

Room G #107 13:30-15:30

[Tu-G2] Ferro/Piezo V
Session Chairs: Andreiv Kholkin
 (Univ. of Aveiro/Ural Federal Univ., Portugal),
 Orlando Auciello (Univ. of Texas-Dallas, USA)

Tu-G2-1 [Invited] 13:30-14:00

Flexible Ferroelectric Organic Crystals

Magdalena Owczarek¹, Karl A. Hujsak¹, Daniel P. Ferris¹,
 Aleksandrs Prokofjevs¹, Irena Majerz⁵, Przemysław
 Szklarz², Huacheng Zhang¹, Amy A. Sarjeant¹, Charlotte L.
 Stern¹, Ryszard Jakubas², Seungbum Hong^{3,4}, Vinayak P.
 Dravid¹, and J. Fraser Stoddart¹
¹Northwestern Univ., USA, ²Univ. of Wrocław, Poland,
³ANL, USA, ⁴KAIST, Korea, ⁵Wrocław Medical Univ., Poland

Tu-G2-2 [Invited] 14:00-14:30

Thin Film Composite Ferroelectrics for Low-Power Devices

Catherine Dubourdieu¹, Lucie Mazet², Martin Frank³,
 Eduard Cartier³, John Bruley³, and Vijay Narayanan³
¹Helmholtz Zentrum Berlin, Germany, ²CNRS, France,
³IBM T.J. Watson Research Center, USA

Tu-G2-3 [Invited] 14:30-15:00

Bulk Photovoltaic Effect in Lead Free Ferroelectrics

Radhe Agarwal¹, Yogesh Sharma², Seungbum Hong³,
 James Scott⁴, Jonathan E. Spanier¹, and Ram S. Katiyar²
¹Drexel Univ., USA, ²ORNL, USA, ³KAIST, Korea, ⁴Univ. of
 St. Andrews, UK, ⁵Univ. of Puerto Rico, USA

Tu-G2-4 15:00-15:15

**Enhanced the Piezoelectric of Polyvinylidene Fluoride
 Polymer by Combining Flexoelectric Properties of
 LDHs Nanosheet**

Thi Minh Tuoi Nguyen and Soon-Gil Yoon
 Chungnam Nat'l Univ., Korea

Tu-G2-5 15:15-15:30

**Dielectric Characteristics of PZT Films Fabricated by
 Aerosol-Deposition Method**

Chunkil Park¹, Dae-Yong Jeong¹, Jong-Jin Choi², Jungho
 Ryu², and Byung-Dong Hahn²
¹Inha Univ. Korea, ²KIMS, Korea

Tu-G2-6 15:30-15:45

**The Observation of Small Polaron Localization in
 W-Doped CeO₂**

Annawit Tipsawat¹, Taras Kolodiazhnyi², and Santi Maensiri¹
¹Suranaree Univ. of Tech., Thailand, ²NIMS, Japan

Tu-G2-7 15:45-16:15

**Ferroelectric β -Crystalline Phase Formation and
 Property Enhancement in Polydopamine Modified
 BaTiO₃/Poly (Vinylidene Fluoride-Trifluoroethylene)
 Nanocomposite Films**

Haiyan Guo¹, Tingting Men², and Seungbum Hong³
¹Qingdao Huanghai Univ., China, ²Shandong Univ. of Sci.
 and Tech., China, ³KAIST, Korea

Room H #108 13:30-15:30

[Tu-H2] Thermoelectric II

Session Chairs:
 Xun Shi (Shanghai Inst. of Ceramics, China),
 Kyu Hyung Lee (Yonsei Univ., Korea)

Tu-H2-1 [Invited] 13:30-14:00

Cu-based Thermoelectric Materials

Xun Shi and Lidong Chen
 Shanghai Inst. of Ceramics, China

Tu-H2-2 [Invited] 14:00-14:30

Thermoelectric Devices at LG Chem

Cheol-Hee Park
 LG Chem, Korea

Tu-H2-3 [Invited] 14:30-15:00

**High-Performance Nanostructured Metal Chalcogenide
 Thermoelectric Materials for Energy Conversion**

Zhigang Chen
 Univ. of Southern Queensland, Australia

Tu-H2-4 15:00-15:15

**Crystallization of Screen-Printed Thermoelectric Mate-
 rials using Functional Paste with Excessive Tellurium**

Hyeongdo Choi¹, Yong Jun Kim¹, Choong Sun Kim¹, Gysoup
 Lee¹, Sung Ho Kim¹, Hye Rim Hwang², and Byung Jin Cho¹
¹KAIST, Korea, ²Flexible Thermoelectric Device Tech.
 Center, Korea

Tu-H2-5 15:15-15:30

**Effects of Sintering Conditions on the Thermoelectric
 Properties of N-Type Half-Heusler (Hf_{0.5}Zr_{0.5})_{0.7}Ti_{0.3}
 NiSn_{0.998}Sb_{0.002}**

Van Du Nguyen^{1,2}, Jamil Ur Rahman^{1,2}, Weon Ho Shin¹,
 Won Seon Seo¹, Myong Ho Kim², and Soonil Lee²
¹KICET, Korea, ²Changwon Nat'l Univ., Korea