## 2021 IEEE 4th Advanced Information Management, Communicates, Electronic and **Automation Control Conference** (IMCEC 2021)

Chongqing, China 18-20 June 2021

Pages 1-726



**IEEE Catalog Number: CFP21E32-POD ISBN:** 

978-1-7281-9152-2

## Copyright © 2021 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP21E32-POD

 ISBN (Print-On-Demand):
 978-1-7281-9152-2

 ISBN (Online):
 978-1-7281-8535-4

ISSN: 2693-2814

## Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



## **Table of Contents**

20200864	A Novel Genetic Algorithm- AGBoost Based Intrusion Detection Method Yingying Sun, Chunhe Song, Shimao Yu, Hao Pan, Tong Li, Yang Liu	1
20201095	A KNN-based classification algorithm for growth stages of Haematococcus pluvialis	6
	Yongliang Wang, Zichuan Chen, Hongyang Shao, Ning Wang	
20201131	Research on Method of Identifying Poor Families Based on Machine Learning Tongping Shen, Zhonghua Zhan, Li Jin, Fangliang Huang, Huanqing Xu	10
20201149	Intelligence information analysis based on computer vision Fuyao Zhang, Anchao Cheng	14
20201155	Improvement of Short-circuit Calculation for distribution network with distributed generation	21
	Saimei Shi,Zhao Huang,Yiwen Zhang	
20201181	An Improved Global State Fusion Filter for Track Estimation Xia Keqiang, Xing Meng, Fu Na, Wei Jun, Li Jixin, Yang Yongan, Li Ganhua	25
20210021	Research on Location and Capacity of Distribution Generation Considering Plug-in Electric Vehicle	29
	Xiaomeng Wu,Rongze Yuan	
20210040	Investigating the stability benefits of the ARCMESH HVDC-VSC interconnection Haijuan Lan, Simon Bartlett	33
20210060	Research on Adaptive Reclosing of Distribution Network based on Signal Injection  Xiaomeng Wu, Tao Zhang	38
20210082	The Impact of Harmonic Generated by Distributed Photovoltaic Grid-connected Power Generation System	43
	Xiaomeng Wu, Zexuan Li	
20210084	Study on the propagation characteristics of the electromagnetic wave across water film on the surface of the towed antenna	47
	Shiyu Wang, Lihua Li, Tianhui Fu, Shimin Feng, Yongbin Wang	
20210089	Generate Personalized Explanations for Recommendation based on Keywords Wei Song, Chenglong Wang, Keqing Ning	51
20210090	Threat Assessment of Cognitive Electronic Warfare to Communication based on Self-organizing Competitive Neural Network Haiyan Lv, Wei Song	58

20210093	Sentiment Analysis of Ecommerce Product Review Data Based on Deep Learning Li Rong, Zhou Weibai, Huang Debo	65
20210095	Research on Secure Access Technology of Electric Power Wireless Private Network Based on Hybrid Encryption	69
	Rui Liu, Yuanbing Zheng, Yun Yang, Yujian Chao, Yang Li, Yuhang Yan	
20210097	Greenhouse data monitoring system  Yin qun, Zhang jianbo	75
20210098	Smart home system based on wechat applet Zhang jianbo ,Yin qun,Xi xiaochen	81
20210099	Leaf Segmentation Algorithm Based on Improved U-shaped Network under Complex Background	87
	Junling Kan, Zongyun Gu, Chun Ma, Qing Wang	
20210100	Integer-Decomposing Topological Authentication Problem For Post-Quantum Cryptosystem	93
	Bing YAO, Wanjia ZHANG, Hongyu WANG, Jing SU	
20210101	Study on Time Delay Model of Deep Space Interferometry Tianyi Chai, Hong Ma, Yiwen Jiao, Weitao Lu	99
20210103	Research on a Nanosecond Standard Time Remote Reproduction Method Ruiqiong Chen, Ya Liu, Xiaohui Li	107
20210104	Research on Key Technology of Industrial Network Boundary Protection based on Endogenous Security	112
	Fei Yu, Qiang Wei, Yangyang Geng, Yunchao Wang	
20210105	Modeling and Parameter Design of MarineMicro-grid Virtual Synchronous Generator	122
	Fu Jun, Jiang Meng	
20210106	Optimization of UAV Ultra-low Altitude Flight Control System Gongcai Xin, Weilun Chen, Kaijun Liao	128
20210108	Research on Information Security Release Scheme of Metro Intelligent Passenger Service	133
	Weihui Zhao ,Tongqing Sun ,Xiaochen Wang	
20210110	Research on a Precision Load Control System Suitable for Shandong Electric Power Communication Network	138
	Fei Xie ,Peng Wang ,Shuyan Shao ,Xun Li ,Han Ye	

20210111	Delay Analysis of Multi-Physiological Parameters in Wireless Body Sensor Network	143
	Qianyu Xu, Suoping Li,Jiankui Peng	
20210112	A Method for Graded Prevention and Control of Geological Disasters in the Longdong Xifeng District based on Weight Vector Analysis	148
	Lihui Zhu ,Beizhan Feng ,Aijun Li	
20210115	Image Ship Target Detection SAR Complex Environment Yonggang Li, Weigang Zhu, Qiongnan Huang	153
20210117	A new algorithm for $D(\beta)$ -vertices sum distinguishing edge coloring of graphs Limin Zhou, Jingwen Li, Bimei Wang	159
20210121	Research on the Requirement Analysis Method of Emergency Communication Task List	165
	Baishun Zuo, Wei Zhu, Changsheng Yin , Haoran Chen	
20210122	Research on MIMO-ISAR High Resolution Imaging Technology Yonghui Guo, Yuntao Li, Yu Zhang	169
20210123	Research on the key techniques of InISAR imaging for high-speed targets <i>Zhang Yu, Yuntao Li, Yonghui Guo</i>	175
20210124	Classification of rotor blade number of rotor targets micro-motion signal based on CNN	182
	Ming Long, Jun Yang, Saiqiang Xia, Xu Wei	
20210126	A modulation recognition method based on enhanced data representation and convolutional neural network	187
	Liu Depeng,Xu Jianhua,Xiang Changbo,Fang Pengfei	
20210127	Positioning Method of Single Baseline Interferometer Based on Time Difference Direction Finding and Phase Difference Change Rate	192
	Qi Liang ,Yang Kang	
20210128	Credit Risk Prediction of Telecom Users based on Model Fusion Juan Du, Jian Zhang, Shuoshuo Wu	197
20210130	The HT-TBD Algorithm for Large Maneuvering Targets with Fewer Beats and More Groups	202
	Juntian Bo ,Hongbo Yu ,Guohong Wang	
20210131	Detection of Inter-turn Short-circuit Fault in Induction Motors, by Park's Vector Difference Approach	207
	Peng Luo, Yanxia Yang, Jinqiang Xu	

20210132	Intelligent command and control of UAV Based on brain computer and eye tracking combined technology	212
	Xinan Wu, Hongguang Li,Jiaqi Chen	
20210133	Optimization of Property Information Management Model Based on Cloud Computing in Big Data Era	222
	Xiaotian Feng	
20210134	A novel method to regulate negative emotions by odors and evaluate the effect by EEG signals	228
	Weiwei Jia, Xiaoling Li, Yang Liu, Huijin Zhu, Jiarui Lai	
20210135	A Identification Method on Real-time Ship Traffic Accident Shukui Zhang, Si Tao, Zhenguo Ding	234
20210136	A robust Kalman filter for SINS/GPS integrated Navigation Xin Lai, Fuxin Yang	238
20210137	A High-performance Charge Pump for 40nm Delay Locked Loops Zhu Shi, Yanpeng Zhao, Bo Yang, Fei Yin, Bin Wang, Wenping Liu	243
20210138	Analysis of EEG and sEMG During Upper Limb Movement between Hemiplegic and Normal People	248
	Ziyan Zou,Lin Mao,Kuiying Yin,Jingyuan Deng	
20210139	Semantic Segmentation Based on Deeplabv3+ and Attention Mechanism Rongrong Liu ,Dongzhi He	255
20210140	Study on rectification algorithm of irregular electronic components in surface mounter	260
	Jin Han, Gen Liu, Qingjun Xue	
20210141	Application of YOLOv3 algorithm in the positioning of Electric Multiple Unit Yuan Zhou , Danyong Li	266
20210142	Prediction method of running fatigue based on depth image Bin Wang ,Dongzhi He	271
20210143	An improved algorithm of Ground Moving Target Tracking based on Obstacle Information	276
	Li Ding,Xuecheng Hu,Ge Xu	
20210144	A High Precision Positioning Platform System Based on Edge Computing Mingyang Yan ,Shuo Sheng	281
20210145	Application of ground-based interferometric radar in slope deformation monitoring  Hongzhe Qin, Zeming Jiang, Binbin Zhao, Honglei Yang, Yi Liu, Xiaoang Kong	286

20210146	Real-Time Facial Landmark Detection by Attention-driven Lightweight Network Lei Li, Lifang Zhou	290
20210147	Research on Spatial Distribution Characteristics of Traditional Villages in Baoshan City Based on GIS	295
	Xiaoliang Ma,Shuangyun Peng,Zhiqiang Lin	
20210148	Research on the Spatial Pattern of Living Service Industry in Kunming City Based on POI Data	299
	Zhiqiang Lin,Shuangyun Peng ,XiaoLiang Ma	
20210150	Beam performance and characteristics analysis of meter-wave OFDM-MIMO radar under multipath conditions	304
	Zhimin Xiong, Dangwei Wang, Xiaoyan Ma	
20210154	Multi-Hop Propagation-Based Computation Offloading Scheme in Vehicular Communication Environment	311
	Weiqi Liu,Qingwei Du	
20210155	Design of Immersive and Interactive Application Based on Augmented Reality and Machine Learning	316
	Yang Lu, Liu Yihao	
20210156	Research on Thermal Error Compensation Technology of CNC Machine Tool Under Real Cutting Condition	324
	Chen Jianguo, Wang Xichang	
20210157	Objective Evaluation of Speech Communication Jamming Effect based on Composite Evaluation	331
	Shuli Dong	
20210158	Towards A Goal-driven Dynamic Configuration approach of Business Process Models	336
	Yan Liang, Rui Wan, Zepeng Wen, Gongliang Li	
20210159	Research on Data Model Construction Method of Enterprise OA System Based on Data Central-Platform	341
	Rui Wan,Pengxiang Gao,Yunchang Chen ,Yan Liang	
20210160	Prediction of Emotional Tendency of COVID-19 Speech Based on Pre-training Model	345
	Jian Huang	
20210161	A New Satellite Selection Algorithm Based on K-means  Jian Tang, Fangling Zeng, Tianbao Dong, Daqian Lv	350

20210162	Stability of Neutral Stochastic Dynamic Systems driven by fBm with Markovian Switching	356
	Xinwen Zhang	
20210163	Comparison of Classification-based Methods for Network Traffic Anomaly Detection	360
	Shuai Guo, Yao Liu, Yang Su	
20210164	Comparison of Clustering-based Network Traffic Anomaly Detection Methods Shuai Guo, Wenbing Lin, Kaiyang Zhao, Yang Su	365
20210168	Construction of a Social Security Monitoring and Early Warning Platform Driven by Big Data	370
	Junfeng Yu, Jianping Guo , Larysa Globa , Sisi Li, Mingjun Zhang, Xianyi Li, Jiaqi Liu	
20210169	Distant Supervised Relation Extraction based on Dense Neural Network with 2-Level Attention Mechanism	374
	Sun Tao ,Su Qian,Qu Xiangyu	
20210170	Base on The Grey correlation System Theory for Analyzing 5G Package Users Influence Factors	380
	Hua Zong,Kang Wang	
20210172	Weighted DBSCAN Algorithm for Discovery of Spatial Features in Industries Management	383
	Lin Jing, Mingjing Guo	
20210173	The Curvelet Compressed Sensing Denoising Algorithm for Tobacco Insect Images	387
	GuangLu Yang, Chunsong Li, Yadong Guo, Jianzhong Chen	
20210174	Research on Virtual Machine Performance Test Based on Cloud Platform Pengxiang Gao, Hang Li, Xiaojie Qu, Yunchang Cheng	392
20210175	Elastic Expansion Model of Container based on Combination Prediction Yunchang Cheng, Xiaojie Qu, Hang Li, Pengxiang Gao	396
20210176	Research On Radiation Characteristics of Rotating Magnetic Dipole Mechanical Antenna	402
	Kangpo Zhou, Youtian Niu, Zhaodi Wang ,Songhao Guo	
20210177	Application of Robot Detection Equipped with Ultraviolet Imaging  Yuntao Sun, Yufeng Chen, Wenbin Ci, Jian Liang, Jiyuan Dong, Haipeng Wang,  Bin Zhang	408
20210178	An On-demand Routing Update Acquisition in Named-data Link State Routing Protocol  Mengze Yuan, Yu Zhang, Yuanchen Hao	412

20210181	Person-post matching model based on BP neural network and its application analysis	417
	Zhenkui Jin ,Jianjun Shen	
20210182	Design and Implementation of High Speed Serial Interface Based on GTY Yongjie Zhao, Sida Li, Zhiping Huang	422
20210184	A Novel Signal Separation Method for Micro-Motion of Helicopter Target Liangfa Hua, Saiqiang Xia, Haifeng Liu, Yan Gao, Xu Huang, Caidong Zhan	429
20210185	Cloud platform load balancing mechanism for microservice architecture Ming Tang, Fei Xia, Haodong Zou, Youjun Hu, Jun Liu, Sai Liu	435
20210187	Integrated Management and Control Platform with Big Data Based on IPv6 for Regional Multi-energy Cooperation	440
	Xiaofeng QU, Shuangshuang FAN, Ke HAN, Dongxu MIAO, Yi FAN, Kun YAO	
20210188	Research on Integrated Data Engineering of Equipment Maintenance Support in the Big Data Era	447
	Zhen Li, Jianping Hao, Xingxin Li, Ke Li	
20210190	The Resource Databases Management System of New Fundamental Surveying Based on Integrating Multi-Source Information	452
	Shengjie Liu,Huizhu Ni ,Shuchang Xu	
20210191	Research on Performance of Orthogonal Convolutional Codes with Ultra-low Code Rate in Spread Spectrum Communication	457
	Huanhuan Yin, Jianxing Sun, Hong Yu, Lifang Zhang, Xin Meng	
20210192	Research on Virtual Synchronous Generator Control of Grid-connected Wind Farm with Hybrid Energy Storage	462
	Wang Yong, Zhang Ziyang, Mou Xiaochun	
20210193	Research on EEG Feature Decoding Based on Stimulus Image Liangcheng Qu,Dong Chen,Kuiying Yin	467
20210194	Design of Series Resonant High-voltage Constant Current Power Supply Yuchen Wang, Yahong Yang, Haitao Chen, Lei Wang, Mochen Xu, Sheng Cai, Jun Huang	471
20210195	A Pixel image generation algorithm based on CycleGAN Hailan Kuang, Nan Huang, Shuchang Xu, Shunpeng Du	476
20210196	A Kind of Syntax Parsing Algorithm Based on The Push-down Automaton <i>Haili Luo</i>	481

20210198	A High-Resolution Interface Circuit based on Resistance-to-Frequency Conversion for Resistive Gas Sensor	486
	Weijie Qi,Chunling Li,Jing Wang,Wenxian Gu,Dongliang Chen,George Adedokun,Lei Xu	
20210200	Application of K-Nearest Neighbor (KNN) Algorithm for Human Action Recognition	492
	Pengbo Wang, Yongqiang Zhang, Wenting Jiang	
20210201	Number-Based Strings/Passwords From Imaginary Graphs Of Topological Coding For Encryption	<b>49</b> 7
	Hongyu WANG, Bing YAO, Jing SU, Wanjia ZHANG	
20210202	Research on Personalized Recommendation Method Based on Multi-source Information Learning	502
	Keqing Guan, Xianli Kong	
20210203	State Space Modeling Method of Microgrid Based on Virtual Synchronous Generator	507
	Chenyang Li, Qinxin Lu , Yazhou Gao , Mengmeng Wang, Wengan Chen, Han Zheng, Siyu Zhu	
20210205	Structural Damage Detection Based on Raw Monitoring Data  Li-tao Zhang	513
20210206	Design and realization of acupoint tapping massage system with three degrees of freedom based on STM32	519
	Wenqing Zhu,Shuqun Wang	
20210208	Research on Time-frequency Feature Fusion Method based on Dynamic Gesture Identity Authentication	523
	Wang Yanna	
20210209	Research on Image Denoising Based on Median Filter Xi Li, Jiajia Ji, Jun Li, Shuling He, Qin Zhou	528
20210210	Design and Implementation of Security Test Pipeline based on DevSecOps Xiaohan Sun, Yunchang Cheng, Xiaojie Qu, Hang Li	532
20210211	An Optimized Scheme of Random Access Procedure for Power Wireless Private Network	536
	Weibin Hou,Bin Du, Qi Wang, Jie Zhou, Weiping Shao, Weijun Zheng, Jiadong Du	
20210212	Research on Layout Strategy of 5G Network Slice in Power Scenarios Qi Wang, Weibin Hou, Jie Zhou, Jiadong Du, Weiping Shao, Weijun Zheng	540

20210214	Big Data on Linear Temporal Logic Formulas Weijun Zhu	544
20210215	Research on Data Sample for SAR Ship Detection  Qiongnan Huang, Weigang Zhu, Yonggang Li	548
20210216	MATLAB-based Design and Performance Calculation of Transmission Ratio of a Passenger Vehicle  YuJie tang, YanXiong Liu	554
20210220	5G Network Slice Configuration Based on Smart Grid Weijun Zheng, Ding Chen ,Jun Duan , Hong Xu, Wei Qian, Leichun Gu ,Jiming Yao	560
20210221	Research on transmission line trip prediction based on logistic regression algorithm under icing condition  Cui Wei ,Han Jingshan,Li Zheng ,Wang Cong ,Wang Jiahao	565
20210223	Construction and measurement of evaluation index system of distributed power carrying capacity in distribution network  Zongfeng ZHANG, Zhangwei YU	570
20210224	Classification of Chinese Herbal Medicines by deep neural network based on orthogonal design  Yan Tang, Yan Wang , Jingzhong Li , Weiwei Zhang, Li Wang, Xing Zhai, Aiqing Han	574
20210225	Research on Remote Visualized Management System of Water Supply Pipe Network Based on Palmprint Recognition Mengyue Liu, Yanxue Xue, Meng Xue, Zhiqiang Wang, Yue Wang	584
20210226	Public Opinion Analysis of Weibo Comments Based on Crawler and SVM Haohong Zhang, Shaohua Li, Jingying Feng, Yiduo Liang	589
20210228	Human Target Detection and Tracking Algorithm based on MIMO Bio-radar Wenting Han, Yang Fan, Zhiyong Li, Hao Lou, Fulai Liang	594
20210229	Appearance difference makes relationship: A new visual relationships inferance mechanism  Nie Yu, Zhu Siyu, su Guiping, Guo Yuxin	599
20210230	The 3D Feature Prediction of the Molten Metal Direct Writing Result based on Neural Network  Mingzhao Wang, Wenjuan Rong, Jialin Wang, Yongwei Wang, Yingying Sa, Yinuo Ma	606
20210231	The Self-powered RFID Sensor System for Power Transformer Condition Monitoring Wang Jian, Zhu Mengzhao, Zhu Wenbing, Gu Zhaoliang, Wang Xuelei, Zhu Qingdong	613

20210233	Fault Analysis of GIS Basin Insulator Based on Laser Ultrasonic Detection Technology	618
	Wei Wang, Yi-bin Gao, Gang Yang, Zhu-mao Lu, Guo-dong Li, Yuan Ren , Da-wei Wang	
20210234	Image saliency detection method for safe operation of substation Pengfei Sheng, Qi Yin, Yuezhong Shen	623
20210235	Faster R-CNN based substation scene image detection method Wei Zhu, Guoping Mu, Jun Li	628
20210237	Research of Improved MRAS Based Sensorless Control of Permanent Magnet Synchronous Motor Considering Parameter Sensitivity	633
	Yunchuan Ni, Dingguo Shao	
20210238	Design and Application of Optical Cable Online Monitoring System in Power Grid Company	639
	Qingrui Guo, Wenbin Guo,Ling He, Xuerang Guo, Qiang Zhang	
20210241	Exploration and application of 5G network slice in electric power <i>Qiang Zhang, Yaping Li, Zhijun Zhang, Peng Xie, Qingrui Guo,Xuerang Guo</i>	644
20210242	Action recognition based on R2.5D-GRU networks  Xiaolin Ma, Yuying Xiao	649
20210243	A Modulation Classification Method for Communication Signals Using TFA and Two-Stream Convolutional Networks	654
	Chenxi Ke,Wei Cheng,Cenxin Peng,Zihao Song	
20210244	Design of Hybrid Learning Mode in Higher Vocational Colleges Based on Cloud Platform	663
	Shuai Zhang, Jinlong Wang, Decai Wang	
20210245	Research on Three-dimensional Simulation Technology of Typical Safety Accidents of Storage Tanks in Port Area	667
	Zilong Li, Ruixin Ma, Jing Chen, Kexin Bao, Zefang Zhang	
20210246	The key technology of blockchain and its research in the field of information security	673
	Shan Liu, Baoguo Tang, Yu Zhang	
20210247	Research of the electric communication network system based on SDN architecture	678
	Shan Liu, Baoguo Tang, Ziqiang Zhou	

20210248	Research of Power Communication Network System Architecture Based on 5G Shan Liu , Baoguo Tang, Yun Tian	682
20210249	Design and pragtfctice of heterogeneous multisystem message center Wenyuan Zhao , Yunchang Cheng, Yunhai Tang, Dandan Li	687
20210250	Design and Research of an Ultrasonic Grain Moisture Content Detection Device <i>Anchen Shao, Jian Chu</i>	692
20210252	Research on Parking Planning Method based on AI Planning Xiaojie Qu, Yunchang Cheng, Pengxiang Gao, Hang Li	<b>697</b>
20210255	A Compression Storage Technology for Production Process Data of an Electric Porcelain Enterprise  Siqi Wei, Shaohong Jing, Jianxue Bi	704
20210256	Analysis method of electric porcelain cracking defects based on firing process data  Qingyao Meng,Qingjin Meng,Jianxue Bi	708
20210257	Application of Breakpoint Continuation Technology in Data Acquisition System <i>Yuanyuan Chang,Qingjin Meng,Jianxue Bi</i>	712
20210258	Radar emitter signal recognition based on convolutional neural network and main ridge coordinate transformation of ambiguity function  Yunwei Pu, Taotao Liu, Haixiao Wu, Jiang Guo	716
20210259	Research on control strategy of retired battery cascade utilization in 5g base station  Dinghao Liu ,Zhe Li	722
20210260	On a New SNR Estimation Approach With Polar Codes Chaofan Chen, Jiayi Wu, Changhong Wang, Xiaqing Miao, Xiangyuan Bu	727
20210261	Research on Imaging Method of Power System Grounding Grid Based on Scattering Principle  Zhang Laifu, Xu Yudong, Yu Hua, Yang Hong, Wang Qian, Zhang Yu	733
20210262	Diagnosis means and development tendency of power economy grounding grid flaws  Yang Hong, Zhang Yu, Yu Hua, Wang Qian, Zhang Laifu, Xu Yudong	740
20210263	Improved AGNES multi-agent dynamic alliance system in complex environment Zhaoyu Zhang,Daozhi Wei,Jiahao Xie,Ning Li	747
20210265	A Video Abnormal Behavior Recognition Algorithm Based on Deep Learning Bin Cao, Hanlin Xia, Zhengyan Liu	755

20210266	Short-term Photovoltaic Plant Output Prediction based on the Case-based Reasoning	760
	Yong Yang ,Zhicheng Ma,Xin He ,Gang Zhang ,Yunyi Niu	
20210267	Design of a Quadruped inspection Robot Used in Substation Xuran Hu,Feng He,Peng Xiao,Tao Wang,Decai Zhang,Xingfu Zhou,Yan Fan	766
20210268	Least Square based System Bias Registration in Elevation for Radar when Tracking an Electrically Large Object	770
	Kunkun Li ,Rui Cao ,Xin Zhou	
20210269	Algorithm for Improving Processor Utilization in Multi-core Processor Environment by Python Language	775
	Feng He,Xuran Hu ,Shuren Liu , Tao Li,Kaifeng Zhu ,Xin Bao ,Chao Jiang	
20210270	Comparative study on anti-lock braking control strategies based on heavy-duty multi-axle special vehicles	780
	Xinglei He,Hongjie Cheng ,Zhihao Liu ,Jianfu Yang ,Tong Huang	
20210271	A Laser Displacement System Based on PSD with High Anti-interference Ability Shuo Yang, Tao Wang, Lisheng Yang, Shiyong Guo	786
20210272	A Comprehensive Review of Permanent Magnet Synchronous Linear Motors in automotive electromagnetic suspension system	792
	Lijuan Yu,Meiyu Zhang,Wen Xue,Wei Luo ,Jialong He,Hailong Tian	
20210273	Cooperative multiple task assignment using cluster method and bidirectional particle swarm optimization	797
	Weiyong Tian,Li Liu , Qiusheng Wang,Han Mu	
20210274	Cooperative Task Assignment of Multi-UAV in Road-network Reconnaissance Using Customized Genetic Algorithm	803
	Qiusheng Wang,Li Liu,Weiyong Tian	
20210275	Research on Rapid Response Technologies for Demand Evolution of Electricity Trading Platform	810
	Longda Huang, Weijin Zhuang, Haichao Wang, Hailong Jiang, Zhemin Lin	
20210276	Evolutionary-based Federated Ensemble Learning on Face Recognition Lin Li, Mai Li, Fang Qin, Weijia Zeng	815
20210278	Optimization of aircraft fuel supply based on centroid balance strategy Hao Zhang, Zhishu Zhang, Jianfeng Lu, Yuewen Li, Junwei Pang, Rongyong Zhao	820
20210279	A Method of Measuring Wrist Angle of Underwater Manipulators Based on Machine Vision Maozhou Yang, Jirong Xie, Zhiheng Zheng	825

835 840 846
840
846
846
856
862
867
876
880
885
890
894
899

20210303	Current Status and Development Trend of Crowd Counting  Jiaming Niu, Yu Yang, Tong Yue	904
20210304	Adaptive Iterative Learning Trajectory Tracking Control of SCARA Robot Zhang Cheng, Zhang Zhuo	910
20210305	ADIW: A Solution on General Deployment in IPv6-only WLANs Fangze Guo, Chenhuan Liu, Shanshan Hao, Congxiao Bao, Xing Li	915
20210306	Research on 3D Medical Image Segmentation based on improved 3D-Unet <i>Hailan Yu , Weili Chen</i>	923
20210307	Design and Experimental Verification of Electromagnetic Integrated Detection Device  Wentie Yang, Jinwu Zhuang, Zuoshuai Wang, Lin Xu, Jianxun Wang	929
20210308	Analysis of Magnetomechanical Effect of Magnetic Cavity under Geomagnetic Field  Wentie Yang, Jinwu Zhuang, Zuoshuai Wang, Chao Zuon, Jianxun Wang	934
20210309	DNA-computing-based methods for Model Checking Temporal Logics with Actions  Weijun Zhu, Xiaoyu Yang, En Li, Miaolei Deng	939
20210310	Cross-Layer Transmission Optimization Technique Supporting URLLC Hang Li, Pengxiang Gao, Yunchang Cheng, Xiaojie Qu	943
20210311	State of Charge Estimation of Li-Ion Battery Based on Improved Extended Kalman Filter  Hao Wang, Yifan Chen, Jiaxuan Luo, Chenchen Liu, Pengfei Gao, Guohao Chen	950
20210317	A Multi-Level Feature Fusion Network For Scene Text Detection with Text Attention Mechanism  Xinhua Liu,Xiaokang Chen,Hailan Kuang,Xiaolin Ma	954
20210318	Delay Analysis of Power Wireless Private Network System in 230MHz Band Qi Wang, Bin Du, Yanru Wang, Hui Liu, Jiadong Du, Jie Xu, Weibin Hou	959
20210321	Highly Reliable Control System based on Reactive Event Stream <i>Haidong Lv</i>	963
20210322	Measurement and analysis of urban landscape expansion based on multi-order adjacency index  Jing Liu, Quanli Xu	967

20210323	Analysis and research on hidden danger of coal mine safety based on improved FP-growth algorithm	971
	Xiaoxia Lin, Jiashuai Zong,Xiaodong Yang ,Min Liu	
20210324	Research on Application of 5G Technology in Unmanned Combat System <i>Jie Luo, Bing Su, Zhigang Jia, Guowei Yuan</i>	979
20210326	Research on Multi-sensor Information Fusion Algorithm Based on SCI-AUKF Shanshan Wan ,Qing Sun ,Xuecheng Yu	985
20210327	Analysis on the Characteristics and Spatial Pattern of Urban Expansion in Yuxi City	990
	Xincheng Zhong,Quanli Xu,Shan Li	
20210328	Sharingchain: A privacy protection scheme based on blockchain in the supply chain	995
	Wei Wang, Lianhai Wang, Shujiang Xu, Jinpeng Wang, Kunlun Fu	
20210329	A Systematic Review of Network Protocol Fuzzing Techniques Zhihao Hu, Zulie Pan	1000
20210330	The Course Selection Platform in Colleges and Universities of Network Load Balance Based on Server Cluster	1006
	Jia Wang, Yinchun Gao	
20210331	Blockchain-based privacy protection scheme for smart park multi-energy fusion system	1011
	Guanlin Si, Yue Zhang, Yue Sun, Wei Chen	
20210332	A Novel Blind Detection Algorithm Based on Multi-Clustering Complex Neural Network	1017
	Jinwen Wu, Haihong Jin, Shujuan Yu, Yun Zhang	
20210334	Research on Ecological Vulnerability Evaluation of Yunnan Province Based on SRP Model	1022
	Lijuan Jin, Quanli Xu	
20210335	Analysis on temporal and spatial changes of vegetation coverage in Yuxi City from 1995 to 2015	1027
	Shan Li,Quanli Xu	
20210336	A Review on Intrusion Drone Target Detection Based on Deep Learning Rongqi Jiang, Yang Zhou, Yueping Peng	1032
20210338	Monitoring and analysis of the dynamic changes of urban land expansion in Kunming from 2000 to 2020	1040
	Wenhui Li, Quanli XU	

20210341	A Identification Method on Traffic Accidents in the Lower Yangtze River Shukui Zhang, Si Tao, Zhenguo Ding	1044
20210342	Radar Emitter Signal Recognition based on Contour Lines of Ambiguity Function and Stacked Denoising Auto-encoders	1048
	Yunwei Pu, Jiang Guo, Taotao Liu, Haixiao wu	
20210346	Research on Automatic Architecture of Energy Consumption Data Acquisition and Uploading Based on TCP/IP Protocol  Pan Wang, Hairong Yan	1054
	Tun wang, Harong Tun	
20210347	Stability Technology Of Wind Speed Indication In Underground Coal Mine Peng Liu	1063
20210349	An improved yolov3 algorithm for pulmonary nodule detection Lin Haibo, Tao Shanli, Song Shuang, Liu Haoran	1068
20210350	Fracture identification and quantification through digital rock analysis Yangdong Gao, Heming Lin, Lijun Guan, Wei Li, Guanqun Wang, Haoran Cheng, Wei Long	1073
20210351	An ECG Sparse Noise Reduction Method based on Deep Unfolding Network Bingxin Xu,Ruixia Liu, Yinglong Wang	1078
20210352	Semi-supervised Extreme Learning Machine-based Method for Moving Cast Shadow Detection	1083
	Guanglei Kan, Chengduan Wang	
20210353	Multifrequency readback and scrub method based on detecting key frames <i>Zhibo Fang, Zhifeng Ma</i>	1090
20210354	Research on the Applications of Data Mining in the Analysis of Vehicle Insurance Industry	1095
	Jianbing Xiahou,Meng Xiao ,Xiaojing He,Xu Cui	
20210355	Design of ARM-based Intelligent Unmanned Surface Vehicle Control and Acquisition Module	1100
	Yongliang Zhang ,Juanhui Yu ,Wenjie Zhang ,Cheng Dai,Rubin Yuan	
20210356	A Entity Attention-based model for Entity Relation Classification for Chinese Literature Text	1104
	Wenrui Xie	
20210358	Picking Path Optimization of Colony Picking Robot Yilang Zhang, Jian Xing, Guohua Chen	1109
20210359	A Method for Recognizing Feature Regions of Object Model Based on Instance Segmentation <i>Guohua Chen, Yiyou Zhang, Jian Xing</i>	1114

20210360	Improved Faster-RCNN Algorithm for Mask Wearing Detection  Lei Wang, Yong Lin, Weiye Sun, Yezhi Wu	1119
20210361	Research on the characteristics of flexible control load of rural distribution network and flexibility evaluation	1125
	Bo Wang,Mingguo Zheng ,Yongting Lu,Jinlian Wu,Jianbin Zhou ,Zhengqiang Wu ,Kai Zhao	
20210362	Research on Multi-objective Optimal Dispatching and Low Voltage of Distributed Generation in Rural Distribution Network	1131
	Jianbin Zhou, Bo Wang, Jinlian Wu , Yongting Lu, Mingguo Zheng, Zhengqiang Wu, Kangchao Ma	
20210363	Electrocardiogram classification based on convolutional neural network and transfer learning  Jing Zhou, Aimei Dong	1137
20210365	Optimization of Target Artifact Under Diffuse Reflection Sihan Wu, Yong Yi, KaiZhu	1142
20210366	An Improved Pole Extraction Algorithm with Low Signal-to-Noise Ratio Tingting Feng, Jun Yang, Pengcheng Ge, Shuo Zhang, Yu Du, Haoyue Wang	1146
20210367	Level set segmentation method based on local area fitting information and guided filter fuzzy clustering	1151
	Cheng Yang ,Yong Xue	
20210368	Design Tension Controller for the Rewinding System of Roll-to-roll Precision Coating Machine	1156
	Ziyu Wang, Shanhui Liu, Feiqiang Jiao, Zengqiang Zhang, Weifeng Chen	
20210369	Data Augmentation for Passive Sonar Received Signal Using Particle Propagation Model	1161
	Jianghao Zhuo,Ling Wang ,Ke Xu ,Jianwei Wan	
20210370	Fault Location Method of Aircraft Cable Based on Spread Spectrum Time-Domain Reflection	1166
	Biyuan Hu, Jiali Wang, Cunbao Ma, Qi Ma, Yan Liang	
20210371	Research and Construction of the Evaluation Technology System of Intelligent Analysis and Decision Software	1175
	Lei Zhang, Wenqiang Li, Bo Xu	
20210375	A new Bi-level programming model for uncertain supply chain problems  Hanshi Shentu, Liuyang Yuan, Weibin Zhang	1179

20210376	Design of a testing system for a large-range piezoelectric force sensor based on LabVIEW	1183
	Xiaoqi Yang ,Yingjun Li ,Guicong Wang ,Sikang Cai	
20210378	Research on Personalized Education Data Processing in the Era of Big Data <i>Dongdong Xue</i>	1188
20210379	Hybrid Denoising Based Correlation Power Analysis for AES Kefei Cheng ,Ziyan Song ,Xiaotong Cui ,Liang Zhang	1192
20210380	Mathematical analysis of 4-ary MSK signal spectrum based on Markov chain Process Strategy	1196
	Niu Zheng, Jiang Yuzhong, Zou Wenliang, Liu Gang, Huang Zhi	
20210381	Research on life prediction method of smart meters in multi environment based on PSO-SVR	1202
	Dan Li ,Dang Ming, Guangze Pan, Qin Luo , Xiaobing Li	
20210382	UAV detection based on rainy environment Kai Luo, Rongjian Luo, Youwei Zhou	1207
20210383	A Fully Convolutional Network based on Double Attention for Saliency Object Detection	1211
	Yufeng Wu ,Yunfeng Nie,Jianlu Fu,Wenxuan Gong	
20210385	Campus network intrusion prevention and detection application research Sijun Li, Haotian Liu, Weichao Lv, Chun Liu	1216
20210386	An Arbitrary Style Transfer Network based on Dual Attention Module <i>Yueming Wang</i>	1221
20210387	An On-line Evaluation Method of Multi-Functional Radar Jamming Effect Bakun Zhu, Weigang Zhu, Wei Li, Tianhao Gao	1227
20210388	Water Velocity and Level Monitoring Based on UAV Radar Taoran Wang, Shuxian Hao, Xinyi Ma	1232
20210390	Analysis of Influencing Factors of Pedestrian Injury Based on Orthogonal Test Yue Zhang, Fengchong Lan, Jiqing Chen	1237
20210391	A Novel PID Control Strategy Based on PSO-BP Neural Network for Phase-Shifted Full-Bridge Current-Doubler Synchronous Rectifying Converter Hemiao Liu, Yulian Zhao, Mahmoud Al Shurafa, Jiufei Chen, Jing Wu, Yanming	1241
	Cheng	
20210392	Vulnerability Assessment and Attack Simulation of Power IoT Based on the Attractiveness of Equipment Assets  Wei Liu, Tao Zhao	1246

20210394	Research on attitude control strategy of Two-DOF helicopter based on LabVIEW <i>Zhiqiang Liu,Xi Ye,Tonghui Qian</i>	1251
20210395	A Feature Learning Model Supporting Incremental Learning Liting Duan, Huiyi Liu, Wenjing Wu, Siying Xu	1256
20210396	An Improved SSD Network for Small Object Detection based on Dilated Convolution and Feature Fusion	1261
	Jianlu Fu, Yunfeng Nie, Wenxuan Gong, Yufeng Wu	
20210398	Research on SDN-based Dynamic Management of Energy Consumption of Cloud Data Center	1266
	Jing Tao	
20210399	Multiband Radar Signal Phase Reference Synthesis Based on Matrix Pencil Method	1271
	Shuo Zhang,Jun Yang,Pengcheng Ge, Tingting Feng, Yu Du, Haohao Jiang	
20210400	Regional Crowd Status Analysis based on GeoVideo and Multimedia Data Collaboration	1278
	Yan Zhou,MengDou Qin,Xu Wang,Cong Zhang	
20210401	Design and Development of Airflow Self-controlling Dust Filter Respirator in Dusty Environment	1283
	Xue Bai	
20210402	Overview of Distant Supervised Relation Extraction  Xiang Li, Junan Yang, Hui Liu, Zongwei Liang, Lingzhi Qu, Yu Zhang, Kun  Shao, Dongxing Zhao	1287
20210403	Research on Evaluation Method of Combat Oriented Data Link Message Coding Guohui Jia, Chen Zhang ,Jian Cheng	1293
20210404	Research on the Advantages of 5G Network to online Learning Chen Xiaoya,Li Zaihui	1299
20210406	Study on Invulnerability Optimization of Optical Backbone Networks Based on Complex Networks	1303
	Yipeng Xiong, Yuan Tan, Guangjun Zeng, Ming Zhou, Xinle Li, Dexin Cheng	
20210407	Data-driven scheduling for smart shop floor via reinforcement learning with model-based clustering algorithm	1310
	Yuxin Li, Wenbin Gu, Xianliang Wang, Zeyu Chen	
20210408	An enhanced INS/GNSS integrated system with ODO for train positioning Yang Meng, Jingxiao Feng, Wei Wang	1315

20210409	Review of SOC estimation methods for lithium battery based on EKF <i>Zhiguo Chang, Qiang Yin, Jianghua Gan, Mingran Zhang, Tianjin Chen, Xiangli Liu,Wei Shi</i>	1319
20210410	Analysis of Distributed Synthesis Algorithm based on Simple and Sumple Algorithm  Jing Xu , Shuyan Ni , Yumin Yang	1327
20210411	A Graphical Design Method of Fractional-Order Proportional-Integral Controllers Based on Frequency-Domain Specifications	1333
	Xu Li, Daqing Wang, Dun Hu, Qianqian Zhang, Lifu Gao	
20210412	Intelligent Communication: Application of Deep Learning at the Physical Layer of Communication	1339
	Yile Fan, Ding Dan, Yuanpeng Li, Zhiqiang Wang, Zhongqian Liu	
20210413	Radar HRRP Data Augmentation Using CVAE with Extended Latent Space Distribution	1346
	Wenxiang Zhang, Youquan Lin, Long Zhuang, Jie Guo	
20210414	Research on Deep Learning Model of Fog Visibility Estimation Based on CNN Junling Wang, Lijing Zhang	1355
20210415	Periodic impulse feature separation by combination of bi-frequency map and nonnegative matrix factorization	1360
	Lin Liang, Xingyun Ding, Haobin Wen, Lei Shan	
20210416	Deep Learning Based MIMO-NOMA Receiver Research  Jingwen Huang, Zhiling Tang	1365
20210417	Fault detection, analysis and prevention of aircraft electrical circuit <i>Xu Heng cheng, Chen Pu</i>	1369
20210418	Research on Edge-Magic Total Labeling Algorithm of Hierarchical Cascade Graph Rong Luo , Jing Wen Li, Shu CHeng Zhang	1374
20210419	Research on Performance Evaluation of Three Level Public Hospitals Based on Fuzzy Comprehensive Evaluation Model	1380
	Yifeng Dou, Fubiao Wang, Xiuchun Wu, Wentao Meng	
20210422	Surface Defect Detection of Hight-speed Railway Hub Based on Improved YOLOv3 Algorithm	1386
	Yelong Yu, Meiling Wang, Zeming Wang, Ping Zhou	
20210423	Research on Color Uniformity and Seam Detection of Standard Test Paper Based on Machine Vision	1391
	Xia Dong,Fei Zheng ,Zewei Wang	

20210424	Small sample signal modulation recognition method based on transfer learning <i>Zhiyi Du ,Baoguo Li</i>	1396
20210425	Multi-agent Deep Reinforcement Learning based on Maximum Entropy Zihao Wang, Yanxin Zhang, Chenkun Yin, Zhiqing Huang	1402
20210426	Dynamic Model Construction and Simulation Based on Intelligent Driving Vehicle  Jie Huang, Shan Xiao, Long Xiao, Yang Jiao, ZhaoQiang Wang, XueLei Wang	1407
20210427	MTDCD: an MTD Enhanced Cyber Deception Defense System Chungang Gao, Yongjie Wang, Xinli Xiong, Wendian Zhao	1412
20210428	Multi-mode Composite Track Estimation Method Based on Distributed Measurement Fusion  Xia KeQiang, Xing Meng, Du ChunYan, Fu Na, Chen JianPing, Li GanHua, Lv JiYuan	1418
20210429	Association Analysis of User Promiscuous Traffic Based on Convolutional Neural Network Yonglin Li, Yan Liu	1422
20210430	A Method for Estimating the Parameters of Spaceborne Synthetic Aperture Radar LFM under a Low Signal-to-Noise Ratio  Shihong Chen, Minghai Pan, Xudong Wang	1426
20210431	Application of Workflow Technology in the Integrated Management Platform of Smart Park  Zhiyang Zhao,Xianxun Zhu,Xiong Wei,Xu Wang,Jiancun Zuo	1433
20210432	Design of distributed temperature and humidity monitoring system based on single-chip microcomputer  Yue Li,Longqing Shi,Peihe Zhai,Deming Zhang,Haibin Fan	1438
20210433	Data Processing and Encryption in UAV Radar  Xinghua Du, Ying Tang, Yangke Gou, Zhanpeng Huang	1445
20210434	Multi-channel wideband signal full bandwidth synchronous acquisition method YangKe Gou, Ying Tang, XingHua Du, ZhanPeng Huang	1451
20210435	Design of Software Fault Tolerant System for Autonomous Underwater Vehicles <i>Qi Wang ,Yong Liu , Tao Xu ,Xuejie Sun ,Jiwei Li</i>	1456
20210436	Music emotion recognition based on combination of multiple features and neural network  Chenguang Zhang, Jinming Yu, Zhuang Chen	1461

20210437	Research on Driving Decision of Smart Vehicles Based on Reinforcement Learning	1466
	Shan Xiao,Jie Huang ,Long Xiao,Yang Jiao, ZhaoQiang Wang,XueLei Wang	
20210438	A Technique for Determining Integer Ambiguity Based on Joint Difference Modeling of Pseudorange and Carrier Phase in GNSS Systems	1470
	Zhongting Chen, Li Zhao, Renshen Huang	
20210440	The modeling and simulation analysis of micro digital servo actuator Lingfei Duan, Xiong Su, Lu Chen, Zixiao Wang, Hongqiao Zhang	1475
20210441	Study on Improving the Direction-Finding Accuracy of Rotary Baseline Phase Interferometer	1480
	Dong Li, Yiwen Jiao, Zefu Gao, Feilong Mao, Hao Zhang	
20210443	Research on correction and recognition of QR code on cylinder Jing Jin, Keyi Wang, Wei Wang	1485
20210445	Design of High-precision Ultrasonic Ranging System for Mobile Robot Qin Li, Zhanpeng Huang, Zhongming Zhu	1490
20210446	Transformer-based channel noise reduction deep convolution residual network Yang Li, Zhongdong Wu, Yuan Kang, Qian Cheng	1496
20210451	Information modeling and redundant data processing of mechanical product configuration design	1500
	Binyuan Liu, Xuefeng Jin, Xinggang Wang	
20210452	Conversion and selection of standard values for mechanical product configuration design features	1506
	Binyuan Liu, Xuefeng Jin, Xinggang Wang	
20210453	Radar Active Jamming Recognition based on Recurrence Plot And Convolutional Neural Network	1511
	Junjie Lin,Xiaolei Fan	
20210454	Test vector generation for high-speed digital integrated circuits Wanyu Yang, Jiacheng Hui, Kun Yin , Zhijian Dai, Kaihua Deng	1516
20210455	High-precision channel synchronization design of PXIe digital integrated circuit test system	1522
	Wanyu Yang,Jian Wu,Kun Yin,Zhijian Dai,Qinchen Dai	
20210456	Surveillance Personnel Behavior Analysis Technology based on Operation Log Chuandong Lv, Yang Yang, Qiyue Sun, Bin Zhou, Peng Xu	1530
20210458	An Adaptive Multipath Routing for LEO Satellite Network  Yunhui Huang, Wanqin Cao, Xun liu, Xiaofeng Jiang, Jian Yang, Feng Yang	1536

20210459	Aircraft Targets Detection in Remote Sensing Images with Feature Optimization Qing Hu, Runsheng Li, Chaofan Pan, Yintu Bao, Haobo Zhang	1542
20210460	Research on the performance of fuel cell vehicle at cold start of -30 °C Tong Wang, Nanlin Lei , Shaoqing He, Xiaoyu Jia, Qiang Zhang, Feikun Zhou, Wenwen Guo	1550
20210462	A Low-Sidelobe-Level Variable Inclination Continuous Transverse Stub Antenna with Two-Types Stubs	1554
	Kexin Wang, Xue Lei, Jun Gao, Tianpeng Li, Mingyang Zhao	
20210463	SCARA Modeling and Simulation based on SimMechanics and Solidworks Zhang Zhuo, Zhang Cheng	1559
20210464	Design of temperature and humidity control system based on ARM ZhanPeng Huang, XinHua Du, YangKe Gou, QinLi	1564
20210466	Handwritten number recognition based on PCA and neural network Zhihong Hu, Qian Tian, Hongbo Wang, Zhenyu He	1570
20210467	Deep Learning Target Vehicle Detection Method Based on YOLOv3-tiny Lifu Li, Yi Liang	1575
20210468	Research on Prediction of Attack Behavior Based on HMM Sen Jing, Min Li, Yue Sun, Yue Zhang	1580
20210469	Research and Implementation of ORB-SLAM in Drastically Changing Scenes Zemin Wang, Meiling Wang, Yelong Yu, Xiaodong Ye	1584
20210470	Traffic Sign Recognition and Retrieval Using Limited Dataset in the Wild Enke Li, Lingrui Mei	1588
20210471	Algorithm of Spaceborne SAR Echo Simulation based on Range Horizontal Segmentation	1595
	Zejie Zhu ,Yongle Lv ,Lin Xue	
20210473	An Automatic Acquisition Method of Detection Data for Substation Equipment Ka Mu, Guangwei Liu, Zhen Hao, Xinsheng Ma, Han Qin, Jixian Ma, Zheng Niu	1600
20210474	Design and Realization of Spacecraft Test Data Analysis Platform Zhongwen Li,Ling Liu,Tiantian Shen	1605
20210475	A Novel Fast NLM Denoising Algorithm Based on Improved Kernel Function Parameters: Applied to RFID Labels	1609
	Shanhao Zhou, Xiaolei Yu, Yu Wang, Feng Zhu, Ke Zhang, Zhenlu Liu,Zhimin Zhao	

20210476	Research and Identification of DC Magnetic Bias of Transformer Based on Discrete Wavelet Transform	1614
	Yuan Liu, Huida Duan	
20210477	Design of signal shaping filter based on distributed algorithm <i>Zhuang He,Fanqiang Lin</i>	1619
20210478	Research on Mine Power System Leakage Fusion Criterion by Improving Genetic Algorithm to Optimize BP Neural Network	1623
	Xiucai Guo,Fei Xie	
20210479	Design of W-Band High Efficient Power Combiner Utilizing Silicon Micromachining	1628
	Shitong Yu,Hai Xiahou,Xiaoming Xing	
20210480	An Adaptive Threshold Estimation for Coarse Synchronization in Transponding Satellite Communication System	1633
	Lei Chen, Chengyao Tang, Ke Zhang, Jingyuan Li, Weihua Mou	
20210481	Key Technologies of Heterogeneous System General Data Service based on Virtual Table	1638
	Hong Zhang,Qi Zhao ,Fang Yu,Weijin Zhuang	
20210482	Measured acoustic coefficient values correction method based on coordinate rotation	1643
	Yajie Ma, Yuyan Yu , Yi Hu	
20210483	Research on frequency distribution and interference coordination method of power wireless private network based on service isolation	1649
	Jiming Yao, Weiping Shao ,Weijun Zheng	
20210484	Research on Statistical Algorithm of Microalgae Growth Status Based on Computer Vision	1653
	Zichuan Chen, Shigang Cui, Yongli Zhang ,Lin He	
20210485	Optimization Method for Coordination Deployment of Air Defense System Based on Improved Genetic Algorithm	1658
	Naiyang Xue, Dan Ding, Jie Ding, Bo Ma, Yutong Jia	
20210487	A Blockchain Based Link-Flooding Attack Detection Scheme Wanqin Cao, Yunhui Huang, Dezheng Li, Feng Yang, Xiaofeng Jiang, Jian Yang	1665
20210489	Analysis of Multi Index Association of Power Grid Work Order based on Data Mining	1670
	Lingyu Huo, Yan Zhang, Jianwen Zhang, Fei Liu, Jing Liang, Yao Wang	

20210490	Divider Implementation Based on USPAwadhoot Division Algorithm For Area Optimization	1675
	Udayan Patankar ,Dr Ants Koel,Sunil Patankar , Miguel E. Flores	
20210492	A Method Based on Quinn Algorithm to Improve The Accuracy of PMF-FFT Doppler Frequency Estimation	1683
	SUN Xiyan, HU Xunxiong, JI Yuanfa, GUO Ning	
20210493	Research on Tracking Robot Based on Depth Camera Yi Liu, Chunchao Chen	1688
20210494	An Improved BoxInst Model for Plane Instance Segmentation in Remote Sensing Images	1694
	Shangzheng Jiang, Qingzhong Jia, Fengkun Luo, Tao Yang	
20210495	Research on Wireless Power Transmission in Coal Mine Based on Explosion-Proof Safety	1700
	Jijian Meng	
20210496	Research and improvement of deep learning tool chain for electric power applications	1705
	He Yang ,Long Lin, Cuncun Shi, Yue Wang	
20210497	Design of Dual-Band CTS Antenna for Ku/Ka Satellite Receiver Rui Yang,Xue Lei,Jun Gao,Mingyang Zhao,Penghui Wei	1711
20210498	Observer-based multiplicative passive control for a class of uncertain time-delay sampled-data system	1716
	Shigang Wang, Yongli Bi, Wenjuan Qi, Xueliang Wang	
20210499	Feasibility Study of Force Feedback in Gear Transmission Fault Monitoring Peng Zhao, Yingjun Li, Fajia Li, Guicong Wang	1721
20210500	Wideband Circularly Polarized Arrow-Shaped Waveguide Slot Array Antenna Hai Wang, Tiandong Duan, Xue Lei, TianPeng Li, Jun Gao	1726
20210503	Terminal Sliding Mode Control of Permanent Magnet Synchronous Motor Based on A Novel Adaptive Reaching Law	1731
	Chang Xu, Kun Wang, Xueqin Yang, Binbin Zhang	
20210504	A Parallel Optimization Method for KCF based on Inter-core Communication of Multi-core DSP	1736
	Wancang Wu, Qingzhong Jia, Fengkun Luo, Tao Yang, Hong Huang	
20210505	Research on hot spots of entrepreneurship of Chinese college students based on text analysis	1741
	Yanhui Feng, Yonghui Dai, Ziyan Wu, Peng Jiang	

20210508	L21-Norm-Based Common Spatial Pattern with Regularized Filters  Jingyu Gu, Qian Cai, Weiqiang Gong, Haixian Wang	1746
20210510	A Method of Polyphone Disambiguation Based on Semantic Extension <i>Qi Wang</i>	1752
20210511	An Energy Management Method of Electric Vehicles Based on Stochastic Model Predictive Control  Yande Li	1757
20210513	Development of accurate and effective software for $4\pi\beta$ - $\gamma$ coincidence counting <i>Ke Zhong, Yukun Li, Kezhu Song</i>	1762
20210514	AMO-Net: abdominal multi-organ segmentation in MRI with a extend Unet Chao Jia, Jianjing Wei	1770
20210515	Research on Stock Market Analysis Based on Deep Learning Allam Maalla, Chong Yao Zhuang, Qin Hui Feng, Lu Shen	1776
20210516	Research on Financial Data Analysis Based on Applied Deep Learning in Quantitative Trading	1781
	Allam Maalla, ChongYao Zhuang,QinHui Feng	
20210518	A Study of Effects of Teaching Styles on Student Engagement: Evidence from E-learning	1786
	Xing Long Xie, Wei Xian Xue	
20210519	Unsupervised Domain Adaptive Object Detection Based on Channel Recalibration and Ancillary Net	1795
	Qin Wang ,Siyu Jiang,Le MA ,Chunyun Zheng,Xiaolei Su,Ruihao Shi	
20210520	A Method for Detecting Micro-scale Weld Defects in Complex Background Hongquan Jiang ,Pengxing Wang ,Jianmin Gao ,Huyue Chen ,He yang ,Zhiguang Shi ,Deyan Yang	1800
20210521	Chinese Proprietary Domain Text Named Entity Recognition  Changzhe Li, Xiaojing Liu	1805
20210522	GLONASS Signal acquisition Based on Analog to Information Convertor Guodong He, Maozhong Song, Shanshan Zhang, Ting Jiang, Huiping Qin	1810
20210524	Application of PID Tracking Control in Inverted Pendulum System  Lingfei Duan, Xiong Su, Youyuan Tang, Houping Yang, Hongqiao Zhang	1815
20210527	Dynamic Inversion controller design for BTT Missile Based on Sliding Mode control  Bin Huang, Yongshan Liu, Anran Xu	1820
	U, U	

20210528	Energy consumption optimization based on Endirichlet distribution in Mobile crowd sensing	1825
	Zhi gang Jia, WeiweiZhao,ChangjingXu,Jie Luo,Bing Ren	
20210529	Detail Modeling research and experimental verification of wound pouch lithium-ion battery	1831
	Jie Qu ,Chao Wang	
20210530	Single Image Super-Resolution with U-Net Generative Adversarial Networks <i>Yin Wang</i>	1835
20210531	Multi-step breast mass image segmentation method based on MFC-PCNN Ruifeng Huang ,Jing Lian ,Caixia Zhang	1841
20210532	Research on Anti-jamming Simulation based on Circular Array Antenna Dashuang Yan, Shuyan Ni	1848
20210533	A People Recognition Method Based on Face and Body Information Nan Wang, Qingyu Sun	1854
20210534	E-Unet++: A Semantic Segmentation Method for Remote Sensing Images <i>Yintu Bao, Wei Liu, Ouyang Gao, Zhikang Lin, Qing Hu</i>	1858
20210535	Specific Emitter Identification Based on Two Residual Networks  Lingzhi Qu, Junan Yang, Hui Liu, Keju Huang, Pengjiang Hu, Xiang Li, Yu  Zhang	1863
20210536	Towards Application-aware Resource Allocation for Virtual Data Centers Saleem Karmoshi, Fekri Saleh, Shuangwu Chen	1870
20210537	Application Model of Video Surveillance System Interworking Based on Blockchain	1874
	Jingwen Li, Xiaoou Liu, Jun Zhao, Wei Liang, Lening Guo	
20210538	An adaptive triangulation optimization algorithm based on empty circumcircle Lianhong Shen, Zhongshan Yang, Shougang Hao	1880
20210539	Research on Road-Network Traversal of Fixed-Wing Multi-UAV in Urban Environment	1885
	Tianhe Lu, Li Liu	
20210541	SINR maximization in MIMO radars using Riemannian quasi-Newtown optimization	1891
	Haoming Zhu, Qihang Zhou, Weijian Zhang, Weijie Xiong, Jinfeng Hu	
20210543	MIMO Radar Waveform Design with Robust Interference Suppression Capability	1896
	Kai Zhong, Qihang Zhou, Weijian Zhang, Weijie Xiong, Jinfeng Hu	

20210546	Semi-supervised Semantic Segmentation Network based on Knowledge Distillation Weizhen Wang	1900
20210548	Application of Hermite Interpolation Finite Element Method in Two-dimensional Ion Flow Field Calculation	1906
	Baojia Deng,Shiling Zhang,Zi Zhang ,Wenyan Gan,Xiaoxiao Luo,Jieli Xu	
20210549	A Modified Method for Welding Seam Location of Tube-Sheet Welding Based on Image Edge Segmentation	1913
	Hanmin Ye, Yingzhi Liu, Keqin Su	
20210550	Complex Division By Baudhayan Triplet Algorithm Using Novel State Of The Art USP-Awadhoot Divider	1918
	Udayan Patankar,Dr Ants Koel ,Sunil Patankar ,Miguel E. Flores	
20210551	Research on Intelligent Cognition Method of Missing status of Pins Based on attention mechanism	1923
	LI Weitao, GUAN Huimin, ZHANG Qian, WU Gang, TANG Jian, DING Meishuang	
20210553	Research on Plant Disease Detection Technology Based on Wireless Sensor Network	1928
	Zhiqing Yang, Hanmin Ye, Yingzhi Liu	
20210554	Analysing Effective Connectivity of the Math-gifted Brain with Nonlinear Granger Causality	1932
	Xiang Jiang, Haixian Wang	
20210555	Building contour regularization method based on ground LIDAR point cloud data Lijiao Li, Hairong Yan	1937
20210556	The Study on Online SSVEP based BCI system using CCA method Yingqiong Yong, Boyu Zang, Jia Yang , Shengjia Li	1942
20210559	Verification Code Recognition Based on Convolutional Neural Network Qian Tian, Qishun Song, Hongbo Wang, Zhihong Hu, Siyu Zhu	1947
20210560	Lithium-ion Battery Remaining Life Prediction Method Based on Hybrid Algorithm  Guowei Tong, Jia Cai, Linyi Huang, Xundao Zhou, Binhui Liu	1951
20210561	Optimization of ADRC Parameters Based on Particle Swarm Optimization Algorithm	1956
	Zhiliang Chen, Yunfei Li , Yongli Zhang	
20210562	Research on Batch Detection Technology of Common Network Security Vulnerabilities in IoT Terminals  Mingxuan Li, Zhushi Yang, Xu Wang , Ling He, Yangxin Teng	1960

20210566	Engine oil quality analysis based on probabilistic neural network  Hui Lian, Zhiyu You, Rong Zhang, Tao Zhou, Yan Xia	1963
20210567	Analysis of Influencing Factors of Technical transformation Project Cost Based on PCA-ISM	1967
	Yujie Xu,Haiyu Qi, Lei Shi	
20210568	Image Enhancement Method Based on Bi-cubic Interpolation and Singular Value Decomposition	1972
	Hanmin Ye, Keqin Su,Yingzhi Liu	
20210569	Research on Space Mosaic Reconfigurable System Based on MAS Gangxuan Hu,Xinhong Li,Guohui Zhang	1977
20210570	Analysis of the Application of 5G Technology in Spacecraft Testing Baowei Tang, Lu Yang, Haixia Su, Junwei He	1982
20210571	Research on Overvoltage Identification Method of EMUs High Voltage Electrical System Based on Deep Learning	1985
	Jiapeng Yang,Shaobing Yang ,Kejian Song,Zhuoming Liu	
20210573	Multi Factor Quantitative Stock and Transaction Timing Selection Model Based on Information Coefficient Mean Value Scoring	1991
	Yiting Zheng, Wei Nai, Yilei Ren	
20210574	Development Study on CBTC Related Techniques Based on Systematically Analyzing Granted Patents of Alstom Company	1997
	Shuo Ma, Jiajun Chen, Zekai Li, Wei Nai, Yidan Xing	
20210575	Research on User Action Recognition Method Based on parallel CNN-BiLSTM neural network	2003
	Minjie Wu, Zhiling Tang	
20210576	Semantic Understanding of Source and Binary Code based on Natural Language Processing	2010
	Zhongtang Zhang ,Shengli Liu ,Qichao Yang ,Shichen Guo	
20210577	Sensor Array Design for Toxic Gas Detection in Electronic Nose System Huan Zhang, Hongli Tai	2017
20210579	Design of a new acoustic Doppler wave and current measurement instrument Yao Puyu, Yang Ying, Zheng Wei, Hui Li, Liu Maoke, Zhao Bin, Zhou Yang	2021
20210580	Advanced Driver Assistance System based on Machine Vision  Jiajun Zhu, Fanglei Shi, Jiaying Li	2026

20210581	Training Samples Set Simplified Method based on Key Frame Extraction Jiguang Mo, Yang Yang, Qiyue Sun, YunXia Liu, Xuesong Gao	2031
20210582	A New Multi-beam Amplitude-Comparison Direction Finding Algorithm based on Gaussian Slope Correction	2037
	Ting Hao, Kang Yang, Mingfeng Zhao, Qichao Zhou, Lei Zhang	
20210585	Comprehensive Evaluation of Emergency Situation after Collisions at Sea Based on Extenics	2042
	Zhihong Ma,Kun Lang,Yingjun Zhang,Shengwei Xing	
20210587	A secure blockchain-based housing rental platform Rong Yu, Zhenqi Wang, Conghui Zhang, Shaopeng Guan	2049
20210588	A Review of Camouflaged Target Detection Research  Tao Wu, Hui Liu, Jingcheng Zhu, Lunwen Wang	2054
20210589	Optimization of small caliber projectile based on neural network WenXuan Ma, Yong Yu,Jun Hu	2060
20210590	Risks prevention and control of university online public opinion based on data clustering algorithm  Yuxiang Zou	2065
20210591	Wild Mushroom Recognition Based on Attention Mechanism and Feature Pyramid  Zhigang Zhang ,Pengfei Yu, Haiyan Li,Hongsong Li	2071
20210592	A Review on Transmission Control Strategies in Energy Harvesting Wireless Sensor Networks	2076
	Qinwen Duan , Xiangyang Liu	
20210593	Research on Control Mode and Perception Model of Intelligent Railway Station Equipment Based on Edge Computing	2085
	Shen Haiyan, Shi Tianyun, Duan Jiaying, Yang Guoyuan, Cheng Qingbo	
20210594	Research on Quadruped Gait Planning of Intelligent Robot Fulong Deng, Hanwen Lai, Shicheng Gan, Qihui Zhang	2091
20210595	Research and Implementation of Anti-interference Cluster Communication Technology Based on Competition-center Network	2096
	Haiwang Zhao	
20210596	Design of Low-power Portable Multi-function Digital Oscilloscope Xueli Zhou, Yuke Tian, Jie Shi, Na Zhao, Yu Yang	2101
20210597	Simulation and Analysis of the Influence of Artificial Interference Signal Style on Wireless Security System Performance  Jing Mu, Xia Jia	2106

20210598	Time synchronization method based on time interval measurement ChenXiaomao, LiuChunfei, FanYiwei, GuoNing	2110
20210599	Review of Dim Small Target Detection Algorithms in Single-frame Infrared Images	2115
	Ke Zhang,Shuyan Ni,Dashuang Yan,Aidi Zhang	
20210600	Grape Diseases and Pests Named Entity Recognition Based on BiLSTM-CRF Lihua Yan ,Shuqin Li	2121
20210601	Based on the improved YOLOv3 under the Catenary Insulator Image Recognition Xinhui Guo, Liuai Wu	2126
20210602	Research on Improved Synchronous Perturbation Stochastic Approximation Algorithm Based on Double Calculation Step	2131
	Xin Zhang,Jin Zhang ,Hao Guo,Weiguang Zhao ,Yajuan Deng	
20210604	Feature Extraction for Bearing Fault based on Singular Value Product Sequence of Sliding Hankel Matrix	2135
	Chengxu Liu,Ben Niu,Lin Liang	
20210605	Obstacle avoidance based on skeleton for the redundant Manipulator Lan Ye, Chao Sun	2140
20210606	Twitter Rumor Detection Technology Based on Hierarchical Capsule Network Wang Caiyun, Sun Xuemei, Rong Chuitian, Li Dong	2145
20210609	Design of Temperature Data Acquisition and Information Processing System based on Mathematical Method  Xinwen Zhang, Weihuo Li	2150
20210610	Based on the improved YOLOV3 small target detection algorithm Fengling Wang, Junyu Su	2155
20210618	Application of Improved Single Neuron Adaptive PID Control Method in the Angle Predefined Loop of Active Radar Seeker for Anti-radiation Missile Fei Ma, Juanzhi Lu, Lin Liu, Yi He	2160
20210619	The control method for rotating missile with three pieces of steering wings Juanzhi Lu ,Feng Wang ,Jun Ma ,Zhiqiang Yan ,Lin Liu	2165
20210622	Research on the Optimization Strategy, Model and Method of Station Deployment for Accurate Positioning in Communication Blind Zone	2170
	Lu Yulong, Shen Haiyan, Xie Yalong, Yang Xinglei, Yang Lingling	
20210149	Design And Implementation of an Efficient Wireless Channel Simulator Zhang Taotao, Tang Yunge, Qiao Huidong, Cui Jianling, Dong Shuli	2175