

Thu. Sep 24, 2026

Oral Session (Material) | Material

1:30 PM - 2:35 PM JST | 4:30 AM - 5:35 AM UTC
Oral Session Room 2 (Small Hall)

[Session 3] Ceramics/Composite/Single crystal 1

◆ Invited Talk

1:30 PM - 1:50 PM JST | 4:30 AM - 4:50 AM UTC
[2R210] An Electrically Gated Ferroelectric Thermal Transistor

Sunghoon Hur¹ (1. Korea Institute of Science and Technology)

1:50 PM - 2:05 PM JST | 4:50 AM - 5:05 AM UTC
[2R211] Characterization and modeling of BST ceramics for electrocaloric applications

Mickaël LALLART¹, Fan NI², Gaspard TAXIL², Youri NOUCHOKGWE², Emmanuel DEFAY², Gaël SEBALD³ (1. Univ. Lyon, INSA-Lyon, LGEF, EA682, F-69621 VILLEURBANNE, FRANCE, 2. Materials Research and Technology Department, Luxembourg Institute of Science and Technology, Belvaux, Luxembourg, 3. ElyTMax IRL3757, CNRS, Univ Lyon, INSA Lyon, Centrale Lyon, Université Claude Bernard Lyon 1, Tohoku University, Sendai, Japan)

2:05 PM - 2:20 PM JST | 5:05 AM - 5:20 AM UTC
[2R212] Frequency dependence of nonlinear loss and softening in a lead-free piezoceramic probed by a self-similar bar-resonator family

Tatsuki Sasamura^{1,2}, Naruhiro Iwama², Takeshi Morita², Wei Qiu¹ (1. Lund University, 2. The University of Tokyo)

2:20 PM - 2:35 PM JST | 5:20 AM - 5:35 AM UTC
[2R213] An integrated platform for direct and indirect electrocaloric measurements

Jeyeon Lee^{1,2}, Chong-Yun Kang¹, Byeong-Kwon Ju², Sunghoon Hur^{1,3,4} (1. Korea Institute of Science and Technology, 2. Korea Univ., 3. Sungkyunkwan Univ., 4. University of Science and Technology)

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3:05 PM - 4:10 PM JST | 6:05 AM - 7:10 AM UTC
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[Session 4] Lead-free 1

◆ Invited Talk

3:05 PM - 3:25 PM JST | 6:05 AM - 6:25 AM UTC
[2R214] Recent development of $(K_{1-x}Na_x)NbO_3$ -based piezoelectric ceramics

Sahn Nahm¹, Geun-Soo Lee¹, Boo-Hyun Choi¹, Hyun-Ju Choi¹ (1. Korea University)

3:25 PM - 3:40 PM JST | 6:25 AM - 6:40 AM UTC
[2R215] Ferroelectric Thermal Switch for Active Heat Control

Byoungjin Yoon^{1,2}, Wonjoon Choi², Chong-Yun Kang¹, Sunghoon Hur¹ (1. Korea Institute of Science and Technology, 2. Korea University)

3:40 PM - 3:55 PM JST | 6:40 AM - 6:55 AM UTC
[2R216] Enhanced Electrocaloric Effect in $BaTiO_3$ -Based Lead-Free Ceramic via Donor-Acceptor Defect-Dipole Engineering

Ye-Rok Choi¹, Byeong-Jae Min¹, Ju-Hee Kim¹, Seo-Hyun Choi¹, YeongSeo Yoon¹, Hyun-Cheol Song¹ (1. Korea University)

3:55 PM - 4:10 PM JST | 6:55 AM - 7:10 AM UTC
[2R217] Accuracy-Controlled Grayscale DLP Printing of $(K,Na)NbO_3$ Ceramic Composites

Dong-Kwan Lee¹, Jisoo Nam¹, Jaewon Cho¹, Miso Kim¹ (1. Korea Advanced Institute of Science and Technology)

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4:15 PM - 5:25 PM JST | 7:15 AM - 8:25 AM UTC
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[Session 5] Thin film 1

◆ Invited Talk

4:15 PM - 4:35 PM JST | 7:15 AM - 7:35 AM UTC
[2R218] Top electrode Electronegativity Induced Coercive Field Asymmetry and Fatigue in PZT Thin Film

Yue Liu¹ (1. Shanghai Jiao Tong University)

◆ Invited Talk

4:35 PM - 4:55 PM JST | 7:35 AM - 7:55 AM UTC
[2R219] Understanding Structure-Property Relationships in Sc-Based Nitrides Contributing to High-Performance Devices

Masato Uehara¹ (1. National Institute of Advanced Industrial Science and Technology (AIST))

4:55 PM - 5:10 PM JST | 7:55 AM - 8:10 AM UTC
[2R220] An In-plane Polarization-inverted KNN Epitaxial Films for Planar Fresnel Lens and Ultrasonic Microscopy

Wataru Oda^{1,2}, Takahiko Yanagitani^{1,2} (1. Waseda University, 2. ZAIKEN)

5:10 PM - 5:25 PM JST | 8:10 AM - 8:25 AM UTC
[2R221] Analysis of piezoelectric response in $BiFeO_3$ epitaxial thin films grown on Si

Kira Fujihara¹, Takeshi Yoshimura^{1,2} (1. Osaka Metro. Univ., 2. Toyohashi Univ. Tech.)

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