

Wed. Sep 23, 2026

Other | Other

5:00 PM - 6:30 PM JST | 8:00 AM - 9:30 AM UTC
Exhibition & Lunch (Multipurpose hall)**[Other] Welcome reception****Thu. Sep 24, 2026**

Other | Other

8:30 AM - 8:35 AM JST | 11:30 PM - 11:35 PM UTC
Oral Session Room 1 (International Conference Hall)**[Other] Opening**

Keynote | Bio

8:35 AM - 9:25 AM JST | 11:35 PM - 12:25 AM UTC
Oral Session Room 1 (International Conference Hall)**[Keynote 1] Keynote 1**

◆ Invited Talk ◆ Keynote Speech

8:35 AM - 9:25 AM JST | 11:35 PM - 12:25 AM UTC
[2R101] Acoustophoretic Cell Manipulation Techniques for Tissue EngineeringHyungsuk Lee¹ (1. Yonsei University)

Other | Other

9:00 AM - 9:25 AM JST | 12:00 AM - 12:25 AM UTC
Exhibition & Lunch (Multipurpose hall)**[Other] Industry Exhibition**

Other | Other

9:25 AM - 9:55 AM JST | 12:25 AM - 12:55 AM UTC
Exhibition & Lunch (Multipurpose hall)**[Other] Coffee break & Exhibition**

Other | Other

9:55 AM - 12:35 PM JST | 12:55 AM - 3:35 AM UTC
Exhibition & Lunch (Multipurpose hall)**[Other] Industry Exhibition**

Oral Session (Device) | Device

9:55 AM - 11:00 AM JST | 12:55 AM - 2:00 AM UTC
Oral Session Room 1 (International Conference Hall)**[Session 1] Piezoelectric Motors and Control Systems 1**

◆ Invited Talk

9:55 AM - 10:15 AM JST | 12:55 AM - 1:15 AM UTC
[2R102] Structural Design and Optimization Methods of Piezoelectric Motors for Aerospace ApplicationsYing Yang¹ (1. Nanjing University of Aeronautics and Astronautics)10:15 AM - 10:30 AM JST | 1:15 AM - 1:30 AM UTC
[2R103] Development of a Slider Retained Micro Linear Ultrasonic Motor Driven in L1B2 ModeKenshin Kaneshiro¹, Shunsuke Izuhara¹, Tomoaki Mashimo¹ (1. Okayama Univ.)10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC
[2R104] Sensorless Control of Contact Force at the Tip of a Robot Finger with Variable Posture Driven by an Ultrasonic MotorIori Miyata¹, Yanbo Wang¹, Tatsuki Sasamura², Shinichi Miyose³, Yoshitaka Oi³, Takeshi Morita¹ (1. Graduate School of Engineering, The University of Tokyo, 2. Department of Biomedical Engineering, Lund University, 3. NACHI-FUJIKOSHI CORP.)10:45 AM - 11:00 AM JST | 1:45 AM - 2:00 AM UTC
[2R105] Design of an Ultrasonic Motor Using a Cross-Shaped Stator TransducerHaoruo JIANG¹, Masaya TAKASAKI¹ (1. Saitama University)

Oral Session (Bio) | Bio

9:55 AM - 11:00 AM JST | 12:55 AM - 2:00 AM UTC
Oral Session Room 2 (Conference Room 501)**[Session 1] Biomedical Acoustics and Acoustofluidics 1**

◆ Invited Talk

9:55 AM - 10:15 AM JST | 12:55 AM - 1:15 AM UTC
[2R201] Sound, Structure, and Life: Nonlinear Acoustofluidics from Capillary Waves to SonogeneticsJames Friend¹ (1. Washington University in St. Louis)10:15 AM - 10:30 AM JST | 1:15 AM - 1:30 AM UTC
[2R202] Effect of PBS Volume on Acoustic Detachment of C2C12 CellsTakashi Sasaki¹, Hideharu Shimozawa², Hitomi Tokutake³, Chikahiro Imashiro¹, Takeshi Morita¹ (1. The University of Tokyo, 2. Medical Business Operations, Canon Inc., 3. Core Technology Development Headquarters, Canon Inc.)10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC
[2R203] Evaluation of Cellular Biochemical Frequency Characteristics under Ultrasound Stimulation Considering Acoustic Streaming EffectsNagisa Tsujimura¹, Yumi Matsushita², Masafumi Shimojo², Makoto Higuchi², Beomseok Cha³, Jinsoo Park³, Takeshi Morita¹, Chikahiro Imashiro¹ (1. Graduate School of Engineering, The University of Tokyo, 2. Advanced Neuroimaging Center, National Institutes for Quantum Science and Technology, 3. Department of Mechanical Engineering, Chonnam National University)

10:45 AM - 11:00 AM JST | 1:45 AM - 2:00 AM UTC
 [2R204] Charge modulation on membranes of CO₂-supersaturated liposomes to improve efficiency in Sonogenetics

Yuto Hayashi¹, Ru Konno¹, Suzuha Morimoto¹, Yasuhiko Orita², Yuta Kurashina¹ (1. Tokyo University of Agriculture and Technology, Kurashina Laboratory, 2. Nagoya University)

Oral Session (Device) | Device

11:05 AM - 12:30 PM JST | 2:05 AM - 3:30 AM UTC
 Oral Session Room 1 (International Conference Hall)

[Session 2] New Energy Technology (Energy Harvesting) & Airborne Transducers

◆ Invited Talk

11:05 AM - 11:25 AM JST | 2:05 AM - 2:25 AM UTC
 [2R106] Piezoelectric energy harvesting for tyre integration

Veronika Kovacova¹, Mayara Cardozo¹, Omar Ramirez-Sanchez¹, Uros Prah¹, Junling Zhao², Emmanuel Defay¹ (1. Luxembourg Institute of Science and Technology, 2. Goodyear Innovation Center Akron)

◆ Invited Talk

11:25 AM - 11:45 AM JST | 2:25 AM - 2:45 AM UTC
 [2R107] Energy Harvesting – Leveraging Bio-inspired Strategies

Shashank Priya¹ (1. MSU)

11:45 AM - 12:00 PM JST | 2:45 AM - 3:00 AM UTC
 [2R108] Development and Evaluation of a 3DoF Linear Ultrasonic Motor

Shoma Tanaka¹, Shunsuke Izuhara¹, Tomoaki Mashimo¹ (1. Okayama University)

12:00 PM - 12:15 PM JST | 3:00 AM - 3:15 AM UTC
 [2R109] Experimental Parameter Identification for an Ultrasonic Transducer under Load

Markus Dohmen¹, Tobias Hemsel¹, Walter Sextro¹ (1. Paderborn University, Chair of Dynamics and Mechatronics)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC
 [2R110] Evaluation of Underwater Actuation Characteristics of a Micro Ultrasonic Motor and Its Applications

Shunsuke Fujiki¹, Shunsuke Izuhara², Tomoaki Mashimo³ (1. Graduate School of Environment, Life, Natural Science and Technology, Okayama University, 2. Faculty of Environmental, Life, Natural Science and Technology Assistant Professor, 3. Faculty of Environmental, Life, Natural Science and Technology Professor)

Oral Session (Bio) | Bio

11:05 AM - 12:30 PM JST | 2:05 AM - 3:30 AM UTC
 Oral Session Room 2 (Conference Room 501)

[Session 2] Biomedical Acoustics and Acoustofluidics 2

◆ Invited Talk

11:05 AM - 11:25 AM JST | 2:05 AM - 2:25 AM UTC
 [2R205] Surface Acoustic Wave Meets Microfluidics for Biomedical Applications

Jinsoo Park¹ (1. Chonnam National University)

◆ Invited Talk

11:25 AM - 11:45 AM JST | 2:25 AM - 2:45 AM UTC
 [2R206] Sonophoresis: The Path to Replace Needles with Ultrasounds

Eduardo W Jorgensen¹ (1. Mediscen)

11:45 AM - 12:00 PM JST | 2:45 AM - 3:00 AM UTC
 [2R207] The Effect of Irradiation Time on Drug Delivery in Sequential Ultrasound Irradiation

Youhei Usui¹, Tsubasa Soita¹, Yoshiaki Sasaki¹, Munenari Itoh², Hiroataka James Okano², Yuta Kurashina¹ (1. Tokyo University of Agriculture and Technology, 2. The Jikei University School of Medicine)

12:00 PM - 12:15 PM JST | 3:00 AM - 3:15 AM UTC
 [2R208] Ultrasound propagation simulation in a rat-tibia pseudo fracture model

Shota Kitajima¹, Yuta Murakami¹, Yusei Matsumoto¹, Mami Matsukawa¹ (1. Doshisha Univ)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC
 [2R209] Visualization of Ultrasonic Shear Wave Attenuation in Cell Aggregates and PDMS for Viscoelastic Characterization

Shunsuke Yamagata¹, Nanaka Takeuchi¹, Takuya Katashima¹, Takeshi Morita¹, Chikahiro Imashiro¹ (1. The University of Tokyo)

Other | Other

12:35 PM - 1:30 PM JST | 3:35 AM - 4:30 AM UTC
 Exhibition & Lunch (Multipurpose hall)

[Other] Lunch & Exhibition

Other | Other

1:30 PM - 2:35 PM JST | 4:30 AM - 5:35 AM UTC
 Exhibition & Lunch (Multipurpose hall)

[Other] Industry Exhibition

Oral Session (Device) | Device

1:30 PM - 2:40 PM JST | 4:30 AM - 5:40 AM UTC
 Oral Session Room 1 (International Conference Hall)

[Session 3] Pb-Free Piezoelectrics & Smart Structures and Systems with Actuators and Sensors

◆ Invited Talk

1:30 PM - 1:50 PM JST | 4:30 AM - 4:50 AM UTC
 [2R111] Innovative lead-free ultrasonic systems: Langevin, bending plate and membrane transducers for low to medium power applications

Tobias Hemsel¹, Claus Scheidemann¹, Peter Bornmann², Martin Leibenger¹, Walter Littmann² (1. Paderborn University, Warburger Strasse 100, 33098 Paderborn, Germany, 2. ATHENA Technologie Beratung GmbH, Technologiepark 13, 33100 Paderborn, Germany)

Invited Talk

1:50 PM - 2:10 PM JST | 4:50 AM - 5:10 AM UTC
 [2R112] Electrospinning Piezoelectric Fiber Yarns as a Scalable Platform for AI-Integrated Self-Powered Sensors

Miso Kim¹ (1. Korea Advanced Institute of Science and Technology (KAIST))

2:10 PM - 2:25 PM JST | 5:10 AM - 5:25 AM UTC
 [2R113] Biaxial Microcrack Engineering in Auxetic Stretchable Strain Sensors

Jaewon Cho¹, Miso Kim¹ (1. Korea Advanced Institute of Science and Technology)

2:25 PM - 2:40 PM JST | 5:25 AM - 5:40 AM UTC
 [2R114] Quantitative Characterisation of Nonlinear Resonance Behaviour in Piezoelectric Components Using a Harmonic Balance FEM

Olga Friesen¹, Jonas Hölscher¹, Michael B. K. Siegmund¹, Finn Gebauer¹, Leander Claes¹, Bernd Henning¹ (1. Measurement Engineering Group, Paderborn University)

Oral Session (Material) | Material

1:30 PM - 2:35 PM JST | 4:30 AM - 5:35 AM UTC
 Oral Session Room 2 (Conference Room 501)
[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)

Other | Other

2:35 PM - 3:05 PM JST | 5:35 AM - 6:05 AM UTC
 Exhibition & Lunch (Multipurpose hall)

[Other] Coffee break & Exhibition

Other | Other

3:05 PM - 5:00 PM JST | 6:05 AM - 8:00 AM UTC
 Exhibition & Lunch (Multipurpose hall)

[Other] Industry Exhibition

Oral Session (Device) | Device

3:05 PM - 4:10 PM JST | 6:05 AM - 7:10 AM UTC
 Oral Session Room 1 (International Conference Hall)

[Session 4] Ultrasonic Technologies 1

3:05 PM - 3:20 PM JST | 6:05 AM - 6:20 AM UTC
 [2R115] Design of a Multi-Frequency High-Power Ultrasonic Transducer with Acoustic Lens-Based Focusing Mechanism

Hayato Nishimura¹, Takeshi Morita¹ (1. The University of Tokyo)

3:20 PM - 3:35 PM JST | 6:20 AM - 6:35 AM UTC
 [2R116] Non-contact Holding and Rotation of $\phi 300$ Wafers Using the Ultrasonic Squeeze Film Levitation

Takumi Miyawaki¹, Masaaki Miyatake¹, Kazumi Haga², Yoshihiro Ishiguro² (1. Tokyo University of Science, Tokyo, Japan, 2. NanoSystem Solutions, Inc., Okinawa, Japan)

3:35 PM - 3:50 PM JST | 6:35 AM - 6:50 AM UTC
 [2R117] Adaptive Vibration Shape and Eigenfrequency Tuning of Multiple Modes utilizing Synthetic Impedance for Ultrasonic-Assisted Laser Beam Welding

Christian Nowroth¹, Willi Ron¹, Jens Twiefel¹, Jörg Wallaschek¹ (1. Leibniz Universität Hannover - Institute of Dynamics and Vibration Research)

◆ Invited Talk

3:50 PM - 4:10 PM JST | 6:50 AM - 7:10 AM UTC
 [2R118] Optical Devices Using Refractive Index Gradients Induced by Ultrasound

Daisuke Koyama¹ (1. Doshisha University)

Oral Session (Material) Material

3:05 PM - 4:10 PM JST | 6:05 AM - 7:10 AM UTC
 Oral Session Room 2 (Conference Room 501)

[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)NbO₃-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 BaTiO₃-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)NbO₃ Ceramic Composites

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

Oral Session (Device) Device

4:15 PM - 5:20 PM JST | 7:15 AM - 8:20 AM UTC
 Oral Session Room 1 (International Conference Hall)

[Session 5] Ultrasonic Technologies 2

◆ Invited Talk

4:15 PM - 4:35 PM JST | 7:15 AM - 7:35 AM UTC
 [2R119] Lead-free piezoelectric materials enable high-performance acoustofluidic devices

Wei Qiu¹ (1. Lund University)

4:35 PM - 4:50 PM JST | 7:35 AM - 7:50 AM UTC
 [2R120] Development of an Acoustically Tunable Liquid Lens for Terahertz Beam Focusing

Naoki Tano¹, Kentaro Nakamura¹, Adrian Dobroiu¹, Safumi Suzuki¹, Marie Tabaru¹ (1. Science Tokyo)

4:50 PM - 5:05 PM JST | 7:50 AM - 8:05 AM UTC
 [2R121] Particle Velocity Analysis for ELIPS-SAW Solid-Liquid Separation Devices operated at 1.0 MHz

Ririka Sato¹, Kyohei Yamada², Chikahiro Imashiro¹, Takeshi Morita¹ (1. The University of Tokyo, 2. Kansai University)

5:05 PM - 5:20 PM JST | 8:05 AM - 8:20 AM UTC
 [2R122] Localized Shear-Horizontal Surface Acoustic Waves for High-Throughput Microparticle Focusing

Zhirui Chen¹, Wei Qiu², Takeshi Morita¹ (1. Graduate School of Engineering, The University of Tokyo, 2. Department of Biomedical Engineering, Lund University)

Oral Session (Material) Material

4:15 PM - 5:25 PM JST | 7:15 AM - 8:25 AM UTC
 Oral Session Room 2 (Conference Room 501)

[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 BiFeO₃ epitaxial thin films grown on Si

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

Fri. Sep 25, 2026

Keynote Material

8:30 AM - 9:20 AM JST | 11:30 PM - 12:20 AM UTC
 Oral Session Room 1 (International Conference

Hall)

[Keynote 2] Keynote 2

◆ Invited Talk ◆ Keynote Speech

8:30 AM - 9:20 AM JST | 11:30 PM - 12:20 AM UTC

[3R101] Piezoelectric Materials in Actuators - A journey through 75 years of history, innovation and visions of the future

Jörg Wallaschek¹ (1. Leibniz Universität Hannover - Institute of Dynamics and Vibration Research)

Other | Other

9:00 AM - 9:20 AM JST | 12:00 AM - 12:20 AM UTC

Exhibition & Lunch (Multipurpose hall)

[Other] Industry Exhibition

Other | Other

9:20 AM - 9:50 AM JST | 12:20 AM - 12:50 AM UTC

Exhibition & Lunch (Multipurpose hall)

[Other] Coffee break & Exhibition

Other | Other

9:50 AM - 12:00 PM JST | 12:50 AM - 3:00 AM UTC

Exhibition & Lunch (Multipurpose hall)

[Other] Industry Exhibition

Oral Session (Device) | Device

9:50 AM - 10:55 AM JST | 12:50 AM - 1:55 AM UTC

Oral Session Room 1 (International Conference Hall)

[Session 6] Ultrasonic Technologies 3

◆ Invited Talk

9:50 AM - 10:10 AM JST | 12:50 AM - 1:10 AM UTC

[3R102] Applications of Plastic Materials for Ultrasonic Devices

Kentaro Nakamura¹ (1. Institute of Science Tokyo)

10:10 AM - 10:25 AM JST | 1:10 AM - 1:25 AM UTC

[3R103] Influence of acoustic streaming on levitation force in near-field acoustic levitation phenomenon

Kohei Aono¹, Manabu Aoyagi¹, Hidekazu Kajiwar¹ (1. Muroran Institute of Technology)

10:25 AM - 10:40 AM JST | 1:25 AM - 1:40 AM UTC

[3R104] Acoustic Pressure generated by an Elliptical reflector for high-Power ultraSound (ELIPS) Under Continuous-Wave Excitation

Makoto Shimaoka¹, Yumi Matsushita², Masafumi Shimojo², Makoto Higuchi², Chikahiro Imashiro¹, Takeshi Morita¹ (1. Graduate School of Engineering, The University of Tokyo, 2. Advanced Neuroimaging Center, QST)

10:40 AM - 10:55 AM JST | 1:40 AM - 1:55 AM UTC

[3R105] A Dual-Excitation Ultrasonic Transducer for Enhanced Acoustic Agglomeration of Airborne

Particles

Dalius Mažeika¹, Andrius Čeponis¹, Piotr Vasiljev², Regimantas Bareikis², Laurynas Šišovas¹, Sergejus Borodinas² (1. Vilnius Gediminas Technical University, 2. Vytautas Magnus University)

Oral Session (Material) | Material

9:50 AM - 11:00 AM JST | 12:50 AM - 2:00 AM UTC

Oral Session Room 2 (Conference Room 501)

[Session 6] Thin film 2

◆ Invited Talk

9:50 AM - 10:10 AM JST | 12:50 AM - 1:10 AM UTC

[3R201] Novel candidate of fluorite-based piezoelectric films

Hiroshi Funakubo¹, Yukari Inoue², Hiroyuki Ono², Kazuki Okamoto¹ (1. Institute of Science Tokyo, 2. TDK Corporation)

◆ Invited Talk

10:10 AM - 10:30 AM JST | 1:10 AM - 1:30 AM UTC

[3R202] Polarization inverted epitaxial piezoelectric films and their applications

Takahiko Yanagitani¹ (1. Waseda University)

10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC

[3R203] Microscopic origin of ferroelectricity in Zn(Ce,Mn)O thin films: XAFS and first-principles study

SangHyo Kweon¹, Kazuhiro Nakamura¹, Isaku Kanno¹ (1. Kobe University)

10:45 AM - 11:00 AM JST | 1:45 AM - 2:00 AM UTC

[3R204] Control of Domain Wall Conditions under DC Bias Application on Q_m of Epitaxial KNN FilmCocono Mita^{1,2}, Takahiko Yanagitani^{1,2} (1. Waseda University, 2. ZAIKEN)

Oral Session (Device) | Device

11:10 AM - 12:30 PM JST | 2:10 AM - 3:30 AM UTC

Oral Session Room 1 (International Conference Hall)

[Session 7] Piezoelectric Motors and Control Systems 2

11:10 AM - 11:25 AM JST | 2:10 AM - 2:25 AM UTC

[3R106] Material Optimization for Type-C Rotor in Micro Ultrasonic Motor

Taiki Hosako¹ (1. Okayama University.)

11:25 AM - 11:40 AM JST | 2:25 AM - 2:40 AM UTC

[3R107] Sensorless Torque Estimation and Frequency-Phase Hybrid Control for an Ultrasonic-Motor-Driven Soft Tissue Grasping Gripper

Yanbo Wang¹, Iori Miyata¹, Takeshi Morita¹ (1. The University of Tokyo)

11:40 AM - 11:55 AM JST | 2:40 AM - 2:55 AM UTC

[3R108] Visual Control of Micro Spherical Ultrasonic Motor

Okuto Nakatsuka¹, Shunsuke Izuhara¹, Taro Shibasaki¹, Takateru Urakubo², Tomoaki Mashimo¹ (1. Okayama Univ., 2. Kobe Univ.)

11:55 AM - 12:10 PM JST | 2:55 AM - 3:10 AM UTC

[3R109] Replacement of PZT in Langevin Transducers with Hard, Lead-Free Piezoceramics

Tobias Hemsel¹, Claus Scheidemann¹, Walter Littmann², Walter Sextro¹ (1. Paderborn University, Warburger Strasse 100, 33098 Paderborn, Germany, 2. ATHENA Technologie Beratung GmbH, Technologiepark 13, 33100 Paderborn, Germany)

12:10 PM - 12:25 PM JST | 3:10 AM - 3:25 AM UTC

[3R110] Non-Contact Surface Wave Velocity Anisotropy Measurement of Food Using Airborne Ultrasound and a Parabolic Reflector with Radial Laser-Access Slits

Keiya Yamashita¹, Naoki Tano¹, Kentaro Nakamura¹, Marie Tabaru¹ (1. Institute of Science Tokyo)

Oral Session (Material) | Material

11:10 AM - 12:30 PM JST | 2:10 AM - 3:30 AM UTC
Oral Session Room 2 (Conference Room 501)

[Session 7] Lead-free 2

◆ Invited Talk

11:10 AM - 11:30 AM JST | 2:10 AM - 2:30 AM UTC

[3R205] KNN-based Pb-free piezoelectrics: from bulk materials to thin films

Jing-Feng Li¹ (1. Tsinghua University)

11:30 AM - 11:45 AM JST | 2:30 AM - 2:45 AM UTC

[3R206] Giant Grain Growth Strategy for Achieving Superior Piezoelectric Properties in Lead-Free (K,Na)NbO₃-Based Ceramics

Byeong-Jae Min¹, Geun-Soo Lee¹, Boo-Hyun Choi¹, Ye-Rok Choi¹, Seo-Hyun Choi¹, Ju-Hee Kim¹, Yeongseo Yoon¹, Hyunseok Song¹, Sahn Nahm¹, Hyun-Cheol Song¹ (1. Korea University)

11:45 AM - 12:00 PM JST | 2:45 AM - 3:00 AM UTC

[3R207] Structural and dielectric properties of B₂O₃-added Li₂O-Nb₂O₅-TiO₂ ceramics

BOOHYUN CHOI¹, Hyun-Ju Choi¹, Geun-Soo Lee¹, Sahn Nahm¹ (1. Korea University)

12:00 PM - 12:15 PM JST | 3:00 AM - 3:15 AM UTC

[3R208] Dielectric characteristics of (1-x)K_{0.9}Na_{0.1}NbO₃-xSrZrO₃ multilayer ceramic capacitors sintered under various atmospheres

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

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[3R209] Nonlinear modeling of soft-type piezoelectric ceramics via the introduction of nonlinear cross-terms

Naruhiro Iwama¹, Tatsuki Sasamura^{2,1}, Ryuichi Arakawa³, Asuka Tsujii³, Takashi Kasashima³, Wei Qiu², Takeshi Morita¹ (1. The Univ. of Tokyo, 2. Lund Univ., 3. Niterra Co., Ltd.)

Other | Other

12:30 PM - 12:35 PM JST | 3:30 AM - 3:35 AM UTC
Oral Session Room 1 (International Conference Hall)

[Other] Group photo

Other | Other

12:35 PM - 1:30 PM JST | 3:35 AM - 4:30 AM UTC
Exhibition & Lunch (Multipurpose hall)

[Other] Lunch & Poster session

Poster Session | Poster session (core time)

1:30 PM - 2:20 PM JST | 4:30 AM - 5:20 AM UTC
Multipurpose hall

[Poster session] Poster session (core time)

[3P101] Advanced Metamaterial Piezoelectric Acoustic Transducer for Broadband Implantable Hearing Applications

Vishesh Singh¹, Jitendra Adhikari², Rajeev Kumar¹, Mohammad Talha¹ (1. School of Mechanical and Materials Engineering, Indian Institute of Technology Mandi, 2. Centre of Excellence in Product Design and Smart Manufacturing, Maulana Azad National Institute of Technology, Bhopal)

[3P102] Fabrication of a Polyimide Bilayer Film Actuator with a Straight Initial Shape

Kaisei Takahashi¹, Tomoya Fujino¹, Daisuke Yamaguchi¹, Shuichi Wakimoto¹, Takefumi Kanda¹ (1. Okayama University)

[3P103] Flow velocity piezoelectric polymer sensors utilizing flow-induced vibrations on flexible beam

Yuya Sato¹, Mitsuki Kurose¹, Takefumi Kanda¹, Shuichi Wakimoto¹, Daisuke Yamaguchi¹, Shinji Hiejima¹, Takeji Ueda² (1. Okayama University, 2. Hydro-VENUS Co.)

[3P104] Effective Opto-Piezo-Pyro-Elasticity Properties Evaluation of Bilayer Photovoltaic-Piezoelectric Smart Composites

Manish Kumar Sharma¹, Ankit Sharma¹, Rajeev Kumar¹, Vishal Singh Chauhan¹ (1. Indian Institute of Technology Mandi, Mandi, Himachal Pradesh)

[3P105] Light-Driven Structural Health Monitoring of Wind Turbine Structures Using a Bioinspired

Spider-Honeycomb Auxetic Metamaterial-Based Photostrictive Actuator

Ankit Sharma¹, Manish Kumar Sharma¹, Rajeev Kumar¹, Himanshu Pathak¹, Kumar Sambhav² (1. Indian Institute of Technology Mandi Himachal Pradesh, 2. Uttar Pradesh Institute of Design Sector 62, Noida, Uttar Pradesh 201301)

[3P106] High-speed phased array ultrasonic levitation

Lisa Lochtenbergh¹, Daisuke Koyama¹ (1. Doshisha University)

[3P107] Tailoring the Ferroelectric and Piezoelectric Properties of KNN Ceramics via SrTiO₃ Modification

Yerin Cho¹, Hyeonwoo Kim¹, Jungyeun You¹, Jungho Ryu¹, Jungmin Park¹ (1. School of Materials Science and Engineering, Yeungnam University)

[3P108] Curved-Surface Conductive Printing Using a Six-DOF Parallel Mechanism

Ryuki Suwabe¹, Zen Takano¹, Chiaki Tanuma², Sayoko Sakama¹, Yutaka Tanaka¹ (1. Graduate School of Engineering and Design, Hosei University, 2. Research Center for Micro-Nano Technology, Hosei University)

[3P109] Reduction of Dielectric Loss in Lead-Free NaNbO₃ Thin Films through Optimization of Sputtering Conditions

Wataru Sawada¹, Jingwei He¹, SangHyo Kweon¹, Isaku Kanno¹ (1. Kobe University)

[3P110] Sputtering Deposition of Epitaxial PMN-PT Thin Films on Si

SHIBO GONG¹, Xiaochuan Sun¹, Jingwei He¹, SangHyo Kweon¹, Isaku Kanno¹ (1. Kobe University)

[3P111] A Compact STM32F407-Based System for High-Speed Impedance Characterization and Phase-Locked Frequency Control of Piezoelectric Actuators

Martin Leibenger¹ (1. University of Paderborn)

[3P112] Investigation of Large-Area Acoustic Streaming Jets Generated by Multiple Through-holes

Kohei Aono¹, Shinsuke Uchida², Akitoshi Kasai², Hidekazu Kajiwar¹ (1. Muroran Institute of Technology, 2. Seidensha Electronics Co., Ltd.)

[3P113] Proximity/Tactile Multimodal Sensor Based on Piezoelectric MEMS Ultrasonic Transducers (PMUTs) for Robotic Hand Grasping Assistance

Seiji Aoyagi¹, Daiju Emi¹, Kensuke Nakamura¹, Tomokazu Takahashi¹, Kyohei Yamada¹, Masato Suzuki¹ (1. KANSAI Univ.)

[3P114] Wireless Energy Transfer Characteristics of Lead-Free KNN Magnetolectric Composites Fabricated by TGG Process

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

[3P115] Application for Wireless Ultrasound Energy Transfer via Reactive Template Grain Growth Method with KNN-based Piezoelectric Material

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

[3P116] Design, fabrication and evaluation of piezoelectric thin films micromotor

Ryoto Uchida¹, Kanno Isaku¹ (1. Kobe Univ.)

[3P117] Stabilization of the Vibration Characteristics for Micro Flow Control Valves Using Particle Excitation

Daisuke Hirooka¹, Frédéric Giraud² (1. Kansai University, 2. Univ. Lille, Arts et Metiers Institute of Technology, Centrale Lille, Junia, ULR 2697 - L2EP)

[3P118] Noncontact Viscoelastic Measurement and Thermal Characterization of Mochi Using an Airborne Ultrasonic Transducer with a Parabolic Reflector

MARIE TABARU¹, Ryo Aoki¹, Keiya Kanaya¹, Naoki Tano¹, Kentaro Nakamura¹ (1. Institute of Science Tokyo)

[3P119] High k_t^2 in Epitaxial (K, Na)NbO₃ Films by DC Bias Application

Cocono Mita^{1,2}, Chuangsheng Zhang^{1,2}, Hiroki Uchida^{1,2}, Yohkoh Shimano^{1,2}, Takahiko Yanagitani^{1,2} (1. Waseda University, 2. ZAIKEN)

Sat. Sep 26, 2026

Keynote | Material

8:30 AM - 9:20 AM JST | 11:30 PM - 12:20 AM UTC
Oral Session Room 1 (International Conference Hall)

[Keynote 3] Keynote 3

◆ Invited Talk ◆ Keynote Speech

8:30 AM - 9:20 AM JST | 11:30 PM - 12:20 AM UTC

[4R101] Domain Engineering of Ferroelectrics

SATOSHI WADA¹, Adisu Tsige¹, Zhuangkai Wang¹, Hyunwook Nam², Ichiro Fujii¹, shintaro Ueno¹ (1. University of Yamanashi, 2. Tokyo University of Science)

Other | Other

9:20 AM - 9:40 AM JST | 12:20 AM - 12:40 AM UTC
Exhibition & Lunch (Multipurpose hall)

[Other] Coffee break

Oral Session (Device) | Device

9:40 AM - 10:45 AM JST | 12:40 AM - 1:45 AM UTC
Oral Session Room 1 (International Conference Hall)

[Session 8] Ultrasonic Technologies 4

◆ Invited Talk

9:40 AM - 10:00 AM JST | 12:40 AM - 1:00 AM UTC
[4R102] Acoustic Wireless Power Transfer for Biomedical Implants and Underwater Electronics
Hyun-Cheol Song¹ (1. Korea University)

10:00 AM - 10:15 AM JST | 1:00 AM - 1:15 AM UTC
[4R103] A Closed-loop Flexible Ultrasonic Array for AI-guided Spatially Adaptive Wound Therapy

Pancheng Zhu^{1,2}, Yiyuan Yang^{1,2,3} (1. N.1 Institute for Health, National University of Singapore, Singapore, 2. Department of Biomedical Engineering, National University of Singapore, Singapore, 3. Institute for Digital Medicine, National University of Singapore, Singapore)

10:15 AM - 10:30 AM JST | 1:15 AM - 1:30 AM UTC
[4R104] Opposing Elliptical-Reflector Focusing Structures (ELIPS) Enabling Surface Acoustic Wave Transmission and Reception for Measuring the Acoustic Properties of Liquids

Kyohei Yamada^{1,2}, Shoki Ieiri¹, Shinsuke Itoh³, Takashi Kasashima³, Chikahiro Imashiro¹, Takeshi Morita¹ (1. The University of Tokyo, 2. Kansai University, 3. Niterra Co., Ltd.)

10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC
[4R105] Study on the Prevention of Particle Adhesion on Semiconductor Wafers Using Ultrasonic Vibration

Tomoya Masuda¹, Masaaki Miyatake¹, Yuki Kumagai², Hayato Hishinuma² (1. Tokyo University of Science, 2. Yamaha Robotics. Co.)

Oral Session (Material) | Material

9:55 AM - 10:45 AM JST | 12:55 AM - 1:45 AM UTC
Oral Session Room 2 (Conference Room 501)

[Session 8] Ceramics/Composite/Single crystal 2

◆ Invited Talk

9:55 AM - 10:15 AM JST | 12:55 AM - 1:15 AM UTC
[4R201] Nanocomposites of PbZrO₃-PbTiO₃ Exhibiting MPB-like Behavior through Nanoclustering Process

DaeYong JEONG¹ (1. Inha University)

10:15 AM - 10:30 AM JST | 1:15 AM - 1:30 AM UTC
[4R202] High-Output Flexible Piezoelectric Energy Harvesters with Structured PMN-PT Composite Active Layers

Hyunhee Kwon^{1,2}, Yunseok Kim², Hoyong Lee³, Miso Kim¹ (1. Korea Advanced Institute of Science and Technology (KAIST), 2. Sungkyunkwan University (SKKU), 3. Ceracomp. Co. Ltd.)

10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC
[4R203] Quantitative Tracking of Domain Fraction in Epitaxial PZT Thin Films under Substrate Clamping

Xiaochuan Sun^{1,2}, Ningwei Zhang¹, Sang Hyo Kweon¹, Yue Liu^{2,3}, Isaku Kanno¹ (1. Department of Mechanical Engineering, Kobe University, 2. State Key Lab of Metal Matrix Composites, School of Materials Science and Engineering, Shanghai Jiao Tong University, 3. School of Integrated Circuits, Shanghai Jiao Tong University)

Oral Session (Device) | Device

10:50 AM - 11:40 AM JST | 1:50 AM - 2:40 AM UTC
Oral Session Room 1 (International Conference Hall)

[Session 9] Multiferroic and Composite Sensors / Actuators & MEMS Devices (Actuators and Sensors)

◆ Invited Talk

10:50 AM - 11:10 AM JST | 1:50 AM - 2:10 AM UTC
[4R106] Magnetically Actuated Energy Conversion Devices: Magneto- Mechano-Electric and Luminescent Energy Generators

Jungho Ryu¹, Geon-Tae Hwang², Hyun-Cheol Song³, Dae-Yong Jeong⁴ (1. Yeungnam University, 2. Pukyong National University, 3. Korea University, 4. Inha University)

11:10 AM - 11:25 AM JST | 2:10 AM - 2:25 AM UTC
[4R107] Microparticle Sensing of Whole Droplet Using Rayleigh-Type Surface Acoustic Wave

Shun Koda¹, Takahiro G Yamada², Yuta Kurashina¹ (1. Tokyo University of Agriculture and Technology, 2. University of California, San Diego)

11:25 AM - 11:40 AM JST | 2:25 AM - 2:40 AM UTC
[4R108] Model-Based Design of a Piezoelectric Microtransducer for a Co-Resonant Nano-Mass Spectrometer

Willi Ron¹, Xiao Xiao², Nynne Britt Edeler², Raphael Hasterok¹, Felix Herrmann³, Stefan Zimmermann³, Marc Christopher Wurz², Jens Twiefel¹ (1. Leibniz University Hannover, Institute of Dynamics and Vibration Research, 2. Leibniz University Hannover, Institute of Micro Production Technology, 3. Leibniz University Hannover, Institute of Electrical Engineering and Measurement Technology)

Oral Session (Material) | Material

10:50 AM - 11:40 AM JST | 1:50 AM - 2:40 AM UTC
Oral Session Room 2 (Conference Room 501)

[Session 9] Ceramics/Composite/Single crystal 3

♥ Invited Talk

10:50 AM - 11:10 AM JST | 1:50 AM - 2:10 AM UTC

[4R204] The Effect of Polarization Methods on the Electromechanical Properties of Relaxor-Based Piezoelectric Single Crystals

Hiroshi Maiwa¹, Osamu Furukawa¹, Yohachi John Yamashita^{1,2} (1. Shonan Institute of Technology, 2. North Carolina State University)

11:10 AM - 11:25 AM JST | 2:10 AM - 2:25 AM UTC

[4R205] [001]-Oriented Texture Engineering in Sm-Doped PIN-PMN-PT Ceramics for High Piezoelectric Performance

Ju-Hee Kim¹, Byeong-Jae Min¹, Xin Liu¹, Ye-Rok Choi¹, Hyunseok Song¹, Seo-Hyun Choi¹, Yeongseo Yoon¹, Hyun-Cheol Song¹ (1. Korea University)

11:25 AM - 11:40 AM JST | 2:25 AM - 2:40 AM UTC

[4R206] Geometry-Dependent Magnetoelectric Antenna Characteristics in Electroplated Ni/PMN-PZT/Ni Tri-layered Composites

Donggeon Baek^{1,2}, Burcu Dursun², Kae Nakamura², Yujun Ji¹, Dongha Yang³, Vincent Tabib³, Isaac Hendrikson³, Arkaprovo Das³, Douglas Werner³, Susan Trolier-McKinstry², Jungho Ryu^{1,4} (1. School of Materials Science and Engineering, Yeungnam University, Gyeongsan 38541, South Korea, 2. Department of Materials Science and Engineering and Materials Research Institute, The Pennsylvania State University, University Park, Pennsylvania 16802, USA, 3. Department of Electrical Engineering, The Pennsylvania State University, University Park, Pennsylvania 16802, USA, 4. Institute of Materials Technology, Yeungnam University, Gyeongsan 38541, South Korea)

Other | Other

11:40 AM - 11:50 AM JST | 2:40 AM - 2:50 AM UTC
Oral Session Room 1 (International Conference Hall)

[Other] Closing

Other | Other

🗓 Wed. Sep 23, 2026 5:00 PM - 6:30 PM JST | Wed. Sep 23, 2026 8:00 AM - 9:30 AM UTC | 🏛 Exhibition
& Lunch (Multipurpose hall)

[Other] Welcome reception

5:00 PM - 6:30 PM JST | 8:00 AM - 9:30 AM UTC

Welcome Reception

Other | Other

🗓 Thu. Sep 24, 2026 8:30 AM - 8:35 AM JST | Wed. Sep 23, 2026 11:30 PM - 11:35 PM UTC | 🏛 Oral
Session Room 1 (International Conference Hall)

[Other] Opening

8:30 AM - 8:35 AM JST | 11:30 PM - 11:35 PM UTC

Opening

Keynote | Bio

📅 Thu. Sep 24, 2026 8:35 AM - 9:25 AM JST | Wed. Sep 23, 2026 11:35 PM - 12:25 AM UTC | 🏛️ Oral
Session Room 1 (International Conference Hall)

[Keynote 1] Keynote 1

💎 Invited Talk 💎 Keynote Speech

8:35 AM - 9:25 AM JST | 11:35 PM - 12:25 AM UTC

[2R101] Acoustophoretic Cell Manipulation Techniques for Tissue Engineering

Hyungsuk Lee¹ (1. Yonsei University)

Other | Other

🗓 Thu. Sep 24, 2026 9:00 AM - 9:25 AM JST | Thu. Sep 24, 2026 12:00 AM - 12:25 AM UTC | 🏛 Exhibition
& Lunch (Multipurpose hall)

[Other] Industry Exhibition

9:00 AM - 9:25 AM JST | 12:00 AM - 12:25 AM UTC

Exhibition

Other | Other

🗓 Thu. Sep 24, 2026 9:25 AM - 9:55 AM JST | Thu. Sep 24, 2026 12:25 AM - 12:55 AM UTC | 🏛 Exhibition
& Lunch (Multipurpose hall)

[Other] Coffee break & Exhibition

9:25 AM - 9:55 AM JST | 12:25 AM - 12:55 AM UTC

Coffee Break

Other | Other

🗓 Thu. Sep 24, 2026 9:55 AM - 12:35 PM JST | Thu. Sep 24, 2026 12:55 AM - 3:35 AM UTC | 🏛 Exhibition
& Lunch (Multipurpose hall)

[Other] Industry Exhibition

9:55 AM - 12:35 PM JST | 12:55 AM - 3:35 AM UTC

Exhibition

Oral Session (Device) | Device

🗓 Thu. Sep 24, 2026 9:55 AM - 11:00 AM JST | Thu. Sep 24, 2026 12:55 AM - 2:00 AM UTC | 🏢 Oral
Session Room 1 (International Conference Hall)

[Session 1] Piezoelectric Motors and Control Systems 1

♥ Invited Talk

9:55 AM - 10:15 AM JST | 12:55 AM - 1:15 AM UTC

[2R102] Structural Design and Optimization Methods of Piezoelectric Motors for Aerospace Applications

Ying Yang¹ (1. Nanjing University of Aeronautics and Astronautics)

10:15 AM - 10:30 AM JST | 1:15 AM - 1:30 AM UTC

[2R103] Development of a Slider Retained Micro Linear Ultrasonic Motor Driven in L1B2 Mode

Kenshin Kanesiro¹, Shunsuke Izuhara¹, Tomoaki Mashimo¹ (1. Okayama Univ.)

10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC

[2R104] Sensorless Control of Contact Force at the Tip of a Robot Finger with Variable Posture Driven by an Ultrasonic Motor

Iori Miyata¹, Yanbo Wang¹, Tatsuki Sasamura², Shinichi Miyose³, Yoshitaka Oi³, Takeshi Morita¹ (1. Graduate School of Engineering, The University of Tokyo, 2. Department of Biomedical Engineering, Lund University, 3. NACHI-FUJIKOSHI CORP.)

10:45 AM - 11:00 AM JST | 1:45 AM - 2:00 AM UTC

[2R105] Design of an Ultrasonic Motor Using a Cross-Shaped Stator Transducer

Haoruo JIANG¹, Masaya TAKASAKI¹ (1. Saitama University)

Oral Session (Bio) | Bio

📅 Thu. Sep 24, 2026 9:55 AM - 11:00 AM JST | Thu. Sep 24, 2026 12:55 AM - 2:00 AM UTC | 🏢 Oral
Session Room 2 (Conference Room 501)

[Session 1] Biomedical Acoustics and Acoustofluidics 1

♥ Invited Talk

9:55 AM - 10:15 AM JST | 12:55 AM - 1:15 AM UTC

[2R201] Sound, Structure, and Life: Nonlinear Acoustofluidics from Capillary Waves to Sonogenetics

James Friend¹ (1. Washington University in St. Louis)

10:15 AM - 10:30 AM JST | 1:15 AM - 1:30 AM UTC

[2R202] Effect of PBS Volume on Acoustic Detachment of C2C12 Cells

Takashi Sasaki¹, Hideharu Shimozaawa², Hitomi Tokutake³, Chikahiro Imashiro¹, Takeshi Morita¹ (1. The University of Tokyo, 2. Medical Business Operations, Canon Inc., 3. Core Technology Development Headquarters, Canon Inc.)

10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC

[2R203] Evaluation of Cellular Biochemical Frequency Characteristics under Ultrasound Stimulation Considering Acoustic Streaming Effects

Nagisa Tsujimura¹, Yumi Matsushita², Masafumi Shimojo², Makoto Higuchi², Beomseok Cha³, Jinsoo Park³, Takeshi Morita¹, Chikahiro Imashiro¹ (1. Graduate School of Engineering, The University of Tokyo, 2. Advanced Neuroimaging Center, National Institutes for Quantum Science and Technology, 3. Department of Mechanical Engineering, Chonnam National University)

10:45 AM - 11:00 AM JST | 1:45 AM - 2:00 AM UTC

[2R204] Charge modulation on membranes of CO₂-supersaturated liposomes to improve efficiency in Sonogenetics

Yuto Hayashi¹, Ru Konno¹, Suzuha Morimoto¹, Yasuhiko Orita², Yuta Kurashina¹ (1. Tokyo University of Agriculture and Technology, Kurashina Laboratory, 2. Nagoya University)

Oral Session (Device)	Device
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📅 Thu. Sep 24, 2026 11:05 AM - 12:30 PM JST | Thu. Sep 24, 2026 2:05 AM - 3:30 AM UTC | 🏛️ Oral
Session Room 1 (International Conference Hall)

[Session 2] New Energy Technology (Energy Harvesting) & Airborne Transducers

💎 Invited Talk

11:05 AM - 11:25 AM JST | 2:05 AM - 2:25 AM UTC

[2R106] Piezoelectric energy harvesting for tyre integration

Veronika Kovacova¹, Mayara Cardozo¹, Omar Ramirez-Sanchez¹, Uros Prah¹, Junling Zhao², Emmanuel Defay¹ (1. Luxembourg Institute of Science and Technology, 2. Goodyear Innovation Center Akron)

💎 Invited Talk

11:25 AM - 11:45 AM JST | 2:25 AM - 2:45 AM UTC

[2R107] Energy Harvesting – Leveraging Bio-inspired Strategies

Shashank Priya¹ (1. MSU)

11:45 AM - 12:00 PM JST | 2:45 AM - 3:00 AM UTC

[2R108] Development and Evaluation of a 3DoF Linear Ultrasonic Motor

Shoma Tanaka¹, Shunsuke Izuhara¹, Tomoaki Mashimo¹ (1. Okayama University)

12:00 PM - 12:15 PM JST | 3:00 AM - 3:15 AM UTC

[2R109] Experimental Parameter Identification for an Ultrasonic Transducer under Load

Markus Dohmen¹, Tobias Hemsell¹, Walter Sextro¹ (1. Paderborn University, Chair of Dynamics and Mechatronics)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[2R110] Evaluation of Underwater Actuation Characteristics of a Micro Ultrasonic Motor and Its Applications

Shunsuke Fujiki¹, Shunsuke Izuhara², Tomoaki Mashimo³ (1. Graduate School of Environment, Life, Natural Science and Technology, Okayama University, 2. Faculty of Environmental, Life, Natural Science and Technology Assistant Professor, 3. Faculty of Environmental, Life, Natural Science and Technology Professor)

Oral Session (Bio) | Bio

📅 Thu. Sep 24, 2026 11:05 AM - 12:30 PM JST | Thu. Sep 24, 2026 2:05 AM - 3:30 AM UTC | 🏠 Oral
Session Room 2 (Conference Room 501)

[Session 2] Biomedical Acoustics and Acoustofluidics 2

♥ Invited Talk

11:05 AM - 11:25 AM JST | 2:05 AM - 2:25 AM UTC

[2R205] Surface Acoustic Wave Meets Microfluidics for Biomedical Applications

Jinsoo Park¹ (1. Chonnam National University)

♥ Invited Talk

11:25 AM - 11:45 AM JST | 2:25 AM - 2:45 AM UTC

[2R206] Sonophoresis: The Path to Replace Needles with Ultrasounds

Eduardo W Jorgensen¹ (1. Medicsen)

11:45 AM - 12:00 PM JST | 2:45 AM - 3:00 AM UTC

[2R207] The Effect of Irradiation Time on Drug Delivery in Sequential Ultrasound Irradiation

Youhei Usui¹, Tsubasa Soita¹, Yoshiaki Sasaki¹, Munenari Itoh², Hiroataka James Okano², Yuta Kurashina¹
(1. Tokyo University of Agriculture and Technology, 2. The Jikei University School of Medicine)

12:00 PM - 12:15 PM JST | 3:00 AM - 3:15 AM UTC

[2R208] Ultrasound propagation simulation in a rat-tibia pseudo fracture model

Shota Kitajima¹, Yuta Murakami¹, Yusei Matsumoto¹, Mami Matsukawa¹ (1. Doshisha Univ)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[2R209] Visualization of Ultrasonic Shear Wave Attenuation in Cell Aggregates and PDMS for Viscoelastic Characterization

Shunsuke Yamagata¹, Nanaka Takeuchi¹, Takuya Katashima¹, Takeshi Morita¹, Chikahiro Imashiro¹ (1. The University of Tokyo)

Other | Other

🗓 Thu. Sep 24, 2026 12:35 PM - 1:30 PM JST | Thu. Sep 24, 2026 3:35 AM - 4:30 AM UTC | 🏛 Exhibition
& Lunch (Multipurpose hall)

[Other] Lunch & Exhibition

12:35 PM - 1:30 PM JST | 3:35 AM - 4:30 AM UTC

Lunch

Other | Other

🗓 Thu. Sep 24, 2026 1:30 PM - 2:35 PM JST | Thu. Sep 24, 2026 4:30 AM - 5:35 AM UTC | 🏛 Exhibition & Lunch (Multipurpose hall)

[Other] Industry Exhibition

1:30 PM - 2:35 PM JST | 4:30 AM - 5:35 AM UTC

Exhibition

Oral Session (Device) Device

🗓 Thu. Sep 24, 2026 1:30 PM - 2:40 PM JST | Thu. Sep 24, 2026 4:30 AM - 5:40 AM UTC | 🏛 Oral Session Room 1 (International Conference Hall)

[Session 3] Pb-Free Piezoelectrics & Smart Structures and Systems with Actuators and Sensors

♥ Invited Talk

1:30 PM - 1:50 PM JST | 4:30 AM - 4:50 AM UTC

[2R111] Innovative lead-free ultrasonic systems: Langevin, bending plate and membrane transducers for low to medium power applications

Tobias Hemsel¹, Claus Scheidemann¹, Peter Bornmann², Martin Leibenger¹, Walter Littmann² (1. Paderborn University, Warburger Strasse 100, 33098 Paderborn, Germany, 2. ATHENA Technologie Beratung GmbH, Technologiepark 13, 33100 Paderborn, Germany)

♥ Invited Talk

1:50 PM - 2:10 PM JST | 4:50 AM - 5:10 AM UTC

[2R112] Electrospinning Piezoelectric Fiber Yarns as a Scalable Platform for AI-Integrated Self-Powered Sensors

Miso Kim¹ (1. Korea Advanced Institute of Science and Technology (KAIST))

2:10 PM - 2:25 PM JST | 5:10 AM - 5:25 AM UTC

[2R113] Biaxial Microcrack Engineering in Auxetic Stretchable Strain Sensors

Jaewon Cho¹, Miso Kim¹ (1. Korea Advanced Institute of Science and Technology)

2:25 PM - 2:40 PM JST | 5:25 AM - 5:40 AM UTC

[2R114] Quantitative Characterisation of Nonlinear Resonance Behaviour in Piezoelectric Components Using a Harmonic Balance FEM

Olga Friesen¹, Jonas Hölscher¹, Michael B. K. Siegmund¹, Finn Gebauer¹, Leander Claes¹, Bernd Henning¹ (1. Measurement Engineering Group, Paderborn University)

Oral Session (Material) | Material

📅 Thu. Sep 24, 2026 1:30 PM - 2:35 PM JST | Thu. Sep 24, 2026 4:30 AM - 5:35 AM UTC | 🏢 Oral Session Room 2 (Conference Room 501)

[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)

Other | Other

🗓 Thu. Sep 24, 2026 2:35 PM - 3:05 PM JST | Thu. Sep 24, 2026 5:35 AM - 6:05 AM UTC | 🏛 Exhibition & Lunch (Multipurpose hall)

[Other] Coffee break & Exhibition

2:35 PM - 3:05 PM JST | 5:35 AM - 6:05 AM UTC

Coffee Break

Other | Other

🗓 Thu. Sep 24, 2026 3:05 PM - 5:00 PM JST | Thu. Sep 24, 2026 6:05 AM - 8:00 AM UTC | 🏛 Exhibition & Lunch (Multipurpose hall)

[Other] Industry Exhibition

3:05 PM - 5:00 PM JST | 6:05 AM - 8:00 AM UTC

Exhibition

Oral Session (Device) | Device

📅 Thu. Sep 24, 2026 3:05 PM - 4:10 PM JST | Thu. Sep 24, 2026 6:05 AM - 7:10 AM UTC | 🏢 Oral Session Room 1 (International Conference Hall)

[Session 4] Ultrasonic Technologies 1

3:05 PM - 3:20 PM JST | 6:05 AM - 6:20 AM UTC

[2R115] Design of a Multi-Frequency High-Power Ultrasonic Transducer with Acoustic Lens-Based Focusing Mechanism

Hayato Nishimura¹, Takeshi Morita¹ (1. The University of Tokyo)

3:20 PM - 3:35 PM JST | 6:20 AM - 6:35 AM UTC

[2R116] Non-contact Holding and Rotation of $\Phi 300$ Wafers Using the Ultrasonic Squeeze Film Levitation

Takumi Miyawaki¹, Masaaki Miyatake¹, Kazumi Haga², Yoshihiro Ishiguro² (1. Tokyo University of Science, Tokyo, Japan, 2. NanoSystem Solutions, Inc., Okinawa, Japan)

3:35 PM - 3:50 PM JST | 6:35 AM - 6:50 AM UTC

[2R117] Adaptive Vibration Shape and Eigenfrequency Tuning of Multiple Modes utilizing Synthetic Impedance for Ultrasonic-Assisted Laser Beam Welding

Christian Nowroth¹, Willi Ron¹, Jens Twiefel¹, Jörg Wallaschek¹ (1. Leibniz Universität Hannover - Institute of Dynamics and Vibration Research)

💎 Invited Talk

3:50 PM - 4:10 PM JST | 6:50 AM - 7:10 AM UTC

[2R118] Optical Devices Using Refractive Index Gradients Induced by Ultrasound

Daisuke Koyama¹ (1. Doshisha University)

Oral Session (Material) | Material

🗓 Thu. Sep 24, 2026 3:05 PM - 4:10 PM JST | Thu. Sep 24, 2026 6:05 AM - 7:10 AM UTC | 🏛 Oral Session Room 2 (Conference Room 501)

[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)

Oral Session (Device) | Device

📅 Thu. Sep 24, 2026 4:15 PM - 5:20 PM JST | Thu. Sep 24, 2026 7:15 AM - 8:20 AM UTC | 🏛️ Oral Session Room 1 (International Conference Hall)

[Session 5] Ultrasonic Technologies 2

💎 Invited Talk

4:15 PM - 4:35 PM JST | 7:15 AM - 7:35 AM UTC

[2R119] Lead-free piezoelectric materials enable high-performance acoustofluidic devices

Wei Qiu¹ (1. Lund University)

4:35 PM - 4:50 PM JST | 7:35 AM - 7:50 AM UTC

[2R120] Development of an Acoustically Tunable Liquid Lens for Terahertz Beam Focusing

Naoki Tano¹, Kentaro Nakamura¹, Adrian Dobroiu¹, Safumi Suzuki¹, Marie Tabaru¹ (1. Science Tokyo)

4:50 PM - 5:05 PM JST | 7:50 AM - 8:05 AM UTC

[2R121] Particle Velocity Analysis for ELIPS-SAW Solid-Liquid Separation Devices operated at 1.0 MHz

Ririka Sato¹, Kyohei Yamada², Chikahiro Imashiro¹, Takeshi Morita¹ (1. The University of Tokyo, 2. Kansai University)

5:05 PM - 5:20 PM JST | 8:05 AM - 8:20 AM UTC

[2R122] Localized Shear-Horizontal Surface Acoustic Waves for High-Throughput Microparticle Focusing

Zhirui Chen¹, Wei Qiu², Takeshi Morita¹ (1. Graduate School of Engineering, The University of Tokyo, 2. Department of Biomedical Engineering, Lund University)

Oral Session (Material) | Material

📅 Thu. Sep 24, 2026 4:15 PM - 5:25 PM JST | Thu. Sep 24, 2026 7:15 AM - 8:25 AM UTC | 🏛️ Oral Session
Room 2 (Conference Room 501)

[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 BiFeO₃ epitaxial thin films grown on Si

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

Keynote | Material

📅 Fri. Sep 25, 2026 8:30 AM - 9:20 AM JST | Thu. Sep 24, 2026 11:30 PM - 12:20 AM UTC | 🏛️ Oral
Session Room 1 (International Conference Hall)

[Keynote 2] Keynote 2

💎 Invited Talk 💎 Keynote Speech

8:30 AM - 9:20 AM JST | 11:30 PM - 12:20 AM UTC

[3R101] Piezoelectric Materials in Actuators - A journey through 75 years of history, innovation and visions of the future

Jörg Wallaschek¹ (1. Leibniz Universität Hannover - Institute of Dynamics and Vibration Research)

Other | Other

🗓 Fri. Sep 25, 2026 9:00 AM - 9:20 AM JST | Fri. Sep 25, 2026 12:00 AM - 12:20 AM UTC | 🏛 Exhibition & Lunch (Multipurpose hall)

[Other] Industry Exhibition

9:00 AM - 9:20 AM JST | 12:00 AM - 12:20 AM UTC

Exhibition

Other | Other

🗓 Fri. Sep 25, 2026 9:20 AM - 9:50 AM JST | Fri. Sep 25, 2026 12:20 AM - 12:50 AM UTC | 🏛 Exhibition & Lunch (Multipurpose hall)

[Other] Coffee break & Exhibition

9:20 AM - 9:50 AM JST | 12:20 AM - 12:50 AM UTC

Coffee Break

Other | Other

🗓 Fri. Sep 25, 2026 9:50 AM - 12:00 PM JST | Fri. Sep 25, 2026 12:50 AM - 3:00 AM UTC | 🏛 Exhibition & Lunch (Multipurpose hall)

[Other] Industry Exhibition

9:50 AM - 12:00 PM JST | 12:50 AM - 3:00 AM UTC

Exhibition

Oral Session (Device) | Device

📅 Fri. Sep 25, 2026 9:50 AM - 10:55 AM JST | Fri. Sep 25, 2026 12:50 AM - 1:55 AM UTC | 🏛️ Oral Session Room 1 (International Conference Hall)

[Session 6] Ultrasonic Technologies 3

♥ Invited Talk

9:50 AM - 10:10 AM JST | 12:50 AM - 1:10 AM UTC

[3R102] Applications of Plastic Materials for Ultrasonic Devices

Kentaro Nakamura¹ (1. Institute of Science Tokyo)

10:10 AM - 10:25 AM JST | 1:10 AM - 1:25 AM UTC

[3R103] Influence of acoustic streaming on levitation force in near-field acoustic levitation phenomenon

Kohei Aono¹, Manabu Aoyagi¹, Hidekazu Kajiwara¹ (1. Muroran Institute of Technology)

10:25 AM - 10:40 AM JST | 1:25 AM - 1:40 AM UTC

[3R104] Acoustic Pressure generated by an Elliptical reflector for high-Power ultrasound (ELIPS) Under Continuous-Wave Excitation

Makoto Shimaoka¹, Yumi Matsushita², Masafumi Shimojo², Makoto Higuchi², Chikahiro Imashiro¹, Takeshi Morita¹ (1. Graduate School of Engineering, The University of Tokyo, 2. Advanced Neuroimaging Center, QST)

10:40 AM - 10:55 AM JST | 1:40 AM - 1:55 AM UTC

[3R105] A Dual-Excitation Ultrasonic Transducer for Enhanced Acoustic Agglomeration of Airborne Particles

Dalius Mažeika¹, Andrius Čėponis¹, Piotr Vasiljev², Regimantas Bareikis², Laurynas Šišovas¹, Sergejus Borodinas² (1. Vilnius Gediminas Technical University, 2. Vytautas Magnus University)

Oral Session (Material) | Material

📅 Fri. Sep 25, 2026 9:50 AM - 11:00 AM JST | Fri. Sep 25, 2026 12:50 AM - 2:00 AM UTC | 🏛️ Oral Session
Room 2 (Conference Room 501)

[Session 6] Thin film 2

♥ Invited Talk

9:50 AM - 10:10 AM JST | 12:50 AM - 1:10 AM UTC

[3R201] Novel candidate of fluorite-based piezoelectric films

Hiroshi Funakubo¹, Yukari Inoue², Hiroyuki Ono², Kazuki Okamoto¹ (1. Institute of Science Tokyo, 2. TDK Corporation)

♥ Invited Talk

10:10 AM - 10:30 AM JST | 1:10 AM - 1:30 AM UTC

[3R202] Polarization inverted epitaxial piezoelectric films and their applications

Takahiko Yanagitani¹ (1. Waseda University)

10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC

[3R203] Microscopic origin of ferroelectricity in Zn(Ce,Mn)O thin films: XAFS and first-principles study

SangHyo Kweon¹, Kazuhiro Nakamura¹, Isaku Kanno¹ (1. Kobe University)

10:45 AM - 11:00 AM JST | 1:45 AM - 2:00 AM UTC

[3R204] Control of Domain Wall Conditions under DC Bias Application on Q_m of Epitaxial KNN Film

Cocono Mita^{1,2}, Takahiko Yanagitani^{1,2} (1. Waseda University, 2. ZAIKEN)

Oral Session (Device) | Device

📅 Fri. Sep 25, 2026 11:10 AM - 12:30 PM JST | Fri. Sep 25, 2026 2:10 AM - 3:30 AM UTC | 🏢 Oral Session Room 1 (International Conference Hall)

[Session 7] Piezoelectric Motors and Control Systems 2

11:10 AM - 11:25 AM JST | 2:10 AM - 2:25 AM UTC

[3R106] Material Optimization for Type-C Rotor in Micro Ultrasonic Motor

Taiki Hosako¹ (1. Okayama University.)

11:25 AM - 11:40 AM JST | 2:25 AM - 2:40 AM UTC

[3R107] Sensorless Torque Estimation and Frequency-Phase Hybrid Control for an Ultrasonic-Motor-Driven Soft Tissue Grasping Gripper

Yanbo Wang¹, Iori Miyata¹, Takeshi Morita¹ (1. The University of Tokyo)

11:40 AM - 11:55 AM JST | 2:40 AM - 2:55 AM UTC

[3R108] Visual Control of Micro Spherical Ultrasonic Motor

Okuto Nakatsuka¹, Shunsuke Izuhara¹, Taro Shibasaki¹, Takateru Urakubo², Tomoaki Mashimo¹ (1. Okayama Univ., 2. Kobe Univ.)

11:55 AM - 12:10 PM JST | 2:55 AM - 3:10 AM UTC

[3R109] Replacement of PZT in Langevin Transducers with Hard, Lead-Free Piezoceramics

Tobias Hemsel¹, Claus Scheidemann¹, Walter Littmann², Walter Sextro¹ (1. Paderborn University, Warburger Strasse 100, 33098 Paderborn, Germany, 2. ATHENA Technologie Beratung GmbH, Technologiepark 13, 33100 Paderborn, Germany)

12:10 PM - 12:25 PM JST | 3:10 AM - 3:25 AM UTC

[3R110] Non-Contact Surface Wave Velocity Anisotropy Measurement of Food Using Airborne Ultrasound and a Parabolic Reflector with Radial Laser-Access Slits

Keiya Yamashita¹, Naoki Tano¹, Kentaro Nakamura¹, Marie Tabaru¹ (1. Institute of Science Tokyo)

Oral Session (Material) | Material

📅 Fri. Sep 25, 2026 11:10 AM - 12:30 PM JST | Fri. Sep 25, 2026 2:10 AM - 3:30 AM UTC | 🏢 Oral Session Room 2 (Conference Room 501)

[Session 7] Lead-free 2

💎 Invited Talk

11:10 AM - 11:30 AM JST | 2:10 AM - 2:30 AM UTC

[3R205] KNN-based Pb-free piezoelectrics: from bulk materials to thin films

Jing-Feng Li¹ (1. Tsinghua University)

11:30 AM - 11:45 AM JST | 2:30 AM - 2:45 AM UTC

[3R206] Giant Grain Growth Strategy for Achieving Superior Piezoelectric Properties in Lead-Free (K,Na)NbO₃-Based Ceramics

Byeong-Jae Min¹, Geun-Soo Lee¹, Boo-Hyun Choi¹, Ye-Rok Choi¹, Seo-Hyun Choi¹, Ju-Hee Kim¹, Yeongseo Yoon¹, Hyunseok Song¹, Sahn Nahm¹, Hyun-Cheol Song¹ (1. Korea University)

11:45 AM - 12:00 PM JST | 2:45 AM - 3:00 AM UTC

[3R207] Structural and dielectric properties of B₂O₃-added Li₂O-Nb₂O₅-TiO₂ ceramics

BOOHYUN CHOI¹, Hyun-Ju Choi¹, Geun-Soo Lee¹, Sahn Nahm¹ (1. Korea University)

12:00 PM - 12:15 PM JST | 3:00 AM - 3:15 AM UTC

[3R208] Dielectric characteristics of (1-x)K_{0.9}Na_{0.1}NbO₃-xSrZrO₃ multilayer ceramic capacitors sintered under various atmospheres

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

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[3R209] Nonlinear modeling of soft-type piezoelectric ceramics via the introduction of nonlinear cross-terms

Naruhiro Iwama¹, Tatsuki Sasamura^{2,1}, Ryuichi Arakawa³, Asuka Tsujii³, Takashi Kasashima³, Wei Qiu², Takeshi Morita¹ (1. The Univ. of Tokyo, 2. Lund Univ., 3. Niterra Co., Ltd.)

Other | Other

🗓 Fri. Sep 25, 2026 12:30 PM - 12:35 PM JST | Fri. Sep 25, 2026 3:30 AM - 3:35 AM UTC | 🏛 Oral Session
Room 1 (International Conference Hall)

[Other] Group photo

Other | Other

🗓 Fri. Sep 25, 2026 12:35 PM - 1:30 PM JST | Fri. Sep 25, 2026 3:35 AM - 4:30 AM UTC | 🏛 Exhibition & Lunch (Multipurpose hall)

[Other] Lunch & Poster session

12:35 PM - 1:30 PM JST | 3:35 AM - 4:30 AM UTC

Lunch & Poster

Poster Session | Poster session (core time)

📅 Fri. Sep 25, 2026 1:30 PM - 2:20 PM JST | Fri. Sep 25, 2026 4:30 AM - 5:20 AM UTC | 🏢 Multipurpose hall

[Poster session] Poster session (core time)

[3P101] Advanced Metamaterial Piezoelectric Acoustic Transducer for Broadband Implantable Hearing Applications

Vishesh Singh¹, Jitendra Adhikari², Rajeev Kumar¹, Mohammad Talha¹ (1. School of Mechanical and Materials Engineering, Indian Institute of Technology Mandi, 2. Centre of Excellence in Product Design and Smart Manufacturing, Maulana Azad National Institute of Technology, Bhopal)

[3P102] Fabrication of a Polyimide Bilayer Film Actuator with a Straight Initial Shape

Kaisei Takahashi¹, Tomoya Fujino¹, Daisuke Yamaguchi¹, Shuichi Wakimoto¹, Takefumi Kanda¹ (1. Okayama University)

[3P103] Flow velocity piezoelectric polymer sensors utilizing flow-induced vibrations on flexible beam

Yuya Sato¹, Mitsuki Kurose¹, Takefumi Kanda¹, Shuichi Wakimoto¹, Daisuke Yamaguchi¹, Shinji Hiejima¹, Takeji Ueda² (1. Okayama University, 2. Hydro-VENUS Co.)

[3P104] Effective Opto-Piezo-Pyro-Elasticity Properties Evaluation of Bilayer Photovoltaic-Piezoelectric Smart Composites

Manish Kumar Sharma¹, Ankit Sharma¹, Rajeev Kumar¹, Vishal Singh Chauhan¹ (1. Indian Institute of Technology Mandi, Mandi, Himachal Pradesh)

[3P105] Light-Driven Structural Health Monitoring of Wind Turbine Structures Using a Bioinspired Spider-Honeycomb Auxetic Metamaterial-Based Photostrictive Actuator

Ankit Sharma¹, Manish Kumar Sharma¹, Rajeev Kumar¹, Himanshu Pathak¹, Kumar Sambhav² (1. Indian Institute of Technology Mandi Himachal Pradesh, 2. Uttar Pradesh Institute of Design Sector 62, Noida, Uttar Pradesh 201301)

[3P106] High-speed phased array ultrasonic levitation

Lisa Lochtenbergh¹, Daisuke Koyama¹ (1. Doshisha University)

[3P107] Tailoring the Ferroelectric and Piezoelectric Properties of KNN Ceramics via SrTiO₃ Modification

Yerin Cho¹, Hyeonwoo Kim¹, Jungyeun You¹, Jungho Ryu¹, Jungmin Park¹ (1. School of Materials Science and Engineering, Yeungnam University)

[3P108] Curved-Surface Conductive Printing Using a Six-DOF Parallel Mechanism

Ryuki Suwabe¹, Zen Takano¹, Chiaki Tanuma², Sayoko Sakama¹, Yutaka Tanaka¹ (1. Graduate School of Engineering and Design, Hosei University, 2. Research Center for Micro-Nano Technology, Hosei University)

[3P109] Reduction of Dielectric Loss in Lead-Free NaNbO₃ Thin Films through Optimization of Sputtering Conditions

Wataru Sawada¹, Jingwei He¹, SangHyo Kweon¹, Isaku Kanno¹ (1. Kobe University)

[3P110] Sputtering Deposition of Epitaxial PMN-PT Thin Films on Si

SHIBO GONG¹, Xiaochuan Sun¹, Jingwei He¹, SangHyo Kweon¹, Isaku Kanno¹ (1. Kobe University)

[3P111] A Compact STM32F407-Based System for High-Speed Impedance Characterization and Phase-Locked Frequency Control of Piezoelectric Actuators

Martin Leibenger¹ (1. University of Paderborn)

[3P112] Investigation of Large-Area Acoustic Streaming Jets Generated by Multiple Through-holes

Kohei Aono¹, Shinsuke Uchida², Akitoshi Kasai², Hidekazu Kajiwara¹ (1. Muroran Institute of Technology, 2. Seidensha Electronics Co., Ltd.)

[3P113] Proximity/Tactile Multimodal Sensor Based on Piezoelectric MEMS Ultrasonic Transducers (PMUTs) for Robotic Hand Grasping Assistance

Seiji Aoyagi¹, Daiju Emi¹, Kensuke Nakamura¹, Tomokazu Takahashi¹, Kyohei Yamada¹, Masato Suzuki¹ (1. KANSAI Univ.)

[3P114] Wireless Energy Transfer Characteristics of Lead-Free KNN Magnetoelectric Composites Fabricated by TGG Process

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

[3P115] Application for Wireless Ultrasound Energy Transfer via Reactive Template Grain Growth Method with KNN-based Piezoelectric Material

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

[3P116] Design, fabrication and evaluation of piezoelectric thin films micromotor

Ryoto Uchida¹, Kanno Isaku¹ (1. Kobe Univ.)

[3P117] Stabilization of the Vibration Characteristics for Micro Flow Control Valves Using Particle Excitation

Daisuke Hirooka¹, Frédéric Giraud² (1. Kansai University, 2. Univ. Lille, Arts et Metiers Institute of Technology, Centrale Lille, Junia, ULR 2697 - L2EP)

[3P118] Noncontact Viscoelastic Measurement and Thermal Characterization of Mochi Using an Airborne Ultrasonic Transducer with a Parabolic Reflector

MARIE TABARU¹, Ryo Aoki¹, Keiya Kanaya¹, Naoki Tano¹, Kentaro Nakamura¹ (1. Institute of Science Tokyo)

[3P119] High k_t^2 in Epitaxial (K, Na)NbO₃ Films by DC Bias Application

Cocono Mita^{1,2}, Chuangsheng Zhang^{1,2}, Hiroki Uchida^{1,2}, Yohkoh Shimano^{1,2}, Takahiko Yanagitani^{1,2} (1. Waseda University, 2. ZAIKEN)

Keynote | Material

📅 Sat. Sep 26, 2026 8:30 AM - 9:20 AM JST | Fri. Sep 25, 2026 11:30 PM - 12:20 AM UTC | 🏛️ Oral Session
Room 1 (International Conference Hall)

[Keynote 3] Keynote 3

💎 Invited Talk 💎 Keynote Speech

8:30 AM - 9:20 AM JST | 11:30 PM - 12:20 AM UTC

[4R101] Domain Engineering of Ferroelectrics

SATOSHI WADA¹, Adisu Tsige¹, Zhuangkai Wang¹, Hyunwook Nam², Ichiro Fujii¹, shintaro Ueno¹ (1. University of Yamanashi, 2. Tokyo University of Science)

Other | Other

🗓 Sat. Sep 26, 2026 9:20 AM - 9:40 AM JST | Sat. Sep 26, 2026 12:20 AM - 12:40 AM UTC | 🏛 Exhibition
& Lunch (Multipurpose hall)

[Other] Coffee break

9:20 AM - 9:40 AM JST | 12:20 AM - 12:40 AM UTC

Coffee Break

Oral Session (Device) | Device

📅 Sat. Sep 26, 2026 9:40 AM - 10:45 AM JST | Sat. Sep 26, 2026 12:40 AM - 1:45 AM UTC | 🏢 Oral
Session Room 1 (International Conference Hall)

[Session 8] Ultrasonic Technologies 4

💎 Invited Talk

9:40 AM - 10:00 AM JST | 12:40 AM - 1:00 AM UTC

[4R102] Acoustic Wireless Power Transfer for Biomedical Implants and Underwater Electronics

Hyun-Cheol Song¹ (1. Korea University)

10:00 AM - 10:15 AM JST | 1:00 AM - 1:15 AM UTC

[4R103] A Closed-loop Flexible Ultrasonic Array for AI-guided Spatially Adaptive Wound Therapy

Pancheng Zhu^{1,2}, Yiyuan Yang^{1,2,3} (1. N.1 Institute for Health, National University of Singapore, Singapore, 2. Department of Biomedical Engineering, National University of Singapore, Singapore, 3. Institute for Digital Medicine, National University of Singapore, Singapore)

10:15 AM - 10:30 AM JST | 1:15 AM - 1:30 AM UTC

[4R104] Opposing Elliptical-Reflector Focusing Structures (ELIPS) Enabling Surface Acoustic Wave Transmission and Reception for Measuring the Acoustic Properties of Liquids

Kyohei Yamada^{1,2}, Shoki Ieiri¹, Shinsuke Itoh³, Takashi Kasashima³, Chikahiro Imashiro¹, Takeshi Morita¹ (1. The University of Tokyo, 2. Kansai University, 3. Niterra Co., Ltd.)

10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC

[4R105] Study on the Prevention of Particle Adhesion on Semiconductor Wafers Using Ultrasonic Vibration

Tomoya Masuda¹, Masaaki Miyatake¹, Yuki Kumagai², Hayato Hishinuma² (1. Tokyo University of Science, 2. Yamaha Robotics. Co.)

Oral Session (Material) | Material

📅 Sat. Sep 26, 2026 9:55 AM - 10:45 AM JST | Sat. Sep 26, 2026 12:55 AM - 1:45 AM UTC | 🏛️ Oral
Session Room 2 (Conference Room 501)

[Session 8] Ceramics/Composite/Single crystal 2

💎 Invited Talk

9:55 AM - 10:15 AM JST | 12:55 AM - 1:15 AM UTC

[4R201] Nanocomposites of PbZrO₃-PbTiO₃ Exhibiting MPB-like Behavior through Nanoclustering Process

DaeYong JEONG¹ (1. Inha University)

10:15 AM - 10:30 AM JST | 1:15 AM - 1:30 AM UTC

[4R202] High-Output Flexible Piezoelectric Energy Harvesters with Structured PMN-PT Composite Active Layers

Hyunhee Kwon^{1,2}, Yunseok Kim², Hoyong Lee³, Miso Kim¹ (1. Korea Advanced Institute of Science and Technology (KAIST), 2. Sungkyunkwan University (SKKU), 3. Ceracomp. Co. Ltd.)

10:30 AM - 10:45 AM JST | 1:30 AM - 1:45 AM UTC

[4R203] Quantitative Tracking of Domain Fraction in Epitaxial PZT Thin Films under Substrate Clamping

Xiaochuan Sun^{1,2}, Ningwei Zhang¹, Sang Hyo Kweon¹, Yue Liu^{2,3}, Isaku Kanno¹ (1. Department of Mechanical Engineering, Kobe University, 2. State Key Lab of Metal Matrix Composites, School of Materials Science and Engineering, Shanghai Jiao Tong University, 3. School of Integrated Circuits, Shanghai Jiao Tong University)

Oral Session (Device) Device

🗓 Sat. Sep 26, 2026 10:50 AM - 11:40 AM JST | Sat. Sep 26, 2026 1:50 AM - 2:40 AM UTC | 🏛 Oral
Session Room 1 (International Conference Hall)

[Session 9] Multiferroic and Composite Sensors / Actuators & MEMS Devices (Actuators and Sensors)

♥ Invited Talk

10:50 AM - 11:10 AM JST | 1:50 AM - 2:10 AM UTC

[4R106] Magnetically Actuated Energy Conversion Devices: Magneto- Mechano-Electric and Luminescent Energy Generators

Jungho Ryu¹, Geon-Tae Hwang², Hyun-Cheol Song³, Dae-Yong Jeong⁴ (1. Yeungnam University, 2. Pukyong National University, 3. Korea University, 4. Inha University)

11:10 AM - 11:25 AM JST | 2:10 AM - 2:25 AM UTC

[4R107] Microparticle Sensing of Whole Droplet Using Rayleigh-Type Surface Acoustic Wave

Shun Koda¹, Takahiro G Yamada², Yuta Kurashina¹ (1. Tokyo University of Agriculture and Technology, 2. University of California, San Diego)

11:25 AM - 11:40 AM JST | 2:25 AM - 2:40 AM UTC

[4R108] Model-Based Design of a Piezoelectric Microtransducer for a Co-Resonant Nano-Mass Spectrometer

Willi Ron¹, Xiao Xiao², Nynne Britt Edeler², Raphael Hasterok¹, Felix Herrmann³, Stefan Zimmermann³, Marc Christopher Wurz², Jens Twiefel¹ (1. Leibniz University Hannover, Institute of Dynamics and Vibration Research, 2. Leibniz University Hannover, Institute of Micro Production Technology, 3. Leibniz University Hannover, Institute of Electrical Engineering and Measurement Technology)

Oral Session (Material) | Material

📅 Sat. Sep 26, 2026 10:50 AM - 11:40 AM JST | Sat. Sep 26, 2026 1:50 AM - 2:40 AM UTC | 🏠 Oral
Session Room 2 (Conference Room 501)

[Session 9] Ceramics/Composite/Single crystal 3

♥ Invited Talk

10:50 AM - 11:10 AM JST | 1:50 AM - 2:10 AM UTC

[4R204] The Effect of Polarization Methods on the Electromechanical Properties of Relaxor-Based Piezoelectric Single Crystals

Hiroshi Maiwa¹, Osamu Furukawa¹, Yohachi John Yamashita^{1,2} (1. Shonan Institute of Technology, 2. North Carolina State University)

11:10 AM - 11:25 AM JST | 2:10 AM - 2:25 AM UTC

[4R205] [001]-Oriented Texture Engineering in Sm-Doped PIN-PMN-PT Ceramics for High Piezoelectric Performance

Ju-Hee Kim¹, Byeong-Jae Min¹, Xin Liu¹, Ye-Rok Choi¹, Hyunseok Song¹, Seo-Hyun Choi¹, Yeongseo Yoon¹, Hyun-Cheol Song¹ (1. Korea University)

11:25 AM - 11:40 AM JST | 2:25 AM - 2:40 AM UTC

[4R206] Geometry-Dependent Magnetoelectric Antenna Characteristics in Electroplated Ni/PMN-PZT/Ni Tri-layered Composites

Donggeon Baek^{1,2}, Burcu Dursun², Kae Nakamura², Yujun Ji¹, Dongha Yang³, Vincent Tabib³, Isaac Hendrikson³, Arkaprovo Das³, Douglas Werner³, Susan Trolier-McKinstry², Jungho Ryu^{1,4} (1. School of Materials Science and Engineering, Yeungnam University, Gyeongsan 38541, South Korea, 2. Department of Materials Science and Engineering and Materials Research Institute, The Pennsylvania State University, University Park, Pennsylvania 16802, USA, 3. Department of Electrical Engineering, The Pennsylvania State University, University Park, Pennsylvania 16802, USA, 4. Institute of Materials Technology, Yeungnam University, Gyeongsan 38541, South Korea)

Other | Other

🗓 Sat. Sep 26, 2026 11:40 AM - 11:50 AM JST | Sat. Sep 26, 2026 2:40 AM - 2:50 AM UTC | 🏛 Oral
Session Room 1 (International Conference Hall)

[Other] Closing

11:40 AM - 11:50 AM JST | 2:40 AM - 2:50 AM UTC

Closing