

Contents

Surveys

Chemics

- Development of Ambient Pressure Ionization Technology ZHANG Yi-han, MA Tao-tao, WANG Rong-hao, LIU Jun-hui, SUN Shi-hao, ZONG Yong-li, ZHANG Jian-xun(15)

Astronomy and Geosciences

- A Review on the Safety Early Warning Model of Rainfall-induced Landslide LIU Ai-hua, LIN Ze-yu, ZHANG Wei(29)

Papers

Chemics

- Determination of Two Synthetic Cannabinoids in Hair by High Performance Liquid Chromatography-tandem Mass Spectrometry LI Chao, XU Duo-qi, WANG Ji-fen, QIN Shi-yang, XIN Guo-bin, WANG Yan-yan(34)

Astronomy and Geosciences

- Matching Method of Linear Vector Data Based on Support Vector Machine and Scale-invariant Feature Transform Algorithm CHU Xiao-rong, LU Yue-feng, CHEN Kun, LU Li-juan, FAN Jun-fu(41)

- Analysis on Spatial and Temporal Characteristics of Land Use Dynamic Change from 2003 to 2018 in Chenggong, Kunming WANG Yi-zhu, HUANG Liang(49)

- Simulation Analysis of Hongtuchuan Landslide in Haiyuan Earthquake Quasi-static Strength Reduction Method YAN Dong-han, BO Jing-shan, LI Xiao-bo, PENG Da(55)

- Major Element Geochemical Features of Sandaogou Loess Section in Jingbian County, Northern Shaanxi Province ZHANG Pei-xin, WANG Pan, YANG Zhen-jing, SHI Ying-chun, SONG Chao, GUO Jiao, DONG Qiu-yao, CHEN Hong-yun(63)

- Cycling Effect on Rock Mass Properties of Mati Temple Grottoes QIAO Zhen, WANG Feng-rui, WANG Jie, ZHU Duo-yan(70)

Medicine

- Characteristics of Airway Resistance Changes after Treatment in Acute Exacerbation of Chronic Obstructive Pulmonary Disease Patients ZHANG Xiang, ZHU Shu-yang(75)

- The Effect of Acute Treatment on Cognitive Function of Schizophrenia and Its Correlation with Symptoms Changes JIA Min, DONG Qian, WANG Wei, MA Qing-yan, DONG Ying-ying, JIAO Xiang, WEN Bing-long, GAO Cheng-ge(80)

General Industrial Technology

- Correlation Experimental Research on Pressure Fluctuation Signal in Wind Cap of Fluidized Bed LI Hai-guang, HAO Xiao-nao, CHEN Wei-peng, WU Xuan(87)

- Mechanical Properties Modeling and Parameters Influence Analysis of a New Spring-supported Dielectric Elastomer Actuator MAO Bo-yong, XIE Shi-lin, SU Jian-jun, ZHAI Xing-hui(93)

- Effect of Water Quality on the Development of Latent Fingerprint

Volume 19 Number 28(Sum 497)

by Physical Developer

- HAO Ye-zi, LUO Ya-ping, ZHAO Ya-bin(100)

- Repeated Low Velocity Impacts on Honeycomb Sandwich Panels and Residual Strength after Impacts

- ZU Zheng, YUAN Tian-yu, TANG Shuang-shuang, DAI Xiang-jun(109)

Mining and Metallurgical Engineering

- Experimental Study on Electrode Ultrasonic Vibration Composite Mixed Powder Electrical Discharge Machining

- ZHAO Yu-tian, SHAO Yun-peng, ZHU Xi-jing, CUI Xue-liang, LI Xiang-meng, TONG Zhi-hong(115)

Petroleum and Natural Gas Industry

- Flow Field Characteristics of PDC Bit Nozzle Inclination Angle Combination HE Pei, WANG Guo-hua, LU Zhao-hui, PAN Lin-hua, TAN Jun(121)

- Main Controlling Factors of the Under-injection Wells in Chang 8 Reservoirs of Jiyuan Oilfield DENG Zhi-ying, SONG Zhao-jie, CHENG You-you, WANG Yong, HUANG Bao-jie, CAO Jian-jun(128)

- Performance Evaluation of Special Polyimide as Oilfield Tube Coating MAO Jin-cheng, HAN Di-fei, YANG Xiao-jiang, WANG Ji-chen, ZHAO Jin-zhou(135)

- Analysis of Interaction between Staggered Cracks Inside and Outside in Pressure Vessels QING Zhong-bao, ZOU Zi-jie, LIU De-jun(140)

Energy and Power Engineering

- Design Procedure of Condensing and Defogging Water Collecting Device for Mechanical Ventilation Cooling Tower

- WANG Wei-shu, ZHENG Hao-nan, LI Zhen, ZHAO Peng-fei, CHEN Gang, YUAN Pei, LÜ Yan-li(146)

- Optimization of Loading Force Arrangement for Full-scale Static Test of Wind Turbine Blades

- GUO Yan-zhen, ZHANG Lei-an, SUI Wen-tao, WANG Jing-hua, HUANG Xue-mei(151)

Electrical Technology

- Day-ahead Dispatching Optimization of Active Distribution Network Considering Demand Response

- WANG Peng, LIU Min(158)

- Lightning Protection Measures for 10 kV Overhead Distribution Lines Near the Substation HAO Feng, LU Ze-jun, WANG Xiao-guang, JI Hong, GUO Shu-xiang(164)

- Battery Capacity Optimal Configuration and Economical Analysis of Energy Storage Photovoltaic System CHEN Jing-wen, MO Rui-rui, DANG Hong-she, LI Shuang-shuang, ZHOU Guang-rong(171)

- Fault Analysis of Watt-hour Meters Based on Adaptive FP_Growth Algorithm ZHU Yi-qun, YANG Lin, CAO Guo-rui, TENG Yong-xing, LI Qi(178)

Electronic and Communicational Technology

- Spectrum Sensing Detection Algorithm Based on Eigenvalue Variance of Random Matrix WANG Zi-li, SONG Xiao-ou, WANG Xiao-rong(183)

Automation and Computational Technology

- Robotic Grabbing System Based on Improved FREAK Algorithm

- DANG Hong-she, WU Chen-gang, SUN Jun-long(188)

- Path Planning Based on Multi-optimization Rapidly-exploring

- Random Tree Algorithm for Soccer Robot RU Feng,
YU Yang-jian, WANG Ping, ZHANG Ni(195)
Broadcast Encryption Scheme for Mobile Devices
..... WANG Xu-qi, CHENG Xiang-guo, WANG Yue(202)
Synthetic Aperture Radar Image Classification Based on Capsule Network FENG Wei-ye,
LIAO Ke-fei, OUYANG Shan, NIU Yao(207)
Driver Behavior Recognition Method Based on Migration Learning and AlexNet RONG Hui, HUA Yi-ding,
ZHANG Xiao-jun, GONG Jin-feng,
TANG Feng-min, GUO Peng, HE Jia(216)
A Tone Mapping Algorithm of X-ray Images Based on Multiscale and Local Edge Preserving Filter QUE Lu-song,
WANG Ming-quan, ZHANG Jun-sheng, LI Han(221)
Improved RANSAC Lane Detection Method Based on OpenCV WANG Zhi-yu, CHEN Guang, CHEN Yong(226)
The Improvement of Multi-camera Image Mosaic Algorithm YAO Wan-ye, BAO Xun, LIU Tong-yu(232)
Numerical Simulation on Structure Optimization of Methanol to Olefin Reactor with Large Opening HU Xiao-dong,
SUN Jian-gui, JIA Xiang-zheng, SUN Qi-tong(238)
3D Reconstruction Based on SURF-RANSAC Matching BIE Zhi-feng,
LIU Shou-shan, HUANG Chun-feng(244)
Experimental Study on Construction of Remote Sensing Spectral Index of Water Stress in Vegetable Crops XU He, PAN Jun,
JIANG Li-jun, SUN Ye-han, ZHONG Wei-jing(252)

Chemical Industry

- Experimental Research on Forced Convective Heat Transfer Coefficient of Cement Clinker Accumulation Body JU Yan-xu,
HUANG Bo-lin, WEN Yan, YUAN Lin(257)
Preparation of Aqueous Epoxy Resin-Acrylic Resin Composite Emulsion and Anti-corrosion Properties ZHANG Ze-qing, LI Xiao-rui, MA Guo-yan,
YANG Kai, CHENG Hang-hang, HOU Xu-ming(263)
Preparation of Biodiesel from Pistacia Chinensis Bunge Oil by Fe/C-SO₃H Hollow Fiber LI Liang-hou,
XIAO Zhi-hong, ZHANG Ai-hua, LI Chang-zhu(269)

Architectural Science

- Grey Model of Acoustic Emission of Recycled Concrete Beam Subjected to Bending Failure LÜ Xu-bin,
YU Jiang, QIN Yong-jun, JIANG Si-fan(275)
Seismic Performance Analysis on Concrete-filled Square Steel Tubular Column-unequal Depth Steel Beam Frame Joints Based on OpenSees XU Cheng-xiang,
GAO Jie, QIU Ying-wei, XIAO Liang-li(283)
Experimental Study on the Effect of Fractures Density on Shear Strength of Fissured Loess CHENG Yu-xiang,
CAO Bao-bao, ZHANG Da-wei(289)

- Microcosmic Determination Method of Coastal Soft Soil HUANG Wei-biao,
LI Xue, SONG Jing, ZHAO Zhou, LI Zhi-jie(296)
Creep Characteristics of Three Typical Rock in Layered Salt Cavern Reservoir ZHANG Qiang-xing,
LIU Jian-feng, LIAO Yi-lin, WU Chi(303)
Numerical Analysis of Local Thermal Comfort in an Open Plan Office under Natural Ventilation Mode DENG Xiang, XUE Xue, FAN Wen-ke(311)
Multi-condition Simulation of Subway Fire Water Supply System with Looped Layout XIE Hong, MAO Qing, LI Shu-ping,
SUN Tan, LI Huai, WANG Yi-wen, MA Shen-yi(317)

Hydraulic Engineering

- Simulation Analyses on Characteristic Parameters and Flow Characteristics of Fixed-cone Valve LI Yan-hui, LIAO Zhi-fang,
JIANG Jin, WANG Yu-cheng, LUO Shuang(324)

Traffics and Transportations

- Dynamic Response Analyses of Operational Tunnel Lining with Cracks under Great Earthquake Excitation WANG Li-zhong,
WANG Hai-yan, HUANG Guang, LI Yong-long(332)
Macroscopic Properties and Microscopic Mechanism of Cement Stabilized Macadam Based on Uniform Design ZHANG Dong-liang,
WU Shuang-quan, LIANG Peng(340)
Experimental Investigation on High-temperature Performance of the Tannin Modified Asphalt Based on DSR and RV PENG Chao, CHENG Chen,
WENG Shao-qing, ZHU De-bin, SHAN Hong-hui(346)
Optimization Analysis of Secondary Lining Thickness in Deep Buried Three-lane Large-section Tunnel XUE Shan, GAO Xiao-yue, DENG Xiang-hui(352)
Simulation and Optimization of Ride Comfort for Wheel Drive Electric Vehicle Based on New European Driving Cycle CHEN Qi-ping, WEI Jia-cheng,
LUO Yu-feng, WANG Liang, SUN Hao-yu(359)

- Analysis on Door Sealing under Deep Water Pressure Based on Segmentation Model NIE Xiao-hua, BAO Zhi-guang,
CHANG Liang, WANG Xiao-hui, WU Cun-li(365)
Forecasting the First Vehicle's Arrival Time at the Signalized Intersection Based on Wavelet-Elman Neural Network ZHANG Hui-ling,
LIU Xiao-xiao, YANG Lin-yu(371)
Fault Diagnosis of Ship Power System Based on Improved GA-PSO Algorithm LI Chao, XUE Shi-long(377)

Aeronautics and Astronautics

- Strain Measurement of Airship Gasbags Material Based on Digital Image Technology ZHAO Xia-jun, ZHANG Wei(383)
A Method for Determining the Configuration Quantity of Aircraft Support Equipment Based on Multi-category Support Activities LIU Jian-xun, HUANG Wei,
WANG Nai-chao, JIANG Kun, PAN Bo-quan(389)
Experimental Study on Electro-thermal De-icing of Graphene Composites TIAN Tian,
WANG Yuan, TAO Ming-jie, ZHU Chun-ling(395)
VB-CKF Filtering Algorithm for SINS/GPS Integrated Navigation System Based on Variational Bayesian Theory LI Bo-lin,
XU Bin, WANG Feng-ju, LI Chun-yu(400)
Ultra-temperature Cooling and Thermal Shock Test for Ceramic Matrix Composite LIU Ning-fu,
JIANG Jun-liang, CONG Lin-hua, TIAN Min(405)

Environmental and Safe Science

- Application of Metal-organic Frameworks Activated Persulfate Advanced Oxidation System on Deep Treatment of Papermaking Wastewater XIE Quan-mo,
WAN Jin-quan, MA Yong-wen, WANG Yan(410)
Sedimentation Law of Water-drop during Marui Crude Oil Storage Process HAN Lu-yuan,
WANG Yan, LIANG Fa-chun, LI Jun(416)
Emergency Evacuation in a Chemical Enterprise Based on Pathfinder Simulation ZHAO Rui,
MENG Xiang-yu, MIN Xue-feng, LIU Si-lin(422)