

Future Technologies from Hiroshima
The 34th Sensor Symposium on Sensors, Micromachines, and Applied Systems
The 8th Symposium on Micro-Nano Engineering
The 9th Symposium on Integrated MEMS Technology

	Hall		Phoenix Hall	Cosmos Hall	Dahlia	Foyer	
	Hall Code		A	B	P	E	
Oct. 31	AM1	30minutes 09:30-10:00	Opening Ceremony		Posters on the board	Posters for research activities of academia and research institutes	Exhibition
	AM2	40minutes 10:10-10:50	Keynote Session (Prof. Dr. Jan G. Korvink , KIT)				
	AM3	100minutes 11:00-12:40			Poster Session A		
		70minutes 12:40-13:50	Exhibitor Presentation		Posters on the board		
	PM1	75minutes 13:50-15:05	Sensor Symposium: Finalist Session for Youth Awards	IEICE Session			
	PM2	60minutes 15:15-16:15	Symposium on Integrated MEMS Technology	IEICE Session			
	PM3	100minutes 16:25-18:05			Poster Session B		
	PM4	55minutes 18:05-19:00			Presentation of research activities of academia and research institutes		
Nov. 1	AM1	90minutes 9:00-10:30	Sensor Symposium: Finalist Session for Youth Awards	Symposium on Micro-Nano Engineering	Posters on the board	Posters for research activities of academia and research institutes	Exhibition
	AM2	100minutes 10:40-12:20			Poster Session C		
		60minutes 12:20-13:20	Exhibitor Presentation		Posters on the board		
	PM1	90minutes 13:30-15:00	Symposium on Integrated MEMS Technology	JIEP Session			
	PM2	40minutes 15:10-15:50	Keynote Session (Open to the public) (Mr. Mitsuo Hitomi, Mazda)				
	PM3	40minutes 16:00-16:40	Keynote Session (Open to the public) (Mr. Takuo Toda, CASTEM)				
	PM4	100minutes 16:40-18:20	Paper Craft Airplane Flight Duration Contest	Special session: Science of "SAKE"	Poster Session D		
	PM5	60minutes 18:30-19:30	Mixer & Ceremony				
		120minutes 20:00-22:00			Youth Generation Networking (in Hiroshima)		
Nov. 2	AM1	40minutes 09:00-09:40	Keynote Session (Prof. Kenji Suzuki, Tsukuba Univ.)		Posters on the board	Posters for research activities of academia and research institutes	Exhibition
	AM2	90minutes 9:50-11:20	Symposium on Micro-Nano Engineering	Sensor Symposium : Finalists Session for Best Paper Awards			
	AM3	60minutes 11:30-12:30	Symposium on Micro-Nano Engineering (Award Ceremony)	Symposium on Integrated MEMS Technology			
		60minutes 12:30-13:30					
	PM1	100minutes 13:30-15:10			Poster Session E		
	PM2	40minutes 15:20-16:00	Keynote Session (Prof. Masaaki, Ritsumeikan Univ.)				
	PM3	40minutes 16:10-16:50	Closing Ceremony and Award Ceremony				

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Presentation Style	Date セッション 時間	Session Time セッション時間 (講演時間ではありません)	Paper # 講演番号	Submission ID 発表申込ID	Paper Title	Authors (* Speaker)	Affiliation
Monday, October 30, 2017							
午後 テクニカルツアー (マツダミュージアム工場見学) /Afternoon Technical Tour to Mazda Museum Factory Tour							
Tuesday, October 31, 2017							
09:30-10:00 開会式 (A会場) /Opening Ceremony (Hall A)							
10:10-10:50 基調講演 (A会場) /Keynote Session (Hall A)							
Keynote	10/31/17	10:10-10:50	31am2-A-1		Microscale magnetic resonance detectors: a technology roadmap for in vivo metabolomics	Dr. Jan G. Korvink	Professor and Director, Institute of Microstructure Technology(IMT), Karlsruhe Institute of Technology(KIT)
11:00-12:40 ポスターセッションA (P会場) /Poster Session A (Hall P)							
Poster	10/31/17	11:00-12:40	31am3-PS-1	S-082	Investigation driving mechanism of electronic type actuator based on polymer nanofiber	*Yuki Sunahase{1}, Satoshi Amaya{2}, Hiroaki Sakamoto{1}, Shin-ichiro Suye{1}	{1}University of Fukui, {2}RIKEN
Poster	10/31/17	11:00-12:40	31am3-PS-3	S-090	Synthesis of Monodisperse Gold Nanoparticles using Glass Microfluidic Device	*Yu Tanabe, Satoru Takano, Hiromasa Yagyu	Kanto Gakuin University
Poster	10/31/17	11:00-12:40	31am3-PS-5	S-097	Fabrication of Si 3D-structure using dependence of etching rate on impurity concentration	*Noriyuki Tamura, Taeko Ando	Ritsumeikan University
Poster	10/31/17	11:00-12:40	31am3-PS-7	S-101	Flexible Organic TFT Bio-signal Amplifier using Reliable Chip Component Assembly Process with Conductive Adhesive	*Shusuke Yoshimoto{1}, Takafumi Uemura{1}, Mihoko Akiyama{1}, Yoshihiro Ihara{2}, Satoshi Otake{2}, Tomoharu Fujii{2}, Teppei Araki{1}, Tsuyoshi Sekitani{1}	{1}Osaka University, {2}Shinko Electric Industries
Poster	10/31/17	11:00-12:40	31am3-PS-9	S-120	Quantitative Model of Rough Feel using Micro Surface Shape and Friction	*Tomohiro Onishi{1}, Kazuki Watatani{1}, Keiko Sato{1}, Kyohei Terao{1}{2}, Fusao Shimokawa{1}{2}, Hidekuni Takao{1}{2}	{1}Kagawa University, {2}JST-CREST
Poster	10/31/17	11:00-12:40	31am3-PS-11	S-204	Development and evaluation of wirelessly excited QCM sensor for thermogravimetric analysis	*MARUYAMA Kohei	Niigata University
Poster	10/31/17	11:00-12:40	31am3-PS-13	S-206	Neural Probe for Optical Stimulation and Electrical Recordings	*wenguang Lu, Tadao Matsunaga, Noriko Tsuruoka, Hajime Mushiake, Makoto Osanai, Tomokazu Ohshiro, Yoichi Haga	Tohoku University
Poster	10/31/17	11:00-12:40	31am3-PS-15	S-252	Near-infrared optical property of Si-deposited gold nanowire grating structures	*Naoyuki Arai, Koji Sugano, Yoshitada Isono	Kobe University
Poster	10/31/17	11:00-12:40	31am3-PS-17	S-055	Evaluation of FBAR-VCOs and MEMS gas cells using a desktop scale atomic clock testbench	*Motoaki Hara{1}, Yuichiro Yano{1}, Masatoshi Kajita{1}, Hitoshi Nishi{2}, Yasuhiro Ibata{2}, Zhu Minjie{2}, Latif Imran{2}, Toda Masaya{2}, Ono Takahito{2}, Ido Tetsuya{1}	{1}National Institute of information and communication technology(NICT), {2}Tohoku University
Poster	10/31/17	11:00-12:40	31am3-PS-19	S-142	FABRICATION OF PMUT USING SILICON ON NOTHING PROCESS FOR FINGERPRINT SENSOR	*SHIM Hang, Nguyen Van Toan, Masaya Toda, Naoki Inomata, Yoshiaki Kanamori, Yunheub Song, Youngtaek Oh	Tohoku University
Poster	10/31/17	11:00-12:40	31am3-PS-21	S-175	Film formation and characterization of PVDF piezoelectric polymer thin film by spray coating and its application to coil spring	*Hiroki Takise, Ayumu Higuchi, Tomokazu Takahashi, Masato Suzuki, Seiji Aoyagi	Kansai University
Poster	10/31/17	11:00-12:40	31am3-PS-23	S-184	Out-of-plane vibration energy harvester by using NdFeb thin film magnet for TPMS application	*Akito Fukunaga, Shinichi Yoshi, Kensuke Kanda, Takayuki Fujita, Kazusuke Maenaka	University of Hyogo
Poster	10/31/17	11:00-12:40	31am3-PS-25	S-292	Optical phase modulator based on electrostatically-driven gold nanograting	*Kentaro Iwami, Takuya Kinoshita, Takashi Shimura, Yuji Koto, Yuki Jokoji, Norihiro Umeda	Tokyo University of Agriculture and Technology
Poster	10/31/17	11:00-12:40	31am3-PS-27	S-293	Broad tunable Quantum Cascade Laser	*Atsushi Sugiyama, Naota Akikusa, Tadataka Edamura	Hamamatsu Photonics
Poster	10/31/17	11:00-12:40	31am3-PS-29	S-313	Development of vibration energy harvester with 2D mechanical metamaterial structure	*Yohei Umino, Tsukamoto Takuya, Sachie Shiomi, Kou Yamada, Takaaki Suzuki	Gunma University

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Poster	10/31/17	11:00-12:40	31am3-PS-31	S-344	Fabrication of micro gear train using three dimensional stereolithography	Yasuhiko Kansai, *Hiroki Kawaguchi	Kansai University
Poster	10/31/17	11:00-12:40	31am3-PS-33	S-051	Electromagnetic Silicon MEMS Resonator	*Yoshiyuki Watanabe, Toru Yahagi, Yutaka Abe, Hiroki Murayama	Yamagata Research Institute of Technology
Poster	10/31/17	11:00-12:40	31am3-PS-35	S-073	All-printed acceleration sensor for wearable flexible device	*Daisuke Yamamoto, Shogo Nakata, Takayuki Arie, Seiji Akita, Kuniharu Takei	Osaka Prefecture University
Poster	10/31/17	11:00-12:40	31am3-PS-37	S-150	High vacuum wafer level package with Titanium film as bonding material	*Toshihiko Takahata{1}, Toshihiko Kato{1}, Hideki Hirano{2}, Froemel Joerg{2}, Shuji Tanaka{2}, Yuji Takakuwa{2}	{1}DENSO , {2}Tohoku university
Poster	10/31/17	11:00-12:40	31am3-PS-39	S-188	Fabrication of switchable dual AFM cantilever with large displacement using magneto-strictive film	*Jinseo Hong, Kazuki Mishina, Takashi Mineta	Yamagata University
Poster	10/31/17	11:00-12:40	31am3-PS-41	S-201	Cavitation Sensor in the Channel for Evaluation of the Micromixer	*Marie Obayashi, Takehumi Kanda	Okayama University
Poster	10/31/17	11:00-12:40	31am3-PS-43	S-326	Textile-type multi-ECG wear fabricated by Ag fiber electro flocking	*Takeshita Toshihiro{1}, Yoshida Manabu{1}, Hinoki Akinari{2}, Ouchi Atsushi{1}, Uchida Hiroo{2}, Kobayashi Takeshi{1}	{1}AIST, {2}Nagoya university
Poster	10/31/17	11:00-12:40	31am3-PS-45	S-047	A Study on Resonant Accelerometers using Electrostatic Potential in the Comb Electrodes	*Liu Jiannan, Muro Hideo	Chiba Institute of Technology
Poster	10/31/17	11:00-12:40	31am3-PS-47	S-071	Fabrication and Characterization of Electret Sensor Suitable for Plant AE Measurement	*Ziyao Lu, kensukei Kageyama	Saitama University
Poster	10/31/17	11:00-12:40	31am3-PS-49	S-105	DEVELOPMENT OF CATHETER FLOW SENSOR FOR BREATHING MEASUREMENTS AT LUNG TRANSBRONCHIALY	*Tomohiro Fujinori{1}, Yoshihiro Hasegawa{1}, Miyoko Matsushima{2}, Tsutomu Kawabe{2}, Mitsuhiro Shikida{1}	{1}Hiroshima City University, {2}Nagoya University
Poster	10/31/17	11:00-12:40	31am3-PS-51	S-127	Fabrication of a new nanoporous film by chemical dealloying of Cu-Cr and its application for a moisture-in-oil sensor	*Yusuke Yoshii, Junpei Sakurai, Mizue Mizoshiri, Seiichi Hata	Nagoya University
Poster	10/31/17	11:00-12:40	31am3-PS-53	S-194	MEMS tactile sensor for simultaneous measurement of coefficient of static friction and triaxial force	*Taiyu Okatani, Akihito Nakai, Tomoyuki Takahata, Isao Shimoyama	The University of Tokyo
Poster	10/31/17	11:00-12:40	31am3-PS-55	S-289	Pressure sensor based on graphene sheet integrated with elastic tube	*Nagisa Inoue, Hiroaki Onoe	Keio University
Poster	10/31/17	11:00-12:40	31am3-PS-57	S-333	Printed Strain Sensor Array for Application to Structural Health Monitoring	*Daniel Zymelka{1}, Kazuyoshi Togashi{2}, Takahiro Yamashita{3}, Seiichi Takamatsu{4}, Toshihiro Itoh{4}, Takeshi Kobayashi{3}	{1}NMEMS, {2}Dai Nippon Printing, {3}AIST, {4}The University of Tokyo
Poster	10/31/17	11:00-12:40	31am3-PS-59	S-062	Highly Sensitive Coulometric Detection of an Analyte in a Solution of a Small Volume Coupled with Metallization	*Shuichi Takie, Shinnosuke Tsuchiya, Hiroaki Suzuki	University of Tsukuba
Poster	10/31/17	11:00-12:40	31am3-PS-61	S-087	Odor source localization strategy under environment with obstacles and dynamic turbulent airflow	*Muis Muhtadi, Takamichi Nakamoto	Tokyo Institute of Technology
Poster	10/31/17	11:00-12:40	31am3-PS-63	S-108	Development of the Personal exposure monitoring system for mercury work environment in Artisanal and Small-scale Gold Mining	*Kazutoshi Noda{1}, Hidenobu Aizawa{1}, koji Marumoto{2}, Masumi Marumoto{2}, Takashi Tomiyasu{2}, Hitoshi Kodamatani{3}, Takeshi Komai{4}, kengo Nakamura{4}	{1}AIST, {2}National Institute for Minamata Disease, {3}Kagoshima University, {4}Tohoku University
Poster	10/31/17	11:00-12:40	31am3-PS-65	S-141	Study on the electrochemical array sensor using pn junctions of inorganic semiconductor	*Keita Kosugi, Yuki Hasegawa, Hidekazu Uchida	Saitama University
Poster	10/31/17	11:00-12:40	31am3-PS-67	S-159	Development of Wirelessly Excited Dual-Mode QCM Sensor	*Sato Ikuto, Sakaguchi Jun, Sohawa Masayuki, Abe Takashi	Niigata University
Poster	10/31/17	11:00-12:40	31am3-PS-69	S-180	Ripeness evaluation of post harvest fruits using plant bioelectric potential	*Ryota Ishida{1}, Yuki Hasegawa{1}, Keiji Ihara{2}, Daisuke Koizumi{2}, Hidekazu Uchida{1}	{1}Saitama University, {2}Maruha Nichiro

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Poster	10/31/17	11:00-12:40	31am3-PS-71	S-249	Toward better understandings on behavioral mechanisms of olfactory search by crayfish to develop underwater robots: Investigations of effectiveness of water sample collection by using jets	*Hanako Ishida, Tatsuki Mitsuishi, Ryuichi Takemura, Haruka Matsukura, Hiroshi Ishida	Tokyo University of Agriculture and Technology
Poster	10/31/17	11:00-12:40	31am3-PS-73	S-089	Tuning of localized surface plasmon resonance characteristics by Au/Ag interleave deposition	*Tatsuro Endo, Kiichi Nishiguchi, Hirota Yamada, Kenichi Maeno, Shoma Aki, Kenji SUEYoshi, Hideaki Hisamoto	Osaka Prefecture University
Poster	10/31/17	11:00-12:40	31am3-PS-75	S-255	Three-dimensional microneedle-electrode assembled on flexible substrate for in vivo neural recordings	*Shota Yamagiwa{1}, Hirohito Sawahata{1}, Rika Numano{1}, Makoto Ishida{1}, Kowa Koida{2}, Takeshi Kawano{1}	{1}Toyohashi University of Technology, {2}Electronics-Inspired Interdisciplinary Research Institute (EIIRIS)
Poster	10/31/17	11:00-12:40	31am3-PS-77	S-272	Active sensing of cell membrane injury using ion-sensitive field-transistors	*Yuki Imaizumi, Tatsuro Goda, Akira Matsumoto, Yuji Miyahara	Tokyo Medical and Dental University
Poster	10/31/17	11:00-12:40	31am3-PS-79	S-295	LSPR sensing device fabricated by using self assembled nano structure of AAO	*Takeshi Ito, Yuki Matsuda, Tsubasa Nishimura, Tomohiro Shimizu, Shoso Shingubara	Kansai University
Poster	10/31/17	11:00-12:40	31am3-PS-81	S-298	Primitive Study of Dual Biosensor Coupling with Localized Surface Plasmon Resonance and QCM-D Using Anodic Aluminum Oxide Substrate	*Hideaki Terasawa, Tomohiro Shimizu, Shoso Shinguba, Takeshi Ito	Kansai University
Poster	10/31/17	11:00-12:40	31am3-PS-83	S-106	Development of image analysis with nanometer resolution for evaluation of the flexural rigidity and the growth rate of microtubules	*Kazuki Ukita{1}, Naoto Isozaki{1}, Hirohumi Shintaku{1}, Hidetoshi Kotera{1}, Hawkins Taviare{2}, Ross Jennifer{3}, Ryuji Yokokawa{1}	{1}Kyoto University, {2}University of Wisconsin, {3}The University of Massachusetts
Poster	10/31/17	11:00-12:40	31am3-PS-85	S-107	Development of a nano-patterning of motor proteins by integration of Au nano-pillars and SAM	*Shotaro Ohba, Taikopaul Kaneko, Hirohumi Shintaku, Hidetoshi Kotera, Ryuji Yokokawa	Kyoto University
Poster	10/31/17	11:00-12:40	31am3-PS-87	S-137	Crystallization of Zn(II) complex containing lysozyme by super water repellent doubly reentrant structure pillar array device	*Daiki Tanaka{1}, Wataru Kawakubo{1}, Dong Hyun Yoon{1}, Tetsushi Sekiguchi{1}, Takashiro Akitsu{2}, Shuichi Shoji{1}	{1}Waseda University, {2}Tokyo University of Science
Poster	10/31/17	11:00-12:40	31am3-PS-89	S-212	Cell Patterning Using SAM Etching with Vacuum Ultraviolet Light	Isamu Morisako, Yusuke Zenmyo, *Takashi Yasuda	Kyushu Institute of Technology
Poster	10/31/17	11:00-12:40	31am3-PS-91	S-247	The size sensing mechanism of signaling molecules in a dendrite spine due to the spatial crowding effect	*Atsushi Matsuda, Yasuhiro Inoue, Taiji Adachi	Kyoto University
Poster	10/31/17	11:00-12:40	31am3-PS-93	S-264	Microfluidic device fabricated by three dimensional lithography for observation of cancer cell invasion process	*Saeko Tachikawa{1}, Shohei Kaneda{1}, Momoko Kumemura{1}, Rui Sato{2}, Takuya Tsukamoto{2}, Teruo Fujii{1}, Takaaki Suzuki{2}, Hiroyuki Fujita{1}	{1}The University of Tokyo, {2}Gunma university
Poster	10/31/17	11:00-12:40	31am3-PS-95	S-268	Heterogeneous bonding between cyclo-olefin polymer (COP) and glass-like substrate by newly developed water vapor assisted plasma, Aqua Plasma Cleaner	*Hirokazu Terai{1}, Risa Funahashi{1}, Taichi Hashimoto{1}, Masaya Kakuta{2}	{1}Samco, {2}Sysmex
Poster	10/31/17	11:00-12:40	31am3-PS-97	S-322	Multiple Light Spots Exposure System for Parallel Motion Control of Phototactic Algae	*Masayuki Nagara, Taiki Nakamizu, Moeto Nagai, Takayuki Shibata	Toyohashi University of Technology
13:50-15:05 センサシンポジウム 若手賞 (五十嵐賞・奨励賞) 候補者発表セッション (A会場) / Sensor Symposium: Finalists Session for Igarashi Award and Youth Encouraging Award (Hall A)							
Oral	10/31/17	13:50-15:05	31pm1-A-1	S-213	SERS detection and analysis of a single DNA oligomer using a single gold nanoparticle dimer	*Katsunori Maruoka, Koji Sugano, Yoshitada Isono	Kobe University
Oral	10/31/17	13:50-15:05	31pm1-A-2	S-211	Microfasteners for flexible nerve recording device	*Yusuke Seki, Shota Yamagiwa, Yusuke Morikawa, Hirohito Sawahata, Rika Numano, Kowa Koida, Makoto Ishida, Takeshi Kawano	Toyohashi University of Technology
Oral	10/31/17	13:50-15:05	31pm1-A-3	S-171	Application of an Optic Interferometric Surface Stress Sensor to Bio/Chemical Sensing and Consideration of the Differential Measurement	*Satoshi Maruyama, Takeshi Hizawa, Kazuhiro Takahashi, Kazuaki Sawada	Toyohashi University of Technology

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Oral	10/31/17	13:50-15:05	31pm1-A-4	S-305	Highly Bendable Indium Tin Oxide Electrode with Mesh Pattern for Flexible Electronic Devices	*Kosuke Sakamoto, Hiroyuki Kuwae, Naofumi Kobayashi, Atsuki Nobori, Shuichi Shoji, Jun Mizuno	Waseda University
Oral	10/31/17	13:50-15:05	31pm1-A-5	S-136	Measuring the Contractile Forces of iPS Cell-derived Cardiomyocytes Using MEMS Force Sensor Array	*Kenei Matsudaira, Thanh-Vinh Nguyen, Kayoko Shoji, Takuya Tsukagoshi, Tomoyuki Takahata, Isao Shimoyama	The University of Tokyo
13:50-15:05 電子情報通信学会企画セッション1 (B会場) / IEICE(The Institute of Electronics, Information and Communication Engineers) Session 1 (Hall B)							
Invited	10/31/17	13:50-15:05	31pm1-B-1			Kazuo Ono	
15:15-16:15 電子情報通信学会企画セッション2 (B会場) / IEICE(The Institute of Electronics, Information and Communication Engineers) Session 2 (Hall B)							
Invited	10/31/17	15:15-16:15	31pm2-B-1			Kiichi Niitsu	
16:25-18:05 ポスターセッションB (P会場) /Poster Session B (Hall P)							
Poster	10/31/17	16:25-18:05	31pm3-PS-2	S-114	Analysis of aerodynamic component matching for micro-scale gas turbine engine	*Hiroki Sumi, Kohei Rikuno, Ryoma Suzuki, Toshiyuki Toriyama	Ritsumeikan University
Poster	10/31/17	16:25-18:05	31pm3-PS-4	S-117	Study on geometical correction of microscale supersonic wind tunnel	*Naoki Murai, Kohei Rikuno, Ryoto Yamamoto, Toshiyuki Toriyama	Ritsumeikan University
Poster	10/31/17	16:25-18:05	31pm3-PS-6	S-123	Crack propagation behavior of nanoscale silicon with different type of notches	*Shinya Nakamura, Kohei Okada, Taeko Ando	Ritsumeikan University
Poster	10/31/17	16:25-18:05	31pm3-PS-8	S-160	Photoelastic stress measurement of PVA hydrogel vessel model	*Shuhei Abe{1}, Yuki Kuwano{1}, Seichi Ikeda{2}, Azusa Saito{3}, Masaru Kawakami{3}, Hidemitsu Yoshikawa{3}, Mizue Mizojiri{1}, Junpei Sakurai{1}, Seiichi Hata{1}	{1}Nagoya University, {2}Fine Biomedical, {3}Yamagata University
Poster	10/31/17	16:25-18:05	31pm3-PS-10	S-165	A new modeling method by using nonlinear equation of motion to get the analysis model	*Hikaru Sasaki{1}, Gen Hashiguchi{2}	{1}DENSO, {2}Shizuoka University
Poster	10/31/17	16:25-18:05	31pm3-PS-12	S-225	SIMULATION AND FABRICATION OF AN Y-TYPE FLEXIBLE THERMOELECTRIC POWER GENERATOR BASED ON ELECTROCHEMICAL DEPOSITION PROCESS OF Bi ₂ Te ₃ and Sb ₂ Te ₃	*Trung Nguyen Huu, Takahito Ono	Tohoku University
Poster	10/31/17	16:25-18:05	31pm3-PS-14	S-301	Experimental verification of titanium substrate photofunctionalization effect on cell behavior	*Masaki Kounoura{1}, Bin Ahmad Kamal Ahmad Aiman{1}, Sae Iwata{1}, Naho Watanabe{1}, Kinichi Morita{3}, Satoru Kuhara{2}, Kosuke Tashiro{2}, Yoshitaka Nakanishi{1}, Yuta Nakashima{1}	{1}Kumamoto University, {2}Kyushu University, {3}USHIO
Poster	10/31/17	16:25-18:05	31pm3-PS-16	S-323	Fabrication of small wavy structure by corrugate process for automotive interconnects	*Ryu Karasawa, Seiichi Takamatsu, Toshihiro Itoh	The University of Tokyo
Poster	10/31/17	16:25-18:05	31pm3-PS-18	S-078	AN ELECTRET-BASED IMPLANTABLE ENERGY HARVESTER WITH LIQUID CELLS (MEMS vs. 3D PRINTING FABRICATION)	*Yu-Fan Chen{1}, Satoshi Inoue{2}, Hiroshi Toshiyoshi{2}	{1}National Taiwan University, {2}The University of Tokyo
Poster	10/31/17	16:25-18:05	31pm3-PS-20	S-139	MEMS Reconfigurable Metamaterial for Tunable Terahertz Bandpass Filter	*Kazuhide Ichikawa{1}, Zhengl Han{2}, Takuya Takahashi{1}, Hiroshi Toshiyoshi{1}	{1}The University of Tokyo, {2}Institute of Physical and Chemical Research
Poster	10/31/17	16:25-18:05	31pm3-PS-22	S-163	Development of Light and Force Sensitive MEMS Sensor for Monitoring Skin Conditions	*Shuhei Sato{1}, Yuta Abe{1}, Takashi Abe{1}, Haruo Noma{2}, Masayuki Sohngawa{1}	{1}Niigata University, {2}Ritsumeikan Univ.
Poster	10/31/17	16:25-18:05	31pm3-PS-24	S-182	Shock Resistance Structure by Using Magnetic Repulsive Force for Vibration Energy Harvester	*Shinichi Yoshii, Yuuki Kitagawa, Takayuki Fujita, Kensuke Kanda, Kazusuke Maenaka	University of Hyogo
Poster	10/31/17	16:25-18:05	31pm3-PS-26	S-191	Evaluation of displacement of MEMS deformable mirror actuated by electrostatic piston array	*Toshiki Ema, Akiko Uno, Yoshikazu Hirai, Toshiyuki Tsuchiya, Osamu Tabata	Kyoto University
Poster	10/31/17	16:25-18:05	31pm3-PS-28	S-207	Minimally Invasive Subepidermal Cell Collection Device Using Ultrasound.	Tatsuya Uechi, Noriko Tsuruoka, Tadao Matsunaga, *Yang Ye, Yoichi Haga	Tohoku University

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Poster	10/31/17	16:25-18:05	31pm3-PS-30	S-288	3D core-shell microneedle Neuroprobes	*Shinnosuke Idogawa, Yoshihiro Kubota, Hideo Hoi, Makoto Ishida, Takeshi Kawano	Toyohashi University of Technology
Poster	10/31/17	16:25-18:05	31pm3-PS-32	S-299	Pressure-Driven Liquid Actuation for in situ TEM Observation of Fluid Mixing	*Vivek Menon{1}, Matthieu Denoual{2}, Takaaki Sato{1}, Hiroyuki Fujita{1}	{1}The University of Tokyo, {2}LIMMS/CNRS-IIS(UMI 2820)
Poster	10/31/17	16:25-18:05	31pm3-PS-34	S-332	Near-infrared light-driven deformation of temperature-responsive gels using Au plasmonic structures	*Wataru Tabata, Miranji Goto, Hiroaki Nishiyama	Yamagata University
Poster	10/31/17	16:25-18:05	31pm3-PS-36	S-343	Fabrication of micro rotor using three dimensional stereolithography	Yasuhiko Arai, *Hiroto Sano	Kansai University
Poster	10/31/17	16:25-18:05	31pm3-PS-38	S-147	Driving the accelerometer by vibration power generation using parallel-type laminated piezoelectric elements	*Morohoshi Akihiro{1}, Fujimoto Shigeru{1}, Masaaki Itiki{2}	{1}Kanagawa University, {2}AIST
Poster	10/31/17	16:25-18:05	31pm3-PS-40	S-162	Cell images taken by two-dimensional laser scanning unit for probe type confocal endoscope	*Noriaki Ishikawa{1}, Yukinori Kawamura{1}, Masao Kubota{1}, Fuminori Hyodo{2}, Hinako Etoh{2}, Masaharu Murata{2}, Renshi Sawada{2}, Makoto Hashizume{2}	Fuji Electric, Fuji Electric Co., Ltd., Fuji Electric Co., Ltd., Kyushu University, Kyushu University, Kyushu University, Kyushu University, Kyushu University, Kyushu University,
Poster	10/31/17	16:25-18:05	31pm3-PS-42	S-172	Development of the sapphire capacitance diaphragm gauge for a freeze-drying device	*Masashi Sekine, Masaru Soeda, Takuya Ishihara	Azbil
Poster	10/31/17	16:25-18:05	31pm3-PS-44	S-208	Brain spatula equipped with optical fiber pressure sensor for quantification of brain pressure	*Yutoku Kawabata{1}, Tadao Matsunaga{1}, Akio Morita{2}, Kanako Harada{3}{4}, Noriko Tsuruoka{1}, Yoichi Haga{1}	{1}Tohoku University, {2}Nippon medical school, {3}JST, {4}The University of Tokyo
Poster	10/31/17	16:25-18:05	31pm3-PS-46	S-258	Chemical Reaction Actuator and Wireless Power Feeding for Swallowable Sensing Device	*Ryota Nakamura{1}, Shintaro Izumi{1}, Hiroshi Kawaguchi{1}, Hidetoshi Ohta{2}, Masahiko Yoshimoto{1}	{1}Kobe University, {2}Sapporo Orthopaedics and Cardiovascular Hospital
Poster	10/31/17	16:25-18:05	31pm3-PS-48	S-068	DEVELOPMENT OF MEMS MICRO FLOW SENSOR FOR LIQUID	*Seichi Nakao, Shinichi Ike, Mayumi Yuyama, Hirohisa Yabuki	Azbil
Poster	10/31/17	16:25-18:05	31pm3-PS-50	S-084	Evaluation of gauge factor of vanadium oxide thin film and its pressure sensor application	*Naoki Inomata, Takahito Ono	Tohoku University
Poster	10/31/17	16:25-18:05	31pm3-PS-52	S-102	DEVELOPMENT OF TUBE MICRO FLOW SENSOR FOR AIRFLOW MEASUREMENT AT MOUTH IN BABY	*Mitsunari Yuki, Hasegawa Yoshihiro, Matsushima Miyoko, Kawabe Tsutomu, Shikida Mitsuhiro	Hiroshima City University
Poster	10/31/17	16:25-18:05	31pm3-PS-54	S-115	Study on Oscillator-Type Thermal Micro Flow Sensor	*Keisuke Hoshino, Jiannan Liu, Hideo Muro	Chiba Institute of Technology
Poster	10/31/17	16:25-18:05	31pm3-PS-56	S-130	Stable high gauge factor of Cr-Al-N thin film strain sensor in High temperature range	*Eiji Niwa	Research Institute for Electromagnetic Materials
Poster	10/31/17	16:25-18:05	31pm3-PS-58	S-257	Surface acoustic wave (SAW) immunosensor for semi-continuous measurement of bioinformation	*Koki Oishi{1}, Koji Toma{1}, Naoyuki Yoshimura{2}, Takahiro Arakawa{1}, Hiromi Yatsuda{2}{3}, Kohji Mitsubayashi{1}	{1}Tokyo Medical and Dental University, {2}Japan Radio, {3}JO-Bio(UK)
Poster	10/31/17	16:25-18:05	31pm3-PS-60	S-308	Development of strain and vibration sensor using inverse magnetostriction effect of magnetostrictive film	*Yuito Kubo, Shuichiro Hashi, Hajime Yokoi, Kaoru Arai, Kazushi Ishiyama	Tohoku University
Poster	10/31/17	16:25-18:05	31pm3-PS-62	S-121	Development of Inverse Opal Photonic Crystal array for odor sensing	*Yuto Komori, Hiroaki Murakami, Takeshi Onodera, Kiyoshi Toko	Kyushu University
Poster	10/31/17	16:25-18:05	31pm3-PS-64	S-143	Semiconductor thin-film gas sensors using a face-to-face type adsorption and desorption layer	Daisuke Sasagawa, *Ryosuke Kinoshita, Tomiharu Yamaguchi, Kazuhiro Hara	Tokyo Denki University
Poster	10/31/17	16:25-18:05	31pm3-PS-66	S-205	Development of contactless Quartz Oscillator based capacitive sensor for evaluating the quality of bottled mineral water	*Yu Oguro, Naoto Yada, Takeshi Shimizu, Masayuki Sohawa, Takashi Abe	Niigata University
Poster	10/31/17	16:25-18:05	31pm3-PS-68	S-210	Study on the ion blocking electrode using metal oxide film for micro electrochemical sensor	*Tomoya Izumiyama, Yuki Hasegawa, Hidekazu Utida	Saitama University
Poster	10/31/17	16:25-18:05	31pm3-PS-70	S-222	Soot detection using interdigitated array electrode and its reusability	*Ki Ando, Yoshihiro Kobayashi, Hiroyuki Shinoda, Nobuki Mutsukura	Tokyo Denki University

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Poster	10/31/17	16:25-18:05	31pm3-PS-72	S-250	Development of TiO ₂ /Polymer Hybrid Photonic Crystal Slab Highly Sensitive Ion Sensor	*Shoma Aki{1}, Kenichi Maeno{1}, Kenji Sueyoshi{1}, Hideaki Hisamoto{1}, Tatsuro Endo{1}{2}	{1}Osaka Prefecture University, {2}JST sakigake
Poster	10/31/17	16:25-18:05	31pm3-PS-74	S-095	Design and optical characterization of plasmonic crystal for highly sensitive biosensor in visible region	*Hirota Yamada, Shoma Aki, Kenichi Maeno, Hideaki Hisamoto, Kenji Sueyoshi, Tatsuro Endo	Osaka Prefecture University
Poster	10/31/17	16:25-18:05	31pm3-PS-76	S-164	Microdroplet Monitoring Using Microfluidic Circuit Combined Quartz Oscillator Based Capacitive Sensor	*Ryo Ebata, Ryo Sakai, Masayuki Sohawa, Takashi Abe	Niigata University
Poster	10/31/17	16:25-18:05	31pm3-PS-78	S-167	Construction of sensitive biosensing system for MRSA using the probe-modified nanoparticles	*Keishi Ichiki, Hiroaki Sakamoto, Shin-Ichiro Suye	University of Fukui
Poster	10/31/17	16:25-18:05	31pm3-PS-80	S-197	Imprinted photonic crystal nanocavity for single cell analysis	*Kenichi Maeno{1}, Shoma Aki{1}, Kazuo Satoh{2}, Shuichi Murakami{2}, Yusuke Sando{2}, Yusuke Kanaoka{2}, Sueyoshi Kenji{1}, Hideaki Hisamoto{1}, Tatsuro Endo{1}	{1}Osaka Prefecture University, {2}Osaka Research Institute of Industrial Science and Technology
Poster	10/31/17	16:25-18:05	31pm3-PS-82	S-219	High sensitive multiplexed protein detection based on Droplet-free Digital ELISA	*Kenji Akama, Kentaro Shirai, Seigo Suzuki	Sysmex
Poster	10/31/17	16:25-18:05	31pm3-PS-84	S-099	Selective immobilization of different motor proteins by using Aqueous Two-Phase System(ATPS)	*Tomohiro Nakagawa{1}, Shunpei Oohara{2}, Hirofumi Shintaku{1}, Hidetoshi Kotera{1}, Ryuji Yokokawa{1}	{1}Kyoto University, {2}Asahi Kasei
Poster	10/31/17	16:25-18:05	31pm3-PS-86	S-133	Sharp tip-separable microneedle device fabrication using alignment mechanism for trans-dermal drug delivery systems	*Yuki Nabekura, Hitoshi Fukuy, Yoshihiro Hasegawa, Mitsuhiro Shikida	Hiroshima City University
Poster	10/31/17	16:25-18:05	31pm3-PS-88	S-156	In vitro Recapitulation of in vivo Tissue Behavior by a Novel Micro-Mesh Co-culture System	*Kennedy O. Okeyo{1}, Kai Yamada{2}, Hidehiro Oana{2}, Masao Washizu{2}	{1}Kyoto University, {2}The University of Tokyo
Poster	10/31/17	16:25-18:05	31pm3-PS-90	S-218	Surface modification and solid state direct bonding method between polymeric materials by illuminating 160-nm vacuum ultraviolet light	*Yuki Hashimoto, Takatoki Yamamoto	Tokyo Institute of Technology
Poster	10/31/17	16:25-18:05	31pm3-PS-92	S-228	Single-cell isolation of E.coli and L.lactis by electrostatic inkjet with a microcapillary	*Ryosuke Murata, Takatoki Yamamoto	Tokyo Institute of Technology
Poster	10/31/17	16:25-18:05	31pm3-PS-94	S-234	Multiplex artificial cellular microenvironment array	*Ken-ichiro Kamei{1}, Yasumasa Mashimo{2}	{1}Kyoto University, {2}Tokyo Institute of Technology
Poster	10/31/17	16:25-18:05	31pm3-PS-96	S-246	Long-term culture of an autaptic neuron using a microwell with a porous SiN membrane	*Yusuke Zenmyo, Isamu Morisako, Takashi Yasuda	Kyushu Institute of Technology
Poster	10/31/17	16:25-18:05	31pm3-PS-98	S-302	An On-chip dual color fluorescence imaging system using a CMOS image sensor for FRET signal measurement	*Kenta Nakamoto, Hee W. S., Makito Haruta, Toshihiko Noda, Kiyotaka Sasagawa, Takashi Tokuda, Jun Ohta	Nara Institute of Science and Technology
Poster	10/31/17	16:25-18:05	31pm3-PS-100	S-320	Cell Assembly Technologies Based on Exposure of Multiple Light Spots for Massively Parallel Single-Cell Printer	*Shota Hiratsuka, Kentaro Tanagi, Yoshitaka Kitagawa, Moeto Nagai, Takayuki Shibata	Toyohashi University of Technology

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Poster	11/01/17	10:40-12:20	01am2-PS-163	S-248	Fabrication of PbS QD/Silicon Hybrid Infrared Photodiode for LSI Platform	*Akio Higo, Haibin Wang, Takaya Kubo, Naoto Usami, Yuki Okamoto, Kentaro Yamada, Hiroshi Segawa, Masakazu Sugiyama, Yoshio Mita,	The University of Tokyo
Poster	11/01/17	10:40-12:20	01am2-PS-165	S-269	Fabrication of Nano-Pore Structure with Local Electrodes for High Performance Coulter Measurement	*Yudai Takeshiro(1), Naoto Usami(1), Takeaki Takada(2), Rimon Ikeno(1), Nobuei Washizu(2), Kunihiro Asada(1), Yoshio Mita(1)	{1}The University of Tokyo, {2}Advantest
Poster	11/01/17	10:40-12:20	01am2-PS-167	S-282	Rapid molecular sensing based on on-chip size-separation process of DNA origami	*Seongsu Park, Zhipeng Ma, Yoshikazu Hirai, Toshiyuki Tsuchiya, Osamu Tabata	Kyoto University
Poster	11/01/17	10:40-12:20	01am2-PS-169	S-334	Fabrication and evaluation of nanoelectromechanical logical gates	*Dong Zhao, Van Toan Nguyen, Takahiro Ono	Tohoku University
Poster	11/01/17	10:40-12:20	01am2-PS-171	S-185	Human sensor system using bioelectric potential of living plants and CNN	*Hidetaka Nambo, Takeo Nakano, Yuta Kanayama	Kanazawa University
Poster	11/01/17	10:40-12:20	01am2-PS-173	S-214	Measurement System of Multiple Physical Quantities using Multi-sensor Platform LSI	*Masanori Muroyama(1), Takahiro Nakayama(2), Yoshiyuki Hata(3), Shuji Tanaka(1)	{1}Tohoku University, {2}Toyota Motor, {3}Toyota Central R&D Labs.
Poster	11/01/17	10:40-12:20	01am2-PS-175	S-260	Multimodal Cardiovascular Information Monitor using Piezoelectric Transducers	*Takaaki Okano, Shintaro Izumi, Takumi Katsuura, Hiroshi Kawaguchi, Masahiko Yoshimoto	Kobe University
Poster	11/01/17	10:40-12:20	01am2-PS-177	S-284	A study of 2-channel wearable layered sensor for analysis of muscular activity	*Yuya Oichi, Akira Kimoto	Saga University
Poster	11/01/17	10:40-12:20	01am2-PS-179	S-074	Influences of static deflections to vibration modes of MEMS diaphragms for piezoelectric ultrasonic microsensors	*Tomoki Nishioka, Kaoru Yamashita, Minoru Noda	Kyoto Institute of Technology
Poster	11/01/17	10:40-12:20	01am2-PS-181	S-086	Fabrication of Au gap filters for high-sensitive observation of magnetic domains	*Takumi Hasegawa(1), Mizue Mizoshiri(1), Junpei Sakurai(1), Seiichi Hata(1), Kenta Takagi(2), Kimihiro Ozaki(2)	{1}Nagoya University, {2}National Institute of Advanced Industrial Science and Technology(AIST)
Poster	11/01/17	10:40-12:20	01am2-PS-183	S-098	Method of Measuring Wind Direction using ND-Filter realizing Long Distance Transmission with No Power Supply	*Shin-ichi Ryoki(1), Tetsunori Hattori(1), Takashi Kuniyoshi(1), Takeshi Daikohara(2)	{1}East Japan Railway, {2}Holy
Poster	11/01/17	10:40-12:20	01am2-PS-185	S-125	Integration of Thermal Flow Sensor into The Tracheal Intubation Tube for in-situ Breathing Evaluation	*Shun Watanabe(1), Yoshihiro Hasegawa(1), Miyoko Matsushima(2), Tsutomu Kawabe(2), Mitsuhiro Shikida(1)	{1}Hiroshima City University, {2}Nagoya University
Poster	11/01/17	10:40-12:20	01am2-PS-187	S-152	Relationship between Sensory Evaluation Tests and Fabric Friction Tests	*Ibuki Mishima(1), Yusuke Inoue(1), Takuma Yahata(1), Takahiro Nakayama(2), Masanori Muroyama(3), Yutaka Nonomura(1)	{1}Meijo University, {2}Toyota Motor, {3}Tohoku University
Poster	11/01/17	10:40-12:20	01am2-P-149	S-216	Fabrication and Characteristic Evaluation of Aerial Ultrasonic Sensor Using Silica Agglomerate Electret with Ultra-thin Insulation Layer	*Ahmad Zharif Afiq Bin Jamaludin, Kensuke Kageyama	Saitama University
Poster	11/01/17	10:40-12:20	01am2-P-151	S-112	Study on NH3 gas sensors using a WO3-based multiple-layered thin film with Pt catalyst	Tsubasa Morita, *Koji Sano	Tokyo Denki University
Poster	11/01/17	10:40-12:20	01am2-P-153	S-140	Degradation degree evaluation of beer by taste sensor with LB film using metal complex	*Masayoshi Yazawa, Yuki Hasegawa, Hidekazu Uchida	Saitama University
Poster	11/01/17	10:40-12:20	01am2-P-155	S-203	Development of Bad Breath Classifier of Small Scale	*Sigeru Omatu	Osaka Institute of Technology
Poster	11/01/17	10:40-12:20	01am2-P-157	S-215	Development of a sensor technology for an evaluation of food inspection	*Hiroki Watanabe, Hiroki Ichihara, Koudai Ryujinn, Yuki Yoshida, Ryohei Hamachi, Kenngo Tone, Takaaki Isoda	The University of Kitakyushu
Poster	11/01/17	10:40-12:20	01am2-P-159	S-266	Design and fabrication of room-temperature-curing glass based photonic crystal waveguide	*Taiki Machino(1), Jiayi Sun(1), Kenichi Maeno(1), Shoma Aki(1), Kazuro Sato(2), Shuichi Murakami(2), Yusuke Sando(2), Yusuke Kanaoka(2), Kenji Sueyoshi(1), Hideaki Hisamoto(1), Tatsuro Endo(1)	{1}Osaka Prefecture University, {2}Technology Research Institute of Osaka Prefecture
Poster	11/01/17	10:40-12:20	01am2-P-161	S-296	Optimization of Electroplated Platinum Catalyst for Quartz Hydrogen Sensors	*Hiroshi Oigawa(1), Koichi Harima(1), Fusao Kohsaka(2), Tooru Tsuno(2), Toshitsugu Ueda(2)	{1}KOA, {2}Waseda University

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Poster	11/01/17	10:40-12:20	01am2-P-163	S-312	Organic Solvent Sensor using Solvatochromism of Copper(I) Complex	Hayakawa Takuya, Nanzan Chika, *Sakata Tomomi	Josai University
Poster	11/01/17	10:40-12:20	01am2-P-165	S-134	Development of MEMS structure for suppression of ion diffusion toward a multimodal neurotransmitter image sensor	*Yuta Ogaeri, Masato Mitsudome, You-Na Lee, Tatsuya Iwata, Kazuhiro Takahashi, Kazuaki Sawada	Toyohashi University of Technology
Poster	11/01/17	10:40-12:20	01am2-P-167	S-157	Development of ultra-high sensitivity compact-size diagnostic system using chemiluminescence enzyme immunoassay - rotation mixing technology and magnetic particles manipulation technology -	*Kazuyoshi Horii, Tomoyuki Nose, Kanako Nagaoka, Sayuri Tomoda, Yusuke Miida, Yongjian Yang, Shun Nakamoto, VARUN NAMBIGARI, Yasunori Maekawa	Sysmex
Poster	11/01/17	10:40-12:20	01am2-P-169	S-190	Development of the simultaneous measurement system with microelectrode and the imaging system to measure the intracellular and extracellular [Ca ²⁺] activity	*Ayako Mashiyama{1}, Tatsuro Goda{2}, Akira Matsumoto{2}, Takao Aoyagi{1}, Yuji Mlyahara{2}	{1}Nihon University, {2}Tokyo Medical and Dental University
Poster	11/01/17	10:40-12:20	01am2-P-171	S-330	Realization of filter-free fluorescence image sensor	*Kiyotsugu Tanaka, Yong Joon Choi, Yasuyuki Kimura, Tatsuya Iwata, Kazuhiro Takahashi, Kazuaki Sawada	Toyohashi University of Technology
Poster	11/01/17	10:40-12:20	01am2-P-173	S-337	Detection of cancer-related substrates for olfactory cell-based transistor	Yuichi Hirose, Akiko Saito, *Toshiya Sakata	The University of Tokyo
Poster	11/01/17	10:40-12:20	01am2-P-175	S-061	Fabrication and evaluation of MEMS multi-site electric stimulation interfaces applied to central nervous systems	*Shuichi Murakami{1}, Sota Takahashi{2}, Kazuo Satoh{1}, Takashi Tateno{2}	{1}Osaka Research Institute of Industrial Science and Technology, {2}Hokkaido University
Poster	11/01/17	10:40-12:20	01am2-P-177	S-151	Development of Si blade array device of through hole type for realizing organ analysis	*Shiomi Taro{1}, Kagawa Daichi{1}, Takao Hidekuni{1}, Shimokawa Fusao{1}, Terao Kyohei{1}{2}	{1}Kagawa University, {2}JST-PREST
Poster	11/01/17	10:40-12:20	01am2-P-179	S-237	Effects of canalicular ultrastructure on the flow-induced mechanosensing of osteocyte	*Masahiro Ozasa, Yoshitaka Kameo, Naoli Takeishi, Taiji Adachi	Kyoto University
Poster	11/01/17	10:40-12:20	01am2-P-181	S-259	Evaluation of anti-clogging effect using liquid-gate to realize continuous sampling device	*Kenshiro Sakata, Lu Yang, Takatoki Yamamoto	Tokyo Institute of Technology
Poster	11/01/17	10:40-12:20	01am2-P-183	S-273	Reconstitutive analyses of intraluminal pressure on angiogenic morphogenesis using a microfluidic device	Yuichiro Arima{1}, Sanshiro Hanada{1}, Shigetomo Fukuhara{2}, Yoshimi Yamaguchi{3}, Michie Uchikawa{1}, Yuji Nashimoto{4}, Akiko Nakamasu{3}, Ryuji Yokokawa{4}, Takashi Miura{3}, *Koichi Nishiyama{1}	{1}Kumamoto University, {2}Nihon Medical School, {3}Kyushu University, {4}Kyoto University
Poster	11/01/17	10:40-12:20	01am2-P-185	S-318	Fiber-shaped hepatic tissue including vascular network for bottom-up tissue reconstruction	*Ryo Sato, Hiroaki Onoe	Keio University
Poster	11/01/17	10:40-12:20	01am2-P-187	S-327	Study on fine patterning method on synthetic resin by vacuum ultraviolet light	*Tomotaka Doi, Yuki Hashmoto, Takatoki Yamamoto	Tokyo Institute of Technology
13:30-15:00 エレクトロニクス実装学会連携セッション：センサ・MEMSのための実装技術 (B会場) /JIEP (The Japan Institute of Electronics Packaging) Session							
Oral	11/01/17	13:30-15:00	01pm1-B-1	S-300	Dynamic Strain Monitoring for Diagnosis of Bridge Deterioration Using Ultra-Thin Piezoelectric Strain Sensor Array	*Takahiro Yamashita{1}, Seiichi Takamatsu{2}, Daniel Zymelka{3}, Kazuyoshi Togashi{4}, Hironao Okada{1}, Toshihiro Itoh{2}, Takeshi Kobayashi{1}	{1}AIST, {2}The University of Tokyo, {3}NMEMS, {4}Dai Nippon Printing
Oral	11/01/17	13:30-15:00	01pm1-B-2	S-311	Room temperature bonding in atmospheric air of SUS substrate using a surface planarization by bond-and-transfer technique	*Yuichi Kurashima, Takashi Matsumae, Hideki Takagi	AIST
Oral	11/01/17	13:30-15:00	01pm1-B-3	S-319	NANOTRANSFER METHOD FOR THE FERROELECTRIC FILMS ONTO THE POLYMER SUBSTRAT	*Masaaki Ichiki, Sho Makino	AIST
Oral	11/01/17	13:30-15:00	01pm1-B-4	S-261	Micro processing characterization using general purpose deep X-ray lithography system (BL11)	*Masaya Takeuchi, Akinobu Yamaguchi, Yuichi Utsumi	University of Hyogo
Oral	11/01/17	13:30-15:00	01pm1-B-5	S-240	Development of an Autonomous Centrifugal Multi Assay Device for POCT	*Shunya Okamoto, Yoshiaki Ukita	University of Yamanashi
Oral	11/01/17	13:30-15:00	01pm1-B-6	S-256	Plasmonic Nanosensing Devices Fabricated in Self-Assembling Bottom-up Method of Gold Nanoparticles	*Takao Fukuoka, Utsumi Yuichi, Yamaguchi Akinobu	University of Hyogo

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15:10-16:40 基調講演/一般公開セッション (A会場) /Keynote Session (Open to the public) (Hall A)							
Keynote	11/01/17	15:10-15:50	01pm2-A-1			Hitsuo Hitomi	Managing Executive Officer, Senior Technical Fellow, Mazda
Keynote	11/01/17	16:00-16:40	01pm3-A-1			Takuo Toda	President & CEO, CASTEM/Chairman, Origami Airplane Association
16:40-18:20 ポスターセッションD (P会場) /Poster Session D (Hall P)							
Poster	11/01/17	16:40-18:20	01pm4-PS-102	S-075	Mechanical robustness evaluation method of MEMS microphone by applying compressive air	*Takashi Kasai, Yuki Uchida, Yu Nakano, Koji Sano, Yusuke Nakagawa, Koji Momotani, Akihiro Okugawa	OMRON
Poster	11/01/17	16:40-18:20	01pm4-PS-104	S-080	Brust-Schiffrin Synthesis of Gold Nanoparticles Dispersion in Organic Solvent on Glass Microfluidic Device	*Mao Hamamoto, Hiromasa Yagyu	Kanto Gakuin University
Poster	11/01/17	16:40-18:20	01pm4-PS-106	S-093	Evaluation of Mechanical Property and Application to DNA Nanostructure of Coarse-grained Double Stranded DNA Model	*Hiromasa Yagyu(1), Jae-Young Lee(2), Do-Nyun Kim(2), Osamu Tabata(3)	(1)Kanto Gakuin University, (2)Seoul National University, (3)Kyoto University
Poster	11/01/17	16:40-18:20	01pm4-PS-108	S-155	Fabrication and evaluation of TiN micro-heater for MEMS gas sensors	*Hiroshi Ito, Hiroyuki Nikkuni	National Institute of Technology, Tokyo College
Poster	11/01/17	16:40-18:20	01pm4-PS-110	S-173	Synthesis of V-doped Molybdenum Disulfide 2D Film	*Minjie Zhu, Naoki Inomata, Takahito Ono	Tohoku University
Poster	11/01/17	16:40-18:20	01pm4-PS-112	S-179	Photoelastic stress measurement of DN-designable-gel using image processing	*Yuki Kumeno(1), Shuhei Abe(1), Seiichi Ikeda(2), Azusa Saito(3), Masaru Kawakami(3), Hidemitsu Yoshikawa(3), Mizue Mizojiri(1), Junpei Sakurai(1), Seiichi Hata(1)	(1)Nagoya University, (2)Fine Biomedical, (3)Yamagata University
Poster	11/01/17	16:40-18:20	01pm4-PS-114	S-285	Near Infrared Spectrometer with Au Grating Schottky Photodetector	Wenjing Chen(1), *Tetsuo Kan(2), Yoshiharu Ajiki(3), Kiyoshi Matsumoto(4), Isao Shimoyama(1)	(1)The University of Tokyo, (2)The University of Electro-Communications, (3)Micromachine Center, (4)Toyo University
Poster	11/01/17	16:40-18:20	01pm4-PS-116	S-287	Bio-mimic 3-dimensional movement of artificial cilium actuated by applied magnetic field	*Fujio Tsumori, Ryuma Marume, Kentaro Kudo, Kazunari Shinagawa	Kyushu University
Poster	11/01/17	16:40-18:20	01pm4-PS-118	S-088	Fabrication of flexible Cu-Ni thin-film thermoelectric generators	*Yuki Shimizu(1), Mizue Mizoshiri(1), Masashi Mikami(2), Junpei Sakurai(1), Seiichi Hata(1)	(1)Nagoya university, (2)National Institute of Advanced Industrial Science and Technology(AIST)
Poster	11/01/17	16:40-18:20	01pm4-PS-120	S-103	Charge characteristics of high power output electrostatic energy harvester in real environment	*Hideaki Koga(1), Hiroyuki Mitsuya(1), Tatsuhiko Sugiyama(2), Hiroyuki Fujita(3), Hiroshi Toshiyoshi(3), Gen Hashiguchi(2)	(1)SAGINOMIYA SEISAKUSHO, (2)Shizuoka University, (3)The University of Tokyo
Poster	11/01/17	16:40-18:20	01pm4-PS-122	S-193	Proposal Piezoelectric MEMS Energy Harvester by Using Multilayer PZT Thin Films	*Ryosuke Nakanishi, Kensuke Kanda, Takayuki Fujita, Kazusuke Maenaka	University of Hyogo
Poster	11/01/17	16:40-18:20	01pm4-PS-124	S-199	Evaluation of a multilayer type electrostatic actuator using a pyroelectric effect of PZT	*Kou Hashimoto, Hayato Osaki, Takefumi Kanda	Okayama University
Poster	11/01/17	16:40-18:20	01pm4-PS-126	S-275	DRIE Technique for minor metals involving use of 3D Self-heated stage	*Gang Han, Yuki Murata, Daiki Ohkawa, Juniti Imai, Masayuki Sohigawa, Takashi Abe	Niigata University
Poster	11/01/17	16:40-18:20	01pm4-PS-128	S-309	A study on the thresholds of optical frequency comb generation within waveguide-type microring resonators	*Kentaro Furusawa, Sekine Norihiko, Akifumi Kasamatsu, Yoshinori Uzawa	National Institute of Information and Communications Technology(NICT)
Poster	11/01/17	16:40-18:20	01pm4-PS-130	S-324	Study of Cu Film on Silicon Trench by Supercritical Fluid Deposition	*Etsuko Ota, Xavier Hurtaud, Takeshi Momose, Yoshio Mita	The University of Tokyo
Poster	11/01/17	16:40-18:20	01pm4-PS-132	S-339	Ultra-thin MEMS optical scanner device mounted on flexible substrate	*Takeshita Toshihiro, Yamashita Takahiro, Makimoto Natsumi, Kobayashi Takeshi	AIST
Poster	11/01/17	16:40-18:20	01pm4-PS-134	S-065	Flexible Sensor Sheet for Real-time Pressure Monitoring in Artificial Knee Joint during Total Knee Arthroplasty	*Fumika Tanabe, Shusuke Yoshimoto, Yuki Noda, Teppei Araki, Takafumi Uemura, Tsuyoshi Sekitani	Osaka University
Poster	11/01/17	16:40-18:20	01pm4-PS-136	S-131	Accelerometers for SiGe monolithic combo sensor	*Choji Hirota, Tokuji Yokomatsu, Kensuke Kanda, Takayuki Fujita, Kazusuke Maenaka	University of Hyogo

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Poster	11/01/17	16:40-18:20	01pm4-PS-138	S-279	Development of endotracheal tube type MEMS flow sensor with wireless function	*Takuma Hada, Kazuhiro Taniguchi, Yoshihiro Hasegawa, Mitsuhiro Shikida	Hiroshima City University
Poster	11/01/17	16:40-18:20	01pm4-PS-140	S-281	Calf health monitoring with wireless auscultation system	*Yuki Morota{1}, Takashi Masuda{1}, Toru Miyamoto{2}, Shozo Arai{2}, Toshihiro Itoh{1}	{1}The University of Tokyo, {2}National Institute of Animal Health, NARO
Poster	11/01/17	16:40-18:20	01pm4-PS-142	S-283	Fabrication and characterization of tactile display device with arrayed SU8 micro-mechanism on Shape memory alloy thick film actuator	*Takashi Mineta{1}, Kazuki Tsuji{1}, Hiroshi Yanatori{1}, Kenta Hiyoishi{1}, Yasuhiro Ono{2}, Konomu Abe{2}	{1}Yamagata University, {2}Tokai Rika
Poster	11/01/17	16:40-18:20	01pm4-PS-144	S-331	Self-power generation device for wireless sensor monitoring condition of pump	*Hiroki Terabaru	The University of Tokyo
Poster	11/01/17	16:40-18:20	01pm4-PS-146	S-053	Resonant Magnetic Sensor using Magnetic gradient field formed by Permalloy Concentrator	*Wataru Suwa, Naoki Inomata, Masaya Toda, Takahito Ono	Tohoku University
Poster	11/01/17	16:40-18:20	01pm4-PS-148	S-054	Improvement of high corrosion resistance, and low power consumption flow sensor device	*Hidehiko Yamaoka, Koki Nagata	Tokyo Metropolitan Industrial Technology Research Institute
Poster	11/01/17	16:40-18:20	01pm4-PS-150	S-067	A "Micro-Macro" Integrated Multiscale MEMS Tactile Sensor for Detection Ability of Surface Texture	*Kazuki Watatani{1}, Kyohei Terao{1}{2}, Fusao Shimokawa{1}{2}, Hidekuni Takao{1}{2}	{1}Kagawa University, {2}JST-CREST
Poster	11/01/17	16:40-18:20	01pm4-PS-152	S-100	A silicon-based optical guided-wave pressure sensor with a circular diaphragm	*Hiroyuki Nikkuni, Hiroshi Ito	National Institute of Technology, Tokyo College
Poster	11/01/17	16:40-18:20	01pm4-PS-154	S-198	Development of the minute MEMS tactile sensor by the high temperature creep forming technique	*Kenji Osaka, Satoshi Nakata, Kensuke Yamamoto, Koji Sugano, Yoshitada Isono	Kobe University
Poster	11/01/17	16:40-18:20	01pm4-PS-156	S-217	Imaging system (sniffer camera) for non-invasive monitoring of human volatolome	*Takahiro Arakawa, Kenta Iitani, Sato Toshiyuki, Munire Naisierding, Toma Koji, Kohji Mitsubayashi	Tokyo Medical and Dental University
Poster	11/01/17	16:40-18:20	01pm4-PS-158	S-064	Response to small pH changes of bottom-gate type a-InGaZnO TFT pH sensors.	*Shinnosuke Iwamatsu{1}, Kazushige Takechi{2}, Yutaka Abe{1}, Shunsuke Konno{1}, Yutaka Murakami{1}, Toru Yahagi{1}, Mutsuto Katoh{1}, Hiroshi Tanabe{2}, Yoshiyuki Watanabe{1}	{1}Yamagata Research Institute of Technology, {2}NLT Technologies
Poster	11/01/17	16:40-18:20	01pm4-PS-160	S-119	Detection of low-molecular-weight compounds using Surface Plasmon Fluorescence Spectroscopy with Focusing ATR method	*Toshihiro Honda, Satoshi Ito, Rui Yatabe, Takeshi Onodera, Kiyoshi Toko	Kyushu University
Poster	11/01/17	16:40-18:20	01pm4-PS-162	S-176	In situ evaluation of physiological activity for cultivation environmental control by plant bioelectric potential	*Fumiya Murohashi, Yuki Hasegawa, Hidekazu Uchida	Saitama University
Poster	11/01/17	16:40-18:20	01pm4-PS-164	S-183	Preconcentrator and amperometric odor sensing system using SAW device with self-assembled monolayer film	*Parthojit Chakraborty, Takamichi Nakamoto	Tokyo Institute of Technology
Poster	11/01/17	16:40-18:20	01pm4-PS-166	S-270	Development of a Technology of Image-sensing IoT to Measure Skin Inflammation for the Use of Remote Inspection System	Ryoutaro Takao{1}, Hiroki Ichihara{2}, Koudai Ryujin{2}, Yuki Yoshida{2}, Hiroki Watanabe{2}, Ryohei Hamachi{2}, Kengo Tone{2}, Takao Shimidzu{3}, Ikuko Urushibara{3}, Satoshi Takeshita{4}, Tetsuro Oike{4}, Hirofumi Okamoto{5}, Chencan Ouyang{5}, *Takaaki Isoda{2},	{1}Toyo Tire & Rubber, {2}The University of Kitakyushu, {3}AR's, {4}FILTOM, {5}KANEKA
Poster	11/01/17	16:40-18:20	01pm4-PS-168	S-303	Impact Test for Gas Sensing Using Large Particle Size Zeolite	*Kentaro Yamada{1}, Julien Grand{2}, Yuki Okamoto{1}, Reddy Ranga{1}, Matthieu Denoual{2}, Svetlana Mintova{2}, Agnès Tixier-Mita{1}, Yoshio Mita{1}	{1}The University of Tokyo, {2}University of Normandie
Poster	11/01/17	16:40-18:20	01pm4-PS-170	S-304	Extremely Efficient and Non-hazardous Bromo Group Addition Reaction Using Simple Microfluidic Devices	*Wataru Kawakubo{1}, Daiki Tanaka{1}, Dong Hyun Yoon{1}, Tetsushi Sekiguchi{1}, Keita Takahashi{2}, Takashiro Akitsu{2}, Shuichi Shoji{1}	{1}Waseda University, {2}Tokyo University of Science
Poster	11/01/17	16:40-18:20	01pm4-PS-172	S-096	Electrical sensing of influenza virus using sugar-modified conducting polymers	*Tatsuro Goda, Wenfeng Hai, Yukichi Horiguchi, Akira Matsumoto, Yuji Miyahara	Tokyo Medical and Dental University

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Poster	11/01/17	16:40-18:20	01pm4-PS-174	S-135	An elastomer-based MEMS Fabry-Perot Interferometric surface-stress sensor for biomarker detection	*Reina Teramoto{1}, Satoshi Maruyama{1}, Toshinori Fujie{2}, Nobutaka Sato{2}, Shinji Takeoka{2}, Kazuaki Sawada{1}, Kazuhiro Takahashi{1}	{1}Toyoashi University of Technology, {2}Waseda University
Poster	11/01/17	16:40-18:20	01pm4-PS-176	S-189	Construction of epithelial tight junction evaluation system using pH responsive field effect transistor	*Hiroaki Hatano, Tatsuro Goda, Akira Matsumoto, Yuji Miyahara	Tokyo Medical and Dental University
Poster	11/01/17	16:40-18:20	01pm4-PS-178	S-244	120- μ m-long nanoscale-tipped vertical microelectrodes for intracellular recordings	*Yoshihiro Kubota, Hirohito Sawahata, Akihiro Goryu, Yoriko Ando, Rika Numano, Makoto Ishida, Takeshi Kawano	Toyoashi University of Technology
Poster	11/01/17	16:40-18:20	01pm4-PS-180	S-290	Fabrication of a QCM sensor using nanostructure	*Naoto Asai, Tomohiro Shimizu, Shoso Shingubara, Takeshi Ito	Kansai University
Poster	11/01/17	16:40-18:20	01pm4-PS-182	S-297	Wireless and Electrodeless Quartz Crystal Microbalance Biosensor by Nanoimprint Lithography with Polydimethylsiloxane (PDMS)	*Yukinari Kodaka{1}, Yuuki Sakai{1}, Ryo Aruga{1}, Shunya Kozuka{1}, Hiroyuki Noguchi{1}, Fumihito Kato{1}, Hirotsugu Ogi{2}	{1}Nippon Institute of Technology, {2}Osaka University
Poster	11/01/17	16:40-18:20	01pm4-PS-184	S-069	Evaluating collective motion of kinesins using a nano-patterning	*Taikopaul Kaneko{1}, Shotaro Ohba{1}, Kenya Furuta{2}, Kazuhiro Oiwa{2}, Hirofumi Shintaku{1}, Hidetoshi Kotera{1}, Ryuji Yokokawa{1}	{1}Kyoto University, {2}National Institute of information and communication technology(NICT)
Poster	11/01/17	16:40-18:20	01pm4-PS-186	S-092	Lipid bilayer formation by immersion of a perforated partition with lipid solution	*Nobuo Misawa{1}, Satoshi Fujii{1}, Koki Kamiya{1}, Toshihisa Osaki{1}{2}, Shoji Takeuchi{1}{2}	{1}Kanagawa Institute of Industrial Science and Technology, {2}The University of Tokyo
Poster	11/01/17	16:40-18:20	01pm4-PS-188	S-158	Design and Performance Assessment of On-chip Cell Gym	*Mitsuhiro Horade, Hiroaki Ito, Chia Hung Tsai, Toshio Takayama, Makoto Kaneko	Osaka University
Poster	11/01/17	16:40-18:20	01pm4-PS-190	S-221	Double-layer collagen microtube device for perfusable heterogeneous culture	*Shun Itai, Hiroaki Onoe	Keio University
Poster	11/01/17	16:40-18:20	01pm4-PS-192	S-239	Microfluidic capture of iPS cells in human iPSCs-derived cardiac cells	*Leqian Yu{1}, Xin Li{2}, JUNJUN Li{1}, Li Liu{1}, Hidetoshi Kotera{1}	{1}Kyoto University, {2}East China Normal University
Poster	11/01/17	16:40-18:20	01pm4-PS-194	S-278	Environment-Light Responsive Device Array Driven by Algae Parallel Actuation of Mechanical Components	*Taiki Nakamizu, Masayuki Nagara, Moeto Nagai, Takayuki Shibata	Toyoashi University of Technology
Poster	11/01/17	16:40-18:20	01pm4-PS-196	S-316	Microfluidic devices for efficient washing process in peptide screening using cancer cell spheroids.	*Kunitoshi, Tadashi Ishida, Toru Omata	Tokyo Institute of Technology
Poster	11/01/17	16:40-18:20	01pm4-PS-198	S-057	Study on dielectrophoresis-enabled higher-order nanostructure formation for molecular sensing	*Akinobu Yamaguchi, Takao Fukuoka, Yuichi Utsumi	University of Hyogo
16:40-18:20 紙ヒコーキ滞空時間コンテスト (一般公開) (A会場) /Papercraft Airplane Flight Duration Contest (Hall A)							
16:40-18:20 日本酒の科学と実践 (B会場) /Science of "SAKE" (Hall B)							
18:30-19:30 Mixer&セレモニー (A会場) / Mixer & Ceremony (Hall A)							
20:00-22:00 3シンボ合同若手交流会 (別会場) /Youth Generation Networking (at a restaurant in Hiroshima City)							

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Thursday, November 2, 2017							
9:00-9:40 基調講演 (A会場) / Keynote Session (Hall A)							
Keynote	11/02/17	9:00-9:40	02am1-A-1				
9:50-11:05 センサシンポジウム：優秀技術論文賞候補者発表セッション (A会場) / Finalists Session for Best Paper Awards (Hall A)							
Oral	11/02/17	9:50-11:05	02am2-B-1	S-238	Capacitive MEMS hydrogen sensor with Pd based metallic glass	*Hiroaki Yamazaki	Toshiba
Oral	11/02/17	9:50-11:05	02am2-B-2	S-153	SILICON BASED MID-INFRARED PHOTODETECTORS USING PLASMONIC GOLD NANO-ANTENNA STRUCTURES	*Tetsuo Kan{1}, Yoshiharu Ajiki{2}	The University of Electro-Communications, Micromachine Center,
Oral	11/02/17	9:50-11:05	02am2-B-3	S-052	Evaluation of Thin Films Composition of Capacitive Micromachined Ultrasonic Transducers for Ultrasonic Diagnoses	*Takanori Aono, Yasuhiro Yoshimura, Shuntaro Machida	Hitachi
Oral	11/02/17	9:50-11:05	02am2-B-4	S-056	AN ULTRA-SENSITIVE SPINTRONIC STRAIN-GAUGE SENSOR WITH GAUGE FACTOR OF 5000 AND DEMONSTRATION OF A SPIN-MEMS MICROPHONE	*Yoshihiko Fuji, Michiko Hara, Yoshihiro Higashi, Shiori Kaji, Kei Masunishi, Tomohiko Nagata, Akiko Yuzawa, Kenji Otsu, Kazuaki Okamoto, Shotaro Baba, Tomio Ono, Akio Hori, Hideaki Fukuzawa	Toshiba
Oral	11/02/17	9:50-11:05	02am2-B-5	S-254	A calculation technique of the ECoG horizontal propagation vector in the brain	*Hirohito Sawahata, Kai Nishikawa, Shota Yamagiwa, Kowa Koida, Rika Numano, Makoto Ishida, Takeshi Kawano	Toyohashi University of Technology
13:30-15:10 ポスターセッションE (P会場) / Poster Session E (Hall P)							
Poster	11/02/17	13:30-15:10	02pm1-PS-199	S-072	Fabrication of smart glasses type retinal inspection system using MEMS mirror	*Yoshiki Takahashi, Takashi Sasaki, Neelam Kaushik, Toru Nakazawa, Kazuhiro Hane	Tohoku university
Poster	11/02/17	13:30-15:10	02pm1-PS-200	S-085	Process Examination for Control of Diameter and Arrangement of Self-assembly DNA Nanowires	*Shogo Kamiya, Hidekuni Takao, Husao Simokawa, Kyouhei Terao	Kagawa University
Poster	11/02/17	13:30-15:10	02pm1-PS-201	S-091	Skin-patch Lactate Monitoring System for Evaluation of Metabolic Activity	*Keigo Enomoto, Kento Takayama, Hiroyuki Kudo	Meiji University
Poster	11/02/17	13:30-15:10	02pm1-PS-202	S-109	Sacrificial DNA Origami Technique and its Application to Gold Nanoparticle Dimers with Nanogap	*Naoki Yamashita, Seongsu Park, Zhipeng Ma, Kentaro Kawai, Yoshikazu Hirai, Toshiyuki Tsuchiya, Osamu Tabata	Kyoto University
Poster	11/02/17	13:30-15:10	02pm1-PS-203	S-224	Structural robustness of different crossover/nick designs of 2D DNA origami	*Zhipeng Ma, Naoki Yamashita, Seongsu Park, Kentaro Kawai, Yoshikazu Hirai, Toshiyuki Tsuchiya, Osamu Tabata	Kyoto University
Poster	11/02/17	13:30-15:10	02pm1-PS-204	S-267	Reducing Scallop in Spiral Trench Sidewall for Compact Superconducting Magnetic Energy Storage	Che-Wei Hsu{1}, Shinya Kumagai{1}, Yasuhiro Suzuki{2}, Tatsumi Hioki{2}, Joo-hyong Noh{3}, Osamu Takai{3}, Tomoyoshi Motohiro{2}, *Minoru Sasaki{1}	{1}Toyota Technological Institute, {2}Nagoya University, {3}Kanto Gakuin University
Poster	11/02/17	13:30-15:10	02pm1-PS-205	S-338	A Wide-band Vibrational Energy Harvester Using Symmetrical Comb-Drives Coupled with Heavily Charged Electret	*Hiroyuki Mitsuya{1}, Hisayuki Ashizawa{1}, Daisuke Anai{1}, Gen Hashiguchi{2}, Hiroaki Honma{3}, Hiroyuki Fujita{3}, Hiroshi Toshiyoshi{3}	Saginomiya Seisakusho, Saginomiya Seisakusho, Saginomiya Seisakusho, Shizuoka University, The University of Tokyo, The University of Tokyo,
Poster	11/02/17	13:30-15:10	02pm1-PS-206	S-340	Femtosecond laser direct precipitation of metallic particles inside temperature-responsive gels	*Shun Odashima, Suguru Aso, Hiroaki Nishiyama	Yamagata University
Poster	11/02/17	13:30-15:10	02pm1-PS-207	S-063	Fabrication of gel-based micromotors for removal of environmental pollutants	*Kinari Yokote, Hiroaki Suzuki	University of Tsukuba
Poster	11/02/17	13:30-15:10	02pm1-PS-208	S-076	Development of vibration energy harvesters indicating broadband characteristics not to depend on quality factor	*Tatsuhiko Sugiyama{1}, Yasushi Shibata{1}, Hideaki Koga{2}, Hiroyuki Fujita{3}, Hiroshi Toshiyoshi{3}, Gen Hashiguchi{1}	{1}Shizuoka University, {2}Saginomiya, {3}The University of Tokyo
Poster	11/02/17	13:30-15:10	02pm1-PS-209	S-148	Resonant Magnetic Sensor using a Magnetostrictive Material	*Taiga Ezura, Naoki Inomata, Takahito Ono	Tohoku University
Poster	11/02/17	13:30-15:10	02pm1-PS-210	S-195	A graphene resonator with a vacuum sealed cavity developed by low-pressure dry transfer technique	Hayato Ishida, Tatsuya Iwata, Kazuaki Sawada, *Kazuhiro Takahashi	Toyohashi University of Technology

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Poster	11/02/17	13:30-15:10	02pm1-PS-211	S-196	Nanoparticles generation using mono-disperse droplets by an ultrasonic transducer	*Nozomu Fujimoto{1}, Takefumi Kanda{1}, Masaya Katsuta{1}, Yusaku Sakata{1}, Yoshiaki Yamada{1}, Norihisa Seno{1}, Yoshiaki Nakazaki{2}, Takafumi Otoyama{2}	{1}Okayama University, {2}Nano Cube Japan
Poster	11/02/17	13:30-15:10	02pm1-PS-212	S-277	Development of MEMs strain sensor for trafficinfrastructures	*Shintaro Goto, Seiichi Takamatsu, Toshihiro Itoh	The University of Tokyo
Poster	11/02/17	13:30-15:10	02pm1-PS-213	S-294	Development of ceramic three-dimensional micro channel by combined process of laser processing and imprinting	*Kazuki Tokumaru, Simon Hunt, Fujio Tsumori, Kentaro Kudo, Kazunari Shinagawa	Kyushu University
Poster	11/02/17	13:30-15:10	02pm1-PS-214	S-336	ScAlN vibration energy harvester with stress compensation	*Ryohei Takei, Natsumi Makimoto, Tatsuo Tabaru, Morito Akiyama, Toshihiro Itoh, Takeshi Kobayashi	AIST
Poster	11/02/17	13:30-15:10	02pm1-PS-215	S-050	Development of a magnetic sensor(Flux gate magnetometer:FGM) using a simple diode detection circuit.	*Shingo Matsuda, Junji Hirama	Kanazawa Institute of Technology
Poster	11/02/17	13:30-15:10	02pm1-PS-216	S-144	Proximity, Contact and Slip Sensing Tactile Sensor for Gripping Control of Flexible Object using Miniature Electromotive Manipulator	*Fumitoshi Suga{1}, Ryoma Araki{1}, Takashi Abe{1}, Masayuki Sohngawa{1}, Haruo Noma{2}	{1}Niigata University, {2}Ritsumeikan University
Poster	11/02/17	13:30-15:10	02pm1-PS-217	S-168	MEMS Tactile Device by Using Multilayered Piezoelectric Thin Film	*So Toyama, Kensuke Kanda, Takashi Okubo, Takayuki Fujita, Kazusuke Maenaka	University of Hyogo
Poster	11/02/17	13:30-15:10	02pm1-PS-218	S-181	Proposal and prototyping of small radio wave observation buoys using multiple triaxial acceleration sensors	*Daisuke Kuramoto	Hiroshima Institute of Technology
Poster	11/02/17	13:30-15:10	02pm1-PS-219	S-286	A study of moisture distribution measurement by electrostatic sensing	*Kazuhiro Toyofuku, Akira Kimoto	Saga University
Poster	11/02/17	13:30-15:10	02pm1-PS-220	S-094	Fabrication of an Impedance Measurement Circuit Chip to Measure Water Content and Ion Concentration in culture medium	*Shogo Nagaya, Keita Yasutomi, Harutoyo Hirano, Shoji Kawahito, Masato Futagawa	Shizuoka University
Poster	11/02/17	13:30-15:10	02pm1-PS-221	S-124	Tube Type Flow Sensor Integration onto Optical Fiberscope for in-situ Breathing and Surface Image Evaluations in Small Airway	*Chiaki Okihara{1}, Yoshihiro Hasegawa{1}, Miyoko Matsushima{2}, Tsutomu Kawabe{2}, Mitsuhiro Shikida{1}	{1}Hiroshima City University, {2}Nagoya University
Poster	11/02/17	13:30-15:10	02pm1-PS-222	S-149	Droplet type viscometer using a MEMS pressure sensor	*Hidetoshi Takahashi, Thanh-Vinh Nguyen, Isao Shimoyama	The University of Tokyo
Poster	11/02/17	13:30-15:10	02pm1-PS-223	S-223	Flexible pressure sensor based on ultra-thin Si piezo-resistive membrane	*Yusuke Takei{1}, Shintaro Goto{2}, Seiich Takamatsu{2}, Toshihiro Itoh{2}, Takeshi Kobayashi{1}	{1}AIST, {2}The University of Tokyo
Poster	11/02/17	13:30-15:10	02pm1-PS-224	S-328	Development of a headset microphone type-respiration sensor with a printed cantilever	*Shusuke Kanazawa, Yoshinori Horii, Yasuyuki Kusaka, Hirobumi Ushijima	AIST
Poster	11/02/17	13:30-15:10	02pm1-PS-225	S-335	Dependence of response of a capacitance-type flexible proximity sensor on its curvature radius	*Ken-ichi Nomura{1}, Yoshinori Horii{1}, Ryosaku Kaji{1}, Shiro Iwata{2}, Shinobu Otao{2}, Naoto Imawaka{2}, Katsumi Yoshino{2}, Hirobumi Ushijima{1}	{1}AIST, {2}Shimane Institute for Industrial Technology
Poster	11/02/17	13:30-15:10	02pm1-PS-226	S-345	Micromagnetic field measurement using Hall element	Takashi Manago{1}, Kenji Kasahara{1}, Kazuhiro Nishimura{2}, *Ichiro Shibasaki{3}	{1}Fukuoka University, {2}Asahi Kasei Electronics, {3}Noguchi Institute
Poster	11/02/17	13:30-15:10	02pm1-PS-227	S-058	Flexible sweat pH sensor integrated with a skin temperature sensor for wearable healthcare patch	*Shogo Nakata, Takayuki Arie, Seiji Akita, Kuniharu Takei	Osaka Prefecture University
Poster	11/02/17	13:30-15:10	02pm1-PS-228	S-059	Development of the gas sensor using the laminated ceramic.	*Kazuki Komiya, Hidehiko Yamaoka	Tokyo Metropolitan Industrial Technology Research Institute
Poster	11/02/17	13:30-15:10	02pm1-PS-229	S-113	A gas sensor by using capillary waves on the ionic liquid droplet	*Hiroshi Saito, Thanh-Vinh Nguyen, Isao Shimoyama	The University of Tokyo
Poster	11/02/17	13:30-15:10	02pm1-PS-230	S-122	Simultaneous detection of methylmercaptan gas and ammonia gas by Quartz Crystal Microbalance sensor	*Yuki Tokura, Gentoku Nakada, Yukari Moriyama, Yuya Oaki, Hiroaki Imai, Seimei Shiratori	Keio University
Poster	11/02/17	13:30-15:10	02pm1-PS-231	S-187	Gap controlled SERS active metal nano structure by light induced metal growth	*Jingshaq Li, Masashi Watanabe, Satoshi Araki, Fumihiko Sassa, Kenshi Hayashi	Kyushu University

Program Schedule of the 34th Sensor Symposium on Sensors, Micromachines, and Applied Systems
Tuesday, October 31 - November 2, 2017, Hiroshima

Late News information will be added by September 22, 2017

Presentation Style	Date セッション 時間	Session Time セッション時間 (講演時間ではありません)	Paper # 講演番号	Submission ID 発表申込ID	Paper Title	Authors (* Speaker)	Affiliation
Poster	11/02/17	13:30-15:10	02pm1-PS-232	S-262	Enzyme printed enzyme electrode sensor for low concentration lactate monitoring	*Noriko Tsuruoka, Tadao Matsunaga, Kumi Inoue, Tomokazu Matue, Yoichi Haga	Tohoku University
Poster	11/02/17	13:30-15:10	02pm1-PS-233	S-280	Study on robotic system for measuring indoor thermal fluid environments	Takumi Seto{1}, Naoko Goto{1}, *Haruka Matsukura{2}, Hiroshi Ishida{1}	{1}Tokyo University of Agriculture and Technology, {2}Osaka University
Poster	11/02/17	13:30-15:10	02pm1-PS-234	S-317	Study of an Semiconductor type pH sensor to measure low water content soil	*Keisuke Uemura{1}, Kumiko Nomiyama{1}, Harutoyo Hirano{1}, Minoru Watanabe{2}, Mitsuru Komatsu{3}, Masato Futagawa{1}	{1}Shizuoka University, {2}LAPIS Semiconductor, {3}Okayama University
Poster	11/02/17	13:30-15:10	02pm1-PS-235	S-081	Development of fluorescence polarization measurement system for multiple sample simultaneous detection toward molecular interaction analysis	*Osamu Wakao	Hokkaido University
Poster	11/02/17	13:30-15:10	02pm1-PS-236	S-116	pH-based device for detecting nucleic acid amplification	*Miyuki Tabata, Tatsuro Goda, Akira Matsumoto, Yuji Miyahara	Tokyo Medical and Dental University
Poster	11/02/17	13:30-15:10	02pm1-PS-237	S-118	In Situ Monitoring of Cell Adhesion on Thermally Responsive Nanofiber Coatings Using Quartz Crystal Microbalance	*Jiatu Li{1}, Mizuki Tenjimbayashi{1}, Yuki Tokura{1}, Ko Matsukawa{2}, Kenta Homma{2}, Aya Akimoto Mizutani{2}, Seimei Shiratori{1}	{1}Keio University, {2}The University of Tokyo
Poster	11/02/17	13:30-15:10	02pm1-PS-238	S-138	Sensitive electrochemical detection in small samples by agitation with surface acoustic waves	*Hiroaki Sakamoto{1}, Kitanishi Hiroki{1}, Satoshi Amaya{2}, Tsunemasa Saiki{3}, Yuichi Utsumi{3}, Shin-ichiro Suye{1}	{1}University of Fukui, {2}Riken, {3}Hyogo Prefectural Institute of Technology
Poster	11/02/17	13:30-15:10	02pm1-PS-239	S-177	Fabrication of MEMS optical interferometric surface stress sensor with high wavelength selectivity for label-free biosensing	*Toshiaki Takahashi{1}, Takeshi Hizawa{1}, Nobuo Misawa{2}, Miki Taki{1}, Kazuaki Sawada{1}{3}, Kazuhiro Takahashi{1}{4}	{1}Toyonashi University of Technology, {2}Kanagawa Academy of Science and Technology, {3}JST-CREST, {4}JST-PRESTO
Poster	11/02/17	13:30-15:10	02pm1-PS-240	S-315	Salivary Uric Acid sensing system using paper-based saliva sampling	*Yuki Takagi, Shuhei Hayashi, Hiroyuki Kudo	Meiji University
Poster	11/02/17	13:30-15:10	02pm1-PS-241	S-070	Single molecule observation of fluorescent labelled ATP in microtubule gliding motility using LZMWs	*Kazuya Fujimoto{1}, Ryota Iino{2}, Michio Tomishige{3}, Hirofumi Shintaku{1}, Hidetoshi Kotera{1}, Ryuji Yokokawa{1}	{1}Kyoto University, {2}Institute for Molecular Science, {3}Aoyama Gakuin University
Poster	11/02/17	13:30-15:10	02pm1-PS-242	S-083	Laser-Manipulated Microtool with Enzyme-Functionalized Surface for On Site Molecular Processing	*Akihito Masuda, Hidekuni Takao, Fusao Shimokawa, Kyouhei Terao	Kagawa University
Poster	11/02/17	13:30-15:10	02pm1-PS-243	S-104	Imaging dynamics of single circular DNA molecules using DNA trapping device	*Daiki Dohi{1}, Ken Hirano{2}, Kyohei Terao{1}{3}	{1}Kagawa University, {2}AIST, {3}JST-PRESTO
Poster	11/02/17	13:30-15:10	02pm1-PS-244	S-166	MICROFLUIDIC CHIP FOR RAPID BIOLOGICAL RISK EVALUATION OF COSMIC RADIATION	*Takahiro Tamura{1}, Asako Nakamura{2}, Kenta Takahashi{2}, Kou Yamada{1}, Takaaki Suzuki{1}	{1}Gunma University, {2}Ibaraki University
Poster	11/02/17	13:30-15:10	02pm1-PS-245	S-227	Development of Low X-ray-scattering Chamber for Recording Single-Molecule Conformational Changes of Proteins with the Diffracted X-ray Tracking Method	*Hirofumi Shimizu{1}, Tomoki Tabuchi{2}, Kio Tahara{2}, Masayuki Iwamoto{1}, Yoshikazu Hirai{2}, Toshiyuki Tsuchiya{2}, Osamu Tabata{2}	{1}University of Fukui, {2}Kyoto University
Poster	11/02/17	13:30-15:10	02pm1-PS-246	S-251	Self-alignment of osteoblast-like cells via tension sensing	*Keiichi Ishikawa, Junko Sunaga, Yoshitaka Kameo, Taiji Adachi	Kyoto University
Poster	11/02/17	13:30-15:10	02pm1-PS-247	S-314	Characterization of Gliding Microtubule for Surface Roughness Structure	*Isamu Miyazaki{1}, Nakahara{1}, Hidetoshi Kotera{2}, Ryuji Yokokawa{2}, Kazuyuki Minami{1}	{1}Yamaguchi University, {2}Kyoto University
15:20-16:00 基調講演 (A会場) / Keynote Session (Hall A)							
Keynote	11/02/17	15:20-16:00	02pm2-A-1		Uncooled Infrared Focal Plane Arrays	Dr. Masaaki Kimata	Professor, Ritsumeikan University
16:10-16:50 閉会式/表彰式 (A会場) /Closing & Award Ceremony (Hall A)							