Program of Session J

Crystals of Piezoelectric, Dielectric, Ferroelectric Materials

J1: August 7 (Thursday), 11:00-12:45
Room: 306
Chair: Fei Li

11:00 – 11:30	**J01(Invited)** Bismuth-Based High-Tc, High-Performance Piezo-/ferroelectrics: Crystal Chemistry, Crystal Growth, and Physical Properties **Zenghui Liu[1], Wei Ren[1], Zuo-Guang Ye[2]** **1. Xi'an Jiaotong University, CHINA** **2. Simon Fraser University, CANADA**
11:30 – 12:00	**J02 (Invited)** Growth and characterization of large size $Sm_xY_{1-x}Ca_4O(BO_3)_3$ crystals for high-temperature piezoelectric applications **Kainan Xiong[1], Xiaoniu Tu[2], Yanqing Zheng[3], Erwei Shi[2]** **1. Midea Corporate Research Center** **2. Shanghai Institute of Ceramics, CAS** **3. Ningbo University, CHINA**
12:00 – 12:15	**J03(Oral)** Enhanced Performance of PMN-PT Crystal Transducers by Electrically Parallel Stacking and Medium Temperature AC Poling **Zibo Jiang[1], Kaijia Wu[2], Zuo-Guang Ye[3]** **1. Xi'an Jiaotong University, CHINA** **2. Jiangsu Rongqing Technology Co., Ltd, CHINA** **3. Simon Fraser University, CANADA**
12:15–12:30	**J04 (Oral)** Study on the Effects of Rare Earth Doping on the Properties and Structure of Relaxor Ferroelectric Single Crystals **Kexin Song, Xi'an Jiaotong University, CHINA**
12:30– 12:45	**J05(Oral)** Synthesis of Lead Free Nanocrystals for Piezoelectric Flexible Nanogenerators and Self-powered Sensors **Nidhi Sinha, Puneet Sagar, Tarun Yadav, Binay Kumar, University of Delhi, INDIA**

J2: August 7 (Thursday), 14:00-15:30
Room: 306
Chair: Geetha Balakrishnan

14:00 – 14:30	**J06(Invited)** Simultaneously achieving giant piezoelectricity and record coercive field enhancement in relaxor-based ferroelectric crystals **Limei Zheng, Shandong University, CHINA**
14:30 – 15:00	**J07 (Invited)** High-uniform, high-performance, Low-cost PZN-based Relaxor Piezo-Single Crystals **Tao Li, Ganjiang Innovation Academy, Chinese Academy of Science, CHINA**
15:00 – 15:15	**J08 (Oral)** Chemical Reduction of $LiTaO_3$ Crystals Using Sodium Borohydride **Joon Hyuk Kang[1], Won Bae Won[1], Su Jong Jeon[1], Ju Hyeon Choi[1], Jin Hyeok Kim[2], Seon Hoon Kim[1], Soyoung Kim[1], Jung Hwan In[1], Karam Han[1]** **1. Korea photonics technology institute** **2. Chonnam National University, KOREA, SOUTH**
15:15 – 15:30	**J09 (Oral)** Structure and piezoelectric properties of lead-free KNN-based single crystals prepared by a seed-free solid-state growth method **Minhong Jiang, Guilin University of Electronic Technology, CHINA**

J3: August 7 (Thursday), 16:00-17:30
Room: 306
Chair: Ningzhong Bao

16:00-16:30	**J10(Invited)** Mesophase induced by alternating-current poling in relaxor ferroelectric single crystals **Yaojin Wang[1], Shuhao Wang[1], Zhen Liu[1], Haosu Luo[2]** **1. Nanjing University of Science and Technology** **2. Shanghai Institute of Ceramics, CHINA**
16:30-16:45	**J11 (Oral)** Electro-elastic feature of several piezoelectric crystals for high-temperature acoustic wave sensing **Guoliang Wang, Fapeng Yu, Shandong University, CHINA**
16:45-17:00	**J12 (Oral)** Design and exploration of new-type electro-optic crystals **Chao He, Lingfei Lv, Fujian Institute of Research on the Structure of Matter, CAS, CHINA**
17:00-17:15	**J13(Oral)** Research on High-Quality Domain Inversion Fabrication in Hydrothermal PPKTP Crystals **Weidi Zhao[1], Xiaoling He[1], Xudong Song[1], Qi Qin[1], Jingfang Tong[1], Wenyuan Wu[1], Haitao Zhou[1], Jinliang Wang[1], Yanbin Zuo[1], Changlong Zhang[2]** **1. Bairay Photoelectric Technology Co., Ltd., CHINA** **2. Guilin Guangxi Key Laboratory of Superhard Materials, CHINA**
17:15 –17:30	**J14(Oral)** Mechanical magnetoelectric resonator with cross-medium wireless communication capability **Tingyu Deng, Jie Jiao, Haosu Luo, Dong Wang, Shanghai Institute of Ceramics, CAS, CHINA**