

Wednesday, May 27, 2009

10:20 - 10:25 Opening Remark Tadashi Shiosaki (Shibaura Inst. of Tech)

10:30 - 12:00 Ferroelectric (I) Chairperson Takaaki Tsurumi (Tokyo Tech)

- 27-F-1 Electrical properties of lead-free relaxor ferroelectric solid solution single crystal ($\text{Na}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$ - BaTiO_3 grown by Bridgman Method
(Gifu Univ., Gifu Technical College*, Toshiba Corp. **, Nagoya Inst. of Tech.***, Aichishukutoku Univ.****)N.Yasuda, S.Hashimoto, H.Ohwa, O. Sakurada, K.Fujita*, Y. Yamashita**, M.Iwata***, Y.Ishibashi****
- 27-F-2 The magnetic/dielectric properties and the domain structures in $(1-x)\text{BiFeO}_3$ - $x\text{BaTiO}_3$
(Osaka Pref. Univ., *Tokyo Univ., **JAEA) T. Ozaki, S. Nishihara, Y. Hosokoshi, Y. Noguchi*, M. Miyayama*, K. Yoshii** and S. Mori
- 27-F-3 Relationship between tolerance factor and morphotropic phase boundary of $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ -based lead-free ferroelectrics
(Tokyo Univ. Sci.) Yuji Hiruma, Hajime Nagata, Tadashi Takenaka
- 27-F-4 Preparation of High TC Barium Titanate – Bismuth Perovskite-type Oxide System Ceramics and Their Piezoelectric Property
(Univ. of Yamanashi, 1Univ. of Yamanashi, 2Hiroshima Univ., 3AIST) Satoshi Wada, Keisuke Yamato, Petr Pulpan, Nobuhiro Kumada1, Chikako Moriyoshi2, Yoshihiro Kuroiwa2, Bong-Yeon Lee3, Takashi Iijima3
- 27-F-5 Permittivity Change of NiZn Ferrite – BaTiO_3 Composites with Fe content
(*Hokkaido Univ., **Tokyo Polytechnic Univ.) Kazutomo Abe*, Naoto Kitahara**, Mikio Higuchi*, Junichi Takahashi*
- 27-F-6 Characteristics of BaTiO_3 Particles Sonochemically-Synthesized in Aqueous Solution
(1 AIST, 2 Keio University, 3 Yamanashi University, 4 NIMS, 5 Kyushu University) Feng Dang1, Kazumi Kato1, Hiroaki Imai2, Satoshi Wada3, Hajime Haneda4, Makoto Kuwabara5

13:15 - 14:30 Fundamental(I) Chairperson Yuji Noguchi (The Univ. of Tokyo)

- 27-B-1 Evaluation of oxygen vacancies migration by electrical field in MLCC using Raman spectroscopy
(Nat. Def. Acad., Taiyo Yuden Co. LTD, NIMS, Tokyo Tech., Kochi Univ. of Tech.) Ken Nishida, Hiroshi Kishi, Minoru Osada, Hiroshi Funakubo, Msamichi Nishide, Hironari Takeuchi, Takashi Katoda and Takashi Yamamoto
- 27-B-2 Charge density study on substitution effect of rare-earth and magnesium elements in BaTiO_3
(*Murata Manufacturing, **Hiroshima Univ.) Noriyuki Inoue*, Toshihiro Okamatsu*, Akira Ando*, Hiroshi Takagi*, Takashi Hashimoto**, Taiki Ryu**, Chikako Moriyoshi**, Yoshihiro Kuroiwa**
- 27-B-3 Charge Density Study on Phase Transition in BaTi_2O_5 Ferroelectric
(*Hiroshima Univ., **JAXA and ***Univ. of Tokyo) C. Moriyoshi*, N. Okizaki*, Y. Kuroiwa*, J. Yu**, Y. Arai** and A. Masuno***
- 27-B-4 Electronic and structural properties of $\text{BiZn}_{0.5}\text{Ti}_{0.5}\text{O}_3$
(**CANON Inc., **Kyoto Univ., ***Tokyo Inst. Tech.) Kaoru Miura*, Makoto Kubota*, Masaki Azuma**, Hiroshi Funakubo***
- 27-B-5 The Born effective charge and piezoelectric e coefficient of BiXO_3
(FUJIFILM Corporation) Yukihiro Okuno and Yukio Sakashita

14:45 - 16:00 Thin Films(I) Chairperson Norifumi Fujimura (Osaka Prefecture Univ.)

- 27-T-1 Evaluation of relative volume fraction of tetragonal phase and rhombohedral phase in $\text{Pb}(\text{Zr,Ti})\text{O}_3$ film by Raman spectroscopy
(Kochi. Univ. of Tech1, Nat. Def. Acad2, Tokyo Inst. of Tech3) Masamichi Nishide1, Hiroshige Takeuchi1, Ken Nishida2, Takashi Yamamoto2, Shintaro Yokoyama3, Shintaro Yasui3, Hiroshi Funakubo3 and Takashi Katoda1, Yukio Yasuda1

- 27-T-2 In-situ observation of piezoelectric microcantilever by XRD²
(Bruker AXS1, Tokyo Tech.2, AIST3) Hitoshi Morioka^{1,2}, Keisuke Saito¹, Takeshi Kobayashi³, Hiroshi Funakubo², and Toshiyuki Kurosawa¹
- 27-T-3 Measurement of dielectric characteristics of dielectric thin films by Terahertz spectroscopy with a DAST crystal as an optical source
(*Inst. of Laser Engineering, Osaka Univ., **Osaka Univ., ***Nanjing Univ.) Ryuhei Kinjo*, Kei Takeya*, Iwao Kawayama*, Hironaru Murakami*, Takeshi Matsukawa**, Yoshinori Takahashi**, Masashi Yoshimura**, Yasuo Kitaoka**, Yusuke Mori**, Takatomo Sasaki**, Caihong Zhang***, Jian Chen***, Masayoshi Tonouchi*
- 27-T-4 Transverse Electric-Field-Induced Displacements in Pt/PZT/Pt/Si
(Nat.Def.Acad.* Tokyo Inst. of Tech**, AIST***, Toyo Co.****) T. Yamamoto*, M. Yamamoto*, K. Nishida*, H. Funakubo**, T. Iijima***, T. Aiso****, Y. Ichikawa****.*
- 27-T-5 Characterization of transparent oxide/ferroelectric/phosphor structures
(Kanazawa Institute of Technology) Hiroyuki Inagaki, Yushi Takatsuka, Koichi Hoko, Yusuke Otani, Yoshiaki Tokunaga, and Koji Aizawa

16:15-17:45 Piezoelectrics(I) Chairperson Tadashi Takenaka (Tokyo Univ. of Science)

- 27-P-1 Thermal reliability of alkaline niobate-based lead-free piezoelectric ceramic
(*TDK Co., **Univ. of Yamanashi, ***Hiroshima Univ.) Daisuke Tanaka*, Takeo Tsukada*, Masahito Furukawa*, Satoshi Wada**, Yoshihiro Kuroiwa***
- 27-P-2 Dielectric and Piezoelectric Properties of (Bi,Na,K,Ag)TiO₃-BaTiO₃ Lead-free Ceramics.
(*Shonan Institute of Tech., **RICOH) Yuuki Ishikawa*, Hayashi Takashi*, Yoshikazu Akiyama**
- 27-P-3 Microstructure control of Barium Titanate – Potassium Niobate Solid Solution System Ceramics and Their Piezoelectric Properties
(Univ. of Yamanashi, 1TDK, 2Univ. of Yamanashi, 3Hiroshima Univ.) Nobuhiro Kumada, Shigehito Shimizu, Daisuke Tanaka¹, Masahito Furukawa¹, Petr Pulpan², Satoshi Wada², Yoshihiro Kuroiwa³
- 27-P-4 Structure and Electrical Properties of (Na_{0.5}Bi_{0.5})_{1-x}Ba_xTiO₃ Piezoelectric Ceramics
(*Toyama Pref. Univ., **Shenyang Inst. Chem. Tech.) J. Lv ***, T. Karaki*, M. Adachi*
- 27-P-5 Characterization of piezoelectric property in BiFeO₃-BiCoO₃ epitaxial thin films using in-situ lattice observation by synchrotron X-ray
(Tokyo Tech., 1Sophia Univ., 2AIST, 3Tokyo Univ. Sci., 4JASRI/SPring8, 5JST-CREST) Shintaro Yasui, Tomoaki Yamada, Mitsumasa Nakajima, Satoru Utsugi, Keisuke Yazawa, 1Hiroshi Uchida, 2Takashi Iijima, 3Soichiro Okamura, Hiroshi Funakubo and 4,5Osami Sakata
- 27-P-6 Electromechanical Properties of BaTiO₃ Ceramics by Various Methods
(Shonan Institute of Technology) Hiroshi Maiwa

Tuesday, May 28, 2009

9:00-10:15 Ferroelectrics(II) Chairperson Akira Ando (Murata Manufacturing Co., LTD.)

- 28-F-7 First-principles study of solution energy of rare-earth metal elements in BaTiO₃ including finite temperature effects
(JFCC) Hiroki Moriwake, Craig Fisher, Akihito Kuwabara
- 28-F-8 Microstructure study of BaTiO₃-HfO₂-MgO-SiO₂ based ceramics using TEM-CBED
(Taiyo Yuden Co., Ltd.) Keisuke Kobayashi*, Jun Nishikawa*, Toshimasa Suzuki*, Youichi Mizuno*
- 28-F-9 Domain Contribution to Dielectric Properties of Fine-grained BaTiO₃ Ceramics
(Tokyo Inst. Tech.) Takuya Hoshina, Yoichi Kigoshi, Saki Hatta, Hiroaki Takeda, Takaaki Tsurumi
- 28-F-10 Measurement of dielectric response of soft mode in SrTiO₃ by terahertz ellipsometry
(*Murata Manufacturing, **Osaka Univ.) Naoki Matsumoto*, **, Takashi Fujii*, Keisuke Kageyama*, Hiroshi Takagi*, Takeshi Nagashima** and Masanori Hangyo**

28-F-11 Fabrication of $\text{Ca}_{1-x}\text{Cu}_3\text{-xTi}_4\text{O}_{12}$ ($x = 0, 0.8$) Thick Films by Aerosol Deposition Method
(AIST) D. Popovici, J. H. Park, J. Akedo

10:30-12:00 Thin Films (II) Chairperson Hiroshi Funakubo (Tokyo Tech)

28-T-6 Electrical properties and microstructure of low-temperature-crystallized PZT thin films by microwave irradiation
(*CAS; ** Tohoku University) Z. J. Wang *, Y. Otsuka**, H. Kokawa **

28-T-7 Investigation on Crystallization Process of PZT Films on Pt Electrodes
(*Tokyo Univ. of Sci., Suwa, **Tokyo Univ. of Sci., ***NAIST) Yohei Otani*, Yukio Fukuda*,
Soichiro Okamura**, Kimitoshi Nakamura***, Takashi Nishida***, Kiyoshi Uchiyama***,
Tadashi Shiosaki***

28-T-8 Effect of the Electrode Structure on the Electrical Properties in alkoxide derived PZT film
(*Kitami Inst. Tech., **Shizuoka Univ.) Tomoya Ohno*, Takeshi Matsuda*, Naoki Wakiya**,
Hisao Suzuki**

28-T-9 Characterization of transferred epitaxial PZT thin film
(Kyoto University) Keiji Morimoto, Isaku Kanno, Hidetoshi Kotera, Kiyotaka Wasa

28-T-10 Release and transfer characterization of the ferroelectric films using nano-transfer method
(The University of Tokyo, AIST and JST-CREST) M, Ichiki, S. Makino, M. Takahashi, T.I toh, R. Maeda
T. Suga

28-T-11 Fabrication of PbTiO_3 nanotubes by MOCVD
(*Univ. Hyogo, **Fujitsu Lab. Ltd) R. Kuri*, H. Fujisawa*, M. Shimizu*, Y. Kotaka**, K. Honda**

13:15-14:30 Fundamental(II) Chairperson Yoshihiro Kuroiwa (Hiroshima Univ.)

28-B-6 Phase Transition near MPB in $(1-x)\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3\text{-xPbTiO}_3$
(*Nagoya Inst. Tech., **Aichi Shukutoku Univ.) M. Iwata*, K. Kuroda*, Y. Hasegawa*, R. Aoyagi*,
M. Maeda*, Y. Ishibashi**

28-B-7 Domain observation in a combination of chemical etching and EBSD
(CANON Inc.) Takayuki Watanabe, Hiroshi Saito, Kenichi Takeda

28-B-8 Coherent X-ray topography on BaTiO_3
(*JAEA/SPring-8, **RIKEN/SPring-8, ***JASRI/SPring-8) *Yasuhiro Yoneda, **Yoshiki Kohmura,
***Yoshio Suzuki

28-B-9 Domain Clamping in Bi-based Ferroelectric Crystals
(RCAST, The University of Tokyo) Yuuki Kitanaka, Yuji Noguchi, Masaru Miyayama

28-B-10 Crystal Growth of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ Single Crystal and Dielectric Behavior
(Hokkaido University) Akira Onodera, Keiichi Kawatani, Masaki Takesada, Migaku Oda and Masayuki Ido

14:45-16:00 Thin Films (III) Chairperson Toshikazu Fujimori (Rohm)

28-T-12 Nanosecond switching characteristics of ferroelectric VDF/TrFE copolymer ultra thin films with extremely high electric field
(Tokyo Univ. of Sci.) Takashi Nakajima, Hajime Ishii, Yoshiyuki Takahashi, Soichiro Okamura,
Takeo Furukawa

28-T-13 Patterning Characteristics of Ferroelectric P(VDF-TrFE) Copolymer Thin Films for Nonvolatile Memory Device Structures
(ETRI) S.-M. Yoon, S.-W. Jung, S.-H. Yang, S.-Y. Kang and B.-G. Yu

28-T-14 Comparative Study on MFIS Diodes Composed of p(VDF-TrFE) and PMMA(poly methyl metacrylate)-blended p(VDF-TrFE)
(*Tokyo Tech., **Univ. Seoul) J.-W. Yoon*, B.-E. Park**, H. Ishiwarai*

- 28-T-15 Electrical Properties of MFIS-FETs Using the PVDF-TrFE/ZrO₂/Si Structure
(Univ. Seoul) G.-G. Lee, H.-S. Han, B.-E. Park
- 28-T-16 Fabricate One-Transistor-Capacitor Non-Volatile Random Access Memory Devices using BTV Ferroelectric Thin Films
(*Tung-Fang Inst. Tech, **South. Taiwan Univ., ***Kaohsiung Univ.) K.-H. Chen*, C.-H. Chang*, W.-H. Cheng**, G.-H. Shen*** and C.-F. Yang***

16:15 - 17:00 Invited Talk Chairperson Masanori Okuyama (Osaka Univ.)

- 28-I-1 Free Charges in Ferroelectrics: Drawbacks and Opportunities
(Université de Bordeaux) Mario Maglione

17:00 - 18:00 Plenary Talk Chairperson Tadashi Shiosaki (Shibaura Inst. of Tech)

- 28-S-1 "MORE THAN MOORE" create a Paradigm Shift
(Rohm) Hidemi Takau

19:00- Banquet

Friday, May 29, 2009 Parallel Session Room:201

9:00 - 10:15 Ferroelectrics (III) Chairperson Seiji Kojima (Tsukuba Univ.)

- 29-F-12 Domain structure in orthorhombic Na_{0.5}K_{0.5}NbO₃ single crystal
(Nagoya Institute of Technology) Yumi Inagaki
- 29-F-13 Growth and electric properties of alkali metal doped KNbO₃ single crystals
(*NIMS, **Univ. Wollongong) H. Kimura, R. Tanahashi, H. Y. Zhao, K. Maiwa, Z. X. Cheng, X. L. Wang
- 29-F-14 Poling Field Dependence of Ferroelectric Properties and P-E Hysteresis Loops in Alkali Niobate Ceramics
(*Shizuoka Inst. Sci. Tech., **TDK Co.) Toshio Ogawa*, Masahito Furukawa**, Takeo Tsukada**
- 29-F-15 Micro Structure and Phase Transition of MnO₂-Doped Bismuth Layered-Structure
(*Univ. Tsukuba, **Shanghai Inst. Ceram.) M. S. Islam*, J. Kano*, S. Tsukada*, Q. R. Yin** and S. Kojima*
- 29-F-16 Dielectric Relaxation of Layer Structured SrBi_{2-x}Nd_xNb₂O₉ Ceramics (x=0, 0.05, 0.2, 0.35)
(Shanghai Inst. Ceram.) C. Feng, L. Sun and S. Huang

10:30 - 12:00 Piezoelectrics (II) Chairperson Yasuo Cho (Tohoku Univ.)

- 29-P-7 Shape memory piezoelectric actuator driven with asymmetric electrical field operation
(The University of Tokyo) Takeshi Morita, Yoichi Kadota and Hiroshi Hosaka
- 29-P-8 Non-Contact Type Ultrasonic Motor Using Flexural Standing-Wave Vibration Disks
(Yamagata University) Yasuhiro Yamayoshi, Jun Siina, Hideki Tamura and Seiji Hirose
- 29-P-9 Nonlinear vibration of MEMS-based piezoelectric microcantilever
(AIST) Takeshi. Kobayashi, Masaharu. Kuroda, Ryutaro. Maeda, Toshihiro. Itoh
- 29-P-10 In-situ observation of MEMS based PZT cantilever using micro-Raman spectroscopy
(*Kochi Univ. of Tech, **AIST, ***Bruker AXS, ****Tokyo Inst of Tech, *****Nat. Def. Acad.) Maresuke Kuzuhara*, Masamichi Nishide*, Takeshi Kobayashi**, Hitoshi Morioka***, Hiroshi Funakubo****, Ken Nishida*****, Takashi Yamamoto*****, Takashi Katoda*
- 29-P-11 Fabrication and Characterization of Ultrasonic Motor Using Shear-mode Vibration of Alkaline Niobate Based Lead-free Ceramics
(Tokyo Tech.) Hiroaki Takeda, Ryo Sasaki, Enzhu Li, Takuya Hoshina, Takaaki Tsurumi

- 29-P-12 Monitoring of Soil Moisture and Groundwater Level Using Ultrasonic Wave for Prediction of Slope Failures
(Ritumeikan Univ.) Katsuhiko Tanaka, Takefumi Suda, Kazuhiro Hirai, Kazunari Sako, Ryoichi Fukagawa

13:15 – 14:30 Piezoelectrics(III) Chairperson Hiroaki Takeda(Tokyo Tech)

- 29-P-13 Piezoelectric Motion of Chiral Polymer with Supercritical CO₂ Treatment
(*Imoto Mech. Eng., **Kobayashi Inst. of Phys. & Chem., *** Kansai Univ.) *Kenji Imoto, *Komei Tahara, *Jun Takarada, *Yoshihiro Kamaiyama, *Takahiro Yamakita, **Munehiro Date, **Eiichi Fukada, ***Yoshiro Tajitsu
- 29-P-14 Diffusion and its effect of Cu and Ag in PZT
(TDK) Norimasa Sakamoto* Kumiko Yamazaki** Junichi Yamazaki** Hideya Sakamoto** Masaru Nanao***
- 29-P-15 The Influence of the Substrate Clamping on Electrical Properties in Polycrystalline Piezoelectric Films
(FUJIFILM Corporation1, Tokyo Tech.2) Tetsu Miyoshi1,2, Mitsumasa Nakajima2, Hiroshi Hunakubo2
- 29-P-16 Fabrication and Properties of Solid and Hollow Piezoelectric Fibers, Springs and 1-3 Piezocomposites
(Gebze Inst. Tech.) S. Alkoy and C. Gol
- 29-P-17 The Effect of CuO Sintering Aid on the Microstructural Features and Electrical Properties of Potassium Sodium Niobate Ceramics and Fibers
(Sabanci Univ.) E. M. Alkoy and M. Papila

Friday, May 29, 2009 Parallel Session Room:202

9:00 - 10:15 Thin Films(IV) Chairperson Kazumi Kato(AIST)

- 29-T-17 Fabrication and characterization of a- and b-axis-oriented Bi₄Ti₃O₁₂-based thin films by high-temperature sputtering
(University of Hyogo) Hisashi Oshima
- 29-T-18 Micro-pattern of Ferroelectric Thin Films Using Sensitized Materials
(Shibaura Inst. of Tech.) Masaki Yamaguchi, Yuta Mashiko, Hiroyuki Nishikawa
- 29-T-19 Preparation of (001)-oriented (Ca,Sr)Bi₄Ti₄O₁₅ films by using buffer layers
(1Sophia Univ., 2Tokyo Tech.) Y. Mizutani1, H. Uchida1, H. Funakubo2 and S. Koda1
- 29-T-20 Optical properties of BiFeO₃-system multiferroic thin films
(Tokyo Univ. of Science*, Kanazawa Univ.***, J. A. Woollam Japan Co., Inc.***, Techno-Synergy, Inc.****, Tohoku Univ.*****, AIST******) Hiromi Shima*, Takeshi Kawae**, Akiharu Morimoto**, Masahiro Matsuda***, Michio Suzuki***, Toshiyasu Tadokoro****, Hiroshi Naganuma*****, Takashi jima*****, Takashi Nakajima* and Soichiro Okamura*
- 29-T-21 Epitaxial growth and electrical properties of (001), (101) and (111) oriented BiFeO₃ thin films
(*Tokyo Inst. Tech., **Univ. Tohoku, ***Univ. Shizuoka) Hyun-Young Go*, Tomohiko Yoshioka*, Osamu Sakurai*, Jeffrey S. Cross*, Junzo Tanaka*, Kazuo Shinozaki*, Takanori Kiguchi**, Naoki Wakiya***

10:30 - 12:00 Micro Wave•Polymer Chairperson Hiroshi Tamura(Murata Manufacturing Co., LTD.)

- 29-M-1 Reading out Spectrum in Holeburning
(Kurume University) Fujio Tsuruoka
- 29-M-2 Molecular Alignment Structure of Non-Symmetric Dimeric Liquid Crystals
(Tokyo Univ. of Sci. and Hirosaki Univ.) Hirokazu Furue, Masaya Furutani, Ayano Ito, Atsushi Yoshizawa
- 29-M-3 Piezoelectricity of ferroelectret porous polyethylene thin film
(Kansai Univ.) Masatoshi Nakayama, Yasuhiro Uenaka, Shingo Kataoka, Yusuke Oda, Ken Yamamoto, Yoshiro Tajitsu

- 29-M-4 Microwave Dielectric Properties and Crystal Structure of $(\text{Ca}_{1-x}\text{Sr}_x)\text{SiO}_3$ Ceramics
(Nagoya Inst. of Tech., *Murata Manufacturing Co., LTD) Isao Kagomiya, Itaru Suzuki*, Hitoshi Ohsato
- 29-M-5 Microwave Dielectric Properties of $x\text{MgO}-(1-x)\text{B}_2\text{O}_3$ Ceramics
(Meijo University) Akinori KAN, Hirotaka Ogawa, Makoto Sumino, Makio Nishizuka
- 29-M-6 Low Temperature Sintering of $\text{Ca}_{0.8}\text{Sr}_{0.2}\text{TiO}_3\text{-Li}_{0.5}\text{Sm}_{0.5}\text{TiO}_3$ Microwave Dielectric Ceramics
(Toyama Pref. Univ.) K. Yan, T. Karaki and M. Adachi

13:15 - 14:30 MultiFerroics Chairperson Hitoshi Tabata (The Univ. of Tokyo)

- 29-L-1 PLD preparation and characterization of Sr and Zn co-substituted BiFeO_3 thin films
(Osaka Univ) Jung Min Park, Seiji Nakashima, Fumiya Gotoda, Takeshi Kanashima, Masanori Okuyama
- 29-L-2 Characteristics of Undoped and Mn-Doped BiFeO_3 Films Formed of Pt and SrRuO_3/Pt Electrodes by RF Sputtering
(*Tokyo Tech, *Fujitsu lab.) J. H. Kim*, H. Funakubo*, S. Yoshihiro**, H. Ishiwara*
- 29-L-3 Polarization Switching Behavior of YMnO_3 Thin Films at around Magnetic Phase Transition Temperature
(Osaka Prefecture University, ** JSPS research fellow) Kazuhiro Maeda ***, Takeshi Yoshimura *, Norifumi Fujimura *
- 29-L-4 The crystal structure and magnetic/dielectric properties in hexagonal iron-oxide $\text{LuFe}_{0.56}\text{Ti}_{0.44}\text{O}_3$
(*Osaka Prefecture Univ., **Japan Atomic Energy Agency, ***NIMS, ****Univ. de Sonora) Y. Matsuo*, T. Hoshiyama*, S. Mori*, K. Yoshii**, Y. michiue***, F. Brown****, N. Kimizuka****
- 29-L-5 Electromagnetic Property of $\text{BaTiO}_3\text{-NiFe}_2\text{O}_4$ Thin Film Prepared on ZnIn_2O_4 Electrode with Spinel Structure
(*Shizuoka Univ., **Tokyo Inst. Tech.) Naoki Wakiya*, Shigeki Sawamura*, Toru Ookushi*, Naonori Sakamoto*, Desheng Fu*, Kazuo Shinozaki**, Hisao Suzuki*

14:50 - 16:05 Fundamental(III) Chairperson Makoto Iwata(Nagoya Inst. of Tech.)

- 29-B-11 UV Photo Excited Soft Mode Dynamics in Quantum Paraelectrics
(Hokkaido University, *Shimane University) Masaki Takesada, Hiroshi Nihonmatsu, Akira Onodera, Yukikuni Akishige*
- 29-B-12 3D observations of LiNbO_3 and LiTaO_3 quasi-phase matching devices using transmission type confocal SHG interference microscope
(1Waseda University, 2Oxide Corporation) Junichi Kaneshiro1, Yoshiaki Uesu1, Tatsuo Fukui2
- 29-B-13 Generation of Multi Self-Pumped Phase-Conjugated Waves by Pulsed Laser
(Tokyo University of Science) Hiroshi Miyao, Masafumi Yamashita
- 29-B-14 Growth of KNbO_3 crystal fiber from KNbO_3 melt by $\mu\text{-PD}$ method
(Ymaaguchi University) Ryuichi Komatsu, Yohei Ohguma
- 29-B-15 The Temperature Dependence of Optical Polaron Scattering Properties of ZnO of 50nm
(Kyungpook National Univ.) S. H. Lee, J.-H. Park, J.-H. Kwon, J. Y. Choi, J. Y. Sug

16:15 - 17:30 Thin Films(IV) Chairperson Hirokuni Fujisawa (Univ. of Hyogo)

- 29-T-22 Deposition of KNbO_3 thick film using hydrothermal method
(The Inst. of Tech, The Univ. of Tokyo) M. Ishikawa, S. Utsugi, T. Fujisawa, S. Yasui, T. Yamada, T. Hasegawa, T. Morita, H. Funakubo and M. Kurosawa
- 29-T-23 Fabrication of $(\text{Na}_{0.52}\text{K}_{0.44}\text{Li}_{0.04})(\text{Nb}_{0.84}\text{Ta}_{0.10}\text{Sb}_{0.06})\text{O}_3$ Lead-Free Piezoelectric Thin Films by Pulsed Laser Deposition
(Ryukoku University, Panasonic Co., Ltd2, Panasonic Electronic Devices Co., Ltd3) Seiji Yamazoe, Yuzo Miyoshi, Takahiro Wada, Kazuki Komaki2 and Hideaki Adachi3
- 29-T-24 Fabrication and Properties of $\text{NaNbO}_3\text{-BaTiO}_3$ Ferroelectric Thin Films by Chemical Solution Deposition
(Nagoya Univ., Shonan Inst. of Tech.) Wataru Sakamoto, Yu-ichi Hamazaki, Makoto Moriya, T oshinobu Yogo, Horoshi Maiwa

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| 29-T-25 | Ferroelectric properties for (Ba _{0.6} Sr _{0.4})TiO ₃ thick films caused by strained hetero-structure
(Kanazawa University, Taiyo Yuden Co., Ltd) Takeshi Kawae, Yuji Fukuda, Kenshiro Munetomo,
Akiharu Morimoto and Kentaro Morito |
| 29-T-26 | Bottom-up Fabrication of High-k Dielectric Nanofilms using Perovskite Nanosheets
(*NIMS, **Tokyo Tech., ***CREST JST) B.-W. Li****, M. Osada****, T. C. Ozawa****, R. Ma****,
K. Akatsuka*** Y. Ebina***** H. Funakubo** T. Sasaki***** |

- 30-TU-1 Raman Scattering and Brillouin Scattering Studies of Ferroelectrics
Seiji Kojima (Tsukuba Univ.)

- 9:00-10:15 Thin Films(VI)**

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| 30-P-18 | Fabrication of (1-x)BaTiO ₃ -xPbTiO ₃ (x=0-0.05) Ceramics and Their Electric Properties.
(*RICOH CO., LTD., **Shonan Institute of Technology) Yoshikazu Akiyama*, Naoki Matsumoto**, Yuuki Ishikawa**, Hayashi Takashi** |
| 30-P-19 | Piezoelectric property of BaTiO ₃ thick film formed by Aerosol Deposition Method
(*NEC TOKIN Corporation, **AIST) *Yoshihiro Kawakami, *Atsushi Sasaki, *Takatoshi Hashimoto, *Yuichi Tokano, **Jun Akedo |
| 30-P-20 | Electric Properties of Ba(Ti,Zr)O ₃ Ceramics under Reduced Atmosphere
(*Toyama Industrial Technology Center, **Toyama Prefectural University) Yuichi Sakai*, Tomoaki Futakuchi*, Masatoshi Adachi** |
| 30-P-21 | Piezoelectric Properties near the Tricritical Point on KF-doped BaTiO ₃ Single Crystal
(Shimane University) Yukikuni Akishige and Yuuta Hiraki |
| 30-P-22 | Influence of substitution, growth atmosphere and annealing treatment on electrical properties of langasite-type piezoelectric crystals
(*Nara Inst. Sci. Tech., **Tokyo Tech.) Tadashi Shiosaki*, Yu Ueda*, Hiroaki Takeda** |
| 30-P-23 | High Power Piezoelectric Characteristics of Thickness Shear Mode for Textured SrBi ₂ Nb ₂ O ₉ Ceramics
(Murata Manufacturing Co., Ltd.) Hirozumi Ogawa, Shinichiro Kawada, Masahiko Kimura, Yukio Higuchi and Hiroshi Takagi |

