Contents

Papers

Astronomy and Geosciences

The Analysis of Agricultural Climate Resources Distribution and Its Change Trends over 30 Years in China

..... LI Meng, SHEN Shuang-he, CHU Rong-hao, LI Nan, SHA Xiu-zhu(11)

Discovery of Qingna Gold Deposit in Jinping Area and Its Geological Significance, Western Sichuan TAN Hong-qi,
LUO Li-ping, ZHOU Jia-yun,

ZHU Zhi-min, GONG Da-xing, LIU Ying-dong (19)

Method of Calculating Tight Sandstone Reservoir Permeability by Creating Dynamic Permeability Chart Based on Formation Rock ConductivityJIAO Nai-lin, DING Wen-long,

YIN Shuai, WANG Yu-yue, CAO Xiang-yu(26)

Distribution Characteristics and Influencing Factors of Geohazards in Xuecheng Section along the Zagunao River

..... LIANG Rui-feng,

WANG Yun-shang, MA Bao-gang, MAO Shuo(40)

Petroleum and Natural Gas Industry

LIU Cheng-chuan, ZENG Yan, LI Hua-ji,

LI Qi, PENG Jun, YAN Huan-rong, CHEN Jun(49)

Weapon Technology

The Dynamic Characteristic Analysis and Signal Calibration of Tank Pressure Sampling Tube System

····· LÜ Yong-zhi, ZHANG Pi-zhuang (54)

 $\label{eq:constraint} \begin{array}{llll} \mbox{Preparation and Characterization of Al/Cr}_2\mbox{O}_3/\mbox{ETN Nanocomposite Energetic Materials} & \cdots & \mbox{SONG Zhao-yang,} \end{array}$

WANG Yi, ZHANG Jun,

SONG Xiao-lan, ZHAO Shan-shan, SONG Dan(66)

Electronic and Communicational Technology

Detection Research of Liquid Refractive Index Based on SPR
....... WEI Chong-guang, TANG Hai-quan, JIAN Ao-qun,

GUO Li-fang, DUAN Qian-qian, SANG Sheng-bo(66) Novel Parameter Estimation Algorithm for LFM Signal Based on

Multi-slot Cooperative Spectrum Sensing and Power Allocation in Cognitive Network ZHU Jiang, DUAN Ang, GUO Bing(79)

Automation and Computational Technology

Research on Railway Video Monitoring and Moving Target Detection Based on Improved ViBE Algorithm YANG Hai-lin, CAI Qi-zhong, XUE Sheng-li, ZHOU Jia-quan(87)

Study on the Classification Method of Aerial Hyperspectral Image

Volume 16 Number 21 (Sum 382)

Based on the Random Forest Algorithm ······ WANG Shu-min, ZHANG Ai-wu, HU Shao-xing, XIAO Tao(87)

Chemical Industry

Electrochemical Reduction Mechanism of Electroplating Zn-Ni-Mn Alloy Coating WANG Xin-yue, YANG Hai-li, ZHANG Zhi-tong, LIU Hai-peng, LI Yun-gang(98)

Traffics and Transportations

Study on the Heat Partition Process between the Friction Components in Multi-disc Clutch XIONG Cen-bo, MA Biao, LI He-yan, YU Liang, ZHU Li-an(98)

ZHAO Jin-bao, SUN Zhong-bo, XI Jian-guo (111)

Parameters Analysis of Physiology Load of Drivers during Stress Response WANG Chang, LU Yu-ping,

FU Rui, WANG Dang-qing(111)

Simulate the Impact of Reclamation Project on Tidal Current and Sediment in the Dafeng Port WU Yao, CAO Yu, CHENG Liang-qiu, TANG Ping-hui(117)

Aeronautics and Astronautics

Squirrel Cage Elastic Support Stiffness Test and Calculation Analysis PENG Jing-hui, ZHOU Hai-lun, ZHANG Ming, AI Yan-ting, SUN Dan(124)

Environmental and Safe Science

Effects of Tubificid Bioturbation on Migration of Cd²⁺ from Water to Sediment Using Planar Optode MAO Dan, ZHENG Fang, ZHAO Tian-yu, HUA Xiu-yi,

GUO Zhi-yong, LIANG Da-peng, DONG De-ming(165) Study on Characteristics of the Cell Surface Features of Fusant Strain 14 In the Process of Degrading Phenanthrene

..... LIU Jin-hui, LU Jing, ZHANG Song(134)

LIU Zhan-li, CHEN Shi-guo, WEI Ya-juan, LI Yong-hui(139)

Survey

Mining and Metallurgical Engineering

The Key Technical and Scientific Issues of Laser Heating Assisted Cutting BAI Zhan-wei(149)

Research Notes

Astronomy and Geosciences

The Detection Sensitivity Analysis of Dual Polarization Radar Parameters for Melting Layer

YAO Xiao-juan, CHEN Shi-guoWEI Ming, DU Ai-jun, LU Mei-qi(156)

stecAn Air Temperature Estimated Method Based on Variational

shin, analysis...... ZHU Zhi, SHI Chun-xiang, TANG Guo-xing(165)

Physical Modeling of Tectonic Inversion in the Xihu Sag East
China Sea Shelf Basin, China YAN Shu-yu, WU Jing-fu,

ZHAO Zhi-gang, QI Jia-fu (176)
Internal Structure Characteristic of Fault Zone in Clastic Formations at Heishanyao Cut Plane LI Yan-chen,
MENG Ling-dong, LIU Lu, SONG Xian-qiang (176)
Research on the Role of the Basin-marginal Sequence Architectural Model in Controlling the Development of Sand-bodies and

Traps—a Case Study of the Jurassic System in Hashan Area

...... ZHOU Jian(185)

Medicine

General Industrial Technology

Petroleum and Natural Gas Industry

The Analysis of Sedimentary Characteristics and Sedimentary Differences In Neritic Shelf——a Case of Wenchang A/B/C District in Pearl River Mouth Basin

...... DAI Yun-jiao, YANG Zhao-qiang, SUN Yi-jia, DAI Bai-xiang, TANG Ming(205)

Study on the Emei Basalt Petrological Characteristics of Wellbore Stability LUO Cheng-bo,

MENG Ying-feng, LI Gao, LIU Hou-bin(205)

The Application of Compound Deep Profile Control System on High Salinity Heavy Oil Reservoir QIN Yi, ZHANG Li-dong, LIU Xiao-jun, ZHOU Xiao-song, ZHENG Rui(218)

Study of Compound Scale Inhibitor for Barium Sulfate Scale Inhibition Effect LI Hong-jian, GU Yu-tong, ZENG Li-yao(223)

The Effects of Waxy Crude Oil Rheology by Thermal History and Shear History ZHAO Shu-hua, LIU Fei-fei,

HUANG Wei-qiu, WANG Shu-li, ZHU Yun-hua(228)

Energy and Power Engineering

Effect of Boost Mode and Boost Rate on Disc Test HU Pan, KONG Wei-hai, ZHANG Qiang, FEI Qin-nan, WEI Shu-tao(242)

Electrical Technology

Study on the Safety Range of the Equivalent Salt Density of Railway Insulator in the Cold and High Polluted Area LUO Yi, WANG Guo-zhi, WU Wen-hai, DENG Bin(237)

Electronic and Communicational Technology

Automation and Computational Technology

A Recommendation Algorithm Based on Collaborative Filtering by Feature Augmentation and Cascade Tactics

..... MA Hu-shuang, SHI Yong-ge, GAO Sheng-bao(277)

Development of a Kind of Multichannel AC Power Recorder Based on PC/104 TANG Xiao-bei, XIE Yun-kai(294)

Abnormal Behavior Detection Based on Integral Channel Feature Algorithm TANG Yi, HUANG Jian-jun,

LAI Mian-li, GAO Guo-xing(288)

Research on the Machining Error Compensation for Flank Milling Complex Surface Based on On-machine Measurement

··· ZHENG Gang, RUAN Sheng, WU Yan, LÜ Bo-xin(298)

Network Database Encryption Optimization Model Simulation

Analysis of Cloud Computing ·············· XIONG Ting,

WANG Ying, MEI Yi(312)

Architectural Science

Hydraulic Engineering

Seepage Characteristics Orthogonal Numerical Simulation Test Analysis of the Tunnel through Water Rich Fault Zone

····· FU Yu-de, WU Li, YUAN Qing, YI Wan-yuan (327)

Environmental and Safe Science

Microscopy Morphology and Chemical Composition of Individual Aerosol Particles near a Coal-fired Power Plant

...... ZHAO Cheng-mei, SHAO Long-yi, HOU Cong, WANG Wen-hua, XING Jiao-ping(333)