

Thursday
8:00 am - 6:00 pm

- Posters of Student Paper Competition -

<p>Session PA. STUDENT PAPER COMPETITION FINALISTS</p> <p><i>Chair: Chair: Stanislav Emelianov</i> <i>Georgia Institute of Technology</i></p>	<p>PA-4 Multiphysics Modeling of BAW Filters</p> <p>Andreas Tag¹, Dominik Karolewski², Bernhard Bader², Maximilian Pitschi³, Robert Weigel¹, Amelie Hagelauer³ ¹Institute for Electronics Engineering, University of Erlangen-Nuremberg, Erlangen, Germany, ²Institut für Mikroelektronik- und Mechatronik-Systeme gemeinnützige GmbH, Germany, ³TDK Corporation, Germany</p>	<p>PA-8 Capsule-based Ultrasound-mediated Targeted Gastrointestinal Drug Delivery</p> <p>Fraser Stewart¹, Antonella Verbeni², Yongqiang Qiu¹, Benjamin Cox¹, Jan Vorstius³, Sandy Cochran¹ ¹Institute for Medical Science and Technology, University of Dundee, United Kingdom, ²The BioRobotics Institute, Scuola Superiore Sant'Anna, Italy, ³School of Engineering, Mathematics and Physics, University of Dundee, United Kingdom</p>	<p>PA-12 Automatic Mouse Embryo Brain Ventricle Segmentation, Gestation Stage Estimation, and Mutant Detection from 3D 40-MHz Ultrasound Data</p> <p>Jen-wei Kuo¹, Yao Wang¹, Orlando Aristizabal^{2,3}, Daniel H. Turnbull³, Jeffrey A. Ketterling², Jonathan Mamou² ¹Electronics and Computer Engineering, Polytechnic School of Engineering, New York University, Brooklyn, USA, ²F. L. Lizzi Center for Biomedical Engineering, Riverside Research, New York, USA, ³Skirball Institute of Biomolecular Medicine, New York University School of Medicine, New York, USA</p>	<p>PA-16 Ultrasound flow mapping for the investigation of crystal growth</p> <p>Norman Thieme¹, Richard Nauber¹, Hannes Beyer¹, Hannes Radner¹, Lars Büttner¹, Paul Bönisch², Kaspars Dadzis², Lamine Sylla², Dagmar Meier³, Olif Pätzold³, Jürgen Czarske¹ ¹Laboratory for Measurement and Sensor System Techniques, Dresden University of Technology, Dresden, Germany, ²SolarWorld Innovations GmbH, Freiberg, Germany, ³Institut für Nichtmetallurgie und Reinstoffe, Technische Universität Bergakademie, Freiberg, Germany</p>
<p>PA-1 Low flow rate spraying using a torsional ultrasonic transducer</p> <p>Shunsuke Tsuyuki¹, Takefumi Kanda¹, Koichi Suzumori², Shin-ichiro Kawasaki³, Shoki Ofuji¹ ¹Okayama University, Okayama, Japan, ²Tokyo Institute of Technology, Tokyo, Japan, ³National Institute of Advanced Industrial Science and Technology, Miyagi, Japan</p>	<p>PA-5 Evaluation of Acoustic Properties of CaTiO₃(K,Na)NbO₃ Film Using Microfabricated Structure</p> <p>Ryosuke Kaneko¹, Michio Kadota¹, Yuji Ohashi², Jun-ichi Kushibiki¹, Shinsuke Ikeuchi³, Shuji Tanaka¹ ¹Graduate school, Tohoku University, Sendai, Miyagi, Japan, ²Institute for Material Research, Tohoku University, Sendai, Miyagi, Japan, ³Devices Development, Murata Manufacturing Co., Ltd., Nagaokakyo, Kyoto, Japan</p>	<p>PA-9 Design of High-Efficiency, Miniaturized Ultrasonic Receivers for Powering Medical Implants with Reconfigurable Power Levels</p> <p>Ting Chia Chang¹, Marcus Weber¹, Jayant Charthad¹, Amin Nikoozadeh¹, Butrus T. Khuri-Yakub¹, Amin Arbabian¹ ¹Electrical Engineering, Stanford University, Stanford, CA, USA</p>	<p>PA-13 Robust Sound Speed Estimation for Hepatic Steatosis Assessment</p> <p>Marion Imbault¹, Alex Faccinetto², Bruno-Félix Osmanski¹, Mathias Fink¹, Jean-Luc Gennisson¹, Valérie Vilgrain², Mickaël Tanter¹ ¹Institut Langevin, ESPCI ParisTech, PSL Research University, CNRS UMR 7587, INSERM U979, Paris, France, ²Department of Radiology, Beaujon Hospital, Paris, France</p>	<p>PA-17 Non-contact mass measurement of droplet based on free oscillation under ultrasonic levitation.</p> <p>Sae Ito¹, Ryohei Nakamura¹, Hiroki Tanaka¹, Yosuke Mizuno¹, Marie Tabaru¹, Kentaro Nakamura¹ ¹Precision and Intelligence Laboratory, Tokyo Institute of Technology, Yokohama, Japan</p>
<p>PA-2 Fast wave velocity measurement by Brillouin scattering using induced phonon from ScAlN piezoelectric thin film</p> <p>Masahiko Kawabe¹, Takahiko Yanagitani², Hayato Ichihashi¹, Shinji Takayanagi¹, Masashi Suzuki³, Mami Matsukawa¹ ¹Doshisha University, Kyoto, Japan, ²Waseda University, Tokyo, Japan, ³Nagoya Institute of Technology, Nagoya, Japan</p>	<p>PA-6 SAW Characteristics of AlN/SiO₂/3C-SiC Layered Structure with Embedded Electrodes</p> <p>Qiaozhen Zhang¹, Tao Han¹, Jing Chen¹, Kenya Hashimoto² ¹Electronic Information and Electrical Engineering, Shanghai Jiao Tong University, Shanghai, Shanghai, China, People's Republic of, ²Graduate School of Engineering, Chiba University, Japan</p>	<p>PA-10 Photoacoustic properties of plasmonic-nanoparticle coated microbubbles</p> <p>Adam Dixon¹, Song Hu¹, Alexander Klibanov¹, John Hossack¹ ¹Biomedical Engineering, University of Virginia, Charlottesville, Virginia, USA</p>	<p>PA-14 In vivo magnetomotive ultrasound imaging of rat lymph nodes – a pilot study</p> <p>Maria Evertsson¹, Magnus Cinthio¹, Pontus Kjellman^{2,3}, Sarah Fredriksson², Roger Andersson¹, Hanna Toftveall², Hans W Persson¹, Tomas Jansson^{4,5} ¹Biomedical Engineering, Faculty of Engineering, LTH, Lund University, Lund, Sweden, ²Genovis AB, Sweden, ³Medical Radiation Physics, Clinical Sciences Lund, Lund University, Lund, Sweden, ⁴Biomedical Engineering, Clinical Sciences Lund, Lund University, Lund, Sweden, ⁵Medical Services, Skåne University Hospital, Lund, Sweden</p>	<p>PA-18 Ultrasound Image-based Absolute Concentration Measurement Technique for Materials with Low Scatterer Concentration</p> <p>John H. Lee¹, Javier Jimenez², Xiang Zhang¹, Duane S. Boning¹, Brian W. Anthony¹ ¹Massachusetts Institute of Technology, Cambridge, MA, USA, ²Madrid-MIT M+Vision Consortium, Massachusetts Institute of Technology, Cambridge, MA, USA</p>

<p>PA-3 High order mode polarity inverted Al-polar (0001) ScAlN/O-polar (000-1) ZnO film resonator</p> <p>Takeshi Mori¹, Takahiko Yanagitani², Masashi Suzuki¹ ¹Nagoya Institute of Technology, Japan, ²Waseda University, Tokyo, Japan</p>	<p>PA-7 Dual-Mode Integrated Circuit for Imaging and HIFU With 2-D CMUT Arrays</p> <p>Ji Hoon Jang¹, Anshuman Bhuyan¹, Hyo-Seon Yoon¹, Jung Woo Choe¹, Amin Nikoozadeh¹, Douglas Stephens², Butrus Khuri-Yakub¹ ¹Electrical Engineering, Stanford University, Stanford, California, USA, ²Biomedical Engineering, University of California, Davis, Davis, California, USA</p>	<p>PA-11 Joint compressive sampling and deconvolution in ultrasound medical imaging</p> <p>Zhouye Chen¹, Adrian Basarab¹, Denis Kouamé¹ ¹IRIT, UMR CNRS 5505, University of Toulouse, France</p>	<p>PA-15 Ultrafast Pulsed Magnetomotive Ultrasound Imaging of Sentinel Lymph Nodes: Small Animal Study</p> <p>Yu-Chun Huang¹, Jieh-Yuan Hwang¹, Yi-Da Kang², San-Yuan Chen², Meng-Lin Li^{1,3} ¹Dept. of Electrical Engineering, National Tsing Hua University, Hsinchu, Taiwan, ²Dept. of Materials Science and Engineering, National Chiao Tung University, Taiwan, ³Institute of Photonics Technologies, National Tsing Hua University, Taiwan</p>	