

Room I #204

13:30-15:30

[Mo-I2] Hybrid Materials and Processing
Technologies II**Session Chairs:**Suck Won Hong (Pusan Nat'l Univ., Korea),
Ki Jun Yu (Yonsei Univ, Korea)**Mo-I2-1 [Invited]**

13:30-14:00

Unconventional Flexible Bio-Integrated Electronics
for Biomedical ImplantsKi Jun Yu
Yonsei Univ., Korea**Mo-I2-2**

14:00-14:15

Synthesis and Study of Electromagnetic Absorbing
Materials of The Composites of ABS/WCNT/
(Ni_{1-x}Zn_x)Fe₂O₄Bing-Jing Li and Yung-Ji Jang
Nat'l Cheng-Kung Univ., Taiwan**Mo-I2-3**

14:15-14:30

Designing of Subnanometric Cobalt Cluster Embedded
Multi Shell Hollow Metal-Organic Frameworks using
Selective Collapse ApproachWon Ho Choi, Hee Soo Jung, and Jeung Ku Kang
KAIST, Korea**Mo-I2-4 [Invited]**

14:30-15:00

Aerodynamic and Aeroelastic Flutter-Membrane based
Triboelectric NanogeneratorsHong Suck Won
Pusan Nat'l Univ., Korea**Mo-I2-5**

15:00-15:15

Bimodal and Wide Range Hydrogen Sensors based on
Hole-Doping Nanohybrids of Reduced Graphene
Oxide and Chemochromic Pd:MoO₃ NanoflakesLe Thai Duy and Hyungtak Seo
Ajou Univ., Korea

Room J #205

13:30-15:30

[Mo-J2] Inorganic Solar Cells**Session Chairs:**Robert Hoyer (Univ. of Cambridge, UK),
Choong-Heui Chung (Hanbat Nat'l Univ., Korea)**Mo-J2-1 [Invited]**

13:30-14:00

Minority Carrier Extraction Study in High Performance
Kesterite Solar CellOki Gunawan¹, Seong Ryul Pae², Jekyung Kim², Tayfun
Gokmen¹, and Byungha Shin²
¹IBM Research, USA, ²KAIST, Korea**Mo-J2-2 [Invited]**

14:00-14:30

Alternative Routes for The Fabrication of Cu₂ZnSnS₄
Solar CellsStela Canulescu¹, Mungunshagai Gansukh¹, Simón López
Mariño¹, Sara Lena Josefin Engberg¹, Filipe Mesquita
Alves Martinho¹, Niels Christian Schjødt², Andrea
Crovetto¹, Eugen Stamate¹, Chang Yan³, Xiaojing Hao³,
Ole Hansen¹, and Jørgen Schou¹
¹Technical Univ. of Denmark, Denmark, ²Haldor Topsoe
A/S, Haldor Topsøes Allé 1, Denmark, ³Univ. of New South
Wales, Australia**Mo-J2-3 [Invited]**

14:30-15:00

Synthesis of Novel Earth-Abundant Chalcogenide and
its Applications to Solar Energy Conversion DevicesDonghyeop Shin¹ and David Mitzi²
¹KIER, Korea, ²Duke Univ., USA**Mo-J2-4 [Invited]**

15:00-15:30

Emerging Nitride Materials as Thin Film Photovoltaic
AbsorbersAndriy Zakutayev
Nat'l Renewable Energy Laboratory, USA**Mo-J2-5**

15:30-15:45

Stable N-Type InAs Colloidal Quantum Dots for
Energy ApplicationHyekyoung Choi¹, Jung Hoon Song¹, Hien Thu Pham¹, and
Sohee Jeong^{1,2}
¹KIMM, Korea, ²UST, Korea