jiazhu, Luo Shuangyan, Liu Hongxia

3-0053-10945 **MINING DYNAMICAL FREQUENT ITEMSETS BASED ON ANT COLONY ALGORITHM** **252**
Chen ShengBing, Wang XiaoFeng, Wang XiaoFang

3-0054-10946 **BIOINFORMATICS ANALYSIS THE HUB-PROTEINS AND CO-EXPRESSION PROTEINS OF LUNG SQUAMOUS CARCINOMA AND ADENOCARCINOMA BASED ON PROTEIN INTERACTION NETWORK** **256**
CHEN Qi-long, QIAO Zi-jun, YANG He-jian,NI Teng-feng, CHEN Xiang-yang, CHEN Jian, HU Sheng, ZHE MA Wen-Li

3-0055-10947 **OPTIMIZED DRIVERS FOR PS/2 AND VGA USING HDL** **262**
Punj Pokharel, Binod Bhatta, Anand D. Darji

3-0056-10953 **A STUDY OF THE INTEGRATED AUTOMATED EMOTION MUSIC WITH THE MOTION GESTURE SYNTHESIS** **267**
Huang, Chih-Fang, Luo, Yin-Jyun

3-0057-10955 **AERODYNAMIC ANALYSIS OF THE FAN-DIFFUSER IN THE AUTOMOTIVE WIND TUNNEL** **273**
YANG Zhigang, Wei Gan, Li Qiliang

3-0058-10956 **HIGH SPEED ARCHITECTURE OF ARITHMETIC CODER** **278**
Kai Liu, Chao Xu

3-0059-10957 **ACCURATE MOVING OBJECT DETECTION IN THERMAL IMAGERY** **282**
Yan Zhang, Ting Zhao, Jian Gu, Shengyang Yu

3-0060-10958 **APPLICATION OF RADIAL BASIS FUNCTION NEURAL NETWORK FOR FISHERY FORECASTING** **287**
Suja Shakya, Hongchun Yuan, Xinjun Chen, Liming Song

3-0061-10967 **A STUDY OF FORECAST RISK MANAGEMENT OF SUPPLY CHAIN BASED ON THE MANAGERIALINCENTIVE MODEL OF INFORMATION SHARING** **292**
Wang Ying, Zhang Tongyao, Li Yan

3-0062-10969 **ALL FREQUENCY BAND DWT-SVD ROBUST WATERMARKING TECHNIQUE FOR COLOR IMAGES IN YUV COLOR SPACE** **295**
Kapre Bhagyashri S, Joshi M.Y.

3-0063-10971 **COMPARATIVE ANALYSIS ON ORTHOGONAL GEOMETRY ELLIPSE FITTING** **300**
Yizhou HE, Li RAN, Zhenlin SHEN

3-0064-10975 **SOLVING PARABOLIC EQUATIONS WITH RADIAL BASIS MESHLESS DOMAIN DECOMPOSITION METHOD** **304**
Qin Xinqiang,Su Pengxiang ,Duan Xianbao,Miao Baoshan

3-0065-10977 **MOBILE ROBOT BAYESIAN MAP BUILDING BASED ON LASER RANGING AND STEREOVISION** **308**
Songmin Jia, Wei Cui, Xiuzhi Li, Jinhui Fan1, Jinbo Sheng

3-0066-10978 **NETWORK SECURITY THREAT ASSESSMENT MODEL BASED ON FUZZY ALGORITHM** **313**
Fakariah Hani Mohd Ali, Wan Mohd Nadzir Hadzril Wan Ismail

3-0067-10982 **IMPROVEMENT ALGORITHM OF DTW ON ISOLATED-WORD RECOGNITION** **319**
Li Yang, Le Jing, Yang Yuxiang, Wang Jian

3-0068-10984 **ADAPTIVE AND QUALITY TETRAHEDRAL MESH GENERATION** **323**
Jun Wang, Zeyun Yu

3-0069-10991 **NUMERICAL SIMULATION RESEARCH ON HYDRAULIC STEWART PLATFORM MOTION SIMULATOR** **328**
Hou Jingwei, Zhao Dingxuan, Zhao Ying, Ni Tao

3-0070-10993 **ITERATIVE LEARNING CONTROL OF NONLINEAR SYSTEMS WITH TIME-VARYING UNCERTAINTIES** **332**
Pengnian Chen, Mingxuan Sun

3-0071-10994 **PREDICTIVE DECOUPLING CONTROL FOR VACUUM HEAT TREATMENT FURNACE** **337**
Xiaobin Li, Naijie Xia, Haiyan Sun, Haibo Wang

3-0072-10995 **NEW ROBUST CONTROL FOR UNCERTAIN T-S FUZZY SYSTEMS WITH TIME-VARYING STATE AND INPUT DELAYS** **343**
SONG Jie-Zhu, HUANG Sheng-Juan

3-0073-10997 **A NEW ALGORITHM BASED ON JOINT DIAGONALIZATION BY THE HOUSEHOLDER TRANSFORMATION FOR CONVOLUTIVE BLIND SEPARATION** **348**
Wen Yuanyuan, Chen Hao

3-0074-10998 **A NEW MULTILAYER FEEDFORWARD SMALL-WORLD NEURAL NETWORK WITH ITS PERFORMANCES ON FUNCTION APPROXIMATION** **353**
Li Xiaohu, Li Xiaoling, Zhang Jinhua, Zhang Yulin, Li Maolin

3-0075-11001 **DEVELOPMENT OF EDUCATIONAL CAMERA GAMES FOR CHILDREN** **358**
XIE Fei, CAI Shan, CHENG Ben, CHEN Chao

3-0076-11004 **MONOTONICALLY DECREASING EIGENVALUE FOR EDGE-SHARPENING DIFFUSION** **363**
Wenhua Ma

3-0077-11006 **VIBRATION SUPPRESSION OF A BEAM USING VARIABLE STRUCTURE CONTROL WITH DISTURBANCE OBSERVER** **367**
Junfeng Hu, Dachang Zhu, Qiang Chen, Qihua Gu

3-0078-11008 **AN IMPROVED PAINTING-BASED TRANSFER FUNCTION DESIGN APPROACH WITH CUDA-ACCELERATION** **372**
Deqing Qu, Yuetong Luo, Wenmin Tan

3-0079-11010 **NUMERICAL SIMULATION OF ALUMINUM ALLOY HOT ROLLING USING DEFORM-3D** **378**
HUANG Chang-qing, DENG Hua, DIAO Jin-peng, HU Xing-hua

3-0080-11050 **A NEW HYBRID IMAGE SEGMENTATION METHOD FOR FINGERPRINT IDENTIFICATION** **382**
Zhigen Fei, Junjie Guo

3-0081-11053 **AN EFFICIENT SIMILARITY MEASURE ALGORITHM OF CHINESE SENTENCE** **387**
Changying Ning, Rongbo Wang, Zhiqun Chen, Bei Lu

3-0082-11055 **QUANTITATIVE SAFETY ANALYSIS OF A KIND OF EMBEDDED SOFTWARE** **391**
Hongpo Wang, Hongjian Zhou, Honglei Wang

3-0083-11056 **MULTI-CORE MULTI-THREADED PROCESSOR ARCHITECTURE SIMULATOR** 397
Lin Deng, Huaihui Li, Yong Dou, Qiang Dou

3-0084-11058 **THE STUDY OF ELECTRIC POWER CUSTOMER RISK EVALUATION BASED ON ENTROPY METHOD AND MADA** 401
Dongxiao Niu, Yimin Liu, Ling Ji, Jinpeng Liu

3-0085-11060 **A NOVEL INDEX STRUCTURE R*Q-TREE BASED ON LAZY SPLITTING AND CLUSTERING** 405
Pan Jin, Quanyou Song

3-0086-11062 **OPTIMAL CONTROLLER DESIGN FOR REMOTELY LOCATED VIBRATING SYSTEMS: A COMPARATIVE STUDY** 408
Nanyan Min, Jiqiang Wang

3-0087-11064 **A METHOD TO CONSTRUCT A QUASI-NORMAL CONE FOR NON-CONVEX AND NON-SMOOTH SET AND ITS APPLICATIONS** 413
Li Hongwei

3-0088-11068 **A GRADED METHOD FOR REASONING ABOUT N-VALUED R0 PROPOSITIONAL LOGIC** 418
Qian Lan, Teng Ma

3-0089-11070 **DEVELOPMENT OF AUTOMATIC LINE-TRACKING INSPECTION DEVICE FOR HIGH VOLTAGE TRANSMISSION LINES BASED ON GROUND CONTROL** 422
Sheng-mei LUO, Le TIAN

3-0090-11071 **A GROUPING PARTICLE SWARM OPTIMIZATION ALGORITHM FOR WEB SERVICE SELECTION BASED ON USER PREFERENCE** 427
Shuzhi LI, Ping SHEN, Shuxin YANG

3-0091-11072 **A GENERALIZED SHARE POTENTIAL FIELDS APPROACH TO MULTI-ROBOT COORDINATION** 432
Ruilei ZHANG, Sheng LI, Qingwei Chen

3-0092-11075 **NONLINEAR BEHAVIORAL MODEL FOR QUADRATURE MODULATORS AND COMPENSATORS** 437
Peng Zhan and Kaiyu Qin, Shunyan Cai

3-0093-11079 **STUDY OF HTHP RHEOMETER PRESSURE CONTROL BASED ON FUZZY SELF-TUNING PID CONTROLLER** 441
Jianhua, Rao, Dongmei,Zhou, Xiaokang, Liu

3-0094-11080 **INTERACTIVE GENETIC ALGORITHMS WITH GREY LEVEL OF INDIVIDUALS FITNESS** 445
Guo Guang-song, Wang Yan-fang

3-0095-11081 **RESEARCH ON DYNAMIC VARIATIONS IN THE GRAVITATIONAL FIELD OF FORTHCOMING VOLCANO ERUPTION** **450**
Korochentsev V.I, Xue Wei, Rubliov V.P, Lisunov E.V, Ma Weiqun

3-0096-11083 **THE STUDY ON THE EFFECT OF THE RESISTANCE CHARACTERISTICS OF THE INERTIAL STAGE WITH DIFFERENT BLADE DISTANCES** **453**
YU Yunliang, WANG Zhongyi, HAN Jia, SUN Tao, SUN Changjiang

3-0097-11084 **THE DESIGN OF VIOLATION VEHICLE MANAGEMENT SYSTEM BASED ON MAS COOPERATION** **457**
Cao Haiqing,Yao Zhiying, Deng QingHua, Wang Yu, Yu MingXin,

3-0098-11088 **DESIGN OF MAGLEV AUTOMATIC TRAIN OPERATION SYSTEM AND RESEARCH ON PREDICTIVE CONTROL ALGORITHM** **463**
QI Hongfeng, XU Wei

3-0099-11089 **RESEARCH AND IMPLEMENTATION OF THE MULTIPLE EXIT LOAD BALANCING OF CAMPUS NETWORK BASED ON DNS SERVICE** **471**
Xiaoqiao Wang, Wei Fu

3-0100-11090 **REDUCTION OF RESIDUAL NOISE USING DIRECTIONAL MEDIAN FILTER** **475**
Ching-Ta Lu, Kun-Fu Tseng, Chih-Tsung Chen

3-0101-11091 **ANALYSIS OF RULE BASED LOOK-AHEAD STRATEGY USING PACMAN TESTBED** **480**
Rabia Babar Ali, Ali Munir, Ashfaq Hussain Farooqi

3-0102-11094 **CONSTRUCT THE BIORTHOGONAL BALANCED MULTIWAVELETS BY LIFTING SCHEME** **484**
Yu Shen, Xieping Gao, Fang Pu, Linlang Liu, Qiying Cao

3-0103-11096 **IMC-FED PMSM CONTROL SYSTEM BASED ON FUZZY PI** **489**
Sun Lishan, Pan Xiao, Liu Hongchen

3-0104-11097 **ANALYZING ALGORITHM FOR MONITORING GREENSWARD IN GOLF COURSE** **493**
Wenjuan Wang

3-0105-11098 **A PCNN-BASED METHOD FOR VEHICLE LICENSE LOCALIZATION** **498**
Wei Zhuo

3-0106-11099 **THE RESEARCH OF COLLISION DETECTION TECHNOLOGIES BASED ON VEGA** **502**
Wang Xiao, Li Hujun

3-0107-11100 **MULTIOBJECTIVE OPTIMIZATION BY ARTIFICIAL FISH SWARM ALGORITHM** **506**
Mingyan Jiang, Kongcun Zhu

3-0108-11101 **RESEARCH ON ALGORITHM OF CHINESE BBS TOPIC DETECTION BASED ON CONTENT ANALYSIS** **512**
NIE Zhe

3-0109-11102 **A NEW MATHEMATICAL MODEL AND USING FINITE DIFFERENCE METHOD TO SIMULATE PIPELINE WATER HAMMER** **517**
Zhang Shiliang, Meng Zhenhu

3-0110-11104 **A GRID SYSTEM FOR COMPLEX PROJECT CRISIS MANAGEMENT** **521**
Wang Aimin

3-0111-11105 **WIRELESS SIGNAL ARBITRATION SYSTEM BASED ON MICROCONTROLLER** **525**
CAO Rui

3-0112-11108 **STUDY ON REMOTE SENSING IMAGE CLASSIFICATION BASED ON ARTIFICIAL IMMUNE SYSTEM** **529**
QIN Xiaoqian

3-0113-11109 **WIRELESS SENSOR NETWORK PATH OPTIMIZATION BASED ON PARTICLE SWARM ALGORITHM** **534**
ZHU Xia, ZHANG Yulin

3-0114-11113 **INTERACTIVE COLORIZATION BASED ON HYBRID DISTANCE TRANSFORM.** **538**
Przemyslaw Lagodzinski, Bogdan Smolka

3-0115-11116 **ANIMATION SYSTEM OF VIRTUAL HUMAN USING MOTION CAPTURE DEVICES** **544**
Jun Li, Yu Ya

3-0116-11118 **APPLICATION OF LVDT SENSOR DATA ACQUISITION SYSTEM BASED ON PCI-1716** **548**
Jinhui Fan, Songmin Jia, Wei Lu, Zhihong Wang, Xiuzhi Li, Jinbo Sheng

3-0117-11120 **COMPUTER DESCRIPTION OF CHINESE CHARACTER FORM BASED ON THE MODEL OF TREE TAKING SEAL SCRIPT EXPLAINED IN "SHUOWEN JIEZI" AS EXAMPLE** **553**
Jiajia Hu, Ning Wang

3-0118-11121 **METROLOGICAL METHODS FOR VIRTUAL INSTRUMENT** **558**
Xi Wenjun, Feng Yuguang, Qin Liang and Yao Yunfeng

3-0119-11122 **A CONTROL SYSTEM FOR PITCH ATTITUDE CONTROL INVESTIGATION OF INSECT INSPIRED MAV** **562**
Meijun Hu, XingYao Yan, Lingjuan Mu

3-0120-11123 **A FLYING INSECT MODEL FOR WIND TUNNEL EXPERIMENTS** **566**
Meijun Hu, XingYao Yan, Lingjuan Mu

3-0121-11125 **SUPER RESOLUTION WITH SIMULTANEOUS DETERMINATION OF REGISTRATION PARAMETER AND REGULARIZATION PARAMETER** **569**

Wen Chen, Xiangzhong Fang, Yan Cheng

3-0122-11127 **LOCAL DISCONTINUOUS GALERKIN METHODS FOR THE ROSENAU-BURGERS EQUATION** **574**
Wenting Li, Kun Jiang, Mingchen Yao

3-0123-11128 **A MODIFIED ALGORITHM FOR LAGRANGIAN MULTI-CLASS SUPPORT VECTOR MACHINE** **578**
YUAN Yuping, AN Zenglong

3-0124-11129 **INFORMATION FLOW MODEL OF THIRD-PARTY LOGISTICS BASED ON INTERNET OF THINGS** **582**
Xiaohui Liu, Youwang Sun

3-0125-11131 **DESCRIPTION OF WEB SERVICE COMPOSITION MODEL BASED ON Z NOTATION** **587**
Fangfang Liu, Chengling Li, Jie Yu

3-0126-11132 **PRECISE POINT POSITIONING STUDY TO USE DIFFERENT IGS PRECISE EPHEMERIS** **592**
Fumin Lu, Jin Li

3-0127-11137 **A PROCESS MODEL ORIENTED TO SYSTEM SERVICE** **596**
Xin Li

3-0128-11138 **DESIGN AND ANALYSIS OF A PARALLEL ARCHITECTURE FOR DISTRIBUTED RADAR SIMULATION** **601**
Wang Lei, Lu Xianliang, Chen Mingyan

3-0129-11140 **IMPLEMENTATION OF GENERAL CORDIC IP CORE BASED ON FPGA** **606**
Zhang Juntao, Ma Wenbo

3-0130-11142 **A NOVEL APPROACH OF TERRAIN CLASSIFICATION FOR OUTDOOR AUTOMOBILE NAVIGATION** **609**
D-V. Nguyen, L. Kuhnert, T. Jiang, K-D Kuhnert

3-0131-11147 **GUARANTEED SEAMLESS TRANSMISSION TECHNIQUE FO NGEO SATELLITE NETWORKS** **617**
Lu Wang, Lixiang Liu, Xiaohui Hu

3-0132-11148 **OPTIMAL SLIDING MODE DESIGN FOR NONLINEAR DISCRETE-TIME SYSTEMS** **622**
DONG Rui, SHI Dong-wei

3-0133-11149 **AUTOHMI: A MODEL DRIVEN SOFTWARE ENGINEERING APPROACH FOR HMIS IN PROCESS INDUSTRIES** **627**
Leon Urbas, Falk Doherr

3-0134-11151 **A SCHEDULABILITY ANALYSIS OF AN INDUSTRY ETHERNET RING NETWORK** **632**
Zhang Yu-Hui, LiDi

3-0135-11153 **AN APPROACH TO CONTENT-INDEPENDENT FEATURE EXTRACTION FOR CHINESE-KOREAN SPOKEN LANGUAGE IDENTIFICATION** **638**
LU Shi-Dan, CUI Rong-Yi

3-0136-11154 **AERODYNAMIC DESIGN OPTIMIZATION OF RACE CAR REAR WING** **642**
YANG Zhigang, GU Wenjun, LI Qiliang

3-0137-11155 **PID CONTROLLER PARAMETERS TUNING OF MAIN STEAM TEMPERATURE BASED ON CHAOTIC PARTICLE SWARM OPTIMIZATION** **647**
Zhou Keliang, Qin Jieqiong

3-0138-11156 **A SCHEME OF MAC/PHY CROSS–LAYER DESIGN IN MIMO AD HOC NETWORKS BASED ON RANDOM NUMBER ALLOCATION STRATEGY** **651**
Fei Ji, Weishan Lu, Xiaocheng Deng

3-0139-11157 **RESIDUAL VIBRATION SUPPRESSION OF FLEXIBLE SPACECRAFT VIA OPTIMAL ARBITRARY TIME-DELAY FILTER COMBINED WITH ADAPTIVE CONTROLLER** **655**
Jing Ma, Zhongyi Chu

3-0140-11159 **BUILDING COGNITIVE MODEL OF INTELLIGENT AGENT IN VIRTUAL GEOGRAPHICAL ENVIRONMENT** **660**
Litao Han, Qiaoli Kong, Bing Liu, Zhiqiang Li

3-0141-11164 **PRIVACY PRESERVING RESEARCH FOR RE-PUBLICATION MULTIPLE SENSITIVE ATTRIBUTES IN DATA** **665**
Xiaolin Zhang, Lifeng Zhang

3-0142-11165 **AN ITERATIVE APPROACH FOR HYBRIA PIPELINE SCHEDULING UNDER THROUGHPUT AND RESOURCE CONSTRAINTS** **668**
Feng Xu, Dan Li, Yuanyuan Wang

3-0143-11166 **APPLICATION OF FUZZY NEURAL NETWORK IN THE SPEED CONTROL SYSTEM OF INDUCTION MOTOR** **673**
Li Yi, Pu Yonghong

3-0144-11167 **AN IMPROVED METHOD OF IMAGE EDGE DETECTION BASED ON WAVELET TRANSFORM** **678**
Yang Hao, Li Changshun, Pei Lei

3-0145-11169 **DESIGN OF OIL TRANSPORT PIPELINE ELECTROMAGNETIC DIRT-REMOVER &DIRT-PROOF APPARATUS** **682**
XiedongCao, Shiyong Cao, Haiyang Qin, J i e L i, W e i b i n T a n, Jinqiu Zhang

3-0146-11171 **A NEW CERTIFICATELESS AUTHENTICATED TWO-PARTY KEY AGREEMENT** **686**
YuXiu-Ying, ZhangWen-Fang, HeDa-Ke

3-0147-11172 **SELF-CALIBRATION FOR A WELDING ROBOT BASED ON KINEMATICS AND MATLAB SOFTWARE** **691**
Lu Dunmin, Gao Daoxiang, Tian Ye, Xiao Aiping

3-0148-11173 **A METHOD FOR 3D RECONSTRUCTION BASED ON FEATURE POINTSON SURFACE OF OBJECT** **695**
Guoqiang Ren, Yong Zhang, Tingting Hu, Yanfang Yin

3-0149-11174 **ENSEMBLE CLASSIFIERS FOR DYNAMIC SIGNATURE AUTHENTICATION** **700**
Nora Al-Muhanna, Souham Meshoul

3-0150-11181 **COORDINATING POWER AND PERFORMANCE IN VIRTUALIZED ENVIRONMENTS** **705**
Zheyuan Liu, Dejun Mu

3-0151-11182 **ADAPTIVE FUZZY CONTROL FOR A CLASS OF NONLINEAR SYSTEMS WITH ADAPTATION COMPENSATOR** **710**
Shi Wuxi

3-0152-11183 **RESEARCH OF LOW-DIMENSIONAL QUANTUM STRUCTURE OF THE SENSOR DETECTION SYSTEM** **714**
Wenquan Gu, Chang Huang

3-0153-11184 **A MODEL OF MOBILE LEARNING OBJECT DESIGN FOR CONCEPT COMPREHENSION USING RECIPROCAL TEACHING STRATEGIES AND AUGMENTED REALITY** **717**
Dayang Noorasura, A. T. , Sazilah S.

3-0154-11185 **DESIGN OF THE TICKETING SERVICE PLATFORM FOR OLYMPIC GAMES** **721**
He xinhua, Jin guozhu, Wang qiong

3-0155-11186 **SCHEDULING FOR COMPLEX MANUFACTURING PROCESSES BASED ON MULTI-AGENT SYSTEM** **726**
Zhengcai Cao, Jijie Deng, Qidi Wu

3-0156-11188 **NEW PASSIVITY RESULT FOR DISCRETE-TIME STOCHASTIC NEURAL NETWORKS WITH TIME-VARYING DELAYS** **731**
Zhenjiang Zhao, Qiankun Song

3-0157-11193 **A STUDY ON SEVERAL FEATURE SELECTION METHODS IN TARGET CLASSIFICATION AND RECOGNITION** **736**
Peng Yuan

3-0158-11194 **FLOW CHARACTERISTICS IN LABYRINTH GLANDS WITH STRAIGHT TEETH** **740**
SUN Tao, ZHANG Yi, SUN Haiou, WANG Zhongyi

3-0159-11195 **A SOFTWARE HAZARD ANALYSIS METHOD FOR AUTOMOTIVE CONTROL SYSTEM** **744**
Wenjun Li, Hongkun Zhang

3-0160-11196 **AN ADAPTIVE GENETIC ALGORITHM FOR FACILITY LAYOUT PROBLEM IN CYLINDER BLOCK LINE** **749**
Liyun XU, Shouyin YANG, Aiping LI, Andrea Matta

3-0161-11197 **CONTROL MODEL FOR LOADING SYSTEMS USING HIGHER ORDER SINGULAR VALUE DECOMPOSITION** 754
Gabriella Orbán, Péter Várlaki, András Rövid

3-0162-11198 **AN ALGORITHM FOR REMOVAL OF EXTRANEOUS IMPLICIT POLYNOMIAL CURVE** 759
Wu Gang, Wang Yunyun

2011 IEEE International Conference on Computer Science and Automation Engineering

(CSAE 2011)

Shanghai, China
10-12 June 2011

Volume 4
Pages 1-763

IEEE Catalog Number: CFP1138L-PRT
ISBN: 978-1-4244-8727-1

TABLE OF CONTENTS VOL0 4

4-0001-11200 **CONTROL STUDY OF RARE EARTH PERMANENT BRUSHLESS DC MOTOR IN CITY RAIL** **1**
Wei Min, Wei Juan

4-0002-11201 **DESIGN AND ANALYSIS ON PRACTICAL AUTOMOBILE PARAMETERS RECORDING SYSTEM** **4**
Wei Min, Wei Juan

4-0003-11202 **A STUDY OF OPEN FRAME OF DISCERNMENT TO THE SAFETY OF BULK CHEMICAL TANKERS** **7**
YuBin, Jin Yong Xing, ZhengBin, Zhang Xiao Dong

4-0004-11203 **ROUTH-PADÉ APPROXIMANTS OF TWO-DIMENSIONAL SEPARABLE-DENOMINATOR CONTINUOUS-TIME SYSTEMS** **11**
Shailendra Kumar Mittal, Dinesh Chandra, N.L. Prajapati

4-0005-11204 **VOLUME CONSTRUCTION FROM SURFACE MODEL BASE ON SPATIAL TOPOLOGY** **16**
Jigang Li, Yanbo Liang, Xianhai Meng, Qin Yang

4-0006-11205 **PREPROCESSING FOR SOLID RECONSTRUCTION FROM ENGINEERING DRAWING** **21**
Shao-Ping Jiang, Zi-Gang Fu

4-0007-11206 **EMPLOYING TOPIC MODELING FOR STATISTICAL MACHINE TRANSLATION** **24**
Gong Zhengxian, Zhou Guodong

4-0008-11207 **IMPLEMENTATION OF MULTI-CHANNEL FUZZY-PID CONTROLLER BASED ON FPGA** **29**
Zhang Juntao, Gao Mingxing

4-0009-11208 **FASTER AFFINE INVARIANT POINT PATTERN MATCHING USING GRAPHICAL MODELS** **32**
Feiyue He, Zheng Tian, Xingshi He, Lijuan Yang, Chunyan Chai

4-0010-11209 **CIRCUIT DESIGN OF A LOSS OF SIGNAL FOR FOUR-CHANNEL PARALLEL 5GBPS/CH OPTICAL RECEIVER** **37**
Feiyan Qin,Guoqing Xu, Huiyun Li, Yuanjun Liang

4-0011-11210 **THE BEES ALGORITHM FOR A PRACTICAL UNIVERSITY TIMETABLING PROBLEM IN VIETNAM** **42**
Nguyen Tan Tran Minh Khang, Nguyen Ba Phuc, Tran Thi Hue Nuong

4-0012-11211 **THE BDD-BASED ASSESSMENT METHOD OF PROJECT SAFETY RISK** **48**
Liqiong Yang, Shirong Li, Yufeng Xiao

4-0013-11212 **DESIGN OF AUTOPILOT WITH POLE PLACEMENT AND STATE-OBSERVER FEEDBACK** **53**

Wang Lei, Meng Xiu-yun, Xia Qun-li, Guo-Tao

4-0014-11214 **DESIGN OF PULSE COMBUSTION CONTROL SYSTEM BASED ON FUZZY CONTROL FOR OXYGEN-ENRICHED CERAMIC KILN** **57**
Zhong Jianwei, Lang Jianxun

4-0015-11215 **ARCHITECTURE DESIGN OF IT EDUCATION PLATFORM BASED ON WEB MINING** **61**
LIU Shengjian, WU Xiaoning

4-0016-11216 **NESTED MULTIPARTITE SECRET SHARING** **66**
Kerem Kaskaloglu, Ferruh Ozbudak

4-0017-11217 **DESIGNING SPACECRAFT TT&C SIMULATION SYSTEM BASED ON HLA** **74**
SUN Hai-zhong, ZHAO Yu-shan, LI Ya-jing, QIU Meng-yue, LIU Shu-juan, LIU Sheng-peng

4-0018-11218 **RISK BOUND OF PRIORITY ORDERED NEURAL NETWORK WITH MULTI-WEIGHTED NEURONS** **79**
Shi-jiao ZHU, Jun YANG

4-0019-11219 **A ROBUST SIFT FEATURE FOR FAST OFFLINE ARABIC WORDS CLASSIFICATION** **83**
Mahmoud Khalifa, Yang BingRu, Ammar Mohammed

4-0020-11220 **NET-CASTING: A NEW INFORMATION SEEKING MODEL FOR AUTOMATED INFORMATION SEEKING PROCESSES** **87**
Qin Zhu, Lei Lin, Hausi A. Müller

4-0021-11221 **AUTONOMOUS MOBILE ROBOT SYSTEM CONCEPT BASED ON PSO PATH PLANNER AND VSLAM** **92**
Abdullah Zawawi MOHAMED, Sang Heon LEE, Hung Yao HSU

4-0022-11222 **A NEW ONTOLOGY FOR FAULT TOLERANCE IN QOS ENABLED SERVICE ORIENTED SYSTEMS** **98**
Zahraa M. S. Almasslawi, Dawood M. S. Almasslawi

4-0023-11224 **SUSPECTED PULMONARY NODULE DETECTION ALGORITHM BASED ON MORPHOLOGY AND GRAY ENTROPY** **103**
Li Yue, Liu Jie, Meng Lingjun

4-0024-11227 **HYBRID FUZZY CONTROL FOR SWINGING UP AND STABILIZING OF THE PENDULUM-CART SYSTEM** **109**
Trihastuti Agustinah, Achmad Jazidie, Mohammad Nuh

4-0025-11230 **DESIGN OF FPGA-BASED TRAFFIC LIGHT CONTROLLER SYSTEM** **114**
M.F.M.Sabri, M.H.Husin, W.A.W.Z.Abidin, K.M.Tay, H.M.Basri

4-0026-11231 **DETECTION AND RECOGNITION OF MOVING OBJECTS USING THE TEMPORAL DIFFERENCE METHOD AND THE HIDDEN MARKOV MODEL** **119**
Wanhyun Cho, Sunworl Kim, Gukdong Ahn

4-0027-11233 **SINGLE AND MULTI THREADING MRI RECONSTRUCTION BASED ON FFTW 2.X AND INTEL MKL** **124**
Shouliang Qi, Jie Feng, Ruiling Zhang, Libang Xiao

4-0028-11234 **AUTOMATIC MESH GENERATION TECHNIQUE FOR LOGARITHMIC SPIRAL CURVED ARCH DAM** **128**
Yonggang Guo, Longbang Qing, Shan Zheng, Longfei An

4-0029-11235 **USING SEMANTIC AND STRUCTURAL SIMILARITIES FOR INDEXING AND SEARCHING SCIENTIFIC PAPERS** **133**
Syed Raza Ali Rizvi, Shawn Xiong Wang

4-0030-11237 **ANALYSIS OF THE AXIAL DIPOLE ANTENNA PROPAGATION CHARACTERISTICS IN RECTANGULAR TUNNEL** **138**
SUN Ji-ping, GAO Mei-feng

4-0031-11238 **THE RELIABILITY-BASED TOPOLOGY OPTIMIZATION DESIGN BY STOCHASTIC PERTURBATION** **142**
Jingkui Li, Yanli Zhang, Chao Yu and Jianye Guo

4-0032-11239 **EFFECT OF ON-LOAD TAP CHANGER ON VOLTAGE STABILITY OF POWER SYSTEMS WITH NONLINEAR LOAD** **146**
Jianyong Li, Yanhong Liu, Lijun Zhang

4-0033-11240 **ON TANGUT CHARACTERS RECOGNITION BASED ON STROKE DENSITY AND DIRECT IMAGE FEATURES** **150**
Changqing Liu

4-0034-11242 **STUDY ON A HYBRID P2P BASED DNS** **152**
Yiting Song, Keiichi Koyanagi

4-0035-11243 **STUDY OF FAST SUPER-RESOLUTION RECONSTRUCTION METHOD** **156**
Cheng Yan

4-0036-11244 **A SPEED-UP AND ROBUST IMAGE REGISTRATION ALGORITHM BASED ON FAST** **160**
Jichao Jiao, Baojun Zhao, Shasha Wu

4-0037-11245 **APPLYING DECISION TREE TO PREDICT BANKRUPTCY** **165**
Elahe zibanezhad, Daryush Foroghi, Amirhassan Monadjemi

4-0038-11246 **RESEARCH ON FORMALIZATION OF DOMAIN-SPECIFIC METAMODELING LANGUAGE BASED ON FIRST-ORDER LOGIC** ★ **170**
Tao Jiang, WenYun Zheng

4-0039-11247 **STUDY ON CITRUS FRUIT IMAGE USING FISHER LINEAR DISCRIMINANT ANALYSIS** **175**
Peilin Li, Sang-Heon Lee, Hung-Yao Hsu

4-0040-11249 **A HYBRID GENE ALGORITHM FOR BYPRODUCT BLAST FURNACE GAS SCHEDULING IN IRON AND STEEL PRODUCTION** **181**
Cantao Shi, Ningning Wang, Tieke Li

4-0041-11250 **AN INTERACTIVE PLANT PRUNING SYSTEM BASED ON GREENLAB MODEL: IMPLEMENTATION AND CASE STUDY** **185**
Jing HUA, MengZhen KANG and Philippe de Reffye

4-0042-11253 **UNBALANCED REPLICATION BY EVALUATING POPULARITY OVER WEB SCALABLE STORAGE** **189**
Ting-wei Chen, Carlos Madrazo, Takeshi Tsuchiya, Keiichi Koyanagi

4-0043-11254 **COMPLETEGRAPHSORT: A COMPLETE GRAPH STRUCTURE BASED SORTING ALGORITHM** **193**
Rajat K. Pal

4-0044-11255 **5-AXIS CIRCUMFERENCE MILLING'S POLAR PROBLEM AND POLAR INTERPOLATION ALGORITHM** **198**
Shen Bin, Qi Dangjin, Fan Liuqun, Zhu Zhihao

4-0045-11256 **DESIGN OF A WIRELESS SENSOR NETWORK NODE BASED ON NRF2401** **203**
ZHU Jian-hong, WANG Jun, LIU Di

4-0046-11257 **EXPERIMENT OF COHERENT SCATTER IMAGING BASED DIGITAL RADIOGRAPHY DEVICE** **207**
Bo Li, Ke Wang, Jingxin Liu, Taihui Liu

4-0047-11259 **VISUALIZATION OF THE CURRENT FIELDS IN CAOFEIDIAN SEA AREA BASED ON GIS** **211**
Cuiping Kuang, Yonghui Huang, Rui Huo, Yi Pan, Maohui Zheng

4-0048-11260 **STABILITY ANALYSIS OF MAGLEV ELASTIC VEHICLE-GUIDEWAY-COUPLED SYSTEM** **215**
Yu Tian, Longhua She

4-0049-11261 **NAMED ENTITY RECOGNITION IN TITLES OF CHINESE VIDEOS FROM THE WEB** **220**
Quan Qi, Jing Dong

4-0050-11262 **PROCESS COMPREHENSION FOR INTEROPERABLE CNC MANUFACTURING** **225**
X. Zhang, A. Nassehi, S. T. Newman

4-0051-11263 **AN INTERCONNECTION SETTLEMENT SCHEME FOR AREA INTERNET EXCHANGE** **230**
Yang ruijun, Cheng yan

4-0052-11268 **PREDICTING NON-CLASSICAL SECRETORY PROTEINS BY USING GENE ONTOLOGY TERMS AND PHYSICOCHEMICAL PROPERTIES** **234**
Wen-Lin Huang, Chyn Liaw, Shinn-Ying Ho

4-0053-11269 **SEU READBACK INTERVAL STRATEGY OF SRAM-BASED FPGA FOR SPACE APPLICATION** **238**
HE Wei, WANG Yueke, XING Kefei, CHEN Li

4-0054-11272 **SIMULATION ANALYSIS ON THE SHELL OF THERMOBARIO EXPLOSIVE BY LSDYNA** **242**
Li Tian-gang, Ning Quan-li, Li Jun

4-0055-11274 **GRID FEATURES BASED VISUAL TRACKING** **247**
Yi Zhou, Hichem Snoussi, Shibao Zheng

4-0056-11275 **EFFICIENT APPROACH TO DESIGN REVERSIBLE LOGIC BLOCKS FOR FIELD PROGRAMMABLE GATE ARRAYS** **251**
Abu Sadat Md. Sayem, Sajib Kumar Mitra

4-0057-11276 **AN ADAPTIVE CACHE CONSISTENCY STRATEGY IN A DISCONNECTED MOBILE WIRELESS NETWORK** **256**
Thu Tran Minh Nguyen, Thuy Thi Bich Dong

4-0058-11277 **ADAPTIVE TRIMMED VECTOR MEDIAN FILTER** **261**
Bogdan Smolka

4-0059-11278 **TERM PROXIMITY IN DOCUMENT RETRIEVAL SYSTEMS** **267**
Behloul Ali, Belloula Abdelkrim, Segaa Mebarek

4-0060-11279 **ESTABLISHING LARGE-SCALE GENE REGULATORY NETWORKS USING A GENE-KNOWLEDGE-EMBEDDED EVOLUTION COMPUTATION METHOD** **272**
Li-Sun Shu, Hui-Ling Huang, Shinn-Jang Ho4, and Shinn-Ying Ho

4-0061-11280 **IMPLEMENTATION OF SYSTEM-LEVEL FAULT DIAGNOSTICS IN VEHICLES ON A GENERIC TEST PLATFORM** **277**
Bo Wang, Mark Amor-Segan and R. Peter Jones

4-0062-11281 **AN EFFICIENT SUFFIX-FREE PADDING RULE FOR ITERATED HASH FUNCTIONS** **282**
Shaolan Zhang, Guobo Xing

4-0063-11282 **INDUCTION MOTOR POSITION SENSORLESS OBSERVER BASED ON SLIDING MODE VARIABLE STRUCTURE** **286**
Liu Gang, Yang Lina

4-0064-11284 **REQUIREMENTS PRIORITIZATION WITH RESPECT TO GEOGRAPHICALLY DISTRIBUTED STAKEHOLDERS** **290**

Azeem Ahmad, Aamir Shahzad, V. Kumar Padmanabhuni, Ali Mansoor, Sushma Joseph , Zaki Arshad

4-0065-11285 **INTERPRETABLE KNOWLEDGE ACQUISTION FOR PREDICTING DNA-BINDING DOMAINS USING AN EVOLUTIONARY FUZZY CLASSIFIER METHOD** **295**
Hui-Ling Huang, Fang-Lin Chang, Shinn-Jang Ho, Li-Sun Shu, and Shinn-Ying Ho

4-0066-11288 **LEARNING SYSTEM FOR STANDING HUMAN DETECTION** **300**
Boudour Ammar, Nizar Rokbani, Adel M. Alimi

4-0067-11313 **A MULTI-CHANNEL WATERMARKING SCHEME BASED ON HVS AND DCT-DWT** **305**
Yi-lin Bei, De-yun Yang, Ming-xia Liu, Li-li Zhu

4-0068-11316 **SECURE MONITORING SCHEME FOR WIRELESS SENSOR NETWORKS BASED ON IDENTITY SIGNCRYPTION** **309**
CHEN Zhe, LIANG Yuanning

4-0069-11317 **CONSENSUS IN MULTI-AGENT WITH TIME-VARYING DELAYS** **313**
Cao Kecai, Liu Chunxiang, Gao Xiang

4-0070-11318 **PHYSICALLY-BASED REAL-TIME SIMULATIVE ALGORITHM OF CAR SHELL COLLISION AND DEFORMATION** **318**
Zhi Dong, Zelin Chen, Shiqiu Liu ,Suifang Guo, Yuntao Ou

4-0071-11320 **RESEARCH AND APPLICATION ON CLARITY-EVALUATION-MODEL FOR THE CROSS-LINE GRAY-SCALE IMAGE** **322**
Fei-ming Du

4-0072-11321 **A NEW INITIALIZING MECHANISM IN PARTICLE SWARM OPTIMIZATION** **325**
DU Jiyong, ZHANG Fengming, HUANG Guorong, YANG Ji

4-0073-11322 **ARITHMETIC AND EXPERIMENT RESEARCH ON ULTRASONIC DETECTION OF PARTIAL DISCHARGE FOR SWITCHBOARD** **330**
Rencheng Zhang, Erli Liu, Li Xie, Jianhong Yang

4-0074-11324 **ESTER RATE SOFT-SENSOR IN PET PROCESS** **335**
G ao Lin

4-0075-11326 **A STUDY OF INDUCTION MOTOR STATOR FLUX OBSERVER BASED ON RADIAL BASIS FUNCTION NETWORK** **340**
DaoLuZhang, GuoRongLiu

4-0076-11331 **A DYNAMIC WORKFLOW AUTHORIZATION METHOD BASED ON PARTICIPANT EXPRESSION RULES** **345**
Da Tang, Jing Guo, Qi Zhang

4-0077-11333 **A NOVEL REMOTE METER-READING SYSTEM BASED ON VIRTUAL INSTRUMENT** **350**
Jia Huiqin, Zhang Ru

4-0078-11336 **AERODYNAMIC INSTABILITY DETECTION IN COMPRESSOR BASED ON HILBERT-HUANG TRANSFORM** **355**
LI Changzheng, LEI Yong, FU Rao

4-0079-11340 **STUDY ON PREDICTION OF ROWING ATHLETES' POTENTIAL BASED ON RETARDING INCREASE MODEL** **359**
Li Guangjun, Du Yunyun

4-0080-11341 **PRIVATE MATCHING PROTOCOLS WITHOUT ERROR PROBABILITY** **363**
Lihua Liu, Zhengjun Cao

4-0081-11342 **THE STUDY OF TRAFFIC ACCIDENT REPRODUCTION SYSTEM** **367**
Liao Xue-hua, Zhu Zhou-sen, Yan Yu-song, Li Ping

4-0082-11345 **THE RECONSTRUCTION OF THREE-DIMENSIONAL TREE MODELS FROM TERRESTRIAL LIDAR** **371**
LIU Hong-wei, ZHANG Xiao-li, WANG shuhan, CHEN li

4-0083-11346 **THE STUDY OF NONPARAMETER IDENTIFICATION ALGORITHM BASED ON COS-PSEUDORANDOM** **375**
Li Wenhong, Zhang Xiuhua, Wu lei

4-0084-11347 **ACTIVE BUFFER MANAGEMENT FOR SENSOR NODE BASED ON SPATIAL CORRELATION** **379**
Li Xun, Tang Shiqi, Yang Wenjing

4-0085-11348 **FOURIER TRANSFORM ANALYSIS IN STOCK WAVE THEORY** **384**
Li qing-feng, Peng wen-feng

4-0086-11349 **A NEW ALGORITHM FOR CLUSTERING AGGREGATION** **389**
Li Qing-feng

4-0087-11350 **THREE-LEVEL FACE FEATURES FOR FACE RECOGNITION BASED ON CENTER-SYMMETRIC LOCAL BINARY PATTERN** **394**
Changming LIU, Jianyun LU, Lin LI

4-0088-11353 **A SEMANTIC FUSION BASED MULTIMODAL INTERACTION PANEL FOR VIRTUAL CITY PLANNING** **399**
Yiyue He, Guohua Geng, Mingquan Zhou, Kang Li, Zhuoming du, Yongmei Zhao

4-0089-11354 **AN ADAPTIVE GENETIC ALGORITHM FOR THE FLEXIBLE JOB-SHOP SCHEDULING PROBLEM** **405**
Y. Pan, W.X.Zhang, T.Y. Gao, Q.Y.Ma and D.J.Xue

4-0090-11355 **DESIGN OF SERIAL COMMUNICATION INTERFACE BASED ON FPGA** **410**

PENG Hui-ling, NIE Ya-lin

4-0091-11359 **A BALANCED ENERGY CONSUMPTION SOLUTION FOR WIRELESS SENSOR NETWORKS WITH FAILURE CLUSTERS** **415**
Wei Wang, Tie Qiu, Lei Wang, Feng Xia, Guowei Wu

4-0092-11361 **ITWIGSTACK : AN IMPROVED ALGORITHM OF XML TWIG PATTERN MATCHING** **420**
Shi Jun-feng, Pang Ning

4-0093-11364 **FAULT MODEL BASED ON H-C MODEL IN THE SYSTEM OF TRACTION POWER SUPPLY** **426**
HUANG Yuan-liang

4-0094-11367 **A FULL LIFECYCLE ORIENTED EXAMINATION TRANSACTION MANAGEMENT SYSTEM** **431**
JingYu Wang, QiuZhong Zhou, WuLiang Peng

4-0095-11368 **A ROUTING PROTOCOL OF MOBILE ADHOC NETWORKS BASED ON UWB** **435**
Hua Jiang, Lei Wang, Xianfeng Ai

4-0096-11370 **GROUPING DELEGATION TASK ALLOCATION MODEL FOR MULTI-ROBOT COLLABORATION SYSTEM** **440**
Zhiguo Shi , Junming Wei, Zhiliang Wang,Qiao Zhang, Lei Liu

4-0097-11371 **THE EUR/CNY EXCHANGE RATE FORECAST BASED ON GARCH MODEL** **447**
Huaijin Gao, Jianan Sun

4-0098-11372 **REAL-TIME MONITORING SOFTWARE FOR TRAIN TRACTION AND TRANSMISSION SYSTEM** **451**
Qin-yue Zhu, Tian-shi Wang, Ya-hui Zhao, Zhao-xu Shen, Chun-shen Xu, Guo-qing Wu

4-0099-11374 **A NORM-RELAXED SQP METHOD OF STRONGLY SUB-FEASIBLE DIRECTION FOR FINELY DISCRETIZED PROBLEMS FROM SEMI-INFINITE PROGRAMMING** **456**
Qingjuan Xu, Jinbao Jian, Daolan Han

4-0100-11375 **EXISTENCE OF SOLUTIONS FOR GENERALIZED VECTOR EQUILIBRIUM PROBLEMS ¤** **461**
Yali Zhao, Yang Yang

4-0101-11376 **A STRAIGHT LINE GENERATION ALGORITHM BASED ON LINE PIXELS** **466**
Li Yan-cui, Hu Jin-yan, Li Shi-yong, Yang Xia

4-0102-11377 **RESEARCH ON THE TEXT CLUSTERING ALGORITHM BASED ON LATENT SEMANTIC ANALYSIS AND OPTIMIZATION** **470**
Wang Chun-hong, Nan Li-Li, Ren Yao-Peng

4-0103-11378 **A HETEROGENEOUS WIRELESS NETWORK INTERCONNECTION STRATEGY BASED ON IP SWITCHING** **474**
Linfeng Yuan

4-0104-11381 **A BIO-INSPIRED KINEMATIC MODEL OF AUV TRACKING CONTROL FOR OCEAN CURRENT** **478**
Yue Zhao, Daqi Zhu

4-0105-11382 **DIRECTIONAL-ADAPTIVE-FILTER-BASED IMAGE INTERPOLATION USING COMPRESSED DOMAIN INFORMATION** **483**
Zhang Rongfu, Cao Fei, Zhou Jinbo

4-0106-11383 **DIGITAL IMAGE HIDING USING CURVELET TRANSFORM** **488**
YongHong ZHANG

4-0107-11384 **THE EXECUTION AND DETECTION OF ARTIFACT-CENTRIC BUSINESS PROCESS** **491**
Danfeng Zhao, Guohua Liu, Yu Jiang, Feng Gao, Ying Wang

4-0108-11386 **THE PREFERENCE RELATION AND ITS APPLICATION IN THE INFORMATION SYSTEM** **496**
Zhao Mingqing

4-0109-11388 **NOVEL STRIP EAM WITH A RING RESONATOR ON INP/INGAASP-MQW** **502**
ZHOU Zheng, CAI Chun, SUN Xiao-Han

4-0110-11389 **INTERNET OF THINGS: KEY TECHNOLOGY, ARCHITECTURE AND CHALLENGING PROBLEMS** **507**
Handong Zhang, Lin Zhu

4-0111-11390 **THE DESIGN OF BUS OVERLOAD CONTROL SYSTEM** **513**
Lili Zhang, Jinyan Hu, Sujun Zhang, Jianfeng Cheng

4-0112-11394 **THE RATE PROBLEM IN BULK: A GAME THEORETICAL MODEL IN LOGISTICS NETWORK** **517**
Fengye Wang, Zhiyong Huang, Aifen Feng

4-0113-11400 **INDUCTION MOTOR CONTROL BASED ON ADAPTIVE INVERSE CONTROL** **521**
Liu Gang, Yang Lina

4-0114-11401 **CHAOS SYNCHRONIZATION OF SECURE COMMUNICATION BASED ON ADAPTIVE INVERSE CONTROL** **525**
Chen Qishuan, Yang Lina

4-0115-11402 **THE OPTIMIZATION ANALYSIS OF SUPPLY CHAIN RELIABILITY BASED ON ECONOMIC CONSTRAINTS** **528**
YANG Guang-hua

4-0116-11403 **TOURISM PLANNING REVIEW BASED ON AUTHENTICITY-INTEGRITY PRINCIPLE: A CASE FROM CONSERVATION AND DEVELOPMENT OF LIANYUN OLD QUARTER** **533**
Xiaoyi Li

4-0117-11404 **A HYBRID ALGORITHM FOR TRAINING ADAPTIVE RIDGELET NEURAL NETWORK** **538**
Fengli Sun, Mingyi He, Quanhua Gao

4-0118-11407 **MULTI-POSE FACE RECOGNITION COMBINING TENSOR FACE AND MANIFOLD LEARNING** **543**
Weiqing Li, Duansheng Chen

4-0119-11411 **BCEXT-BASED PROXY MOBILE IPV6 EXTENSION: A DATA TRANSMISSION EXTENSION SCHEME FOR MULTI-INTERFACE MOBILE NODES** **548**
Hu Weiqi, Li Yuhong, Zou Shihong, Cheng Shiduan

4-0120-11416 **RELAXED NON-STATIONARY MULTISPLITTING TOR METHODS FOR H−MATRICES** **553**
Hao Li, Yu Fu, Li Tao Zhang

4-0121-11418 **CMOS PRECISION FULL-WAVE/HALF-WAVE RECTIFIER** **556**
Athipong Virattiya and Boonying Knobnob, Montree Kumngern

4-0122-11419 **ELECTRONICALLY TUNABLE VOLTAGE-MODE UNIVERSAL FILTER USING CMOS SIMPLE OTAS** **560**
Jimlee Sarasri and Boonying Knobnob, Montree Kumngern

4-0123-11420 **FULLY CMOS PROGRAMMABLE VOLTAGE ADDER/SUBTRACTOR** **564**
Montree Kumngern

4-0124-11421 **CURRENT-CONTROLLED CCDDCC WITH CONTROLLED CURRENT GAIN** **568**
Usa Torteanchai, Montree Kumngern, Kobchai Dejhan

4-0125-11423 **DESIGN AND IMPLEMENTATION OF A GRAPHICAL PROGRAMMING TOOL FOR CHILDREN** **572**
Chen Xiajian, Wang Danli, Wang Hongan

4-0126-11424 **HUMANOIDS THAT CRAWL: COMPARING GAIT PERFORMANCE OF ICUB AND NAO USING A CPG ARCHITECTURE** **577**
Cai Li, Robert Lowe, Boris Duran and Tom Ziemke

4-0127-11428 **PROPOSED DECISION SUPPORT IN A DISTURBED ENVIRONMENT USING THE METHOD GIMSI** **583**
Samia Aitouche, Abdeghfour Kaanit, Kinza MOUSS, Mohamed Djamel Mouss

4-0128-11430 **A STUDY OF PERCEPTRON BASED BRANCH PREDICTION ON SIMPLESCALAR PLATFORM** **591**
Yang Lu, Yi Liu , He Wang

4-0129-11431 **RESEARCH OF CRISIS MANAGEMENT SYSTEM BASED ON CG AND GIS** **596**
Zhan Yongsong, Lo Siuming, Yuen Kwokkit

4-0130-11432 **THE DESIGN OF REAL-TIME VISUALIZATION SYSTEM BASED ON STK OF SPACE-BASED TELECONTROL AND TELEMETRY** **600**
SUN Hai-zhong, HE Wei-ping, ZHU Zhuan-min, LIU Tao, ZHAO Hui

4-0131-11437 **THE DESIGN OF SIGNAL PROCESS CIRCUIT FOR FOUR-LIGHT ACCURACY OPTICAL TARGET** **605**
Tian Hui, Ni Jin-ping, Lu Hong-wei

4-0132-11440 **A SEARCH RESULT RANKING ALGORITHM BASED ON WEB PAGES AND TAGS CLUSTERING** **609**
Chongchong Zhao, Zhiqiang Zhang, Hualong Li, Xiaoqin Xie

4-0133-11442 **A FAST MULTI-REFERENCE FRAME SELECTION ALGORITHM FOR H.264/AVC** **615**
Minlian Xiao, Yun Cheng

4-0134-11448 **ENHANCED CABOSFV CLUSTERING ALGORITHM BASED ON ADAPTIVE THRESHOLD** **620**
Qin Zhu, guoping Tu,Xuedong Gao, Sen Wu Hua Chen

4-0135-11449 **A PRAGMATIC APPROACH TO AID VISUALLY IMPAIRED PEOPLE IN READING, VISUALIZING AND UNDERSTANDING TEXTUAL CONTENTS WITH AN AUTOMATIC ELECTRONIC PEN** **623**
Joshi Kumar.A.V, Visu.A, Mohan Raj.S, Madhan Prabhu. T, Kalaiselvi.V.K.G

4-0136-11450 **A PLATFORM-SPECIFIC MODELING METHOD FOR PATTERN-BASED COARSE-GRAINED COMPONENT** **627**
Jindan Feng, Lanshun Nie, Dechen Zhan, Xiaofei Xu

4-0137-11453 **EFFICIENT ALGORITHM ON VIDEO SHOT SEGMENTATION OF THE ADAPTIVE THRESHOLD** **634**
CHEN Zhuo-yi, ZHOU Ming-ji, DING Wan-ning

4-0138-11454 **MULTI-SENSOR IMAGE FUSION BY NSCT-PCNN TRANSFORM** **638**
Yong Li, Guang-hua Song, Shu-chen Yang

4-0139-11456 **THE ANALYSIS OF EXPLOSIVE IMAGE CHARACTER BASED ON THE FRACTAL DIMENSION OF GRAY LEVEL IMAGE** **643**
Dong Yu-cai, Jiang Tian-yuan, Zhang Ling, Lin Min, Shi Hong-tao, Cai Ren-mou

4-0140-11458 **AN ELECTRONICALLY TUNABLE ACTIVE-C CURRENT-MODE UNIVERSAL FILTER EMPLOYING CCCII AND OTA** **647**
Xifeng Zhou, Shanshan Li, Jiake Wang

4-0141-11459 **HIGH SIGNAL-TO-NOISE RATIO GAIN BY STOCHASTIC RESONANCE IN AN UNCONVENTIONAL BISTABLE SYSTEM** **652**
Pin Wan, Yiju Zhan, Hui Zheng

4-0142-11461 **CONTROLLING ENGINE IGNITION ADVANCE ANGLE BASED ON THE BP NEURAL NETWORK** **656**
Li-jie Chen

4-0143-11465 **ARMA MODEL FOR PREDICTING THE NUMBER OF NEW OUTBREAKS OF NEWCASTLE DISEASE DURING THE MONTH** **660**
Fangge Li, Peixian Luan

4-0144-11466 **RESEARCH ON DESIGN OF EXCAVATING FACE BALANCE CONTROL FOR LARGE SLURRY SHIELD** **664**
SONG Yunpu

4-0145-11467 **RESEARCH ON SHIELD GESTURE CONTROL BASED ON INVERSE KINEMATICS OF PARALLEL MANIPULATOR** **669**
SONG Yunpu

4-0146-11468 **A NOVEL NEIGHBORHOOD STRUCTURE FOR JOB SHOP SCHEDULING** **674**
Lianghui Zhao

4-0147-11469 **A BLIND DIGITAL WATERMARKING ALGORITHM BASED ON WAVELET TRANSFORM** **679**
Zheng Xiong-bo, Zhang Xiao-wei, Sun Ming-jian

4-0148-11482 **AN IMAGE RETRIEVAL APPROACH WITH RELEVANCE FEEDBACK** **683**
Ke Chen, Zhiyong Xiong, Xuefeng Xian, Fusheng Yu

4-0149-11483 **AN ALGORITHM OF IMAGE RETRIEVAL BASED ON CONTENT SIMILARITY** **688**
Zhiyong Xiong, Ke Chen

4-0150-11488 **A NOVEL DESCRIPTION OF THE REPRODUCING KERNEL SUPPORT VECTOR MACHINES** **692**
Li-xiang Xu, Bin Luo, Feng-hai Yu, Jin Xie

4-0151-11489 **ANALYSIS OF SMART GRID SECURITY STANDARDS** **697**
Yong Wang, Da Ruan, Dawu Gu, Jason Gao, Daming Liu, Jianping Xu,Fang Chen

4-0152-11490 **A DELAYED INPUT DFA OPTIMIZED ALGORITHM OF BOUNDING DEFAULT PATH** **702**
Jin Qu, Rongcai Zhao, Peng Liu, Zishuang Li, Qin Li

4-0153-11502 **POWER MEASUREMENT AND ANALYSIS OF GSM SIGNAL** **706**
Huang He, Wang Jun, Xu Zhe, Pan Quan

4-0154-11504 **OBSTACLE DETECTION ALGORITHMS FOR AVIATION** **710**

Li Fu, Songtao Lu

4-0155-11506 **A RELAY-BASED CLUSTERING ALGORITHM FOR HETEROGENEOUS ENERGY WIRELESS SENSOR NETWORKS** **715**
Yu Fang, Xiaofu Ma, Ming Jiang

4-0156-11508 **AERONAUTICAL CHANNEL MODELING IN FREQUENCY-DOMAIN FOR BLOCK-DATA TRANSMISSION SYSTEMS** **719**
Xinle Yu, Dandan Song, Zhanxin Yang

4-0157-11510 **A DYNAMIC FLOW MODEL FOR CONSTRAINED DELAY TOLERANT NETWORKS** **724**
Zhenguo Yang, Liusheng Huang and Mingjun Xiao

4-0158-11512 **A NEW LINK SCHEDULING ALGORITHM FOR MULTI-RADIO INTERFACES WIRELESS MESH NETWORKS** **728**
Zhuyan Zhao, Jianhong Mou

4-0159-11514 **MODELLING AND PERFORMACE ANALYSIS OF MIPV6 ON CNGI** **733**
Deguang Le, Yufeng Yao, Yong Jin, Miaomiao Zhu

4-0160-11516 **IDENTIFYING BUFFER OVERFLOW VULNERABILITIES BASED ON BINARY CODE** **738**
Shunli Ding, Jingbo Yuan

4-0161-11518 **THE CONTRAST BETWEEN MOTION AND APPEARANCE REPRESENTATION OF STIP IN HUMAN ACTION CLASSIFICATION** **743**
Hong-Bo Zhang, Shao-Zi Li, Xian-Ming Lin, Bi-Xia Liu

4-0162-11519 **FAST HOG FEATURE COMPUTATION BASED ON CUDA** **748**
CHEN Yan-ping, LI Shao-zi, LIN Xian-ming

4-0163-11521 **DECOUPLING RSEARCH OF MULTI-DEGREE-OF-FREEDOM SYSTEM BASED ON SIMILARITY TRANSFORMATION** **752**
Pengju Lv, Jie Yuan, Jinghua Lv

4-0164-11522 **RECENT DEVELOPMENT IN IMAGE COMPLETION TECHNIQUES** **756**
Chunxiao Liu, Qunsheng Peng, Xun Wang

4-0165-11523 **THE PRELIMINARY REARCH ON PLANT FAMILY RETRIEVAL SYSTEM OF ANGIOSPERM IN INNER MONGOLIA** **761**
Wang Shusen, Luo Yuyang, Tan Hu, She Hongyan