Poster session

Tuesday, August 30th, 2022 16:10~

P-1 Electrical study on ferroelectric Ce doped HfO₂ epitaxial thin film capacitors

Felix Cüppers, Koji Hirai, and Hiroshi Funakubo

Department of Materials Science and Engineering, Tokyo Institute of Technology

P-2 SXRD Electron Density Study on Phase Transitions in BaTiO₃ Nanocube

<u>Nagise Fukushima</u>, ¹ Sangwook Kim, ¹ Shintaro Ueno, ² Ichiro Fujii, ² Satoshi Wada, ² and Yoshihiro Kuroiwa ¹

- ¹ Graduate School of Advanced Science and Engineering, Hiroshima University
- ² Graduate Faculty of Interdisciplinary Research, University of Yamanashi

P-3 Piezoelectricity caused by partial ordering of bismuth-ions in perovskite-type pseudo-cubic ferroelectrics

<u>Takahiro Hokii</u>, ¹ Sangwook Kim, ¹ Yususke Yatabe, ¹ Yuki Nakahira, ² Chikako Moriyoshi, ¹ Hitoshi Osawa, ³ Minako Hirose, ⁴ Ichiro Fujii, ⁴ Shintaro Ueno, ⁴ Yukio Sato, ⁵ Satoshi Wada, ⁴ and Yoshihiro Kuroiwa ¹

- ¹ Graduate School of Advanced Science and Engineering, Hiroshima University
- ² Quantum Beam Science Research Directorate, National Institutes for Quantum Science and Technology
- ³ Research and Utilization Division, Japan Synchrotron Radiation Research Institute
- ⁴ Graduate Faculty of Interdisciplinary Research, University of Yamanashi
- ⁵ Department of Materials Science and Engineering, Graduate School of Engineering, Kyushu University

P-4 Domain Structure and Properties of Epitaxial PbTiO₃ Films Deposited below Curie Temperature by Hydrothermal Method

Yuxian Hu, ¹ Kazuki Okamoto, ¹ Takahisa Shiraishi, ^{1,2,3} and Hiroshi Funakubo ¹

- ¹ School of Materials and Chemical Technology, Tokyo Institute of Technology
- ² Department of Materials Science, Graduate School of Science and Technology, Kumamoto University
- ³ Magnesium Research Center, Kumamoto University

P-5 Core-Shell Structure of Heteroepitaxial KNbO₃/BaTiO₃ Nanocomposite Particles Studied by Synchrotron Radiation X-ray Diffraction

Shao Mingyang, ¹ Kaede Furuta, ¹ Sangwook Kim, ¹ Ichiro Fujii, ² Shintaro Ueno, ² Satoshi Wada, ² and Yoshihiro Kuroiwa ¹

- ¹ Graduate School of Advanced Science and Engineering, Hiroshima University
- ² Graduate Faculty of Interdisciplinary Research, University of Yamanashi

P-6 Dielectric properties of core-shell-type KNbO₃/BaTiO₃ Nanocomposite ceramics with Different Core Sizes Prepared by Solvothermal Solidification

Takeshi Miyazawa, 1 Shintaro Ueno, 1 Ichiro Fujii, 1 and Satoshi Wada 1

¹ Graduate Faculty of Interdisciplinary Research, University of Yamanashi

P-7 Investigation of Ferroelectricity for Metal free Perovskite type MDABCONH4I3 Crystals Exposed with Different Facets

Takuma Moriyama¹, Shintaro Ueno¹, Shunsuke Ando¹, Takahito Unno¹, Ichiro Fujii¹,

Tetsuo Kuwabara¹, Shiro Kawachi², Jun ichi Yamaura³, and Satoshi Wada¹

- ¹ Graduate Faculty of Interdisciplinary Research, University of Yamanashi
- ² Graduate School of Science, University of Hyogo

P-8 Electron Charge Density Study on Antiferroelectric Phase Transition in Pb-based B-site Ordered Double Perovskite

<u>Takayasu Shigemasu</u>, ¹ Kim Sangwook, ¹ Chikako Moriyoshi, ¹ Guorong Li, ² Chul-Hong Park, ³ and Yoshihiro Kuroiwa ¹

- ¹ Graduate School of Advanced Science and Engineering, Hiroshima University
- ² Chinese Academy of Sciences, Shanghai Institute of Ceramics
- ³ Department of Physics Education, Pusan National University

P-9 Hardening and Softening Behavior on High-power Piezoelectric Properties of Quenched (Bi_{0.5}Na_{0.5})TiO₃-based Solid Solution Ceramics

Takeru Tayama, Yuka Takagi, and Hajime Nagata

Faculty of Science and Technology, Tokyo University of Science

P-10 Structural and Electrical Characteristics of Lead-free BiAlO₃-based Piezoelectric Ceramics Prepared by High-Pressure Sintering

<u>Gopal Prasad Khanal</u>,¹ Ichiro Fujii,¹ Shintaro Ueno,¹ Sangwook Kim,² Masashi Miyakawa,³ Takashi Taniguchi,³ Yoshihiro Kuroiwa,² and Satoshi Wada¹

- ¹ Department of Applied Chemistry, University of Yamanashi
- ² Graduate School of Advanced Science and Engineering, Hiroshima University
- ³ High-Pressure Group, Research Center for Functional Materials, National Institute for Materials Science

P-11 A-site Bi ion off-centering contribution on piezoelectricity in Bi(Mg_{0.5}Ti_{0.5})O₃-modified BiFeO₃-BaTiO₃ piezoelectric ceramics

<u>Hyunwook Nam</u>, ¹ Sangwook Kim, ² Ichiro Fujii, ¹ Shintaro Ueno, ¹ Yoshihiro Kuroiwa, ² and Satoshi Wada ¹

- ¹ Graduate Faculty of Interdisciplinary Research, University of Yamanashi
- ² Graduate School of Advanced Science and Engineering, Hiroshima University

P-12 Inducing Superparaelectricity in BaTiO₃ ceramics through Heterovalent Co-doping for DC-bias free Dielectrics

<u>Piyush Sapkota</u>, ¹ Ichiro Fujii, ¹ Sangwook Kim, ² Shintaro Ueno, ¹ Yoshihiro Kuroiwa, ² and Satoshi Wada ¹

- ¹ Graduate Faculty of Interdisciplinary Research, University of Yamanashi
- ² Graduate School of Advanced Science and Engineering, Hiroshima University

P-13 Bulk response and grain boundary micro-electrical activity of high TC BaTiO₃–(Bi_{1/2}K_{1/2})TiO₃-based PTCR ceramics

Hiroaki Takeda¹, and Mohammad A. Zubair²

- ¹ Department of Applied Chemistry, Graduate School of Science and Engineering, Saitama University
- ² Department of Glass and Ceramic Engineering, Bangladesh University of Engineering and Technology

³ Institute of Materials Structure Science, High Energy Accelerator Research Organization