

7th International Conference on Energy and Environmental Protection (ICEEP 2018)

Advances in Engineering Research Volume 170

Shenzhen, China
14 - 15 July 2018

Part 1 of 3

Editor:

Yun-Hae Kim

ISBN: 978-1-5108-7362-9

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2018) by Atlantis Press
All rights reserved.
<http://www.atlantis-press.com/php/pub.php?publication=iceep-18>

Printed by Curran Associates, Inc. (2018)

For permission requests, please contact the publisher:

Atlantis Press
Amsterdam / Paris

Email: contact@atlantis-press.com

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
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

PART 1

COMPUTER, INFORMATION TECHNOLOGY, AND ENGINEERING MANAGEMENT SCIENCE

| | |
|---|-----------|
| IMPLICIT FINITE DIFFERENCE METHOD FOR FRACTIONAL WAVE EQUATION WITH DIRICHLET AND FRACTIONAL BOUNDARY CONDITIONS | 1 |
| <i>Shaomei Fang, Wenjie Huang, Changping Xie, Yingshu Zhanga, Jinyan Li, Zhenfu Cai</i> | |
| THE DESIGN OF INTELLIGENT FUNGI TRAININGSYSTEM BASEDON ZIGBEE TECHNOLOGY | 10 |
| <i>Ping-ping Xiao, Chao Wang</i> | |
| APPLICATION OF PLASTIC WOOD MATERIAL IN THE ARTISTIC MODELING DESIGN OF CONSERVATION LANDSCAPE | 14 |
| <i>Xing Sun</i> | |
| AN INTELLIGENT CONTROL FIRE DAM SYSTEM FOR MINE ROADWAY | 19 |
| <i>Xuezhao Zheng, Hu Wang, Hu Wen, Jun Guo, Kang Qin, Wenqing Wu</i> | |
| CONTROL MODE OF MINE VENTILATION SYSTEM AND ITS IMPLEMENTATION BASED ON MONITORING DATA AND SAFETY INFORMATION | 26 |
| <i>Yin-shang Wei, Yu-quan Jia, Yi-bo Wang</i> | |
| SKELETAL MUSCLES MODELING FOR ISOGEOMETRIC ANALYSIS | 34 |
| <i>Linlin Li, John Boss</i> | |

MATERIALS, PROCESSING AND EQUIPMENT TECHNOLOGY

| | |
|---|-----------|
| PHASE FIELD SIMULATION OF DENDRITE GROWTH IN AL-CU ALLOY DURING SOLIDIFICATION PROCESS | 38 |
| <i>Li Feng, Junhe Zhong, Nini Lu, Yalong Gao, Guosheng An</i> | |
| EFFECT OF POWDER ON PROPERTIES OF LOW PRESSURE COLD SPRAY COPPER MATRIX COMPOSITE COATINGS | 45 |
| <i>Li Feng, Dongting Li, Goransky Georg, Elena Alfredovna Yatsenko, Cheng Hua</i> | |
| MATHEMATICAL MODEL OF POTATO SLICES UNDER PROCESS-BASED TEMPERATURE AND HUMIDITY INTEGRATION CONTROL OF TILTED TRAY AIR IMPINGEMENT DRYING | 50 |
| <i>Jian Wu Dai, Jie Wang, Ling Ren, Yao Wen Liu, Li Hua Zhang</i> | |
| MICROWAVE INTERMITTENT DRYING ENHANCES DRYING KINETICS OF BANANA SLICES | 57 |
| <i>Jian Wu Dai, Ling Ren, Jie Wang, Yao Wen Liu, Li Hua Zhang</i> | |
| EMPIRICAL STUDY ON THE INTERACTION BETWEEN THE INDUSTRY-UNIVERSITY-RESEARCH COLLABORATION AND THE INNOVATIVE CITY CONSTRUCTION | 64 |
| <i>Huining Jin, Jie Duan, Hailin Bai</i> | |
| RESEARCH ON NEURAL NETWORK INTIMAL CONTROL OF WIND-PV HYBRID POWER SYSTEM | 69 |
| <i>Guangjun Ma, Bingbing Wu</i> | |
| DISCUSSION OF LOAD COMBINATION PARAMETERS FOR HEAVY-CARGO TRANSPORTATION IN PASSING HIGHWAY BRIDGE | 74 |
| <i>Ping Lu, Yulin Zhou, Haiyang Yu, Haijun Wu</i> | |
| TIME-DEPENDENT RELIABILITY OF CONCRETE STRUCTURE IN CHLORIDE ENVIRONMENT | 78 |
| <i>Qiong Ming JIANG, Kai SHI, Sheng Ning LAN</i> | |
| EFFECTS OF COMPOUNDED SOIL WITH FELDSPATHIC SANDSTONE AND SAND ON PHYSICAL AND CHEMICAL CHARACTERS AND YIELD | 84 |
| <i>Ya Hu</i> | |
| RESEARCH ON THE GROUND BEARING CAPACITY OF SULFATE SALINE SOIL | 88 |
| <i>Yu-xin Zheng, Chun-yan Li</i> | |

| | |
|--|-----------|
| AN EFFECTIVE METHOD IN SAFETY PERFORMANCE EVALUATION FOR CONSTRUCTION COMPANIES | 93 |
| <i>Liulin Kong, Hanbin Luo</i> | |

INFRASTRUCTURE CONSTRUCTION, SUSTAINABLE USE AND ITS OPTIMIZATION

| | |
|--|------------|
| A DYNAMIC MODEL OF RISK PROPAGATION MECHANISM ANALYSIS IN METRO CONSTRUCTION..... | 100 |
| <i>Chao Dong</i> | |
| APPLICATION OF BIM TECHNOLOGY IN CONSTRUCTION OF VISUAL SIMULATION | 107 |
| <i>Binjie Qian, Liyuan Wang, Xiaotong Cui, Liu Chao</i> | |
| APPLICATION OF BIM TECHNOLOGY IN INTERFERENCE CHECK IN CONSTRUCTION WORK..... | 116 |
| <i>Liyuan Wang, Binjie Qian, Xiaotong Cui, Liu Chao</i> | |
| APPLICATION OF NUMERICAL SIMULATION IN OPTIMIZED LIGHTING DESIGN OF INDUSTRIAL BUILDINGS..... | 124 |
| <i>Yannan Huo, Wei Li, Yan Wang</i> | |
| RESEARCH ON ENERGY SAVING OF PLATFORM LIGHTING IN AN UNDERGROUND TRANSPORT HUB IN TIANJIN | 128 |
| <i>Yangyang Wu, Wei Li</i> | |
| STUDY OF NUMERICAL SIMULATION AND OPTIMIZATION ON DAYLIGHT OF AN UNDERGROUND TRANSPORTATION HUB IN TIANJIN | 138 |
| <i>Yangyang Wu, Wei Li, Yan Wang</i> | |
| A VARIANT HYBRID CONJUGATE GRADIENT ALGORITHM FOR LARGE-SCALE UNCONSTRAINED OPTIMIZATION | 146 |
| <i>Zhijun Luo, Lirong Wang, Guohua Chen</i> | |
| REVIEW ON THE RESEARCH PROGRESS OF MODIFIED RECYCLED CONCRETE | 150 |
| <i>Yihong Wang, Tao Zhang, Jiawei Chen</i> | |
| PREPARATION AND TEST OF SPRAYABLE GYPSUM-BASED MORTAR | 156 |
| <i>XiaoLiang Luo, KaiSheng Wu</i> | |
| ANALYSIS OF TYPICAL OZONE POLLUTION PROCESS IN JINAN, SHANDONG PROVINCE, CHINA..... | 160 |
| <i>Guiqin Zhang, Chun Ding, Huaizhong Yan, Li Zhu, Siyuan Li</i> | |
| THE APPLICATION COMPARISON OF BOTTOM ANCHORED CABLE-STAYED CANTILEVER SCAFFOLD IN BUILDING ASSEMBLY | 165 |
| <i>LanYun Chen, QuanWei Zhao</i> | |
| THE STATUS AND CHARACTERISTICS OF ORGANOCHLORINE PESTICIDE RESIDUES IN SURFACE WATER BODY FROM THE DRINKING WATER SOURCES JINXIUCHUAN RESERVOIR OF CHINA D..... | 170 |
| <i>Youmin Sun, Haibo Lv, Na Yu, Xianjie Lin, Guiqin Zhang</i> | |
| RESEARCH OF A PRECISE ROAD LOAD TEST METHOD | 175 |
| <i>Jun Hui Xu, Peng Zhang, Dandan Xu</i> | |
| PREPARATION AND ADSORPTION PERFORMANCE OF TOLUENE ON MONTMORILLONITE MESOPOROUS MATERIALS | 180 |
| <i>Dingsheng Chen, Huanmu Zeng, Chaoping Cen, Zhihang Chen, Ping Fang, Yukui Zhang, Xiongbo Chen, Zijun Tang</i> | |
| RESEARCH ON DESIGN PARAMETERS OF DOUBLE HOLE CORRUGATED PIPE CULVERT..... | 184 |
| <i>Chengying Hao, Liqian Liu, Zhihong Wang, Shui Wan</i> | |
| NUMERICAL ANALYSIS OF DEFORMATION AND MECHANICAL PROPERTIES OF DOUBLE CORRUGATED PIPE..... | 190 |
| <i>Peng Zhou, Wei Fan, Zhihong Wang, Shui Wan</i> | |
| PERFORMANCE OF FIBER REINFORCED OPEN GRADED ASPHALT TREATED BASE..... | 195 |
| <i>Xiaoge Tian, Yantian Chu, Ren Zhang, Zhen Yang, Yicao Xv, Shaohua Zheng</i> | |
| THE AXIAL COMPRESSION TEST AND RESEARCH ON CONCRETE PRISM SPECIMENS CONFINED BY CORRODED STIRRUPS..... | 200 |
| <i>Qiang Li, Xiao Guan, Qianhui Xiao, Shaojie Chen</i> | |
| RESEARCH ON CHLORIDE TRANSPORT OF PRESTRESSED BOX GIRDERS UNDER COUPLING ACTION OF SALT FOG AND FATIGUE LOADING | 207 |
| <i>Guofang Chen, Yingzi Zhang, Chengxin Wang, Lizhe Jia, Yiming Duan</i> | |

| | |
|--|-----|
| STUDY ON BIM MODELING METHOD OF BRIDGE RAILWAY INTEGRATION BASED ON REVIT AND CIVIL3D | 214 |
| <i>Siqing Lv</i> | |
| CONSTRUCTION MONITORING AND CONTROL OF PC COMPOSITE BOX-GIRDER WITH CORRUGATED STEEL WEBS | 221 |
| <i>Xiaoyong Chen, Yingbo Zhu, Yunfei Xia, Shui Wan</i> | |
| DRIVERS' EMOTIONAL EVALUATION IN THE NOISY ENVIRONMENT OF THE CONTROL CABIN OF A SHIELD TUNNELING MACHINE | 226 |
| <i>Liangbin Zhang, Hanbin Luo</i> | |
| THEORETICAL RESEARCH AND EXPERIMENTAL VERIFICATION ON VIBRATION AND ACOUSTIC SIMILARITY OF STIFFENED CYLINDRICAL SHELLS | 231 |
| <i>Bin Fang, Zhemín Jin, Hanqin Li</i> | |
| NONLINEAR SYSTEM IDENTIFICATION METHOD BASED ON MULTI-DIMENSIONAL TAYLOR NETWORK AND ITS APPLICATIONS IN CONSTRUCTION SAFETY MONITORING | 238 |
| <i>Yi Lin, Yifei Chen, Liling Zhao, Yufang Wang</i> | |
| RESEARCH ON BUILDING EXTRACTION BASED ON HIGH-RESOLUTION DSM IMAGES FROM OBLIQUE PHOTOGRAPHY | 242 |
| <i>Xianghua Shuai, Weiwei Li, Wei Feng, Haifang Yang, Meng Zhen</i> | |
| COMPOSITE FOUNDATION BEARING CHARACTERISTICS OF PHC PILE | 251 |
| <i>Cai-hui Zhou, An Chen, Bao Zhang</i> | |
| GREEN CONSTRUCTION TECHNOLOGY OF ALGERIA NORTH-SOUTH EXPRESSWAY | 256 |
| <i>Daiguang Chen, Likui Huang, Enkuan Tang, Wenbin Wu, Qing Shen</i> | |
| STEEP EMBANKMENT TREATMENT TECHNOLOGY OF ALGERIA NORTH-SOUTH EXPRESSWAY | 262 |
| <i>Daiguang Chen, Likui Huang, Enkuan Tang, Qing Shen, Zhihao Liu</i> | |
| THE SPATIAL SPILLOVER EFFECT OF HIGH SPEED RAILWAY ON THE BEIJING-SHANGHAI HSR ECONOMIC ZONE | 267 |
| <i>Gongding Wei, Xuemei Li</i> | |
| STUDY ON ADAPTABILITY OF THE FREIGHT SUPPLY AND DEMAND STRUCTURE IN URBAN AGGLOMERATION BASED ON THE ENTROPY THEORY | 274 |
| <i>Zhu Liu</i> | |
| THE OBSERVATION OF THE PHENOPHASE IN SIX BLUEBERRY VARIETIES | 281 |
| <i>Tingyu Gou, Can Luo, Jiaqi Le, Jun Wang, Xun Wang</i> | |
| THE INFLUENCE OF DIFFERENT STORAGE TEMPERATURE ON CHANGES OF DELPHINIDIN-3-O-GLUCOSIDE AND MALVIDIN-3-O-GLUCOSIDE | 285 |
| <i>Yuan Li, Yuxin Wang, Maolan Yue, Ya Luo, Xun Wang</i> | |
| | |
| <u>ENERGY, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT OF HUMAN SOCIETY</u> | |
| EFFECTS OF HORMONE SEED SOAKING AND SUBSTRATE CULTIVATION ON THE GROWTH OF BLUEBERRY | 289 |
| <i>Yanping Fan, Xiancong Zhang, Siyu Zhang, Guochao Sun, Xun Wang</i> | |
| STRENGTH ANALYSIS OF JACKET PLATFORM BASED ON ANSYS | 294 |
| <i>Hongwei Ren</i> | |
| IMPROVED ELECTRICAL PERFORMANCE FOR MULTILAYER MOS2 TRANSISTORS BY USING A FULLY ENCAPSULATED AL2O3 DIELECTRIC LAYER | 298 |
| <i>Zixuan Huang</i> | |
| A SIMPLE METHOD TO EVALUATE THE VAPOR PRESSURE OF TRANSFORMER OIL AT VARIOUS TEMPERATURES | 305 |
| <i>Bin Hong, Shunya Lv, Qing Liu, Jing Hou, Ya Ji, Zhendong Gao, Jianye Gao, Ju Hu</i> | |
| EXPERIMENTAL INVESTIGATION ON VIBRATION AND ACOUSTIC SIMILARITY OF STIFFENED CYLINDRICAL SHELLS | 315 |
| <i>Bin Fang, Hanqin Li, Zhemín Jin</i> | |
| CONDITION ANALYSIS OF STEAM TURBINE DEH CONTROL SYSTEM BASED ON DATA FUSION | 321 |
| <i>Zhenhe Wang</i> | |
| RESEARCH ON KEY TECHNOLOGIES AND DEVICE OF RESCUE FOR MINE DYNAMIC DISASTER | 328 |
| <i>Jun Guo, Yin Liu, Yongfei Jin, Xuezhao Zheng, Wenyong Liu</i> | |

| | |
|--|------------|
| ANALYSIS OF SEISMIC PERFORMANCE OF THE SCALE MODEL OF A RIB-RING SHALLOW SPHERICAL SHELL | 335 |
| <i>Zhan Gao, Dongyun Jia, Jianwen Liu</i> | |
| STATIC ANALYSIS OF SCALE MODEL FOR RIBBED RING STIFFENED SHALLOW SPHERICAL SHELL..... | 340 |
| <i>Jianwen Liu, Dongyun Jia, Zhan Gao</i> | |
| DESIGN AND SIMULATION OF A CERTAIN TYPE GUN INTERACTIVE VIRTUAL MAINTENANCE PLATFORM..... | 345 |
| <i>Hua Li, Lei Wang, Zhong-ting Su, Ming-hua Yang</i> | |
| STUDY ON THE TRANSDUCER POWER ELECTRONIC CIRCUITS FAULT DIAGNOSIS BASED ON SVM..... | 351 |
| <i>Jianyong Li, Yanqiu Yang, Rui Li, Yu Lei</i> | |
| RESEARCH AND APPLICATION OF HIGH CONCURRENT REAL-TIME STREAMING FORWARDING SERVICE UNDER MULTI-SOURCE HETEROGENEOUS NETWORK..... | 356 |
| <i>Jiangzhou Zhang, Xingwu Jia, Yingying Zhang, Ning Gao, Ning Li</i> | |
| PRESSURE SIMULATION OF AN ELECTRO-HYDRAULIC PROPORTIONAL PISTON PUMP | 360 |
| <i>Jinyan Shi</i> | |
| APPLICATION AND RESEARCH ON THE GENERAL GATEWAY FOR MODBUS PROTOCOL AND SIEMENS INSIGHT SOFTWARE | 364 |
| <i>Haiyan Wang, Xiguang Liu</i> | |
| RESEARCH ON NEW ENERGY UTILIZATION BASED ON CLOUD COMPUTING AND BIG DATA..... | 371 |
| <i>Liang Gao, Xinyan Zhang, Tao Tong, Jiajun Zhang</i> | |
| STUDY ON OPERATION CONTROL STRATEGY OF SINGLE STAGE PUMPING STATION IN LONG - DISTANCE AND MULTI - STAGE PUMPING STATION CONTROL SYSTEM | 376 |
| <i>Xuejun Xu, Qingqing Ma, Ying Yan</i> | |
| STUDY ON OPERATION CONTROL STRATEGY OF ADJACENT PUMP STATIONS IN LONG DISTANCE MULTISTAGE PUMPING STATION CONTROL SYSTEM..... | 382 |
| <i>Xuejun Xu, Ying Yan, Qingqing Ma</i> | |
| COMBINED POSITIONING METHOD WITH SINGLE DOPPLER RADAR AND SINGLE OPTICAL THEODOLITE | 388 |
| <i>Zhi-hua Gong, Peng-wei Duan, Chun-jiang Chen, Hai-dong Lv</i> | |
| RESEARCH ON KEY TECHNOLOGIES OF RAILWAY MASTER DATA MANAGEMENT FOR BIG DATA APPLICATIONS..... | 394 |
| <i>Yifei Liu, Ping Li, Lianbao Yang</i> | |
| TRAJECTORY TRACKING CONTROL FOR VEHICLE LANE CHANGING CONSIDERING SIDESLIP SPEED | 402 |
| <i>Dian Bo Ren, Hao Wang, Yong Zhang</i> | |
| POLICY RESEARCH ON UNMANNED INTELLIGENT MONITORING AND PROCESSING TECHNOLOGY TO IMPROVE THE LEVEL OF ENVIRONMENTAL PROTECTION..... | 407 |
| <i>Jinwen Wu, Dan Li</i> | |
| A ROBUST VIDEO WATERMARKING ALGORITHM BASED ON SPATIAL DOMAIN..... | 412 |
| <i>Guangxi Chen, Chunsheng Kang, Dao shun Wang, Xianghui Zhao, Yong Huang</i> | |
| ANALYSIS AND DESIGN FOR CLASS-E ZVS DC-DC CONVERTERS | 420 |
| <i>Xiang Zhang, Jing Chun Huang, Jian Xiao</i> | |
| IRON CONTAINING SOIL CONDITIONER CAN EFFECTIVELY REDUCE CADMIUM AND PLUMBUM POLLUTION IN VEGETABLE AND SOIL | 430 |
| <i>Dong-feng Huang, Zan-de Zhang, Zhong-fa Yang, Tao Luo</i> | |
| MINERALIZATION REACTION OF BACTERIA IN CEMENT MATERIALS | 437 |
| <i>Chung-Hao Wu, Pang-Hsu Tai, How-Ji Chen</i> | |
| RESEARCH ON DEMAND RESPONSE STRATEGY FOR PROMOTING NEW ENERGY GRID CONNECTED CONSUMPTION..... | 441 |
| <i>Jingkai Zhu, Xiaotian Wang, Genzhu Li</i> | |
| RESEARCH ON OPTIMIZATION CONTROL TECHNOLOGY FOR COORDINATED OF SOURCE-GRID-LOAD BASED ON BALANCE OF POWER SUPPLY AND DEMAND..... | 448 |
| <i>Jingkai Zhu, Xiaotian Wang, Xiaofeng Xu</i> | |
| DECOMPOSITION ANALYSIS ON THE FACTORS OF ENERGY CONSUMPTION GROWTH IN BEIJING-TIANJIN-HEBEI..... | 453 |
| <i>Yanmei Li, Zhongyuan Li, Liyun Sun</i> | |
| ACUTE AND CHRONIC EFFECTS OF PULSED PHENOL EXPOSURE TO MOINA MACROCOPA | 459 |
| <i>Jingbo Xu, Nan Jing, Chao Gao</i> | |

| | |
|---|------------|
| RURAL ECOTOURISM -- ASSISTANCE IN THE SOLUTION OF THE DEVELOPMENT DILEMMA ABOUT "WONDERFUL CHINA" | 464 |
| <i>Xiang Jia</i> | |
| TWO-DIMENSIONAL CUTTING SIMULATION OF SICP/AL COMPOSITES..... | 469 |
| <i>Kai Yang, Yingwei Zhang, Jia Li, Qingfei Jiang, Xiaodong Xia</i> | |
| STUDY ON BIOTOXICITY OF SLUDGE STABILIZED BY SLUDGE DRYING REED BED..... | 473 |
| <i>Yao-bo Liu, Yu-bo Cui, Zhuma Luosang, Xin Li, Wen-ju Yang, Jun-yu Liang</i> | |
| THE STATUS OF ANTIBIOTICS POLLUTION IN COASTAL WETLANDS IN CHINA | 478 |
| <i>Ming-yue Zhang, Chun-qi Ran, Ze-hang Huang, Shi-fei Li, Yi-man Niu, Yu-bo Cui</i> | |
| THE REMOVAL OF ANTIBIOTICS IN SLUDGE DRYING REED BED | 482 |
| <i>Chao Wang, Yu-bo Cui, Jun-wen Ma, Ai-min Li, Shi-fei Li, Shu-chang Zhang</i> | |
| STUDY ON THE DISTRIBUTION OF SULFONAMIDE RESISTANT GENES IN SLUDGE TREATMENT WETLAND | 486 |
| <i>Yi-Man Niu, Yu-bo Cui, Jun-Yu Liang, Xin Li, Peng-Ju Zhang, Shu-chang Zhang</i> | |
| ANTIBIOTICS IN COASTAL WATERS OF NORTHERN CHINA: OCCURRENCE AND ENVIRONMENTAL RISK | 491 |
| <i>Jian-rong Zhang, Yu-bo Cui, Peng-Ju Zhang, Ze-hang Huang, Shi-fei Li, Ming-yue Zhang</i> | |
| REVIEW ON THE END DISTILLED WATER TREATMENT FROM MVR+VP LANDFILL LEACHATE PROCESS BY FENTON METHOD..... | 495 |
| <i>Chen-ning Bao, Xin Li, Yi Dong, Jie Chen, Asiha Tenigeer, Yu-bo Cui</i> | |
| PREPARATION OF CU-CNT/CERAMIC HOLLOW FIBER MEMBRANES AND INVESTIGATION OF THEIR ANTIBIOFOULING PERFORMANCE UNDER ELECTROCHEMICAL ASSISTANCE..... | 499 |
| <i>Xiaochen Wang, Xinfei Fan, Xie Quan</i> | |
| REALIZATION OF A HAND-HELD CIRCULAR POLARIZED ANTENNA'S TRANSMITTING POLARIZATION MODE CHECKER..... | 503 |
| <i>Yong Xie, Guoqing Liu, Jun Xue, Ran Ding</i> | |
| DESIGN AND IMPLEMENTATION OF COOPERATIVE TARGET CONTROL IN THE ROUTE OF FLIGHT CALIBRATION TEST..... | 508 |
| <i>Gaofeng Pan, Guoqing Liu, Jun Xue, Yan Su</i> | |
| SCREENING AND FERMENTATION OF JINGGANG-MYCIN HIGH-YIELDING STRAINS | 512 |
| <i>Xiaoju Zhang, Shijie Li, Jiangrong Xiao</i> | |
| ANALYSIS OF THE SOLUTION TO THE 0.5% OF GLOBAL SULFUR LIMITS OF SHIPS BY 2020 | 517 |
| <i>Yanhong Zhao, Yang Xu, Lijiao Zhou, Xingmin Zhao, Yaning Wang</i> | |
| THE DESIGN OF SWITCHING MODE POWER SUPPLY CHARGER BASED ON PFC..... | 521 |
| <i>Ya-long Liu, Guan-yue Zhang, Kuang-cheng Li</i> | |
| ENERGY INTERNET COMPREHENSIVE BENEFIT EVALUATION SYSTEM AND OPERATION STRATEGY | 526 |
| <i>Hongkun Bai, Jiangbo Wang, Fangzhao Deng, Dunnan Liu, Lingxiang Wang, Guangyu Qing, Genzhu Li</i> | |
| OPTIMIZATION PRACTICE OF GAS EXTRACTION TECHNOLOGY FOR LONG DISTANCE PROTECTED LAYER | 538 |
| <i>Siqian Li, Zunyu Xu, Benqing Yuan</i> | |
| STUDY ON THE RELATION BETWEEN ADVANCE RATE OF SINGLE SEAM WORKING FACE AND GAS DRAINAGE VOLUME | 544 |
| <i>Hanhao Xiao, Weiguang Li</i> | |
| STUDY ON MONITORING AND ACQUISITION SYSTEM OF STRESS THROUGHOUT THE LIFE CYCLE OF VEHICLE | 548 |
| <i>Shuang Shi, Pengfei Feng, Lingli Han</i> | |
| STUDY ON THE RELATIONSHIP BETWEEN AIR POLLUTION AND STROKE | 552 |
| <i>Chunshan Zhao, Chunguo Li</i> | |
| ENVIRONMENTAL NGOS PARTICIPATION IN POLICY MAKING: THE CASE OF THE PM2.5 INCIDENT | 556 |
| <i>Yingruo Wang</i> | |
| RESEARCH ON THE IMPACT OF INFORMATION NETWORK ON UTILIZATION EFFICIENCY OF CULTIVATED LAND | 561 |
| <i>Yanjuan Jiang, Ying Huang</i> | |
| ANALYSIS ON STATIC AND DYNAMIC PERFORMANCES OF ULTRA-THIN MULTI-LOBE GAS LUBRICATION BEARINGS..... | 567 |
| <i>Datao Wu, Lihua Yang</i> | |
| INTERIOR PATH PLANNING METHOD BASED ON MAIN ROAD | 574 |
| <i>Bin Feng, Qian Xia, Carlos A. Acosta</i> | |

| | |
|---|------------|
| SPATIAL AND TEMPORAL EVOLUTION OF URBAN EXPANSION IN OASIS CITIES: A CASE STUDY OF GANZHOU DISTRICT IN ZHANGYE CITY | 581 |
| <i>Xuebin Zhang, Jun Luo</i> | |
| RESEARCH ON 2.45GHZ ACTIVE RFID CARD MOTION DIRECTION JUDGEMENT ALGORITHM BASED ON RSSI DISTRIBUTION | 587 |
| <i>Zhanbin Wang, Tong Zhu, Haibo Zhang</i> | |
| EFFECTS OF DIFFERENT FERTILIZATION PATTERNS ON SOIL MICROBIAL BIOMASS C, N IN WAX GOURD - PEPPER CROP ROTATION SYSTEM..... | 593 |
| <i>Xiao Deng, Chun-Yuan Wu, Yi Li, Dong-Ming Wu, Hua-Dong Tan, Qin-Fen Li, Miao Chen</i> | |
| ABSCISIC ACID AFFECTS STRAWBERRY FRUIT ANTIOXIDANT CAPACITY | 598 |
| <i>Cong Ge, Fan Mo, Yan'ling Li, Hao'ru Tang, Qing Chen, Bo Sun, Yong Zhang, Ya Luo</i> | |

PART 2

| | |
|--|------------|
| DEVELOPMENT AND APPLICATION OF THERMOELECTRIC POWER GENERATION FOR WASTE HEAT RECOVERY | 602 |
| <i>Min He, Enhua Wang, Tong Liu, Fujun Zhang, Changlu Zhao</i> | |
| ANALYSIS AND APPLICATION OF SENSOR ALARM THRESHOLD ADAPTIVE TECHNOLOGY BASED ON BIG DATA ANALYSIS..... | 609 |
| <i>Tong Zhu, Zhanbin Wang, Ke Shao</i> | |
| RETROSPECT AND PROSPECT OF ECOLOGICAL CIVILIZATION CONSTRUCTION IN CHINA..... | 616 |
| <i>Jie He</i> | |
| STUDY ON FLUORESCENT POWDER USING IN PACKAGING OF LED COB FOR MARINE FISHING | 621 |
| <i>Zhengye Xiong, Pinwang Lin, Yongqiang Li, Yongqi Liang, Qingxiang Chen, Wenqing Shi</i> | |
| THE ROLE OF BIM TECHNOLOGY IN ENERGY-SAVING RECONSTRUCTION OF EXISTING RESIDENTIAL BUILDINGS IN RURAL AREAS..... | 627 |
| <i>Mingqiang Huang, Jinheng Li, Chunlin Liao</i> | |
| IMPACT CHARACTERISTIC ANALYSIS OF HYDRAULICALLY ACTUATED QUADRUPED ROBOTS DURING RUNNING..... | 632 |
| <i>Yuan Yuan GE, Hong Ji Zhang</i> | |
| MODELING AND SIMULATION OF PROPULSION SYSTEM FOR ELECTRONICALLY CONTROLLED MARINE DIESEL ENGINE | 638 |
| <i>Yuanqing Wang, Qi Wang, Hongyu Qiao, Juan Su, Liang An</i> | |
| INVESTIGATION ON INSULATING PROPERTIES OF THE OIL-PAPER TRANSFORMER AT ITS DIFFERENT POSITION BY PARTIAL DISCHARGING SYSTEM | 646 |
| <i>Bin Hong, Kang Peng, Shunya Lv, Qing Liu, Jing Hou, Ya Ji, Zhendong Gao, Jianye Gao, Ju Hu</i> | |
| STUDY ON THE VACUUM-DEGASSING TECHNOLOGY OF THE OIL-PAPER INSULATED TRANSFORMER..... | 652 |
| <i>Bin Hong, Shunya Lv, Qing Liu, Jing Hou, Ya Ji, Zhendong Gao, Jianye Gao, Ju Hu</i> | |
| APPLICATION OF "THE OPTIMIZATION METHOD" (GOLDEN SECTION LAW) IN BLASTING ENGINEERING..... | 659 |
| <i>Shu-bao Yu, Xu-guang Wang, Bo-yin Wang, Zhan-hua Fu, Yong-hai Yu</i> | |
| STUDY ON COAL BLENDING SCHEME OF FORMED COKE MADE FROM ANTHRACITE BLENDING WITH COAL | 666 |
| <i>Yonghua Ji, Bingke Qin</i> | |
| THE PRINCIPLE OF MINIMAL POTENTIAL ENERGY OF MIXED VARIABLES TO SOLVE THE BENDING OF CANTILEVER RECTANGULAR PLATE UNDER UNIFORM LOAD..... | 670 |
| <i>Xin-min Liu, Jia-heng Jiang, Jing-bo Dong, Dun Guo</i> | |
| COUPLING EFFECT ANALYSIS OF A CONDUCTIVE BAR-SHELL IN A MAGNETIC FIELD..... | 677 |
| <i>Yuhong Bian, Qun You, Chen Zhang</i> | |
| STUDY ON THE PERFORMANCE OF RESISTANCE TO FREEZE-THAW OF CONCRETE COATED WITH ORGANOSILICON HYDROPHOBIC AGENTS..... | 682 |
| <i>Hongyao Sun, Xuechuan Wang, Xingduo Zhang, Gaoxia Sun</i> | |
| EXPERIMENTAL RESEARCH ON OPTIMIZATION FOR PERFORMANCE OF PERVIOUS CONCRETE | 690 |
| <i>Liangying Xu, Tongyuan Ni, Yang Yang, Jingru Yu, Jintao Liu, Chunping Gu</i> | |
| DESIGN AND EXPERIMENTAL STUDY ON DUST COLLECTION SYSTEM OF CERAMIC DRY EDGE GRINDING MACHINE..... | 698 |
| <i>Junpeng Li, Qingchun Qu</i> | |

| | |
|--|------------|
| INFLUENCE OF CULTURE SUBSTRATE ON THE PHYTOCHEMICAL CONTENTS OF FRUITING BODIES AND SPORES OF 3 VARIETIES OF GANODERMA LUCIDUM..... | 702 |
| <i>Zuofa Zhang, Weiming Cai, Guoying Lv, Chaoqian Li, Ying Wang</i> | |
| ANALYSIS OF ENGINEERING CHARACTERISTICS AND FOUNDATION TREATMENT METHODS OF SOFT SOIL IN GUYANA GEORGETOWN REGINE | 707 |
| <i>Fanglong Yuan, Yuntao Chen, Yaoting Zhu, Dongjun Li</i> | |
| STUDY ON BIASED MULTI ARCH TUNNEL BIASING ANGLE EFFECT ON MECHANICAL BEHAVIOR OF SURROUNDING ROCK BIAS | 714 |
| <i>Cheng-liang Zhang, Jiang-xu Shi, Wen-qian Lv, Zi-long Wang</i> | |
| STUDY ON THE COUNTERMEASURES FOR DISPOSING OF THE WATER-RICH SECTION OF JUNMACHANG TUNNEL | 720 |
| <i>Cheng-liang Zhang, Wen-qian Lv, Jiang-xu Shi, Zi-long Wang</i> | |
| THE ANALYSIS OF DUST EMISSION IN THE LIFE CYCLE OF RESIDENTIAL BUILDINGS WITH DIFFERENT STRUCTURES | 726 |
| <i>Yadong Bian, Yanru Dai, Li Li, Cheng Hong</i> | |
| FIELD LARGE-SCALE RELATIVE DENSITY TESTS OF GRAVEL SOIL OF YULONGKASHI HIGH EARTH-ROCK FILL DAM | 731 |
| <i>Zhengquan Yang, Yijie Xue, Long Wang, Xiaosheng Liu, Qiwan Liu, Jianming Zhao</i> | |
| DISCUSSION AND ANALYSIS OF WATER RESOURCES DEMONSTRATION IN DASHAHE RESERVOIR | 736 |
| <i>Xiaojiao Zhang, Wanglin Li, Xinyi Li</i> | |
| NUMERICAL SIMULATION OF RIVERBANK FAILURE IN LOWER REACHES OF YANGTZE RIVER | 741 |
| <i>Kaihua Chen, Yunfeng Xia, Yuncheng Wen, Hua Xu, Xingtong Liu</i> | |
| CONTROL OF ARTIFICIAL STRAIN ENERGY IN ABAQUS | 747 |
| <i>Xiaoming Chen, Jin Duan, Yungui Li, Jianyun Sun</i> | |
| DAMPING EFFECT ON STRUCTURAL ENERGY DISSIPATION IN ABAQUS..... | 752 |
| <i>Xiaoming Chen, Jin Duan, Yungui Li, Jianyun Sun</i> | |
| ANALYSIS OF SEISMIC BEHAVIOR FOR TRANSFORM STRUCTURES | 756 |
| <i>Xiaoming Chen, Jin Duan, Yungui Li, Jianyun Sun</i> | |
| EMPTY ADAPTIVE TRIAL STUDY ON AIRPORT PRESTRESSED CONCRETE ROAD SURFACE | 761 |
| <i>Qingjuan Liu, Jialin Cao</i> | |
| CHARACTERISTICS AND RISK ASSESSMENT OF FLUID PROPERTIES IN DAQING DEBRIS FLOW..... | 767 |
| <i>Cheng-liang Zhang, Zi-long Wang</i> | |
| REGIONAL WATER RESOURCES CARRYING CAPACITY INDEX SYSTEM EVALUATION MODEL AND ITS APPLICATION | 774 |
| <i>Yingqin Chen</i> | |
| CONSTRUCTION OF CONCRETE SUPPLIER EVALUATION CRITERIA IN BUILDING INDUSTRY | 780 |
| <i>Wei Wei, Chun-Ming Yang</i> | |
| MULTI-OBJECTIVE PROGRAMMING PROBLEMS WITH EQUILIBRIUM CONSTRAINTS..... | 784 |
| <i>Xue Zhao, Yueting Yang</i> | |
| SIMULATION OF SUBSTRUCTURE SHAKING TABLE TEST BASED ON MULTI-PARAMETER CONTROLLING AND DEVICE..... | 788 |
| <i>Jin-Bao Ji, Peng-Li Cong, Chen-Guang Wang</i> | |
| EXPERIMENTAL STUDY ON 18000 KN•M ULTRA HIGH ENERGY LEVEL DYNAMIC CONSOLIDATION ON LARGE THICKNESS GRAVEL FOUNDATION | 794 |
| <i>Jianbao Fu, Ruiqi Zhang, Jian Yu</i> | |
| STUDY ON PROPERTIES OF SBS MODIFIED ASPHALT MORTAR BLENDED WITH NICKEL IRON SLAG FIBER..... | 799 |
| <i>Yanhai Yang, Chen Chen, Ye Yang</i> | |
| INFLUENCE OF RUBBER BEARING ISOLATION TECHNOLOGY ON BUILDINGS WITH DIFFERENT PERIODS | 805 |
| <i>Ye Wang, Xiaosheng Song</i> | |
| THE RESEARCH ON WIND RESISTANCE PERFORMANCE OF TRADITIONAL HOUSES IN SOUTHERN FUJIAN | 814 |
| <i>Zhuangwei Huang</i> | |
| THE RESEARCH ON SPATIAL FORMS OF HATHPACE FOLK HOUSES | 820 |
| <i>Jing Liu</i> | |

| | |
|---|-----|
| EFFECT OF GIBBERELLIN ON FRUIT PRESERVATION AND QUALITY OF ZIZYPHUS JUJUBA 'ZHANSHANMIZAO' | 825 |
| <i>Yuyang Zhang, Huiifen Zhang, Yan Zhou, Jie Zhou</i> | |
| THE STUDY OF KNO₃ ON BREAKING FORCED DORMANCY OF ZIZIPHUS JUJUBA 'ZHANSHANMIZAO' AND THE EFFECTS ON FRUIT QUALITY | 830 |
| <i>Peng Ma, Zhibing Zhang, Yan Zhou, Jie Zhou, Qunxian Deng</i> | |
| THE STUDY OF KNO₃ BREAKS THE DORMANCY OF ZIZIPHUS JUJUBE 'MIZAO' AND ITS INFLUENCE ON ANTIOXIDANT SUBSTANCES | 837 |
| <i>Zhibing Zhang, Peng Ma, Yan Zhou, Jie Zhou, Qunxian Deng</i> | |
| EFFECT OF "ZAOFENGLING" ON FRUIT RETENTION AND QUALITY OF ZIZYPHUS JUJUBA 'ZHANSHANMIZAO' | 841 |
| <i>Qi Feng, Houyong Zeng, Tao Tao, Huiifen Zhang</i> | |
| CHANGES OF ASCORBIC ACID CONTENT IN LEAVES AND FRUITS OF ZIZIPHUS JUJUBE 'ZHANSHANMIZAO' AT DIFFERENT DEVELOPMENTAL STAGES | 846 |
| <i>Shuyue Huang, Nengli Fu, Guoying Song, Huiifen Zhang</i> | |
| STUDY ON VIBRATION CHARACTERISTICS OF WIND TURBINE ROTOR BLADES BASED ON ANSYS | 851 |
| <i>Lei Lu, Lida Zhang</i> | |
| THE EFFECT OF SEAWEED FERTILIZER 'SUNRED' ON THE COLORING OF 'RED GLOBE' GRAPE | 856 |
| <i>Lu Yuan, Jun Ou, Xiulan Lv, Jin Wang, Lijin Lin, Qunxian Deng</i> | |
| RESEARCH ON EXISTING PROBLEMS AND IMPROVEMENT MEASURES OF BIDDING FOR CONSTRUCTION PROJECTS | 861 |
| <i>Ruiju Cui, Huihui Yang, Mingzhen Wang, Lin Gao</i> | |
| THE DECISION ANALYSIS TO KEY ELEMENTS OF MARINE ENGINEERING FLOATING PIER STRUCTURE | 866 |
| <i>Wenbai Liu, Zhouxiang Wu, Lin Yang, Qifei Fang</i> | |
| EFFECTS OF SHEDS ON ANTIOXIDATIVE SUBSTANCES OF ZIZIPHUS JUJUBA 'ZHANSHANMIZAO' | 871 |
| <i>Xi Wang, Meihong Guo, Yan Zhou, Qunxian Deng</i> | |
| THE STUDY OF SA ON BREAKING FORCED DORMANCY OF ZIZIPHUS JUJUBA 'ZHANSHANMIZAO' AND THE EFFECTS ON FRUIT QUALITY | 875 |
| <i>Guojing Cai, Jie Zhou, Yan Zhou, Qunxian Deng</i> | |
| ADSORPTION PERFORMANCE OF ROXITHROMYCIN ON MULTI-WALLED CARBON NANOTUBES IN WATER | 880 |
| <i>Zhen-zhong Liu</i> | |
| EFFECT OF GA₃ ON BREAKING DORMANCY OF ZIZYPHUS JUJUBA 'ZHANSHANMIZAO' AND ITS EFFECT ON ANTIOXIDANTS | 887 |
| <i>Xingyu Long, Mengwei Chen, Yan Zhou, Jie Zhou, Qunxian Deng</i> | |
| STUDY ON EFFECT OF RAINFALL ON EARTH PRESSURE OF SHIELD TUNNEL IN EXPANSIVE SOIL STRATUM | 891 |
| <i>Feng Chao, Zaifeng Yao, Xiaohong Guo</i> | |
| RESEARCH ON WORK ZONE TRAFFIC ORGANIZATION OF RECONSTRUCTION AND EXTENSION OF ARTERIAL HIGHWAY | 897 |
| <i>Keman Wu, Nale Zhao</i> | |
| EXPERIMENT STUDY ON THE REMEDIATION EFFECTS OF COPPER POLLUTED GROUNDWATER BY PRB WITH THE VOLCANIC AS REACTIVE MEDIUM | 904 |
| <i>Zhi-yong Han, Xiao-bin Lv, Lu Di</i> | |
| RESEARCH ON IMPROVING THE STRENGTH OF THE CEMENT STABILIZED GRAVEL SOIL BASING ON COMPACTNESS | 912 |
| <i>Yazhen Sun, Linjiang Li, Bincheng Gu, Rui Guo</i> | |
| MODEL TEST OF LONG-TERM DRAINAGE CONSOLIDATION OF FLOATING MUD | 916 |
| <i>Jianbao Fu, Jinfang Hou</i> | |
| INTERFACE BEHAVIOR BETWEEN CARBON NANOTUBES AND ASPHALT | 921 |
| <i>Dong Sheng LI</i> | |
| FREE VIBRATIONS OF TIMOSHENKO BEAMS ON VISCOELASTIC FOUNDATION | 929 |
| <i>Li Peng, Ying Wang</i> | |
| FATIGUE DAMAGE OF CONCRETE UNDER UNIAXIAL COMPRESSION | 933 |
| <i>Lihui Yin</i> | |
| APPLICATION OF SCM IN AUTOMATIC TRACKING MOTION SYSTEM OF ORGANIC FERTILIZER TURNING MACHINE | 937 |
| <i>Zunxiang Li, Xiaohong Huang, Jing Jiao, Jihua Du, Changjin Guo</i> | |

| | |
|--|-------------|
| STUDY ON VULNERABILITY EVALUATION METHOD OF LIGHTNING DISASTER BASED ON PROJECTION PURSUIT DYNAMIC CLUSTERING MODEL | 941 |
| <i>Xinli Zhang, Min Huang</i> | |
| WATERPROOF DESIGN FOR UNDERGROUND ENGINEERING OF BUILDING | 950 |
| <i>Jianfei Sun</i> | |
| EXPLOSIVE SPALLING BEHAVIOR OF REACTIVE POWDER CONCRETE EXPOSED TO HIGH TEMPERATURE | 954 |
| <i>Juan Yang, Gai Fei Peng, Guo Shuang Shui</i> | |
| DEVELOPMENT AND APPLICATION OF CONSTRUCTION TECHNOLOGY OF OFFSHORE BOOSTER STATION | 958 |
| <i>Shengqiang Zhang, Xuanyi Zhang, Chao Fang, Huichi Zhang</i> | |
| LINKAGE FUNCTION OF MONITORING AND ALARM SYSTEM FOR URBAN UTILITY TUNNEL ENGINEERING | 963 |
| <i>Yan Wei, Jianxun Ma, Bo Dang, Dong Luo, Ningjun Dang, Junnan Li, Yuanyuan Li</i> | |
| RESEARCH ON THE MONITORING AND ADJUSTING SYSTEM OF POWER LINE TOWERS..... | 970 |
| <i>FuXiang Zhao, YiYong Yao, AuJun Guo, JianXun Ma, XiangLi Liu, Dong Luo, Xing Liu, Peng Li, Xu Dong Wang, Peng Dong Wang, W W Zhen</i> | |
| CONSTRUCTION CONTROL TECHNOLOGY OF CAST-IN-PLACE FOOT SECTION ON ARCH AQUEDUCT USING CANTILEVER ERECTION METHOD | 975 |
| <i>Wenping Peng, Zhongchu Tian</i> | |
| RESEARCH ON THE DYNAMIC CHARACTERISTICS OF THE ROD FASTENING ROTOR..... | 980 |
| <i>Yiping Li</i> | |
| AN EXPERIMENTAL STUDY ON THE EFFECT OF MARINE CORROSION ON FRICTIONAL PROPERTIES OF SLIDING PAIRS OF OFFSHORE ISOLATED BRIDGES | 986 |
| <i>Guifeng Zhao, Yuhong Ma, Yanmin Li, Jian Liang, Kangkang Wang, Fulin Zhou</i> | |
| A PHENOMENOLOGICAL MODEL FOR SHAPE MEMORY ALLOY SPRING BASED ON DIFFERENTIAL HYSTERESIS THEORY | 1001 |
| <i>Yang Yu, R. A. Abubakar, Ting Wu</i> | |
| THE STUDY ON THE QUASI-SINGLE CRYSTALLINE SILICON INGOT PRODUCED WITH PLATE SEED BLOCK LAYER | 1008 |
| <i>Shuaidi Song, Yang Cao, Tingxi Wu, Qiang Wang</i> | |
| MESH GENERATION TECHNIQUE FOR SHOCK PROOF DESIGN OF FLAT DISPLAY PRODUCT | 1013 |
| <i>Joon-Seong Lee, Ji-Hoon Yoo</i> | |
| EFFECT OF Y AND B CONTENT TAILORING ON THE CRYSTALLIZATION BEHAVIOR AND CORROSION RESISTANCE OF $Fe_{76-2x}Y_{4+x}B_{20+x}$ (X=0 AND 2) GLASSY ALLOYS..... | 1017 |
| <i>Hanjian Ma, Weimin Wang</i> | |
| FATIGUE CRACK INITIATION LIFE ANALYSIS OF BUTT-WELDED JOINTS CONSIDERING WELDING DEFORMATION..... | 1021 |
| <i>Yu Feng, He Feng, Qin Kai</i> | |
| THE PARAMETERS OPTIMIZATION OF THE CLAMP LOCKING MECHANISM..... | 1029 |
| <i>Xiayu Ai, Xiang Shi, Zhen Zhang</i> | |
| SYNTHESIS OF MnO_2 NANOWIRES ON CORDIERITE HONEYCOMB CERAMICS BY IN-SITU DEPOSITION METHOD | 1038 |
| <i>Zehua Xu, Fangfang Liu, Yongshen Dou, Sanmao Liu, Yongfeng Li</i> | |
| IN SITU GROWTH OF MnO_2 NANOSHEETS ON HONEYCOMB CERAMIC VIA HYDROTHERMAL METHOD AND ITS APPLICATION IN CATALYTIC COMBUSTION..... | 1042 |
| <i>Fangfang Liu, Zehua Xu, Yongshen Dou, Sanmao Liu, Yongfeng Li</i> | |
| EFFECT OF REINFORCED PARTICLE SHAPE ON THE FAILURE BEHAVIOR OF TIC/AZ91 COMPOSITES..... | 1046 |
| <i>Letian Shao, Junping Yao, Qiyao Hu, Kaixin Huang, Zhong Sun</i> | |
| MOLECULAR DYNAMICS SIMULATION OF TEMPERATURE EFFECT ON VOID PROPAGATION IN MAGNESIUM SINGLE CRYSTAL..... | 1051 |
| <i>Kai-xin Huang, Jun-ping Yao, Qi-yao Hu, Le-tian Shao, Zhong Sun</i> | |
| SYNTHESIS OF COPPER OXIDE BY REACTIVE MAGNETRON SPUTTERING FOR PHOTOELECTROCHEMICAL WATER SPLITTING | 1055 |
| <i>Tian Xie, Tao Zheng, Jin-Ping Ao</i> | |
| SERVO TURRET MODAL ANALYSIS BASED ON FINITE ELEMENT METHOD | 1062 |
| <i>Zhe Li, Nan Chen, Ning Zhang</i> | |
| RESEARCH AND EXPERIMENTAL VERIFICATION OF THE 126KV VACUUM INTERRUPTER CONTACT STRUCTURE | 1071 |
| <i>Congjun Xue, Xiaozhao Li, Chang Liu, Shibai Liu, Fangshuai Zhao, Liangjing Pu</i> | |

| | |
|---|------|
| PREPARATION AND CHARACTERIZATION OF FE-CONTAINING MESOPOROUS HZSM-5 CATALYSTS FOR AUTOMOTIVE EXHAUST CLEANING | 1077 |
| <i>Yi Liang, Yongwan Gu, Changfu Zhuang, Zhengjun Shi, Ying Wang, Chunhua Wu</i> | |
| A DESIGN METHOD OF CORRUGATED STEEL SHEAR WALL UNDER EARTHQUAKE MOTION | 1084 |
| <i>Xiao-Tong Peng, Chen Lin, Ting-Ting Zhang, Xu Zhang</i> | |
| SEISMIC BEHAVIORS OF THE COMPOSITE CENTRAL BRACE WITH STEEL RING DAMPER | 1089 |
| <i>Xiao-Tong Peng, Chen Lin, Yong-Ming Cao, Wen-Xu Duan</i> | |
| ANALYSIS OF INTERLAYER ROOF STRUCTURE AND BREAKING MODEL OF CLOSE-RANGE COAL SEAMS | 1093 |
| <i>Zhanjin Lu, Fei Ji, Zunyu Xu</i> | |
| EFFECT OF AL DEOXIDIZING FOR SPRING STEEL DURING LF PROCESS | 1099 |
| <i>Wei Lin</i> | |
| PREPARATION AND PROPERTIES OF SMT ENVIRONMENTAL PROTECTION AND HIGH EFFICIENT LEAD-FREE SOLDER PASTE | 1103 |
| <i>Zhi-wei Wang, Xuan Li, Hong Chen</i> | |
| RELIABILITY ANALYSIS OF ABB IRB 4600-40-255 POLISHING ROBOT WITH SIX DEGREE OF FREEDOM | 1108 |
| <i>Jing-jing Zhao, You-qiang Wang</i> | |
| DEVELOPMENT OF PREFABRICATED CONCRETE STRUCTURES | 1113 |
| <i>Weiling Wang</i> | |
| ANNEALED MICROSTRUCTURE AND THERMAL FATIGUE PROPERTIES OF NI60/WC COMPOSITE LAYER ON H13 STEEL SURFACE BY PTAW | 1118 |
| <i>Huajun Wang, Song Liu, Wen Chen, Bing Xie, Chundong Zhu, Qingyang Liu</i> | |
| IMPROVED DESIGN OF SMALL AGRICULTURAL MACHINERY TRANSMISSION | 1123 |
| <i>Xi Wang, YanYu Gao, JianJun Li</i> | |
| STUDY ON CORROSION OF ZINC METAL IN ACID ENVIRONMENT | 1127 |
| <i>Chang-shan Huang, Jin-ying Wu, Ming Ding, Hui-wu Xu, Min Zhang, Min Chen, Mian Xue, Xiao-guang Zhang, Ke-ping Tian</i> | |
| DEFORMATION BEHAVIOR OF 7050 ALUMINUM ALLOY PANELS WITH VARIABLE THICKNESS BY SHOT PEEN FORMING | 1133 |
| <i>Mingtao Wang, Yuansong Zeng, Xuepiao Bai</i> | |
| STUDY ON THE PREPARATION OF SI-AL ALLOY BY CARBON REDUCTION COAL FLY ASH | 1139 |
| <i>Zhiling Bai, Bingke Qin, Minglei Lian</i> | |
| DYNAMICS OF AN INVERTED PENDULUM WITH TWO CONCENTRATED MASSES | 1143 |
| <i>Bin Zhen, Zhenyu Fu, Liang Chang</i> | |
| FAILURE CHARACTERS AND DAMAGE MECHANISM OF SN3.0AG0.5CU/CU SOLDER JOINTS UNDER SHEAR THERMAL CYCLING | 1148 |
| <i>Linmei Yang, Xiying Piao</i> | |
| STUDY ON THE SEALING AND INACTIVATION MECHANICS OF TITANIUM ALLOY TUBE FLARELESS INTERNAL ROLLING CONNECTION | 1152 |
| <i>Rong-xia Zhang, Wei Wu, Yuan-song Zeng</i> | |
| CLOUD SERVICE RESEARCH ON BIG DATA COMPUTING IN COLLEGES | 1159 |
| <i>Hongkai Lin</i> | |
| THE PREPARING OF THE UNI-DIRECTIONAL GLASS FIBER METAL LAMINATES AND THE FATIGUE CRACK PROPAGATION CHARACTERS | 1163 |
| <i>Yu Sha, Shigang Bai, Ning Sha, Lei Chen, Yu Guan</i> | |
| FUZZY IDENTITY-BASED KEY-INSULATED ENCRYPTION WITH AND GATES ON ATTRIBUTES | 1169 |
| <i>Jianhong Chen</i> | |
| ATTRIBUTE-BASED THRESHOLD KEY-INSULATED ENCRYPTION | 1174 |
| <i>Jianhong Chen</i> | |
| A ROUTING FOR DELAY-SENSITIVE TRAFFIC IN AEROSPACE NETWORKS | 1178 |
| <i>Wei-qiang Wu, Sunan Wang, Rui Zhang</i> | |
| FUZZY IDENTITY-BASED THRESHOLD KEY-INSULATED ENCRYPTION WITH CIPHERTEXT POLICY | 1184 |
| <i>Jianhong Chen</i> | |
| NI, CO - DOPED CARBON AEROGELS FOR SUPERCAPACITORS | 1188 |
| <i>Yuelong Xu, Bin Ren, Meifang Yan, Zhenfa Liu</i> | |

| | |
|--|------|
| ON COUPLING OF MULTI-TRAFFIC SYSTEM AND ACCESSIBILITY OF THE TRANSIT NETWORKS | 1193 |
| <i>Haibin Huang, Xiuying DU, Leiyan Huang, Xiaoming Ma, Jun Yang</i> | |
| THE RELATIONSHIP BETWEEN MINE PRESSURE AND GAS EMISSION IN DAYANG MINE | 1199 |
| <i>Jun He</i> | |

PART 3

| | |
|--|------|
| ANALYSIS OF THE CLIMATE CHANGE IN THE DAGU RIVER BASIN IN RECENT 50 YEARS | 1205 |
| <i>Sufang Cui, Baoxiang Zhang, Xin Zhang, Qing Shi, Zhenting Wang, Junling Cui, Shixia Sun</i> | |
| STUDY ON THE RELATIONSHIP BETWEEN AIR POLLUTION AND THE ELDERLY CONTRACTING CEREBRAL VASCULAR DISEASE IN VILLAGES AND TOWNS | 1214 |
| <i>Qiao Han, Meng Cheng, Chunshan Zhao</i> | |
| EFFECTS OF OPERATIONAL CONDITIONS ON ELECTROCHEMICAL WATER SOFTENING USING DSA ANODE | 1218 |
| <i>Jiaoping Wang, Meina Shi, Gang Zhang</i> | |
| RESEARCH ON THE OZONE AND ELECTROMAGNETIC COTREATMENT TECHNOLOGY OF PAPERMAKING WASTEWATER | 1222 |
| <i>Zhengshun Wang, Mingchao Chi, Kaitai Yao, Baiman An, Zhihao Wang, Xianhao Wang</i> | |
| STUDY ON THE PERFORMANCE OF CARBON DIOXIDE TRANS-CRITICAL REFRIGERATION CYCLE WITH VORTEX TUBE EXPANSION | 1230 |
| <i>Yefeng Liu, Ying Sun</i> | |
| PREPARATION OF BRIQUETTE COAL WITH A LUBRICATING OIL SLUDGE AS BINDER | 1236 |
| <i>Tonghuan Zhang, Xin Chen, Xi Zhao, Yingjie Gao, Yanwei Song</i> | |
| OPTIMAL DESIGN OF INTEGRAL STEERING LINKAGE | 1240 |
| <i>Wen Chen</i> | |
| EXPERIMENTAL AND STATISTICAL STUDY OF THE OPTIMIZATION OF FIRE RETARDANTS IN A FORMULATIONS OF WATERBORNE INTUMESCENT FIRE-RESISTANT COATINGS FOR STEEL STRUCTURE USING UNIFORM EXPERIMENTAL DESIGN | 1244 |
| <i>Jian Hu, Chunling Hu</i> | |
| THE ANALYSIS ON FINANCIAL PERFORMANCE OF THE INDUSTRIAL CHAIN AND SPATIAL EFFECT FOR CHINA'S NEW ENERGY AUTOMOBILE | 1249 |
| <i>Hongbo Zhang, Ming Hu, Hongming Zhang</i> | |
| LARGE UNDERGROUND WATER SEAL RESERVOIR JET DISTURBANCE SYSTEM | 1260 |
| <i>XiaoHui Zhang, GenMin Zhu, DongFeng Zhao, JiaJun Ye, JianKang Shen, MingQing Zhang</i> | |
| RESEARCH ON OPTIMIZING STRATEGY OF DISTRIBUTION NETWORK OPERATION EFFICIENCY BASED ON PSO | 1266 |
| <i>Tao Han, Shaoguang Yuan, Quan Zhou, Kun Yu</i> | |
| PREPARATION OF MIL-53(Fe)/BIOCL COMPOSITES AND ITS PHOTO-FENTON PERFORMANCE IN DEGRADATION OF 2,4-DCP UNDER VISIBLE LIGHT | 1271 |
| <i>Yaru Zhang, Kegang Zhang, Xiaodong Wang, Tao Yan</i> | |
| RESEARCH ON OPTIMIZATION OF DISTRIBUTION AUTOMATION TERMINAL | 1280 |
| <i>Hailong Wang, Zhimin Guo, Xinyi Zheng, Kun Yu</i> | |
| EFFECT OF TWO-COMPONENT SOLUTION-CROSSLINKING AGENT ON RECYCLING OF WASTE PU TO PREPARE COMPOSITES | 1287 |
| <i>Xiaohua Gu, Hongxiang Luo, Yan Li, Fu Li, Rui Cao, Shiwei Lv</i> | |
| OPTIMIZATION OF BIDIRECTIONAL NOZZLE OF CRUDE OIL STORAGE TANKS BASED ON CFD APPROACHES | 1292 |
| <i>JiaJun Ye, GenMin Zhu, Jun Lyu, XiaoHui Zhang, MingQiang Zhang, JianKang Shen</i> | |
| NUMERICAL SIMULATION AND OPTIMIZATION OF THE DUAL CIRCULATION FLOW CLEANING DEVICE FOR UNDERGROUND CRUDE OIL STORAGE CAVERNS | 1300 |
| <i>JiaJun Ye, GenMin Zhu, Jun Lyu, XiaoHui Zhang, MingQiang Zhang, JianKang Shen</i> | |
| BIOLEACHING OF FLUORIDE-CONTAINING URANIUM: FLASK EXPERIMENTS WITH FLUORIDE-RESISTANT BACTERIA | 1307 |
| <i>Xiang Li, Xiaolan Mo, Jiankang Wen, Biao Wu, Dianzuo Wang, Hongying Yang</i> | |
| APPLICATION OF MOVING-WINDOW BASED ON SCMC IN FINITE ELEMENT ANALYSIS OF COMPOSITE MATERIALS | 1312 |
| <i>XinHai Xiang, YouCai Wang, HaiQing Xiao, GuangZhao Yang</i> | |
| DESIGN AND SIMULATION OF SOLID POLYMER MICRO NEEDLES ARRAY | 1318 |
| <i>S. Abubaker Samir, Yajun Zhang, Liqun Dong</i> | |

| | |
|---|------|
| INSERTION EXPERIMENT AND RESISTANCE TESTS OF SOLID POLYMER MICRO NEEDLES ARRAY | 1322 |
| <i>S. Abubaker Samir, Yajun Zhang, Zhiming Jin</i> | |
| STUDY OF ECOLOGICAL PLANNING METHOD FOR GRASSLAND REGION URBAN GREEN-SPACE SYSTEMS IN INNER MONGOLIA: A CASE STUDY OF KANGBASHI, ORDOS | 1327 |
| <i>Jianxun Xing, Chaoming Li</i> | |
| IMPLEMENTING A DEMAND RESPONSE READY SMART HOME PROTOTYPE ON A SYSTEM-ON-CHIP PLATFORM | 1334 |
| <i>Hongmei Li, Yanli Chai</i> | |
| EFFECTIVENESS ANALYSIS OF EMISSION REDUCTION MEASURES IN THE HUANGSHUI RIVER WATERSHED BASED ON MIKE11 MODEL | 1342 |
| <i>Xiaokang Zheng, Shaoming Peng, Hang Yang, Xinlei Zhao</i> | |
| RESEARCH ON REAL-TIME MONITORING OF URBAN AIR QUALITY BASED ON OPTIMAL SCALE AND FACTOR ANALYSIS | 1349 |
| <i>Chun Chen, Xiang Gao, Qian Mou</i> | |
| A STUDY ON ANECHOIC CHAMBER USING COUNTER-PHASE COUNTERACT | 1355 |
| <i>Ying-li Shao</i> | |
| STUDY AND ANALYSIS ON THE FACTORS OF SITE SELECTION IN LARGE OIL SEAL CAVERN AT HOME AND ABROAD | 1359 |
| <i>YuXuan Sui, DongFeng Zhao, Li Zhang, JiaWei Chen</i> | |
| THE PREDICTION OF ALUMINUM DEMAND BASED ON S-SHAPED REGULARITY AND RESEARCH ON SUPPLY PROPOSAL OF CHINA | 1363 |
| <i>Guangyu Jiang</i> | |
| A PROCESSING METHOD TO INCREASE PRODUCTION OF BIOMETHANE FROM LIGNITE | 1368 |
| <i>Xingcheng Zhao, Bo Wang, Yuhong Xie, Xin Feng</i> | |
| APPLICATION OF A SMALL ELECTROSTATIC DESALINATION EQUIPMENT | 1372 |
| <i>Huawei Xu</i> | |
| RESEARCH TRENDS AND APPLICATION PROSPECTS OF CO2 FLOODING TECHNOLOGY AND SEQUESTRATION TECHNOLOGY | 1376 |
| <i>Tianshu Chu, Dongfeng Zhao, Chen Yuan</i> | |
| STUDY ON APPLYING OXIDIZED POLY-SILICIC-FERRIC COAGULANT TO COMBINED PROCESS OF SHORT-TERM COAGULATION AND FILTRATION | 1381 |
| <i>Dong Gao, Ying Fu</i> | |
| STUDY ON THE CHILLING REQUIREMENT AND DORMANT PHYSIOLOGY OF ZIZIPHUS JUJUBA ‘ZHANSHANMIZAO’ | 1385 |
| <i>Qian Deng, Yang Wang, Wanqiu Zhu, Yan Zhou, Qunxian Deng</i> | |
| ANALYSIS ON A CASE OF MARINE HYDRAULIC STEERING GEAR FAILURE | 1389 |
| <i>Xiaohua Ye</i> | |
| A PRELIMINARY STUDY ON THE FRUIT DROP MECHANISM OF ZIZYPHUS JUJUBA ‘ZHANSHANMIZAO’ | 1395 |
| <i>Si Ren, Wenjun Yang, Bin Zhou, Tao Tao, Qunxian Deng</i> | |
| STUDY ON THE EFFECT OF ZIZYPHUS JUJUBA ‘ZHANSHANMIZAO’ DORMANCY RELEASE BY COVER | 1400 |
| <i>Lei Li, Qunxian Deng, Yan Zhou, Xuehui Lan</i> | |
| EFFECTS OF GA₃, NAA AND PCPA ON THE FRUIT DROP RATE AND QUALITY OF ZIZIPHUS JUJUBA ‘ZHANSHANMIZAO’ | 1406 |
| <i>Yang Wang, Tao Tao, Pan Liao, Qunxian Deng</i> | |
| EFFECTS OF SPRAYING SALICYLIC ACID ON BREAKING DORMANCY AND ANTIOXIDANT SUBSTANCES OF ZIZIPHUS JUJUBA ‘ZHANSHANMIZAO’ | 1410 |
| <i>Shangyu Tao, Jie Zhou, Yan Zhou, Huiifen Zhang</i> | |
| STUDY OF GA₃ ON BREAKING FORCED DORMANCY OF ZIZIPHUS JUJUBA ‘ZHANSHANMIZAO’ BUD AND THE EFFECT ON FRUIT QUALITY | 1414 |
| <i>Haiyan Wang, Jie Zhou, Yan Zhou, Huiifen Zhang</i> | |
| RESEARCH ON THE CROSS INFLUENCE OF ENERGY CONSUMPTION STRUCTURE AND INDUSTRIAL STRUCTURE FROM PERSPECTIVE OF EFFICIENCY | 1418 |
| <i>Mingxiang Lu, Heming Xie, Guangcai Zhu</i> | |
| CHANGES OF ASCORBIC ACID CONTENT IN LEAVES AND FRUITS OF JUJUBE AT DIFFERENT DEVELOPMENTAL STAGES | 1424 |
| <i>Jia Guo, Nengli Fu, Guoying Song, Qunxian Deng</i> | |
| EFFECT OF SEAWEED FERTILIZER ‘SUNRED’ ON THE FRUIT QUALITY OF ‘RED GLOBE’ GRAPE | 1428 |
| <i>Lu Yuan, Xiulan Lv, Jin Wang, Lijin Lin, Qunxian Deng</i> | |

| | |
|--|------|
| RESEARCH ON ANTI-SEEPAGE LAYER PERFORMANCE OF LANDFILL SITE | 1433 |
| <i>Xue-jing Sun, Zhan-hua Wang</i> | |
| ADSORPTION OF CU²⁺ AND PB²⁺ BY BIOLOGICAL CARBON FROM MIXED WASTE | 1437 |
| <i>Shucong Hua, Ying Fu</i> | |
| STUDY ON COAGULATION EFFECT OF COMPOSITE PEEL COAGULANT IN TREATING HUMIC ACID SIMULATED WATER | 1441 |
| <i>Hailong Jian, Ying Fu</i> | |
| A REVIEW ON ORGANISM REGROWTH IN UV-BASED BALLAST WATER TREATMENT SYSTEMS FOR THE APPROVAL OF NEW G8 GUIDELINES | 1445 |
| <i>Jiaxin Chen, Meina Xie, Sen Liang, Ying Yang, Wenting Guan, Cong Zhang, Yong Liang, Tianqi Li, Lixuan Xu, Manxia Zhang</i> | |
| STUDY ON ACCOUNTING METHODS OF SHIP CARBON EMISSION AND MEASURES OF EMISSION REDUCTION | 1449 |
| <i>Guodong Zhao, Wei Li, Chunze Li</i> | |
| ULTRASONIC MICROWAVE-ASSISTED EXTRACTION OF ANTIOXIDANT PHENOLICS FROM WASTE JACKFRUIT (ARTOCARPUS HETEROPHYLLUS LAM.) PEELS | 1455 |
| <i>Zhiguo Jiang, Yanhua Wang</i> | |
| NUMERICAL SIMULATION AND OPTIMIZATION OF CDS/P-SI HETEROJUNCTION SOLAR CELLS | 1463 |
| <i>Chunyan Duan, Yingwen Zhao, Shenghao Li, Qun Ban, Yizhan Chen, Hui Shen</i> | |
| REMOVAL OF AMMONIUM NITROGEN IN THE SUBSIDING WATER FROM CROPLAND IN THE YELLOW RIVER IRRIGATION AREA OF NINGXIA BY NATURAL ZEOLITE | 1470 |
| <i>Cuiling Zhang, Hongfang Wang, Qing Chang, Jiali Zhang</i> | |
| THE STATUS, REQUIREMENTS AND SUGGESTIONS TO THE INTEGRATION OF TRANSPORTATION NETWORK AND NEW ENERGY NETWORK | 1476 |
| <i>Xianguang Wang, Kechao Sun, Jinping Shang, Zhenguo Liu, Wangyihong Oscar</i> | |
| EFFECT OF POTASSIUM SULPHATE ON FRUIT QUALITY OF ‘BLACK BARALDO’ GRAPE | 1482 |
| <i>Bin Hou, Yan Huang, Xiaoli Ma, Jin Wang</i> | |
| STUDY ON EEOI INFLUENCING FACTORS OF LARGE BULK CARRIER | 1486 |
| <i>Changyu Lu, Wei Li</i> | |
| WEBGIS DESIGN AND DEVELOPMENT OF WATER QUALITY TEST OF RURAL DOMESTIC SEWAGE DIANCHI LAKE BASIN | 1491 |
| <i>Pengju Quan, Hong Liang, Xuehui Lu, Ruitao Cui</i> | |
| EVALUATION OF SHORT-CIRCUIT CURRENT BREAKING CAPACITY OF CIRCUIT BREAKER | 1496 |
| <i>Yongchun Su, Xiaoming Wang, Ning Zhou, Zhan Shu</i> | |
| DYNAMIC ANALYSIS AND PARAMETER MATCHING SIMULATION SYSTEM OF DTH HAMMER | 1501 |
| <i>Xueqing Wang, Xing Li, Xiaozhe Wang, Zhongxiang Wang, Chao Gao, Xiangsheng Guo, Yingqi Wang, Yabo Shang, Yuguo Tian</i> | |
| EFFECTS OF DIFFERENT HORTICULTURAL SUBSTRATES COMPOSITION AND DEPTH ON RUNOFF WATER QUALITY | 1505 |
| <i>Shuai Hao, Yihe Zhu, Shunli Wang, Kefeng Liu, Qiang Zhang</i> | |
| RESEARCH ON FUZZY PID CONTROL OF BUILDING HYDROELECTRIC SPEED REGULATING SYSTEM | 1513 |
| <i>Guanlu Yang, Shuyang Wang, Zehong Huang</i> | |
| THE TOTAL INVESTMENT RECOVERY CYCLE FOR OPTIMAL CAPACITY ALLOCATION OF THE WIND-SOLAR-BATTERY MICRO-GRID SYSTEM | 1518 |
| <i>Guanlu Yang, Yang Wang, Minxu Wu</i> | |
| ENERGY HARVESTING FOR WIRELESS ELECTRIC POWER TRANSMISSION BASED ON ANALYSING INDUCTIVE COUPLING | 1523 |
| <i>Guo Zhu Zhao, Zheng Quan Li, You Jun Chen</i> | |
| RESEARCH ON THE HIGH-POWER DIRECTIONAL ACOUSTIC TRANSDUCER | 1527 |
| <i>Guo Zhu Zhao, You Jun Chen</i> | |
| THE BOX-COUNTING DIMENSION OF SPATIAL PATTERNS OF POPULATION DISTRIBUTION OF LILIUM REGALE | 1531 |
| <i>Zi-song Yang, Yi Li</i> | |
| A METHOD BASED ON FIBER RAMAN SCATTERING CABLE FOR TESTING TEMPERATURE AND REDUCING NOISE | 1536 |
| <i>Chunbo LIU, Liangyi Huang, Rui LI, Zhidong GU, Jiawei XU</i> | |

| | |
|---|------|
| ASSESSMENT OF ECOLOGICAL SUSTAINABILITY OF RESOURCE-BASED CITY—A CASE STUDY OF HANCHENG CITY, CHINA | 1539 |
| <i>Yan Zhu, Lihui Zhou, Xuan Zhang, Jun Zhang, Hongxia Du, Lanzhou Xu, Pengkang Jin, Bizhou Ge</i> | |
| SYNTHESIS AND PHOTOPHYSICAL PROPERTIES OF A COPPER(I) COMPLEX EMITTING MATERIAL CONTAINING 5-(9H-FLUOREN-2-YL)-2-(1H-IMIDAZOL-2-YL)PYRIDINE LIGAND | 1544 |
| <i>Chaoyang Chai, Qingzhi Su, Feng Zhao</i> | |
| SYNTHESIS AND PHOTOPHYSICAL PROPERTIES OF FOUR-COORDINATE N-HETEROCYCLIC CARBENE COPPER(I) COMPLEX EMITTING MATERIAL WITH BRIGHTLY LUMINESCENCE | 1548 |
| <i>Qingzhi Su, Chaoyang Chai, Feng Zhao</i> | |
| ANALYSIS OF NUTRIENT SUBSTANCE CONTENTS IN BLUEBERRY PULP | 1552 |
| <i>Zhaofang Chen, Liancong Yang, Jin Wang, Xun Wang</i> | |
| ENERGY EFFICIENCY MANAGEMENT OF VIRTUAL POWER PLANTS CONSIDERING TEMPERATURE CONTROL LOAD | 1556 |
| <i>Guanlu Yang, Xiaofeng Chen, Yajing Lv</i> | |
| EFFECT OF SPRAYING CALCIUM FERTILIZER ON THE FRUIT QUALITY OF ‘SUMMER BLACK’ GRAPE | 1560 |
| <i>Yan Huang, Jin Wang, Qiong Zhou, Xiulan Lv</i> | |
| EFFECT OF SPRAYING CALCIUM FERTILIZER ON THE FRUIT QUALITY OF ‘RUBY SEEDLESS’ GRAPE | 1564 |
| <i>Yan Huang, Xiaoli Ma, Wenjie HU, Jin Wang</i> | |
| AN INNOVATIVE SYSTEM FOR ONLINE EVALUATION OF DENITRATION CATALYST ACTIVITY AND AUTOMATIC ADJUSTMENT OF AIG SPRAY DISTRIBUTION | 1568 |
| <i>Ruifeng Dong, Yang Guo, Xueying Zhang</i> | |
| INVESTIGATION ON GROWTH OF 15 BLUEBERRY VARIETIES/STRAINS IN QIONGLAI | 1574 |
| <i>Yuxin Wang, Ke Xu, Jin Wang, Changjiang Yi, Xun Wang</i> | |
| STUDY ON COLLECTION OF THE PARTICLES IN WASTE GASIFICATION GAS BY WET ELECTROSTATIC PRECIPITATOR | 1578 |
| <i>Lichun Xiao, Meng Zhang, Yuchuan Wang</i> | |
| COLOR RESEARCH IN URBAN PLANNING | 1586 |
| <i>Jing Yan</i> | |
| THE EFFECT OF DIFFERENT DEGREE OF FRUIT THINNING ON THE QUALITY OF ‘SUMMER BLACK’ GRAPE | 1590 |
| <i>Bin Hou, Yan Huang, Qiong Zhou, Jin Wang</i> | |
| STUDY ON MAIN POLLUTANTS AND WATER QUALITY OF LANDSCAPE WATERBODY IN SUZHOU ANCIENT CITY | 1594 |
| <i>Guosheng Ma, Juan Chen</i> | |
| STUDY ON ENVIRONMENTAL POLLUTION AND CONTROL COUNTERMEASURES OF AGRICULTURAL AND RURAL AREAS IN JIANGSU PROVINCE | 1599 |
| <i>Juan Chen, Guosheng Ma</i> | |
| DISCUSSION ON MISCLASSIFICATION OF ULTRASONIC CROSS-HOLE DETECTION METHOD IN BORED PILES | 1604 |
| <i>Likui Huang, Enkuan Tang, Ganming Yi, Wenbin Wu, Qing Shen</i> | |
| TREATMENT PLANS OF SETTLEMENT DEFORMATION AT EXPRESSWAY TUNNEL PORTAL AREA | 1608 |
| <i>Tang Enkuan, Likui Huang, Daiguang Chen, Qing Shen, Wenbin Wu</i> | |
| ANALYSIS OF CAR TRAVEL CHARACTERISTICS BASED ON VEHICLE OBD DATA | 1613 |
| <i>Jianping Sun, Jifu Guo, Huimin Wen, Xiang Zhao, Fangshu Lei</i> | |
| MAPPING THE MINED-OUT AREA SATURATED BY WATER WITH TRANSIENT ELECTROMAGNETIC METHOD | 1625 |
| <i>Chuantao Yu, Xinyue Liu, En-guo Li</i> | |
| TOLERANCE CHARACTERISTICS OF SONCHUS ARVENSIS L. ON CADMIUM | 1630 |
| <i>Qianxin Wang, Zhanbiao Yang, Yuanxiang Yang, Bowen Sun, Zhang Cheng, Xuemei Zhu</i> | |
| EXPLORATION AND DETECTION OF QUANTITATIVE ANALYSIS METHOD OF OPES IN URINE | 1636 |
| <i>Jun Chen, Hongling Yin, Lin Luo, Fei Peng, Yi Luo, Xu Deng</i> | |
| IMPORTANCE OF POLLUTION CONTROLLING BY GREY CORRELATION ANALYSIS | 1641 |
| <i>Li-na Wang, Yi-tong Wang</i> | |
| EFFECTS OF WATER STRESS ON THE GROWTH STATUS OF FIVE SPECIES OF SHRUBS | 1646 |
| <i>Pingwei Xiang, Xiaoli Ma, Xuefeng Liu, Xiangcheng Yuan, Zhihua Fu</i> | |

| | |
|--|------|
| STUDY ON COMBUSTION CHARACTERISTICS OF GLYPHOSATE WASTE LIQUOR | 1651 |
| <i>Jianmin Zhu, Tao Wang, Guangming Shen, Rui Zhang, Shuzhong Wang, Jun Zhao</i> | |
| ATTRACTIVE EFFECT OF DIFFERENT COLORED STICKY TRAPS ON COTARINA SP. IN MULBERRY FIELD | 1658 |
| <i>Jiequn Ren, Li Chen, Zhinan Li, Minghai Zhang, Yi Yang, Zhangyun Zheng</i> | |
| CADMIUM ACCUMULATION CHARACTERISTICS OF CYPHOMANDRA BETACEA SEEDLINGS | 1662 |
| <i>Mei Qing, Lijin Lin, Ming'an Liao</i> | |
| EFFECTS OF CADMIUM STRESS ON PHOTOSYNTHESIS OF CYPHOMANDRA BETACEA SEEDLINGS | 1666 |
| <i>Mei Qing, Lijin Lin, Ming'an Liao</i> | |
| EFFECTS OF DIFFERENT CONCENTRATIONS OF SELENIUM ON ANTIOXIDANT ENZYME ACTIVITY OF PTEROCYPSELA LACINIATA | 1670 |
| <i>Dandi Xu, Yuzhi Wei, Yue Gao, Lijin Lin, Zitong Wang, Yifei Zheng</i> | |
| EFFECTS OF DIFFERENT SELENIUM CONCENTRATIONS ON PHOTOSYNTHETIC PIGMENT CONTENT OF PTEROCYPSELA LACINIATA | 1674 |
| <i>Dandi Xu, Yuzhi Wei, Yue Gao, Lijin Lin, Zitong Wang, Yifei Zheng</i> | |
| EFFECTS OF DIFFERENT SELENIUM CONCENTRATIONS ON THE PHOTOSYNTHETIC PIGMENT CONTENT IN SOLANUM ALATUM | 1678 |
| <i>Kewen Huang, Huashan Lian, Ming'an Liao, Lijin Lin</i> | |
| EFFECTS OF GRAPE SEEDLINGS INTERCROPPING WITH HYPERACCUMULATORS ON DIFFERENT FRACTIONS OF CADMIUM CONTENT IN SOIL | 1682 |
| <i>Kewen Huang, Lijin Lin, Ming'an Liao</i> | |
| EFFECTS OF MULCHING WITH HYPERACCUMULATOR STRAW ON NUTRIENTS UPTAKE OF CYPHOMANDRA BETACEA SEEDLINGS UNDER CADMIUM STRESS | 1686 |
| <i>Kewen Huang, Huashan Lian, Ming'an Liao, Lijin Lin</i> | |
| EFFECTS OF PLANTING CYPHOMANDRA BETACEA SEEDLINGS AFTER MULCHING WITH ACCUMULATOR STRAW ON SOIL NUTRIENT CONTENT UNDER CADMIUM STRESS | 1690 |
| <i>Kewen Huang, Lijin Lin, Ming'an Liao</i> | |
| EFFECTS OF MULCHING TOLERANCE PLANT STRAW ON PHOSPHORUS AND POTASSIUM UPTAKES OF CYPHOMANDRA BETACEA SEEDLINGS UNDER CADMIUM | 1694 |
| <i>Piao Liu, Huashan Lian, Hongyan Li, Lijin Lin</i> | |
| EFFECTS OF DIFFERENT CONCENTRATIONS OF SELENIUM ON PHOTOSYNTHETIC PIGMENT CONTENT OF PERILLA FRUTESCENS | 1698 |
| <i>Renyan Liao</i> | |
| A STUDY OF PHYLLOSTACHYS BAMBUSOIDES FORMA SHOZHOU YI FOREST SOIL N INDICATORS AND ENZYME ACTIVITY IN SPRING AND SUMMER | 1702 |
| <i>Qianxin Wang, Zhanbiao Yang, Yuanxiang Yang, Bowen Sun, Zhang Cheng, Xuemei Zhu</i> | |
| THE ECOLOGICAL SIGNIFICANCE AND CONSTRUCTION FORM OF FOREST SCHOOL | 1707 |
| <i>Jing Yan, Man Yin</i> | |
| SCREENING CITRUS SSR MOLECULAR MARKER PRIMERS | 1713 |
| <i>Xiaojia Wang, Zhihui Wang, Siyu Zhang, Jundou Liu, Xun Wang</i> | |
| NUMERICAL SIMULATION RESEARCH ON PERMEABILITY COEFFICIENT INVERSION BASED ON THE DATA OF MINE WATER INRUSH | 1717 |
| <i>Baofeng Zhao, Lianjing Ma</i> | |
| SPATIAL POSITION AND POSTURE OF COMPONENT DETECTION SYSTEM BASED ON BINOCULAR STEREO VISION | 1722 |
| <i>Yuan Liu, Yunfeng Fei, Wei Wang, Yinhao Song</i> | |
| INFLUENCE OF COIL CHARACTERISTICS ON SENSOR SENSITIVITY OF PERMEABILITY TESTING TECHNOLOGY BASED ON CONSTANT CURRENT SOURCE | 1727 |
| <i>Xianzhi Ren, Shangkun Ren</i> | |
| A NOVEL LOCUST-INSPIRED JUMPING ROBOT DRIVEN BY PNEUMATIC MUSCLE ACTUATORS | 1732 |
| <i>Jun Zhong, Chun Zhao, Hui Su</i> | |
| A HIGH PERFORMANCE ASIC INTERFACE FOR MEMS GYROSCOPE | 1736 |
| <i>Bing Meng, Lin Liu, Gang Wang, Hangwei Lv</i> | |
| DESIGN OF A CONFIGURABLE REMOTE DATA ACQUISITION SYSTEM | 1744 |
| <i>Jiawen He, Jiqiang Xia</i> | |
| AN ALTERNATE CHARGING METHOD FOR ADDITIONAL SMART SWITCH IN WEAK LIGHT ENVIRONMENT | 1749 |
| <i>Jing Wang, Lijun Wang, Zhicheng Wang, Junjie Wang</i> | |

| | |
|--|------|
| DESIGN OF LONG-DISTANCE TRANSMISSION CIRCUIT OF HIGH PRECISION MICRO-SEISMIC SIGNALS FOR MINES..... | 1756 |
| <i>Hua Zhang, Binxin Hu, Tao Jiang, Shaowei Ge, Feng Zhu, Tongyu Liu</i> | |
| THE CRUISE MISSILE GUIDANCE AND CONTROL SYSTEM DESIGN AND SIMULATION BASED ON THE INTEGRAL SLIDING MODE CONTROL..... | 1760 |
| <i>Xipeng Liu</i> | |
| IMPROVED DGA METHODS OF POWER TRANSFORMER FAULT DIAGNOSIS: A REVIEW..... | 1765 |
| <i>Chen-hang Ge, Hao-yang Cui, Si-jia Huo, Wen-cheng Guo, Hong-wei Ma, Lun-ming Qin</i> | |
| MODELING AND CONTROL FOR A NEAR-SPACE MORPHING GLIDE AIRCRAFT | 1769 |
| <i>Tie Biao Chen, Min Gong, Chen Xi Wang, Lei Zhang, Bin Bai</i> | |
| RESEARCH ON DIRECT LOAD CONTROL SECURITY MECHANISM BY USING NILM..... | 1779 |
| <i>Chuqi Song, Zhongwei Sun</i> | |
| STUDY AND DESIGN OF MONITORING SYSTEM FOR OIL SPECIAL VEHICLE | 1784 |
| <i>Yun-chang Xiong, Lei Yan</i> | |
| GAS SENSOR ARRAY BASED ON MULTI-WALLED CARBON NANOTUBES AND POLYMER | 1790 |
| <i>Tuoyu Yang, Zitao Li, Ying Dong, Xiaohao Wang</i> | |
| THE ANALYSIS OF WEAK MAGNETIC INSPECTION OF STANDARD TEST BLOCK DEFECTS..... | 1797 |
| <i>Yuelin Tang, Dingdong Zou, Kunyu Zhang, Chaojun Luo, Minxu Deng</i> | |
| NUMERICAL SIMULATION AND OPTIMIZATION OF THE DUAL CIRCULATION FLOW CLEANING DEVICE FOR UNDERGROUND CRUDE OIL STORAGE CAVERNS..... | 1801 |
| <i>Jingkai Zhu, Xiaotian Wang, Genzhu Li</i> | |
| Author Index | |