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June 19–24, Maui, Hawaii, USA

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- 3rd Nanotechnology
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ISOPE-2011

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Chair: R Ellis-Behnke, MIT, USA & Univ of Hong Kong, China
Co-Chair: LC Feldman, Rutgers Univ, USA

High Strain-rate Scratch Methods for the Nanoscale
AF Jankowski, Texas Tech Univ, USA

High Resolution Chemical and Mechanical Characterization of Nanocomposite Materials
ML Trudeau, L Rodrigue, R Veillette, Hydro-Quebec Research Inst, Canada

Reactivity Measurement with Electrochemical SPM
H Wolfschmidt, U Stimming, Tech Univ München, Germany

Metallic Nanoporous Solids for Device Applications
RN Viswanath, Indira Gandhi Centre for Atomic Energy, India

Flexural Behavior of Corroded RC Members with Patch Repair
Y Kato, Univ of Tokyo, Japan

Processing of Nanostructured c-BN and B₄C
J Doyle, HF Lee, JF Al-Sharab, AA Pelegri, BH Kear, Rutgers Univ; O Voronov, Diamon Materials; SD Tse, Rutgers Univ, USA

Phase-Equilibrium-Dominated Vapor-Liquid-Solid Growth Mechanism
Z Hu, Nanjing Univ, China

Monday **26. NANOMATERIALS III (V. 4)**
 June 20 **16:20** Room 6

Chair: HW Jin, Exxon-Mobil Research & Engineering Co, USA
Co-Chair: M Akinc, Iowa State Univ, USA

Extreme High Temperature Stability and Creep Resistance of a Silicon Nitride Nanocomposite
AK Mukherjee, Univ of California Davis, USA

Application of High-pressure High-temperature Technique to Synthesis of Nanocomposites
B Palosz, S Gierlotka, Inst of High Pressure Physics UNIPRESS, PAS, Poland

The Electrochemical Preparation and Advanced Performance of Composite Coating with Amorphous and Nano-Crystalline
DB Sun, HY Yu, XT Yuan, Univ of Sci & Tech, China

Flame Synthesis of Nanostructured Carbon
N Memon, J Al-Sharab, Y Jaluria, B Kear, M Chhowlla, SD Tse, Rutgers Univ, USA

Nanotechnology in Electrochemical Energy Conversion and Storage
H Wolfschmidt, U Stimming, Tech Univ München, Germany

High-Pressure and High-Temperature X-ray Diffraction Studies of Ceramic Nanocomposites
EK Akdoğan, I Savkilyildiz, B Berke, T Tsakalakos, Rutgers Univ, USA

Tuesday **36. NANOMATERIALS IV: (V. 4)**
 June 21 **08:00** Room 6

Chair: HW Jin, Exxon-Mobil Research & Engineering, USA
Co-Chair: R Ellis-Behnke, MIT, USA & Univ of Hong Kong, China

Bioinspired Synthesis of Nanocomposites Using Self-assembling Natural and Synthetic Polymers
M Akinc, XP Liu, YY Hu, Iowa State Univ; Y Yusufoglu, Argonne National Lab; K Schmidt-Rohr, S Mallapragada, Iowa State Univ, USA

How Can Smart Environments Outwit Cancer Cells?
RG Ellis-Behnke, MIT, USA; PMT Ling, SWH Cheung, DKC Tay, Univ of Hong Kong, China

Nanotechnology for Reducing Bacterial Functions
TJ Webster, Brown Univ, USA

Nanostructured Surfaces: Organising Atoms, Nanoparticles and Proteins to Create Functional Architectures
RE Palmer, Univ of Birmingham, UK

Probing Nanostructure in Functional Materials with Total Scattering
K Page, Los Alamos National Laboratory, USA

Novel Nanocrystalline TiO₂-Coatings with High Photocatalytic Activity for Environmental Technology
T Klassen, J-O Kliemann, H Gutzmann, F Gärtner, Helmut Schmidt Univ; D Bahnemann, Gottfried Wilhelm Leibniz Univ, Germany

Surface Reactions of Polycrystalline Y₂O₃ at High Pressure
S Deutsch, JF Al-Sharab, BH Kear, OA Voronov, SD Tse, Rutgers Univ, USA

Nano-crystals and Nano-crystallography: Ordinary Materials with Extraordinary Properties
BF Palosz, S Stelmakh, E Grzanka, S Gierlotka, Inst of High Pressure Physics UNIPRESS, PAS, Poland; WF Palosz, Brimrose Corp, USA

Zinc Oxide Based Nanomaterials as an Additive to Enhance the Properties of Polymer Nanocomposites
Z. Crnjak Orel, P Podbrscek, M Bitenc, National Inst of Chemistry, Slovenia

