2021 2nd International Conference on Artificial Intelligence and **Computer Engineering (ICAICE 2021)**

Hangzhou, China **5-7 November 2021**

Pages 1-444



IEEE Catalog Number: CFP21Z07-POD ISBN:

978-1-6654-2187-4

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:
 CFP21Z07-POD

 ISBN (Print-On-Demand):
 978-1-6654-2187-4

 ISBN (Online):
 978-1-6654-2186-7

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



2021 2nd International Conference on Artificial Intelligence and Computer Engineering (ICAICE) ICAICE 2021

Table of Contents

rfacexxii	
viewers xxiv	
ession 1: Artificial Intelligence Technology and Algorithm Deep earning)eep
nmary and Experiment on the Exploration of Brain Tumor Image Classification Recognition: tial Experience of Artificial Intelligence Technology	nition: 1
search Progress of Monitoring System Based on Wearable Fall Detection Equipment for The lerly ϵ	
Yanli Li (China Jiliang University, China), Pengda Liu (China Jiliang University, China), Ruihan Xiang (China Jiliang University, China), and Julong Pan (China Jiliang University, China)	
proved DV-Hop Node Location Optimization Algorithm Based on Adaptive Particle Swarm 11 Bingquan Chen (Wuhan Institute of Technology, China), Xingfeng Guo (Wuhan Institute of Technology Electrical, China), Yuanfeng Huang (Wuhan Institute of Technology, China), and Mingrun Yang (Wuhan Institute of Technology, China)	warm11
tomatic Classification of Chinese Long Texts Based on Deep Transfer Learning Algorithm 17 Yuanxi Li (Jiangsu Research and Development Center of Application Technology for Wireless Sensing System, China)	thm 17
alysis of Library Loan Records Based on Hybrid Apriori- Genetic Algorithm	21
xing Pooling Instead of Class Token Representation Learning for Vision Transformer	25

An Improved Yolov5 Marine Biological Object Detection Algorithm	9
An Gradient-Based Continuous-Time Trajectory Optimization Method for Real-Time Collision Avoidance on Collaborative Robot	5
Research on the Scheduling Strategy of Intelligent Manufacturing Workshop Based on Machine Learning	9
A Firefly Optimization Fault-Tolerant Control Algorithm for 4500m Human Occupied Vehicle 44 Xiaotong Yan (Shanghai Maritime University, China), Daqi Zhu (University of Shanghai for Science and Technology, China), and Weize Zhou (Shanghai Maritime University, China)	4
A Blockchain-Based Smart Agriculture Privacy Protection Data Aggregation Scheme	9
ntelligent Repair Method of Old Movie Speckle Noise Based on AI Deep Learning	3
mproved Method of Multi-Objective Particle Swarm Algorithm Learning Factor Based on Fitness Change	7
Research on Crack Image Detection Method Based on Improved Otsu Algorithm	4
The Research of Loop Closure Detection Algorithm Based on DeepLabv3+	2
COVID-19 Image Diagnosis on CT Images Using Deep Learning	7
Application of AI Technology in Management Engineering	1

An Improved Mutation Operator Which Can Improve the Performance of Genetic Algorithm 8 Yingying Song (Dalian University) and Feifei Yan (Dalian University)	85
A Deep Learning Method for Pneumonia Detection Based on Fuzzy Non-Maximum Suppression 8 Hongli Wu (China Jiliang University, China), Mingzhu Ping (Zhejiang Dahua Technology Co., Ltd, China), Huijuan Lu (China Jiliang University, China), and Wenjie Zhu (China Jiliang University, China)	89
Research Progress of Automatic Driving Path Planning Yuxuan Huang (Shanghai Institute of Technology, China) and Dashan Chen (Shanghai Institute of Technology, China)	95
CNN Implementation on Major Skin Cancer Types Classification and NLP Diagnose Robot System 100 Yujia Guo (Beijing University of Posts and Telecommunications, China), Zijian Ye (Beijing University of Posts and Telecommunications, China), Xizheng Yu (University of Wisconsin-Madison, United States), and Yuze Zhao (Fujian Normal University, China)	•••
Classification and Identification of Domestic Catsbased on Deep Learning	06
SinGlow: Singing Voice Synthesis with Glow: Help Virtual Singers More Human-Like	11
Adaptive Fusion Link Prediction Algorithm Based on Non-Equilibrium Resource Allocation Index	15
A new Method for Detecting COVID-19 Combining Deep Learning with Improved Histogram Equalization and Median Filter	19
An Improved Faster RCNN Marine Fish Classification Identification Algorithm 12 Yuhang Li (Shanghai Maritime University, China), Daqi Zhu (Shanghai Maritime University, China), and HaoDong Fan (Shanghai Maritime University, China)	26
Keyword Extraction Method of Text Combining Random Walk and Variational Inference	30
Application and Existing Problems of Computer Network Technology in the Field of Artificial Intelligence	39
Application Analysis of Artificial Intelligence in Hospital	43

Data Enhancement for Melanoma Classification	49
BPNN Anomaly Data Detection Algorithm Based on Gray Wolf Algorithm to Optimize K-Means Clustering	56
Generalized Power Flow Algorithm for Multi-Energy Flow New Distribution Network	62
Unsupervised Cross-Domain Target Detection and Recognition System Based on Deep	68
Parameter Factorial Weighting of Federated Learning: Center-Client Access Strategy and Application Design	74
A Snoring Signal Enhancement Algorithm Based on OM-LSA and Subspace	7 8
Application of Deep Learning in Intelligentization of Power System Vulnerability Knowledge Graph	85
CNN Based Music Emotion Recognition	90
Improved YOLOv5 with BiFPN on PCB Defect Detection	96
A Wearable Fall Detection System Based on 1D CNN	00

Adversarial Learning Based on Global and Local Features for Cross-Modal Person Re-Identification	204
A Quantitative Analysis Method of Influencing Factors of Railway Goods Arrival Time	208
Application of Varint_LZW Encoding Algorithm in Image Compression Yi Wei (China Jiliang University, China), Jianfei Zhang (China Jiliang University, China), and Ying Tang (China Jiliang University, China)	212
Design and Implementation of Pork Freshness Grading Based on Deep Learning	216
Hua Guo-cai-rang (Qinghai Normal University, China; Qinghai Key Laboratory of Tibetan information processing and machine translation, China; Qinghai Tibetan information processing engineering technology research center, China; State Key Laboratory of Tibetan intelligent information processing and application, China), Secha Jia (Qinghai Normal University, China; Qinghai Key Laboratory of Tibetan information processing and machine translation, China; Qinghai Tibetan information processing engineering technology research center, China; State Key Laboratory of Tibetan intelligent information processing and application, China), Ban Ma-bao (Qinghai Normal University, China; Qinghai Key Laboratory of Tibetan information processing and machine translation, China; Qinghai Tibetan information processing engineering technology research center, China; State Key Laboratory of Tibetan information processing and application, China), and Cai Rang-jia (Qinghai Normal University, China; Qinghai Key Laboratory of Tibetan information processing and machine translation, China; Qinghai Tibetan information processing engineering technology research center, China; State Key Laboratory of Tibetan intelligent information processing and application, China)	221
Review and Prospect of Determination Methods of Water Content in Crude Oil	227

Design and Implementation of China's Ancient Silk Road Platform Based on Human-Computer Interaction	231
Lin Yang (Beijing Institute of Graphic Communication, China), Hou Shu (Beijing Institute of Graphic Communication, China), Wei Song (Beijing Institute of Graphic Communication, China), Ziyao Li (Beijing Institute of Graphic Communication, China), Xinrui Li (Beijing Institute of Graphic Communication, China), and Shan Zhao (Beijing Institute of Graphic Communication, China)	201
Chinese Named Entity Recognition via Multi-Channel Attention of Lexicon	235
Application Research for Train Intelligent Rescheduling Based on the Improved TLBO Algorithm Xiaozhao Zhou (Signal & Communication Research Institute, China Academy of Railway Sciences Corporation Limited, China), Qi Zhang (Signal & Communication Research Institute, China Academy of Railway Sciences Corporation Limited, China), and Tao Wang (Signal & Communication Research Institute, China Academy of Railway Sciences Corporation Limited, China)	241
Autonomous Navigation for Indoor Mobile Robots Based on Reinforcement Learning	. 246
Detection of Violations in Construction Site Based on YOLO Algorithm BinBin Chen (China Jiliang University, China), XiuHui Wang (China Jiliang University, China), GuanCheng Huang (China Jiliang University, China), and GuangYan Li (China Jiliang University, China)	251
Image Classification on Hurricane Damage Prediction via Deep Learning Methods	256
Multi-Rotor UAV Autonomous Tracking and Obstacle Avoidance Based on Improved DDPG Wen Chao (Air Force Engineering University, China), Dongwen Han (Air Force Engineering University, China), and Xiewu Jie (Air Force Engineering University, China)	. 261
Active Learning-Based Optimization of Scientific Experimental Design	268
An Unsupervised Driving Behavior Pattern Recognition Algorithm Based on Clustering and LDA Model	275
Post Earthquake Path Planning Based on Improved Ant Colony Algorithm Yalong Li (Anhui Earthquake Agency, China), Jie Zhang (Anhui Earthquake Agency, China), Wei Wang (Anhui Earthquake Agency, China), Jing Sun (Anhui Mengcheng National Geophysical Observatory, China), and Jie Wan (Anhui Mengcheng National Geophysical Observatory, China)	284

Algorithm of Bioenergy Production from Localized Municipal Waste Biomass
Session 2: Computer Model Prediction and Neural Network Research
Hurricane Damage Prediction Based on Convolutional Neural Network Models
BootstrapNet:An Contrastive Learning Model for Sleep Stage Scoring Based on Raw Single-Channel Electroencephalogram
Multi-Scale Modeling of the Lithium Battery Energy Storage System
A Graph Convolutional Network-Based Approach for Community Detection in Attributed Networks
Design of Smart Service System Based on Kano Model and Calculation of Importance of Function
Dynamic Bi-Level Optimal Planning Method for Microgrid Considering Dispatching Strategy 327 Xiuling Wu (State Grid Ningbo Power Supply Company, China), Shaojun Wang (State Grid Ningbo Power Supply Company, China), Yuzhe Xie (State Grid Ningbo Power Supply Company, China), Dan Zhou (Zhejiang University of Technology, China), and Shangren Chen (Zhejiang University of Technology, China)
Using Machine Learning to Identify Epidemic Threshold in Complex Networks

MSLCNet: A Multi-Stream Locally-Connected Neural Network For Surface Electromyography Based Hand Movement Recognition Wentao Wei (Nanjing University of Science and Technology, China), Yiguo Yin (Nanjing University of Science and Technology, China), Yanan Tang (Nanjing University of Science and Technology, China), and Runze Fu (Nanjing University of Science and Technology, China)	337
Convolutional Neural Networks for Image Classification	342
Span-Adaptive Transformer for the Cascade Relation Triple Extraction	346
Applying Active Learning in Music Popularity Prediction	355
An Intelligent Evaluation Method of Design Scheme for Electromagnet Quality Based on ELECTRE II	359
A Self-Augmented Radial Basis Function Neural Network for Sensitive Systems Yanxia Yang (Beijing university of technology), Pu Wang (Beijing university of technology), Xuejin Gao (Beijing university of technology), and Huihui Gao (Beijing university of technology)	363
A Deterministic Complex Network Model: Generate Modules Spontaneously and Keep Splitting Cong Dong Wang (China JiLiang University, China) and Cui Yu (China JiLiang University, China)	368
Efficiency for Face Mask Detection in Neural Network	373
A General Multi Time Scale Spatiotemporal Compound Model for EEG Classification	377
E-Government Research Hotspots and the Implication Based on Bibliometrics and Latent Dirichlet Allocation Topic Model Jing Wang (China Center for Information Industry Development, China), Li Chen (Chinese Academy of Agricultural Sciences, China), Mo Wang (Chinese Academy of Agricultural Sciences, China), and Yulun Song (Unicom Digital Tech, China)	382
Hurricane Damage Prediction on Satellite Imagery Based on Neural Networks	386
Nonlinear Fitting Based on BP-Neural Network for Prediction of Commodity House Prices in Beijing	391

Weighted Deformable Convolution Network with IOU-Boundary Loss for Solid Waste Detection . 4 Beibei Zhao (Tongji University, China) and Xiong Xu (Tongji University, China)	102
Simulation of Prevention and Control of COVID-19 Epidemic Based on Computer Modeling 4 RuiYang Wang (Southwest Petroleum University, China)	408
Data Mining Application in Infrared Countermeasures 4 Bian Chen (Air Force Engineering University, China), Youli Wu (Air Force Engineering University, China), and Xin Wu (Air Force Engineering University, China)	413
Research on Machine Translation Strategy in Low Resources	417
Feature Extraction and Early Warning of Coal Mine Gas Disaster Based on Data Analysis	421
Audio Replay Spoof Attack Detection Using A GMM-RFPNN Model as Back-end Classifier 4 Kaikai Qi (Tianjin University of Technology, China), Wei Huang (Tianjin University of Technology, China), Dan Wang (Tianjin University of Science and Technology, China), and Honghao Zhang (Tianjin University of Technology, China)	12 5
Brain Tumor Diagnose Applying CNN Through MRI	1 30
The Tracking Control of Autonomous Underwater Vehicle Based on FA - Model Predictive Control	435
Sleep Staged Method Based on 2D CNN-MEMM Model	44 0
Classification of Lung Nodule Malignancy on CT Images Using Convolutional Neural Network 4 Wenbin Su (Nanyang Technological University, Singapore), Qianxue Jiang (Shanghai Jiao Tong University, China), Yanchen Jing (Rutgers University, United States), and Xiaorun Zhu (New York University, United States)	14 5
Using Machine Learning Forecasts Movie Revenue	4 55
Arrhythmia Classifier Using Convolutional Neural Network with Adaptive Loss-Aware Multi-bit Networks Quantization	461

Research on Classification of Respiratory Diseases Based on BiGRU and CNN Cascade Neural Network	168
Yuming Zhu (China Jiliang University, China) and Wenlong Xu (China Jiliang University, China)	100
Analysis of Volatility Characteristics of Chinese and American Financial Markets Based on SV Model	472
Research on Fake Reviews Detection Based on Feature Construction and EasyEnsemble-RF Xunyi Ren (Nanjing University of Posts and Telecommunications), Ziyan Yuan (Nanjing University of Posts and Telecommunications), and Jiaming Huang (Nanjing University of Posts and Telecommunications)	478
Hurricane Damage Detection Using Convolutional Neural Network and Customized KNN	483
Low-Resource Machine Translation Based on Fusion Drop Method	488
PSOU-Net: A Neural Network Based on Improved Particle Swarm Optimization for Breast Ultrasound Image Segmentation	491
Modeling Neural Networks Training Process with Markov Decision Process Yantao Bai (Key Laboratory of Software Engineering for Complex Systems National University of Defense Technology, China), Wanwei Liu (College of Computer Science National University of Defense Technology, China), Xinjun Mao (Key Laboratory of Software Engineering for Complex Systems National University of Defense Technology, China), and Zhen Liang (Institute for Quantum Information & State Key Laboratory of High Performance Computing National University of Defense Technology, China)	499
Prediction of NASDAQ Index Based on Stacking Method	505
Temporal Feature Enhancement Module for Action Recognition GuanCheng Huang (China Jiliang University, China), XiuHui Wang (China Jiliang University, China), BinBin Chen (China Jiliang University, China), and GuangYan Li (China Jiliang University, China)	511
A Judgement Model of the Traditional Chinese Medicine's Quality Based on Ensemble Algorithms Linjie Xiao (Peking University, China), Peng Jiao (Beijing Academy of Blockchain and Edge Computing, China), and Guanyu Chen (Beijing Academy of Blockchain and Edge Computing, China)	515

Cross-Scene Relationship Mining with Learning Graph Net for Hyperspectral Image Classification	519
Junbin Chen (China Jiliang University, China), Minchao Ye (China Jiliang University, China), Huijuan Lu (China Jiliang University, China), and Ling Ling Lei (China Jiliang University, China)	
Bidirectional LSTM Model in Predicting Satisfaction Level of Passengers on Airline Service	525
Skin Cancer Classification Based On Convolutional Neural Network	532
Cloud Detection from the Hyperspectral Infrared Radiation Using Random Forest Model	541
Causal Network Structure Analysis of Pharmaceutical and Biological Industry Under the COVID-19	551
Yulian Li (Wuhan University of Science and Technology, China) and Yongmei Ding (Wuhan University of Science and Technology, China)	
Study on Hydrodynamic Characteristics Prediction Technology of Deep-Sea Crude oil Transfer Multi-Floating System	556
A Study of the Framework of Smart City Management System Construction Yanping Xiao (Logistical Research Institute of Science and Technology, China), Puheng Zhang (Logistical Research Institute of Science and Technology, China), Ting Wang (China Highway Engineering Consulting Corporation, China), Ting Li (China Highway Engineering Consulting Corporation, China), and Zhangliang Song (China Highway Engineering Consulting Corporation, China)	566
Online Florist System Based on JavaWeb Meng Chen (Jianghan University, China), Tao Liu (Weifang University of Science and Technology, China), Wuxin Yu (Jianghan University, China), and Jun Gao (Jianghan University, China)	570
Image Style Transfer Based on Improved Convolutional Neural Kun Sun (Xi'an Shiyou University, China), Mingli Jing (Xi'an Shiyou University, China), Yuliag Hu (Xi'an Shiyou University, China), and Yao Jiao (Xi'an Shiyou University, China)	575
The Application of BIM Technology in Construction Projects	580

Session 3: Mobile Electronic Computing and Signal Image Processing

Research on Object Detection Method of Underground Video Image Based on SSD	586
Domain Adaptation Network with Parameter Shared Domain-Specific Attention for Fault Diagnosis	590
On Design and Implementation of Health Reminder System Based on Apple iOS Platform Shiheng Ge (Wenzhou-Kean University, China), Huichao Huang (Wenzhou-Kean University), and Jing-Chiou Liou (Kean University, USA)	594
Adaptively Discriminant Locality Preserving Projection	598
Study on Classification Algorithm of Motor Imagination EEG Signal	605
Panoramic Light Field - Oriented Image Stitching Method with Semantics and Projection Xin Chen (Ningbo University, China), Yeyao Chen (Ningbo University, China), Mei Yu (Ningbo University, China), and Gangyi Jiang (Ningbo University, China)	610
CTFC: A Convolution and Visual Transformer Based Classifier for Few-Shot Chest X-ray	
Images	616
Application of Stacking Ensemble Learning in Option Implied Volatility	623
Mirror Feature Fusion for Salient Object Detection	628
Multi-Objective Stochastic Optimization Planning Method Based on Microgrid	632

A Binocular Location Method Based on Feature Point Matching and Region Pixel Matching	537
Classification of Histopathologic Images of Breast Cancer by Multi-Teacher Small-Sample Knowledge Distillation	642
Cross-Domain Hyperspectral Image Classification Based on Generative Adversarial Networks 6 Zhihao Meng (China Jiliang University, China), Minchao Ye (China Jiliang University, China), Huijuan Lu (China Jiliang University, China), and Ling Lei (China Jiliang University, China)	548
A Partitioning Method for Gamma Gaussian Inverse Wishart Probability Hypothesis Density Filter Using Kolmogorov-Smirnov Test	555
Motor Imagery Analysis Based on Filter Bank Common Spatial Pattern	560
3D Reconstruction Using a Linear Laser Scanner and A Camera	566
A Control Allocation Strategy of Multi-Axle Unmanned Distributed Drive Vehicle	5 74
ICool: One-Stop Service IoT Cloud Platform Han Han (Taizhou University, China), Binbin Zhu (Taizhou University, China), Luyao Zhan (Taizhou University, China), Tiantian Yu (Taizhou University, China), Gangwei Shen (Taizhou University, China), and Ying Chen (Taizhou University, China)	680
ECG Signal Detection via Bidirectional Projection Clustering-Enhanced Hashing	685
An External Contour Extraction Method for Pollen Images Xinyue Zhang (Inner Mongolia University of Technology, China), Shi Bao (Inner Mongolia University of Technology, China), Chuanying Yang (Inner Mongolia University of Technology, China), Shaoying Ma (Inner Mongolia University of Technology, China), and Jingping Yang (Inner Mongolia Baogang Hospital, China)	591

Recognition and Extraction of Cough Sound from Audio Signals	696
Scattering Speckle Information Extraction Network for Aircraft Detection in SAR Images Sizhe Lin (Shenzhen Campus of Sun Yat-sen University, China), Xiaohong Huang (Shenzhen Campus of Sun Yat-sen University, China), and Mingwu Li (Shenzhen Campus of Sun Yat-sen University, China)	700
Face Detection Under Non-Uniform Low Light Based on Improved MTCNN	704
Multi-Task Medical Image-to-Images Translation Using Transformer for Chest X-Ray Radiography	708
Phishing Website Detection Based on Multi-Feature Stacking Qiang Hu (China Jiliang University, China), Hangxia Zhou (China Jiliang University, China), and Qian Liu (China Jiliang University, China)	716
SRM-Based Service Discovery Method in Information System Architecture Design	721
Infrared Dim Small Target Tracking Based on Inter-Frame Consistency Under Complex Background Heng Zhou (Xidian University, China), Zhaoyu Zhang (Xidian University, China), Zhiheng Chen (Xidian University, China), Yongqiang Xie (Institute of Systems Engineering, China), and Zhongbo Li (Institute of Systems Engineering, China)	728
Distributed Storage System for Small Files Xue Gao (Beijing University of Posts and Telecommunications, China) and Peng Xu (Beijing University of Posts and Telecommunications, China)	736
Diagnose COVID-19 Based on CT Images Using Transfer Learning	740
Measurement and Analysis of Single Video Camera-System in Clamp-Band Unlocking Test Xue Long (Beijing institute of structure and environment engineering, China), Zhuomao Zhao (Beijing institute of structure and environment engineering, China), Zeyu Yang (China academy of launch vehicle, China), Yue Gao (Beijing institute of structure and environment engineering, China), Feng Xue (Beijing institute of structure and environment engineering, China), and Yang Yu (Beijing institute of structure and environment engineering, China)	74 5
A Robust Human-Machine Hybrid Visual Tracking System	749

Research on the Control Method of Emergency Microgrid's Quick Restoration of Power Supply 75 Yuzhe Xie (State Grid Ningbo Power Supply Company, China), Yanhua He (State Grid Ningbo Power Supply Company, China), Sipei Chen (State Grid Ningbo Power Supply Company, China), Zhi Li (State Grid Ningbo Power Supply Company, China), and Yan Zhang (Ningbo Electric Power Design Institute, China)	i3
SAR Ship Detection Based on Enhanced Attention Mechanism	9
Active Contour Driven by Region Fitting and Laplacian for Image Segmentation	3
Target Magnetic Anomaly Signal Recognition Based on a Fusion Algorithm	7
Image Detection of Dental Diseases Based on Deep Transfer Learning	'4
Automatic Classification of Childhood Asthma and Pneumonia Based on Cough Sound Analysis . 77 Li Yue (China Jiliang University, China) and Wenlong Xu (China Jiliang University, China)	'9
An Image-Based Measuring Technique for the Prediction of Human Body Size	4
Radar Signal Recognition Under Impact Noise Based on Convolutional Neural Network	0'
h-Restricted Connectivity of BCuben, k Data Center Networks	7
Image Translation Based on Attention Residual GAN	12
Dual-Forwarding Routing Protocol for Wireless Body Area Network Based on Energy Harvesting. 80 Chuangfan Wu (China Ji Liang University, China) and Jin Tan (China Ji Liang University, China)	16

Discriminative Feature Extraction and Enhancement Network for Low-Light Image
Generating Adversarial Examples for Robust Deception Against Image Transfer and Reloading 817 Chuan Zhou (Chinese Academy of Sciences, China), Duohe Ma (Chinese Academy of Sciences, China), Tianwei Zhang (Nanyang Technological University, Singapore), and Liming Wang (Chinese Academy of Sciences, China)
EEG-Based Confusion Recognition Using Different Machine Learning Methods
Ontology Construction and Application Based on Internet Financial Risk Management
Generation and Elimination of Antenna Effect
Research on the Construction of Teenagers' Virtual Self-Efficacy Under Computer Games
A Configuration Analysis Method of High-Speed Railway Train-set Equipment Based on Handle . 846 Peng Sun (China Academy of Railway Sciences, China) and Hui Wang (China Academy of Railway Sciences, China)
Study of Primary Frequency Regulation Characteristics for Thermal Power Units Under Deep Peak Shaving Condition
Color Calibration Method for Images Taken by Different Imaging Conditions Which Suppresses False Color
Thwart Physical and Digital Domain's Adversarial Attack Methods on Face Detection

Numerical Simulation of Spray Pressure on Atomization Characteristics of Water Mist Nozzle 872 Shiwei Fang (Tianjin University of Commerce), Wanfu Liu (Tianjin University of Commerce), Wuqin Qi (Tianjin University of Commerce), Xingbo Li (Tianjin University of Commerce), Peng Wang (Tianjin University of Commerce), and Zhenfeng Qi (Tianjin University of Commerce)
Research on Evacuation of People in Quasi-Rectangular Subway Tunnel Fire Environment Based on Pathfinder Software
Research on Numerical Simulation of Double Axial Flow Pump Passing Through Sand Dune 882 Li Zou (Dalian University of technology; Collaborative Innovation Center for high-tech ships and deep-sea development equipment, China), Junwei Dong (Dalian University of technology, China), Huaibin Zhao (Dalian University of technology, China), Xinyu Ma (Dalian University of technology, China), and Yelin Gao (Dalian University of technology, China)

Author Index