Scientific Program
(Updated)

14th International Conference and Exhibition on
MATERIALS SCIENCE AND ENGINEERING
November 13-15, 2017  Las Vegas, USA
Day 1  November 13, 2017

08:00-9:00 Registrations

Conference Hall: The Five Spot Room

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
Panel Discussions 17:00-17:15

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

Day 1 Concludes...

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
Title: Colorimetric contact lens type sensor consisting of cerium oxide nanoparticles and glucose oxidase for tear glucose detection
Sijin Park, Hanyang University, South Korea

Title: Periodic nanostructures obtained by spinodal decomposition at low temperature on Co$_{1.7}$Fe$_{1.3}$O$_4$ thin films prepared by radio frequency sputtering
Antoine Barnabe, CIRIMAT – Université de Toulouse III Paul Sabatier, France

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

Title: Characterization and analysis of phosphor condition with electrode of perovskite solar cells
Hyung Wook Choi, Gachon University, Republic of Korea

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

Title: Characterizations of ZnO nanorods and ZnO/ZnS core/shell nanorods on copper grids
Yu-Shan Lee, National Chi Nan University, Republic of China

Title: Fatty acid-based electrospun fiber for temperature-controlled drug release
Ji Hyeon Choi, Kyungpook National University, Republic of Korea

Title: NIR light-triggered, localized anti-cancer drug delivery using poly($\varepsilon$-caprolactone) (PCL) fibers incorporated with indocyanine green and phase-changeable fatty acid
Ju Hyang Park, Kyungpook National University, Republic of Korea

Title: Chitosan-coated magnetic nanoparticles modified with folate use for doxorubicin released
Yu-Chen Fa, National Sun Yat-sen University, Taiwan

Title: Age heat treatments of the CoCrFeNiTi$_{0.3}$ high-entropy alloy
Tao-Tsung Shun, Feng Chia University, Taiwan

Title: Thermal, mechanical properties of modified poly (lactic-acid) / poly (butylene-adipate-co-terephthalate) blends
Gi Hong Kim, Kyungpook National University, Republic of Korea

Title: Fabrication of poly($\varepsilon$-caprolactone) (PCL) particles with non-spherical geometries via selective dewetting and deposition of the polymer
Jin Ho Son, Kyungpook National University, Republic of Korea

Title: Innovative superhydrophobic nano coatings for durable applications
Daniela Rusu, LPIM - Université de Haute-Alsace, France

Title: Random poly($\varepsilon$-Caprolactone-L-Alanine) by direct melt copolymerization
Christelle Delaite, LPIM - Université de Haute-Alsace, France

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....
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

11:00-11:35
Title: New DGEBA-based epoxy resins toughened with liquid silicones
Daniela Rusu, LPIM - Université de Haute-Alsace, France

Title: Hydrogen storage characteristics of nanostructured La$_{0.75}$Ce$_{0.25}$Ni$_5$ alloy grinded by sonication process
Shrok Allami, Ministry of Science and Technology, Iraq

11:35-12:00
Title: Rational design of novel Cu-containing catalysts for effective CO$_2$ conversion
Qiang Sun, Peking University, China

12:00-12:25
Title: Effect of TMAI pretreatment of sapphire substrate on the properties of MOCVD grown AlN epilayers
Talal M Al Tahtamouni, Qatar University, Qatar

12:25-12:50
Title: Injectable antimicrobial collagen/nanohydroxyapatite hydrogel scaffolds for bone regenerative applications
Ahmed Abd El-Fattah, Alexandria University, Egypt

12:50-13:15
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....