

International Conference on Nanomaterial, Semiconductor and Composite Materials (ICNSCM 2016)

MATEC Web of Conferences Volume 65 (2016)

Singapore
18-19 June 2016

Editors:

R. K. Agarwal

H. Abd. Rahman

ISBN: 978-1-5108-2602-1

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 license:
<http://creativecommons.org/licenses/by/2.0/>

You are free to:

Share – copy and redistribute the material in any medium or format.

Adapt – remix, transform, and build upon the material for any purpose, even commercial.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. The copyright is retained by the corresponding authors.

Printed by Curran Associates, Inc. (2016)

For additional information, please contact EDP Sciences – Web of Conferences
at the address below.

EDP Sciences – Web of Conferences
17, Avenue du Hoggar
Parc d'Activité de Courtabœuf
BP 112
F-91944 Les Ulis Cedex A
France

Phone: +33 (0) 1 69 18 75 75

Fax: +33 (0) 1 69 28 84 91

contact-edps@webofconferences.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

Self-Healing Concept for Damaged Composite Structure of Automobile Bonnet	1
<i>Park Hyunbum</i>	
A Study on Structural Design and Analysis of Blade and Tower for Small Wind Turbine System	4
<i>Park Hyunbum</i>	
Comparative Study of Gearbox Fault Diagnosis by Vibration Measurements	7
<i>Hartono Dennis, Halim Dunant, Widodo Achmad, Roberts Gethin Wyn</i>	
Dynamic Model and Analysis of Asymmetric Telescopic Wing for Morphing Aircraft	11
<i>Chen Lili, Guo Zheng, Wang Wenkai</i>	
Improved Mask Protected DES using RSA Algorithm	18
<i>Asha Latha S., Sivabalan A.</i>	
Imperfect Preventive Maintenance Model Study Based On Reliability Limitation	23
<i>Zhou Qian, Sun Yufeng</i>	
The Research and Application of Anchor Foundation	26
<i>Li Yongping, Yan Shiming</i>	
The Effects of Packaging on Collision Energy Absorption of Automotive Seat Headrest	29
<i>Chen Minggang, Zhou Lei, Meng Zhenghua, Wei Xuebing, Wang Hui</i>	
Non-linear Static Analysis of Offshore Steep Wave Riser	32
<i>Qiao Hongdong, Ruan Weidong, Shang Zhaohui, Bai Yong</i>	
Research on Patent Portfolio Design by Using of TRIZ Method	38
<i>Li Hui, Liu Luguang, Huo Jiangtao, Xu Bo</i>	
Artificial Neural Network Analysis of the Impact of Sample Output Accuracy	43
<i>Zhang Yu Zhong, Song Shao Yun</i>	
Carbothermal Reduction Process of Silica Formed from Shirasu Volcanic Ash Using Solar Furnace	46
<i>Hatakeyama Keisuke, Sato Keigo, Nishioka Kensuke</i>	
Geant4 Simulation Study of Dose Distribution and Energy Straggling for Proton and Carbon Ion Beams in Water	50
<i>Zhao Qiang, Zhang Zheng, Li Yang</i>	
Electro Conductive Alumina Nanocomposites From Different Alumina-Carbides Mixtures	54
<i>Díaz Luís A., Fernández Adolfo, Okunkova Anna, Solís Washington, Peretyagin Pavel, Gotor Francisco J., Torrecillas Ramón</i>	
Comprehensive Analysis of Internal and Surface Defects of Ceramics	60
<i>Grigoriev Sergey N., Volosova Marina A.</i>	
Energy Demand and Environment Integration Model and Application: the Case of Beijing	64
<i>Guo Fangyuan</i>	
Model Validation of Solar PV Plant with Hybrid Data Dynamic Simulation Based on Fast-responding Generator Method	68
<i>Zhao Dawei, Hu Dongping, He Jieqiong, Zhang Lei, Chen Ning</i>	
The Effect of Adding Carbon Nitride Nanometer Material on The Properties of Epoxy Resin Project	72
<i>Wang Xing, Sun Wenliang, Guo Min</i>	
Hydrothermal Synthesis of $\text{Li}_{4-x}\text{Na}_x\text{Ti}_5\text{O}_{12}$ and $\text{Li}_{4-x}\text{Na}_x\text{Ti}_5\text{O}_{12}$/Graphene Composites as Anode Materials for Lithium-ion Batteries	77
<i>Zhu Jiping, Zhang Yangyang, Zhu Jie, Duan Rui, Da Yumin</i>	
Combustion Synthesis and Electrochemical Properties of $\text{LiNi}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3}\text{Br}_x\text{O}_{2-x}$ and $\text{LiNi}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3}\text{Br}_x\text{O}_{2-x}$/Graphene Cathode Material for Li-ion Batteries	85
<i>Zhu Jiping, Zhu Jie, Zhang Yangyang, Wang Juan, Yan Jiawei</i>	
Synthesis of Pd@Pt Core-shell Nanoparticles based on Photochemical Seed Growth Method and Co-reduction Method and the Electrocatalytic Performance	93
<i>Li Shanshan, Dong Yingnan, Bi Xiaoguo, Liu Xudong, Niu Wei</i>	
The Effects of Milling Factors on Surface Finish of Chromium-Molybdenum Steel	97
<i>Wongsasiripat Warachanin, Jirapattarasilpls Komson</i>	
Temperature Control of Heating Zone for Drying Process: Effect of Air Velocity Change	101
<i>Wutthithanyawat Chananchai, Srisiriwat Nawadee</i>	
Numerical Investigation on Mechanical Behaviour of Closed-cell Aluminium Foams Using a Representative Volume Element Method	104
<i>Liu Chengjun, Zhang Y.X., Yang Chunhui</i>	
Inhibitory Effect of Cratogeomys Formosum Gum on Candida Glabrata and Its α-mangostin Content	108
<i>Thaweboon Sroisiri, Thaweboon Boonyanit, Nisalak Passiri, Kaypetch Rattiporn</i>	

Study on the Motion state of Powdery Materials in Dense-phase Pneumatic Conveying Pipe	111
<i>Lia Zhihua, Liu Guangpeng, Guo Nan, Liu Feipeng</i>	
Analysis and Study on Performance of a New Integrated Dust Precipitator.....	115
<i>Li Zhihua, Dai Fengxue, Liu Feipeng, Guo Nan</i>	
The Reliability Study of Ram BOP Seals of Temperature Snubbing	119
<i>Jin Jiaqi, Wang Xianrong, Liang Yuan, Zhou Wei</i>	
Development and Research of Vacuum-plasma Composite Coatings for Increase of Operability of Shearing Dies	122
<i>Volosova Marina A., Seleznev Anton E., Shein Alexander A.</i>	
Research on the Prediction Model of CPU Utilization Based on ARIMA-BP Neural Network.....	126
<i>Wang Jina, Yan Yongming, Guo Jun</i>	
Reduction of Temperature in Silicon Photovoltaic Module Using Thermal Radiation Coating.....	130
<i>Nakamura Satoshi, Nishioka Kensuke</i>	
Designing of Long Wavelength Cut Thin Film Filter for Temperature Reduction of Concentrator Photovoltaic.....	134
<i>Ahmad Nawwar, Hatakeyama Keisuke, Ota Yasuyuki, Nishioka Kensuke</i>	
Outdoor Performance Comparison of Concentrator Photovoltaic and Flat Plate Photovoltaic Systems	138
<i>Hidaka Yoshihide, Imai Kenta, Ota Yasuyuki, Nishioka Kensuke</i>	
Reduction of Temperature in Concentrator Photovoltaic Module Using Coating with High Thermal Emissivity and Conductivity	141
<i>Nakamura Satoshi, Sakamoto Kazumasa, Nishioka Kensuke</i>	
Photochemical Synthesis of Au@Pd Core-Shell Nanoparticles for Methanol Oxidation Reaction: the Promotional Effect of the Au Core.....	144
<i>Dong Yingnan, Yang Xikun, Zhang Zhengfu, Dong Shouan, Li Shanshan</i>	
Author Index	