9th International Conference on Applied Science, Engineering and Technology (ICASET 2020)

Advances in Engineering Research Volume 197

Qingdao, China 25 – 26 May 2020

Editors:

Hongzong Si Peilong Xu

ISBN: 978-1-7138-2459-6

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© (2020) by Atlantis Press All rights reserved. Copyright for individual electronic papers remains with the authors.

For permission requests, please contact the publisher:

Atlantis Press Amsterdam / Paris

Email: contact@atlantis-press.com

Conference Website: http://www.atlantis-press.com/php/pub.php?publication=icaset-20

Printed with permission by Curran Associates, Inc. (2021)

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

GUANGZHOU RESIDENTS	1
Zhenqian Zhang, Qiangqiang Bai	1
RESEARCH ON AGRICULTURAL INTELLIGENT INFORMATION PLATFORM BASED ON INTERNET OF THINGS AND CLOUD COMPUTING SERVICES	21
DESIGN OF MEASURE AND CONTROL SYSTEM BASED ON VC++ FOR DAMPER TEST BENCH	25
Yao Jingjing, Jun Zhou	
RESEARCH ON OPTIMAL DECISION OF OPEN-ENDED FUND INVESTMENT BASED ON MATHEMATICAL MODEL	29
Luling Duan, Zhiheng Lin	
BLIND SIGNAL SEPARATION OF THE UNKNOWN SOURCES NUMBER BASED UNDER THE CONSTRAINT OF SPACE DIRECTION	34
RESEARCH ON ONLINE EVALUATION OF CONSUMER PURCHASE INTENTION BASED ON DATA ANALYSIS	38
A RESEARCH ON OPTIMIZING THE E-COMMERCE MARKETING PLATFORM FOR THE WESTERN AGRICULTURAL PRODUCTS BASING ON THE BLOCKCHAIN TECHNOLOGY	47
Li Yang, Weiguo Li, Wen Jie Zhou	
THE DESIGN OF INFUSION MONITORING SYSTEM BASED ON AT89C51	54
RESEARCH ON INTELLIGENT WAREHOUSE MANAGEMENT SYSTEM BASED ON RFID $\it Ma Junhong$	58
EMPIRICAL ANALYSIS ON THE INFLUENCE OF EQUITY STRUCTURE OF LISTED COMPANIES ON GEM IN CHINA ON ENTERPRISE DEVELOPMENT ABILITY	62
ONLINE AND OFFLINE, LEARNING ALL THE TIME—THE ANALYSIS ON THE PRACTICABILITY OF BLENDED TEACHING MODE OF COLLEGE ENGLISH BASED ON ISMART PLATFORM	70
DESIGN AND APPLICATION OF MULTIDIMENSIONAL ANALYSIS SYSTEM FOR MEDICAL LITERATURE RETRIEVAL	76
Gui-Min Jie, Zhen-Guo Wang, Zhen-Lei Yu	
RESEARCH ON THE LEAKAGE PROBLEMS OF A CAMPUS WATER SUPPLY SYSTEM	81

THE STUDY AND ANALYSIS OF DIFFERENT CNC MODEL BASED ON IMAGE CAPTCHA RECOGNITION	88
COMPARATIVE ANALYSIS ON TECHNOLOGY OF SOFT TOUNDATION TREATMENT OF DREDGER FILL IN WATER TRANSPORTATION ENGINEERING	94
ON THE PROBLEM-SOLVING ACTIVITY MODEL THAT FACILITATES TEACHERS' TPACK CONSTRUCTION IN ONLINE RESEARCH AND STUDIES Yue-Fei Gao, Zhong-Da Wu	98
KNOWLEDGE RECONSTRUCTION FOR MEDICATION NURSING BASED ON WORKING THOUGHT OF VOCATIONAL ELDERLY NURSING ORIENTED	104
SMART HOME SECURITY SYSTEM BASED ON MSP430 MICROCOMPUTER	107
RESEARCH ON WORD-OF-MOUTH MARKETING STRATEGY OF INTERNET FIRM	111
RESEARCH ON TECTONIC COAL STRUCTURE BASED ON NMR TECHNOLOGY	115
EVALUATION OF FREE RADICAL SCAVENGING AND ANTIOXIDATION CAPACITY OF RESVERATROL AND POLYDATIN	119
EXPERIMENTAL STUDY ON DIRECTIONAL LONG HOLE GAS DRAINAGE IN THICK COAL SEAM ROOF	124
A STUDY OF FALL RISK ASSESSMENT IN THE ELDERLY	128
RESEARCH ON CT SYSTEM PARAMETER CALIBRATION AND IMAGING	136
RESEARCH ON USER ADOPTION BEHAVIOR OF INTERNET FINANCING PRODUCTS: EMPIRICAL ANALYSIS BASED ON STRUCTURAL EQUATION MODEL	142
RESEARCH ON STRATEGIC DECISION MAKING OF SCIENCE AND TECHNOLOGY TALENTS BASED ON INFLUENCE, EFFECTIVENESS AND EFFICIENCY — A THEORETICAL ANALYSIS FRAMEWORK	148
EFFECTS OF ANTIOXIDANT COMPOUNDS ON METHAMPHETAMINE-INDUCED LEARNING AND MEMORY IMPAIRMENT IN MICE	154
Pi Mingshan, Zhou Mei, Ru Qin, Gong Xiaokang, Liang Zheng, Leng Changlong	
ANALYSIS OF KEY FACTORS AFFECTING DEEP HOLE DRILLING IN SOFT OUTBURST COAL SEAMS	159

RESEARCH ON THE CONSTRUCTION MODE OF INFORMATION SYSTEM IN SCENIC SPOTS1	163
Gao Wenling	
A FEATURE-BASED AERIAL IMAGE MAPPING ALGORITHM FOR UAV	167
RESEARCH ON ENERGY-SAVING OPTIMIZATION OF IMPROVED DV-HOP	
LOCALIZATION ALGORITHM IN WIRELESS SENSOR NETWORKS	171
RESEARCH AND IMPLEMENTATION OF ORGANIC CUCUMBER INTELLIGENT GREENHOUSE MONITORING SYSTEM BASED ON NB-IOT AND RASPBERRY PI	175
STUDY ON MODULAR DESIGN BASED ON THE THEORY OF LIFE CYCLE	180
RESEARCH ON MISSING TAG ICEBERG QUERY FOR MULTI-CATEGORY RFID SYSTEMS WITH NON-IDEAL CHANNEL	185

Author Index