International Conference on Intelligent Manufacturing and Intelligent Materials (2IM 2019)

IOP Conference Series: Materials Science and Engineering Volume 565

Sanya, China 9 – 11 May 2019

ISBN: 978-1-5108-9391-7

ISSN: 1757-8981

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.

This work is licensed under a Creative Commons Attribution 3.0 International Licence. Licence details: http://creativecommons.org/licenses/by/3.0/.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed by Curran Associates, Inc. (2019)

For permission requests, please contact the Institute of Physics at the address below.

Institute of Physics Dirac House, Temple Back Bristol BS1 6BE UK

Phone: 44 1 17 929 7481 Fax: 44 1 17 920 0979

techtracking@iop.org

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

Volume 565

2019 International Conference on Intelligent Manufacturing and Intelligent Materials (2IM 2019)

9-11 May 2019, Sanya, China

Accepted papers received: 6 June 2019

Published online: 26 June 2019

Preface

2019 International Conference on Intelligent Manufacturing and Intelligent Materials (2IM 2019)

Committees

Peer review statement

Papers

<u>A Production Planning and Scheduling Method Based on Heuristic Rules for Forming-sintering Production System</u>

Zhang Zhengmin, Guan Zailin, Yue Lei, Wang Chuangjian and Wang Hao.....1

<u>Collection and Storage of Assembly Quality Data of Complex Electromechanical</u> Products

Y Liang, Q D Zhang, N Zhao and H Duan....9

<u>Application of Particle Swarm Optimization BP Algorithm in Air Humidity of Greenhouse Crops</u>

Guo Li-Li, Liu Yong, Liu Zi-Wei and Sun Hua-Wei.....18

Research and Applicati	ion of Bottleneck-base	d Planning and	Scheduling	Method for	or PCB
Manufacturing System		_	_		

Dan Luo, Zailin Guan, Cong He, Weikang Fang, Chuangjian Wang and Zhangyi Zeng.....24

Research on Automatic Flow-shop Planning Problem Based on Data Driven Modelling Simulation and Optimization

Weikang Fang, Zailin Guan, Dan Luo, Cong He, Hao Wang and Chuangjian Wang.....33

Design of Secure Enhanced Privacy Protection Electronic Hotel-card Based on QR Code

Eryang Chen, Ansheng Ye, Fang Miao, Wenjie Fan and Yi Jiang.....41

Generating Calligraphy Works Based on DiscoGAN

Yuqing Zhao and Guangyuan Fu....47

Approximate Yield Estimation of Correlated Failure Events for Near-threshold SRAM

Zhongmao Sun, Shuaibo Huang and Hao Yan.....53

The Generalized Modular Design Method of Emergency Rescue Equipment Vehicle

Li Anhu, Li Qiao, Gao Fei, Zhou Yihe, Liu Guangjun and Li Mengru.....63

Several Implementation Methods of Signal Processing Algorithm Based on FPGA

Wang Xin, Hu Zhi-Qiang, Jiang Da-Qing, Sun Zhi-Xiao, Zhang Yu and Liu Yong.....70

Study on the Vibrant Angular Velocity Measurement Algorithm Based on Planar Sensor Array

Tianhe Zhao and Wei Wang.....76

The Analysis of the Negative Feedback Circuit in the Induction Sensors

Pengfei Lin, Chunsheng Lin, Xingya Wu and Ning Zhang.....83

Research on Pose Estimation of Mobile Robo	t Based on Convolutional Neural Network
--	---

Min Yue, Guangyuan Fu and Ming Wu.....90

Influence of Waveform Symmetry on Output Performance of Piezoelectric Inertia
Actuator Controlled by Composite Method

H Y Qi.....96

The Design of an Intelligent Fast Continuous Vialog

Zhang Jinning, Zhou Yishu, Guo Hongbo and He Huayang.....102

Research on Heat Sissipation System Based on High Power LED-UV Curing Equipment

Li Haichao, Li Jinyao, Xu Jingxiang, Zhang Mingming, Cai Jifei and Zhang Guishan.....108

Research Progress on Water-based Ink Drying Technology

Xu Jingxiang, Li Jinyao, Li Haichao, Zhang Mingming and Cai Jifei.....114

Femtosecond Laser Double Pulses Nanofabrication on Silicon

Jin Zhang, Sumei Wang, Mengmeng Wang and Zhuyuan Chu.....120