

MECHANICAL AND CONTROL ENGINEERING

Conference Proceedings

ISBN: 978-1-948012-06-5

Editor: Prof. Dr. Aleksandar Zunjic



2017

WORLD SYMPOSIUM ON MECHANICAL AND CONTROL ENGINEERING

College Of Mechanical And Control Engineering Of Guilin University Of Technology December 2-3, 2017 Guilin, China

VOLKSON PRESS SDN BHD (1253697-P) 6, Jalan Sri Tasik 1A, Summer Glades, Perdana Lake View West, 63000 Cyber Jaya, Selangor Malaysia

Email: info@volksonpress.com



(Volume 1 Issue 2)

ISBN: 978-1-948012-06-5

Editor: Prof. Dr. Aleksandar Zunjic

Location: Guilin, China

Date: December 2-3, 2017

Website: <http://www.wsmce.org>

Description

World Symposium on Mechanical and Control Engineering (WSMCE), supported by International Engineering and Technology Institute (IETI) and International Water, Air, Soil Conversation Society (INWASCON), is an international conference in the topic of World Symposium on Mechanical and Control Engineering . As one of the leading International conference, it aims at providing an innovative exchange platform for students, faculties, and researchers from all over the world.

Table of Contents

Paper	Air ,water & Soil Environments	Authors	No.
1	LONGITUDINAL THERMAL STRESS/STRAIN ANALYSIS FOR CARBON FIBER COMPOSITE	Xiao Yao, Li Shulin, Zhang Tiejun, Yin Junjie, Zhang Xianhang	1-5
2	COMPARATIVE STUDY ON DEFORMATION CHARACTERISTICS OF AL SINGLE CRYSTAL UNDER DYNAMIC AND QUASI-STATIC COMPRESSION	<i>Meng Jiahong, Li Shukui, Liu Jinxu, Ma Siming</i>	6-8
3	NUMERICAL SIMULATION ON THE MIGRATION BEHAVIOR OF GAS BUBBLES IN THE SIMULATED HIGH TEMPERATURE MELTS	<i>Cao Yifeng, Ma Guojun, Zhang Xiang</i>	9-11
4	PREPARATION AND PERFORMANCE OF MICROORGANISM MINERALIZED STEEL SLAG CEMENTING MATERIAL	Haihe Yi, Chun xiang Qian	12-14
5	STUDY ON DRYING PROCESS OF CHINESE YAM	Liu Xiao, Luo Shiyong, Xu Wencai, Liu Shoujie, Zhang Yuyao, Huang Wei, Ma size	15-17
6	CHARACTERIZATION OF THE UV - VISIBLE ABSORPTION SPECTRA OF COMMONLY USED PHOTOINITIATORS	Bu Rongxia, Luo Shiyong, Xu Wencai ,Meng Ruiqiang ,He Di, Mao Kelin,	18-20
7	EFFECTS OF COPPER AND HAFNIUM INFILTRATION SOURCE CATHODE DIFFERENT MIXING PROPORTION ON THE THICKNESS AND HARDNESS OF ALLOY LAYER	Jinyong Xu, Yang Liu, Jian Wang, Bo Gao	21-23
8	EXPERIMENTAL STUDY ON LOGISTIC DISTRIBUTION OF WHOLE STALK SUGARCANE HARVESTER	Zhonghua Shen, Bo Huang	24-26
9	RESEARCH AND APPLICATION OF RTSJ-BASED EMBEDDED SYSTEM API	Teng Haikun, Liu Xincheng, Wang Shiyong	27-29
10	STUDY ON HYBRID MODELING OF HYDRAULIC EXCAVATOR	Liu jun , Wang Dongyun , Xie Xiaobing, Ren Hualin	30-33
11	ANALYSIS OF TWO KINDS OF INJECTION MOLDS FOR MOBILE PHONE BACK COVER BASED ON MOLDFLOW	Sun Bao-fu, Jiang Cong, Hu Ming-jiang	34-36
12	RESEARCH AND DEVELOPMENT OF DURABILITY TEST DEVICE FOR RAIL PASSENGER CAR LOCKS	Li Zihua, Cao Yu	37-38
13	THE DESIGN OF BABY AUTOMATICALLY WOBBLER THE SLEEPING DEVICE	Li haixia, Linjican	39-42
14	THE DESIGN OF VEHICLE HAZARD WARNING DEVICE	Li haixia, Linjican	43-45
15	RESEARCH AND DEVELOPMENT OF STATIC LOAD TEST BENCH FOR EMU GEAR UNIT	Cao Yu, Li Zihua, Dong Bo	46-47

16	DESIGN AND SIMULATION OF IMPROVED PI NEURON CONTROL FOR PHOTOVOLTAIC INVERTER	Zhou Rui, Zhang Yu, Zhang Lie-ping	48-51
17	INFLUENCE OF SHOCK ABSORBER DEGRADATION ON VEHICLE NVH PERFORMANCE	Hong-yu Shu, Shuang Luo, Mao-ju Yang	52-56
18	RESEARCH ON RAPID GENERATION OF DUCTED PROPELLER MODEL AND ITS OPEN WATER PERFORMANCE	Xianlong Liu, Song Tang	57-59
19	BAND GAP CHARACTERISTICS OF ONE-DIMENSIONAL QUASI-PERIODIC PHONONIC CRYSTALS WITH LAYER THICKNESS ARRANGED BY TM (THUE-MORSE) SEQUENCE	Li Shang-da, Liu Yan	60-64
20	A STUDY OF OWNERSHIP FORECASTING BASED ON REGRESSION-COMBINATION OF CIVILIAN VEHICLES IN XI'AN	Sun Jian, Shan Yan, Xu Chao-Ran, Sun Ya-Ru, Song Jin, Chen Nuo	65-67
21	DESIGN OF MULTI-LANGUAGE AUTOMATIC PLAYER SYSTEM	Zhang xueqin, Sun xuan	68-70
22	RESEARCH ON THE INFLUENCE FACTORS OF THE DROPLETS VOLUME OF JETTING DISPENSER	Qian Shen, Guiling Deng, Can Zhou, Zhixiang Yang, Xikang Cheng	71-73
23	APPLICATION RESEARCH OF FEED-FORWARD FEEDBACK COMPOUND CONTROL IN WHITEBOARD DRY VOLUME	Chen mingxia, Zhanghan	74-75
24	RESEARCH ON ADAPTIVE SLIDING MODE CONTROL FOR PIEZOELECTRIC POSITIONING SYSTEM	Yang Gui-hua, Zhong Zhi-xian, Liang Yu	76-78
25	APPLICATION OF FEEDFORWARD-FUZZY ADAPTIVE CONTROL IN THE CONTROL OF ADSORPTION TOWER OF DRY DESULFURIZATION	Wang-Wencheng, Qiu-Shengpeng, Wang-Yongzhen	79-82
26	DESIGN AND SIMULATION OF AUTOMATIC GLASS WASHING MACHINE IN HIGHRISE BUILDING	Ganyuanyan, Xieyongzhi	83-85
27	ANALYSIS OF SPINDLE MOTOR OPTIONS FOR DESKTOP FIVE - AXIS ENGRAVING AND MILLING MACHINE TOOL	Fang Ming Jiang, Jianhua Qin	86-88
28	DAMPING LAYER OPTIMIZATION DESIGN OF VISCOELASTIC CO-CURING STRUCTURE	Li Haiyan, Xu Yang, Zhang Yaolei, Li Chengxiang, Wang Bin	89-91
29	PLC-BASED LEVEL CONTROL SYSTEM	Huidong Zhang, Jianhua Qin	92-94
30	METHOD FOR WEIGHT DECISION-MAKING OF WIRELESS NETWORK PERFORMANCE INDICATOR BASED ON ENTROPY METHOD	Zhang Ruifang, Chen Yang, Liu Yangxue	95-98
31	DESIGN OF AUTOMATIC MECHANICAL AND ELECTRICAL EQUIPMENT MOTION PLAN FOR KELP NATURAL DRYING	Guangying Ma, Chenyao Zhao, Daiyin Yang	99-101
32	DESIGN OF KELP AUTOMATIC DRYING AND HARVESTING MECHANISM	Guangying Ma, Chenyao Zhao, Wenfei Ji	102-104
33	THE INNOVATIVE DESIGNING OF THE CONNECTING-ROD SWINGROD GEARDRIVING INTERNAL-COMBUSTION ENGINES	Yi Fan	105-107
34	BRAIN ACTIVATION LOCALIZATION ALGORITHM BASED ON ALTERNATING VOLUME MAXIMIZATION METHODS	Liushengqian Fengbao Zhanglieping and Sunxuan	108-111
35	FIELD MEASUREMENT AND ANALYSIS OF VIBRATION REDUCTION EFFECT OF STEEL SPRING FLOATING PLATE AND VIBRATION RESPONSE STUDY ON SURROUNDING BUILDING	Shan Ao, Feng Lili, Wang Dongfang, Luo Yanyun	112-115
36	DESIGN OF HIGHLY RELIABLE LOGIC CONTROL SOFTWARE FOR ESCAPE SYSTEM IN PRE-LAUNCHING STAGE	Xu Yang, Wang Haitao, Peng Yue, Wang Ziyu, Ren Yuehui	116-117

37	A NEW METHOD OF CORRELATION REGION LEAST SQUARE ALGORITHM FOR EARTH SYSTEM PARAMETER IDENTIFICATION	Sun Guoliang , Wang Shuo, Qin Honglei, Cao Weihua	118-120
38	RESEARCH ON MATERIALS FLOW BEHAVIOR DURING V-GROOVE MICRO HOT EMBOSsing PROCESS	Haixiong Wang, Junli Wang	121-124
39	DESIGN OF CLASSROOM ZONING LIGHTING CONTROL SYSTEM BASED ON MICROCONTROLLER	Teng Haikun, Liang Xinxin, Jiang Yibin	125-126
40	AN ANALYSIS ON DIAGNOSTIC METHOD OF ROLLER BEARING FAULTS BASED ON AUDITORY SPECTRUM AND SPECTRAL CORRELATION	Li Yungong, Xu Jinfang, Da Li, Zhang Qilin	127-128
41	VEHICLE DATA PROCESSING AND ANALYSIS PLATFORM BASED ON SPARK	Xiaolan Xie, Tianwei Yuan , Xiao Zhou	129-130
42	RESEARCH ON CLOUD PLATFORM OF CASTINGS QUALITY MANAGEMENT BASED ON SPARK	Xiaolan Xie, Xiao Zhou, Tianwei Yuan	131-133
43	DESIGN OF THE DOUBLE-LOOP NETWORKED CONTROL SYSTEM WITH DIFFERENT SAMPLING RATE BASED ON SMITH PREDICTOR	Hong Zhao, Anjin Wu	134-136
44	STRAIN ANALYSIS OF CRACKED SHAFT BASED ON ELECTRIC MEASUREMENT THEORY	Jiao Bolong, Zhong Zhixian, Wang Jiayuan and Liu Yixin	137-139
45	DESIGN AND IMPLEMENTATION OF MESSAGE PUSH SYSTEM BASED ON MQTT PROTOCOL	Yelei Guan, Xiaohui Cheng, Congcong Xia	104-142
46	RESEARCH AND DESIGN OF LIGHTWEIGHT ENCRYPTION FOR MQTT PROTOCOL	Yanping Pan, Xiaohui Cheng, Congcong Xia	143-145
47	PERSONALIZED E-COMMERCE RECOMMENDATION SYSTEM BASED ON COLLABORATIVE FILTERING UNDER HADOOP	Haodong Tang, Xiaohui Cheng	146-148
48	THE INFLUENCE OF HORIZONTAL RING RIB ON VIBRATION AND NOISE OF BOX GIRDER IN URBAN RAILWAY TRANSIT	Xu Yang, Wang Haitao, Peng Yue, Wang Ziyu, Ren Yuehui	149-153
49	DESIGN OF AN AUTOMATIC FOOD CLEANING MACHINE BASED ON SIMATIC LOGO	Hong Zhao, Anjin Wu, Zhen Lu	154-156
50	COMPLICATED MECHANICAL EQUIPMENT DIAGNOSIS BASED ON BAYESIAN NETWORKS	Chaoquan Chen, Xinrong Li, Xiaolan XIE	157-159
51	AN IMPROVED HYBRID RECOMMENDATION ALGORITHM STUDY AND DESIGN ON MAHOUT FRAMEWORK	Dai Fei, Xiaohui Cheng	160-163
52	RESEARCH AND APPLICATION OF INTEGRAL SEPARATION PID CONTROL BASED ON FUZZY CONTROL IN INTELLIGENT CAR	Xiaolan Xie, Xiaohua Tao, Jili Chen	164-166
53	APPLICATION OF INDOOR POSITIONING BASED ON KPCA AND BP NEURAL NETWORK ALGORITHM	Zou Zi-ming, He Wen-bin, Li Fu-min	169-170
54	INTERNET OF VEHICLES DATA SERVICE SYSTEM BASED ON CLOUD PLATFORM	Xiaolan Xie, Qiangqing Zheng, Zhihong Guo	171-173
55	THE INDOOR WIFI LOCALIZATION METHOD BASED ON THE FINGERPRINT LIBRARY NOISE FILTERING	Zou Zi-ming, Li Fu-min, He Wen-bin	174-176
56	ALGORITHM RESEARCH ON CONFLICT DETECTION AND ELIMINATION IN COLLABORATIVE WORK	Teng Haikun, Li Lunbin, Cong Wanjuan	177-180