

14th International Conference and Exhibition on

MATERIALS SCIENCE AND ENGINEERING

November 13-15, 2017 Las Vegas, USA



08:00-9:00 Registrations

Conference Hall: The Five Spot Room

conference**series.com** 09:00-09:30

Opening Ceremony

Keynote Forum

09:30-10:00 **Title: Surface stress in nano-structural formation**
Hidehito Asaoka, Japan Atomic Energy Agency, Japan

10:00-10:30 **Title: Design of metamaterials using transformation physics**
Ramesh K Agarwal, Washington University in St. Louis, USA

Networking & Refreshment Break: 10:30-10:45 @ Pre-Function Space

10:45-11:15 **Title: Functional structures & devices by additive manufacturing**
Jun Ding, National University of Singapore, Singapore

11:15-11:45 **Title: Mitigation of major product defects in aluminum extrusion**
Sayyad Zahid Qamar, Sultan Qaboos University, Oman

Group Photo & Panel Discussion 11:45-12:00 @ The Five Spot Room

Sessions:

Materials Science & Engineering | Nanotechnology in Materials Science | Batteries and Energy Materials | Mining, Metallurgy and Materials Science | Surface Science and Engineering | Electrical, Optical and Magnetic Materials | Materials Chemistry and Physics

Session Chair: Jun Ding, National University of Singapore, Singapore

12:00-12:25 **Title: High-magnetization oxide spinel ferrite films**
Jun Ding, National University of Singapore, Singapore

12:25-12:50 **Title: Impact of the residual flux reduction on the internal corrosion behavior for the automotive brazed heater cores**
Philippe Da Silva, Valeo THS, France

12:50-13:15 **Title: Influence of boehmite nanoparticle on the curing kinetics and rheology of an epoxy matrix for liquid composite molding process**
Dilmurat Abliz, Clausthal University of Technology, Germany

Lunch Break 13:15-14:15 @ Renaissance III

14:15-14:40 **Title: Accelerated corrosion test for exhaust gas recirculation exchangers**
Vincent Renault, Valeo THS, France

14:40-15:05 **Title: Cleaner production practices for resource optimisation**
Sampath Kumar M C, B M S College of Engineering Bangalore, India

15:05-15:30 **Title: The determining role of brazing clad in aluminium material fatigue behavior for automotive exchanger applications**
Anne-Gaëlle Villemiane, Valeo THS, France

15:30-15:55 **Title: Hydrothermally grown nanoflowered WO₃ thin films on etched ITO for electrochromic studies**
Anamika V Kadam, D Y Patil College of Engineering and Technology, India

Networking & Refreshment Break 15:55-16:10 @ Pre-Function Space

16:10-16:35 **Title: Spinorbitronics at interfaces for THz emission**
Henri Jaffrès, Unité Mixte de Physique CNRS-Thales, France

16:35-17:00 **Title: Crystal growth of Si based on the Na-Si binary phase diagram**
Haruhiko Morito, Tohoku University, Japan

Panel Discussions 17:00-17:15

Day 1 Concludes...

Reception Pool Deck 6:00PM-7:00PM

Day 2 November 14, 2017

Conference Hall: The Five Spot Room

Keynote Forum

08:15-09:30 Registrations

09:30-09:45 Introduction

Plenary Speech

09:45-10:45 Title: Wave scattering by many small impedance particles and creating materials with a desired refraction coefficient

Alexander G Ramm, Kansas State University, USA

Networking & Refreshment Break 10:45-11:05 @ Pre-Function Space

Young Researcher Forum @ The Five Spot Room

Sessions:

Materials Science & Engineering | Nanotechnology in Materials Science | Surface Science and Engineering

Session Chair: Sampath Kumar M C, B M S College of Engineering Bangalore, India

11:05-11:25 Title: Flexible organic field effect transistors with enhanced electrical properties
Davoud Dastan, Cornell University, USA

11:25-11:45 Title: Microstructural characterization of Mg-SiC nanocomposites produced by powder metallurgy techniques

Daniela Penther, Technische Universität Berlin, Germany

11:45-12:05 Title: Fabrication of surfaces modified with carboxymethylthio ligands towards chelate-assisted trace-level extraction of copper

John O Adongo, Humboldt-Universität zu Berlin, Germany

12:05-12:25 Title: Thermal-Structural and elemental analysis of Cu-Fe-O system coupled with available thermodynamic modeling

Juliano Schorne Pinto, Université de Toulouse, France

12:25-12:45 Title: The improved photoelectrochemical properties using α -hematite -molybdenum disulfide nanostructured material

Hussein Alrobei, University of South Florida, USA

Panel Discussion & Best Presentation Award distribution 12:45-12:50 @ The Five Spot Room

Lunch Break 12:50-13:45 @ Renaissance III

Poster Presentations @ Pre-Function Space

10 minutes for each presentation (13:45-17:30)

MSE 01 Title: Online monitoring of the filling behavior of highly-filled polymeric materials during the injection molding process

Tamara Florian, Clausthal University of Technology, Germany

MSE 02 Title: Angiogenesis depression effect; A cure for glioblastoma multiforme through oral administration by lactoferrin-glycyrrhizin conjugate, as HMGB1 antagonist

Hae Jin Kim, Hanyang University, South Korea

- MSE 03** **Title: Colorimetric contact lens type sensor consisting of cerium oxide nanoparticles and glucose oxidase for tear glucose detection**
Sijin Park, Hanyang University, South Korea
- MSE 04** **Title: Periodic nanostructures obtained by spinodal decomposition at low temperature on $\text{Co}_{1.7}\text{Fe}_{1.3}\text{O}_4$ thin films prepared by radio frequency sputtering**
Antoine Barnabe, CIRIMAT – Université de Toulouse III Paul Sabatier, France
- MSE 05** **Title: Effects of doping ratio of cobalt and iron on the structure and optical properties of ferroelectric bismuth titanates**
Chung Wung Bark, Gachon University, Republic of Korea
- MSE 06** **Title: Characterization and analysis of phosphor condition with electrode of perovskite solar cells**
Hyung Wook Choi, Gachon University, Republic of Korea
- MSE 07** **Title: Preparation of oxide semiconductors thin films for the transparent electrode by helicon-wave excited plasma sputtering method**
Takumi Namba, Tokyo University of Science, Japan
- MSE 08** **Title: Characterizations of ZnO nanorods and ZnO/ZnS core/shell nanorods on copper grids**
Yu-Shan Lee, National Chi Nan University, Republic of China
- MSE 09** **Title: Fatty acid-based electrospun fiber for temperature-controlled drug release**
Ji Hyeon Choi, Kyungpook National University, Republic of Korea
- MSE 10** **Title: NIR light-triggered, localized anti-cancer drug delivery using poly(ϵ -caprolactone) (PCL) fibers incorporated with indocyanine green and phase-changeable fatty acid**
Ju Hyang Park, Kyungpook National University, Republic of Korea
- MSE 11** **Title: Chitosan-coated magnetic nanoparticles modified with folate use for doxorubicin released**
Yu-Chen Fa, National Sun Yat-sen University, Taiwan
- MSE 12** **Title: Age heat treatments of the $\text{CoCrFeNiTi}_{0.3}$ high-entropy alloy**
Tao-Tsung Shun, Feng Chia University, Taiwan
- MSE 13** **Title: Thermal, mechanical properties of modified poly (lactic-acid) / poly (butylene-adipate-co-terephthalate) blends**
Gi Hong Kim, Kyungpook National University, Republic of Korea
- MSE 14** **Title: Fabrication of poly(ϵ -caprolactone) (PCL) particles with non-spherical geometries via selective dewetting and deposition of the polymer**
Jin Ho Son, Kyungpook National University, Republic of Korea
- MSE 15** **Title: Innovative superhydrophobic nano coatings for durable applications**
Daniela Rusu, LPIM - Université de Haute-Alsace, France
- MSE 16** **Title: Random poly(ϵ -Caprolactone-L-Alanine) by direct melt copolymerization**
Christelle Delaite, LPIM - Université de Haute-Alsace, France
- MSE 17** **Title: Thermal and humid influence on the interfacial aging of polyurethane coated polyketone fabrics**
Jee-Woo Yang, Chungnam National University, South Korea

Best Poster Presentation @ Pre-Function Space

Networking & Refreshment Break from 16:30 @ Pre-Function Space

Day 2 Concludes....

Conference Hall: The Five Spot Room

Sessions:

Materials Science & Engineering | Nanotechnology in Materials Science | Batteries and Energy Materials | Mining, Metallurgy and Materials Science | Surface Science and Engineering | Electrical, Optical and Magnetic Materials | Materials Chemistry and Physics

Session Chair: Antoine Barnabe, CIRIMAT – Université de Toulouse III Paul Sabatier, France

10:00-10:25 Title: p-type TCO thin films of Delafossite CuCrO_2 :Mg by rf sputtering with conventional thermal and ultra-rapid laser annealings

Antoine Barnabe, CIRIMAT – Université de Toulouse III Paul Sabatier, France

10:25-10:50 Title: Single element transition metal nitride protective sputtering coatings with versatile structural features

Fan-Bean Wu, National United University, Taiwan

Networking & Refreshment Break 10:50-11:10 @ Pre-Function Space

11:10-11:35 Title: New DGEBA-based epoxy resins toughened with liquid silicones

Daniela Rusu, LPIM - Université de Haute-Alsace, France

11:35-12:00 Title: Hydrogen storage characteristics of nanostructured $\text{La}_{0.75}\text{Ce}_{0.25}\text{Ni}_5$ alloy grinded by sonication process

Shrok Allami, Ministry of Science and Technology, Iraq

12:00-12:25 Title: Rational design of novel Cu-containing catalysts for effective CO_2 conversion

Qiang Sun, Peking University, China

12:25-12:50 Title: Effect of TMAI pretreatment of sapphire substrate on the properties of MOCVD grown AlN epilayers

Talal M Al Tahtamouni, Qatar University, Qatar

12:50-13:15 Title: Injectable antimicrobial collagen/nanohydroxyapatite hydrogel scaffolds for bone regenerative applications

Ahmed Abd El-Fattah, Alexandria University, Egypt

13:15-13:40 Title: Self-assembled pectin-conjugated multi-arm-polyethylene glycol nanoparticles loading dihydroartemisinin for anticancer combination therapy

Yanxue Liu, Beijing Forestry University, P R China

Panel Discussions and Award Ceremony 13:40-13:50 @ The Five Spot Room

Lunch Break 13:50 onwards @ Renaissance III

Day 3 Concludes....