

EUROSENSORS2016 PROGRAM
Wednesday - September 7, 2016

Special session: Sensors for healthcare I., Physical, Room 1:"PATRIA"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
8.30-8.50	WL.HLTH-1-8409	A simple conditioner for resonant intraocular pressure sensor	F. Soulier(a,*), F. Maily(a), V. Kerzérho(a), A. Deluthault(a), S. Bernard(a), P. Cauvet(b)	(a)LIRMM-University of Montpellier, 161 rue Ada, 34095 Montpellier, France (b)Ophtimalia, 5 esplanade Anton Philips Campus E Science, 14460 Colombelles, France
8.50-9.10	WL.HLTH-2-8261	Novel Sensor Integration Approach for Blood Pressure Sensing in Ventricular Assist Devices	Silvan Staufert (*) , Christofer Hierold	Micro and Nanosystems, ETH Zurich, Tannenstrasse 3, 8092 Zurich, Switzerland
9.10-9.30	WL.HLTH-3-8534	New MEMS Pressure Sensor Element and Concept for Coronary Catheter	Anu Kärkkäinen (a), Jaakko Saarilahti (a), Jukka Kyynäräinen (a), and Heikki Kuisma (b,*)	(a) VTT Technical Research Centre of Finland Ltd., Espoo, Finland (b) Murata Electronics Ltd., Vantaa, Finland
9.30 - 9.50	WL.HLTH-4-8128	Biocompatible Packaging of an Epicardial Accelerometer for Real-Time Assessment of Cardiac Motion	L. Brancato (a,*), T. Weydts (a), W. Oosterlinck (b), P. Herjegers (b), R. Puers (a)	(a) ESAT-MICAS, KU Leuven, Leuven, Belgium (b) Department of Cardiovascular Diseases, research unit of Experimental Cardiac Surgery, KU Leuven, Leuven, Belgium
9.50-10.10	WL.HLTH-5-8048	Glucose Sensing by an Enzyme-Modified ZnO-Based FET	Kazuto Koike, Yuina Mori, Shigehiko Sasa, Yuichi Hirofujii, Mitsuaki Yano(*)	Nanomaterials Microdevices Research Center, Osaka Institute of Technology, Asahi-ku Ohmiya, Osaka 535-8585, Japan
10.10-10.40	WKeynote.HLTH-6-8650	Body core temperature sensing: Challenges and new sensor solutions	Marc-Florian Uth	Drägerwerk AG & Co. , Technology & IP, Lübeck, 23558 , Germany

Special session: Sensors for healthcare II. Biochemical, Room 1:"PATRIA"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
11.10-11.30	WL.HLTH-7-8087	Flexible Ion Sensors for Bodily Fluids	V.A.T. Dam (*), M.A.G. Zevenbergen, R. van Schaijk	Holst Centre / imec, 5656 AE Eindhoven, The Netherlands
11.30-11.50	WL.HLTH-8-8430	Highly sensitive Electrochemical BioMEMS for TNF- α detection in humansaliva: Heart Failure	Alessia Longo (a,b), Abdoullatif Baraket (f,*), Monica Vatteroni (a,f), Nadia Zine (f), Joan Baussells (c), RogerFuoco (d), Fabio Di Francesco (d), Georgia S. Karanasiou (e), Dimitrios I. Fotiadis (e), Arianna Mencias (b), Abdelhamid Errachid (f)	(a) Biomedical Engineering University of Pisa, Italy. (b) BioRobotics Institute Scuola Superiore Sant'Anna, Viale R. Piaggio 34, 56025 Pontedera (PI Italy). (c) Instituto de Microelectronica de Barcelona, IMB-CNM (CSIC), Campus UAB, 08193, Bellaterra, Spain. (d) Department of Chemistry and Industrial Chemistry, University of Pisa, Pisa, Italy. (e) Department of Biomedical Research, Institute of Molecular Biology and Biotechnology, FORTH, Ioannina, Greece and Department of Materials Science, Unit of Medical Technology and Intelligent Information Systems, Ioannina, Greece. (f) Université de Lyon, Institut de Sciences Analytiques (ISA) – UMR 5280, 5 rue de la Doua, 69100, France.
11.50-12.10	WL.HLTH-9-8423	Molecularly Imprinted Polymers for Diagnostics: Sensing High Density Lipoprotein and Dengue Virus	P.A. Lieberzeit(a,*), S. Chunta(a), K. Navakul(b), C. Sangma(b), C. Jungmann(a)	(a)University of Vienna, Faculty for Chemistry, Department of Physical Chemistry, Währinger Straße 42, Vienna 1090, Austria (b)Department of Chemistry, Faculty of Science, Kasetsart University, Chatuchak, Bangkok, 10900, Thailand
12.10 - 12.30	WL.HLTH-10-8411	Measuring Calcium Content of Human Milk on a Microfluidic Chip	A. Haller(a,*), S. Zauner (b), A. Managhebaty(a), D. Puchberger(a), N. Haiden(c), A. Kreissl(c), A. Kasper-Giebl(b), F. Keplinger(a), M. Vellekoop(d)	(a) Institute of Sensor and Actuator Systems (ISAS), Vienna University of Technology, Austria (b) Institute of Chemical Technologies and Analytics, Vienna University of Technology, Austria (c) Division of Neonatology, Pediatric Intensive Care Medicine and Neuropediatrics, Medical University of Vienna, Austria (d) Institute for Microsensors, -actuators and -systems (IMSAS), Microsystems Center Bremen (MCB), University of Bremen, Germany
12.30-13.00	WKeynote.HLTH-11-8651	Label-free optical waveguide biosensors for monitoring small molecules and dynamic changes of living cells	Róbert Horváth	MTA EK MFA – Institute of Technical Physics and Materials Science, Budapest, H-1121, Hungary

Chemical sensors V. Biochemical sensors 2., Room 1:"PATRIA"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
14.00-14.20	WL.CHM-23-8194	Ethanol Vapor Imaging System "sniffer camera" for Evaluation of Alcohol Metabolism from Breath and Palm Skin Gas	Takahiro Arakawa (a), Kenta Iitani (b), Toshiyuki Sato (b), Koji Toma (a), Kohji Mitsubayashi (a,b,*)	(a) Department of Biomedical Devices and Instrumentation, Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, 2-3-10 Kanda-Surugadai, Chiyoda-ku, Tokyo 101-0062, Japan (b) Graduate school of Medical and Dental Sciences, Tokyo Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo 113-8549, Japan
14.20 - 14.40	WL.CHM-24-8382	A Spiking Artificial Olfactory Receptor Neuron (AORN) Based on Temperature Modulated Gas Sensor	A. Cafini(a), E. Martinelli(a,*), G. Galizia(b), C. Di Natale(a)	(a) Sensors Group, University of Rome Tor Vergata, Roma Italy (b) Neurobiology, University of Konstanz, Universitätsstraße 10, 78457 Konstanz, Germany
14.40-15.00	WL.CHM-25-8215	Membrane-Sealed Bioreactor for on-Site Autonomous Detection of Fungi Spore Contamination in Archives	P. Papireddy Vinayaka (a,b,*), S. van den Driesche (a,b), R. Blank (a,b), A. Chakraborty (a), R. Amin (a), M.W. Tahir (a,b), N.A. Zaidi (a,b), M. Frodl (c), W. Lang (a,b), M.J. Vellekoop (a,b)	(a) Institute for Microsensors, -actuators and -systems (IMSAS), University of Bremen, Bremen, Germany (b) Microsystems Center Bremen (MCB), Bremen, Germany (c) microFAB Service GmbH, Bremen, Germany
15.00-15.20	WL.CHM-26-8324	Intracellular Silicon Chips: Our Experience from the "stone age" to the nanosystem Age	Marta Duch(a), Rodrigo Gómez-Martínez(a), Alberto M. Hernández-Pinto(b), Patricia Vázquez(b), Kirill Zinoviev(a), Enrique J. de la Rosa(b), Jaume Esteve(a), Teresa Suárez(b) and José A. Plaza(a)	(a) Instituto de Microelectrónica de Barcelona, IMB-CNM (CSIC), Campus UAB, 08193, Cerdanyola, SPAIN (b) Centro de Investigaciones Biológicas, CIB (CSIC), C/Ramiro de Maeztu 9, 28040, Madrid, SPAIN
15.20-15.40	WL.CHM-27-8176	Label Free Detection of Lead(II) Ion Using Differential Phase Modulated Localized Surface Plasmon Resonance Sensors	G.Y. Qiu, Anton H.L. Law, S.P. Ng, C.M. Lawrence Wu (*)	Department of Physics and Materials Science, City University of Hong Kong, Hong Kong SAR, PR China
15.40-16.00	WL.CHM-28-8498	Effective flow control in autonomous polymer microfluidic systems based on surface modification and bioinspired micropatterning	E. Holczer, P.Fürjes	HAS - Centre for Energy Research, Inst. of Technical Physics and Materials Science, Budapest, Hungary

Materials and Processes I. Room2: "BARTOK"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
8.30-8.50	WL.PRO-1-8629	Nanopore Formation to Thin SiO ₂ Membrane in Electrolyte Solution Using Dielectric Breakdown	Kentaro Kawai(a,*), Takumi Hayashia, Yuichi Shibunob, Zhipeing Mab, Naoki Yamashitab, Seongsu Parkb, Kenta Arimaa, Mizuho Moritaa and Osamu Tabatab	(a) Department of Precision Science and Technology, Graduate School of Engineering, Osaka University, Yamadaoka 2-1, Suita, Osaka, 565-0871, Japan (b) Department of Microengineering, Graduate School of Engineering, Kyoto University, Katsura, Saikyo-ku, Kyoto, 615-8540, Japan
8.50-9.10	WL.PRO-2-8182	Spark Discharge Synthesis of Semiconductor nanoparticles for Thick-Film Metal Oxide Gas Sensors	A.A. Efimov (a), I.A. Volkov (a), V.V. Ivanov (a), A.A. Vasiliev (b,d,*), A.E. Varfolomeev (a,b), A.V. Pisyakov (b), A.S. Lagutin (b), T. Maeder (c)	(a) Moscow Institute of Physics and Technology, Dolgoprudny, Moscow region, Russia (b) NRC Kurchatov Institute, Moscow, Russia (c) Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland (d) Ostec Enterprise Ltd., Moscow, Russia
9.10-9.30	WL.PRO-3-8511	Piezoelectric AlN films for FPW sensors with improved device performance	Markus Reusch (a,b,*), Katarzyna Holc (b), Lutz Kirste(b), Philip Katus(c), Leonhard Reindl(c), Oliver Ambacher(a,b) and Vadim Lebedev (b)	(a) Laboratory for Compound Semiconductor Microsystems, IMTEK, University of Freiburg, Freiburg, Germany (b) Fraunhofer Institute for Applied Solid State Physics, Freiburg, Germany (c) Laboratory for Electrical Instrumentation, IMTEK, University of Freiburg, Freiburg, Germany
9.30 - 9.50	WL.PRO-4-8618	Integrated Piezoelectric Nanowire Arrays for High Resolution Tactile Mapping	J. Volk(a), J. Radó(a), I. E. Lukács(a), N. Q. Khanh(a), R. Erdélyi(a), G. Battistig(a), C. Sturm(b), M. Grundmann(b), A. Gaillot(c), C. Loubat(c)	(a) MTA EK MFA, Budapest, Hungary (b) Universität Leipzig, Leipzig, Germany (c) Specific Polymers, Castries, France
9.50-10.10	WL.PRO-5-8429	A Flexible Multifunctional Tactile Sensor Using interlocked ZnO Nanorod Arrays for Artificial Electronic Skin	Min-Sheng Suen, Yi-Cheng Lin, Rongshun Chen(*)	Department of Power Mechanical Engineering, National Tsing Hua University, Hsinchu 30013, Taiwan

Materials and Processes II. Room2: "BARTOK"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
11.10-11.30	WL.PRO-6-8061	Silica nanoparticles Assisted Electrochemical Biosensor for the Detection and Degradation of Escherichia coli Bacteria	Marion Mathelié-Guinlet (a,b), Ibtissem Gammoudi (a), Laure Beven (c), Fabien Moroté (a), Marie-Hélène Delville (b), Christine Grauby-Heywang (a), Touria Cohen-Bouhacina (a,d,*)	(a) LOMA, Université de Bordeaux, UMR CNRS 5798, 351 cours de la Libération, 33400 Talence, France (b) ICMCB, 87 avenue du Dr Albert Schweitzer, 33600 Pessac, France (c) INRA, UMR 1332 Biologie du Fruit et Pathologie, 33140 Villenaved'Ornon, France (d) Cellule de transfert NanoPhyNov, ADERA, LOMA, 351 cours de la Libération, 33400 Talence, France
11.30-11.50	WL.PRO-7-8383	Single metal oxide nanowire devices for ammonia and other gases detection in humid atmosphere	M. Donarelli(a,b,*), M. Ferroni(a,b), A. Ponzoni(b), F. Rigoni(a,b), D. Zappa(b), C. Baratto(b), G. Faglia(a,b), E. Comini(a,b), G. Sberveglieri(a,b)	(a) Sensor Lab., Dept. of Information Engineering, University of Brescia, Via Branze 38, 25123 Brescia, Italy (b) CNR-INO Brescia, Via Branze 38, 25123 Brescia, Italy
11.50-12.10	WL.PRO-8-8644	Site-selectively grown p-type Ge NWs as a gas sensor	J. Samà(a,*), G. Domènech-Gil (a), I. Gràcia(b), J. Santander(b), C. Cané(b), M. Seifner(c), S. Barth(c), A. Romano-Rodríguez(a)	(a) Universitat de Barcelona (UB), MIND-Departament of Engineering and Institute of Nanoscience and Nanotechnology (IN2UB) 08028 Barcelona, Spain (b) Consejo Superior de Investigaciones Científicas (CSIC), Institut de Microelectrónica de Barcelona-Centro Nacional de Microelectrónica, 08193 Bellaterra, Spain (c) Vienna University of Technology (TUW), Institute of Materials Chemistry, 1060 Vienna, Austria
12.10 - 12.30	WL.PRO-9-8014	Low-Cost Silver Screen-Printed Electrowetting on Dielectrics Structure for Optofluidic Switches	Andreas Tröls (*), Herbert Enser, Bernhard Jakoby	Institute for Microelectronics and Microsensors, Johannes Kepler University, Linz-4040, Austria
12.30-12.50	WL.PRO-10-8202	Pulsed Laser Deposition for Improved Metal-Oxide Gas Sensing Layers	Joni Huotari (a,*), Ville Kekkonen (b), Jarkko Puustinen (a), Jari Liimatainen (b), Jyrki Lappalainen (a)	(a) Faculty of information technology and electrical engineering, University of Oulu, Erkki Koiso-Kanttilankatu 3, 90570 Oulu, Finland (b) Picodeon Ltd., Piisilta 1, 91100 Ii, Finland

Accuracy Room3: "LISZT"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
8.30-8.50	WL.ACC-1-8131	Resilience to Vibration of a Tuning Fork MEMS Gyroscope	Alexandra Koumela (a,b,*), Christophe Poulain (a,b), Carole Le Goc (a,b), Thierry Verdot (a,b), Loic Joet (a,b), Patrice Rey (a,b), Audrey Berthelot (a,b), Guillaume Jourdan (a,b)	(a) Univ. Grenoble Alpes, F-38000 Grenoble, France (b) CEA, LETI, MINATEC Campus, F-38054 Grenoble, France
8.50-9.10	WL.ACC-2-8196	A Resonant Pressure Sensor Capable of Temperature Compensation with Least Squares Support Vector Machine	Lin Zhu (a,b), Bo Xie (a,b), Yonghao Xing (a,b), Deyong Chen (b,*), Junbo Wang (b,*), Yanshuang Wang (a,b), Qiuxu Wei (a,b), Jian Chen (b)	(a) University of Chinese Academy of Sciences, No.80, Zhongguancun East Road, Haidian District, Beijing 100190, China (b) State Key Laboratory of Transducer Technology, Institute of Electronics, Chinese Academy of Sciences, No.19, North 4th Ring Road, Haidian District, Beijing 100190, China
9.10-9.30	WL.ACC-3-8038	Influence of Optical Fiber Coatings on the Long-Term Accuracy of Interferometric Fiber-Optic Current Sensors	Miklós Lenner (*), Lin Yang, Andreas Frank, Klaus Bohnert	ABB Switzerland Ltd., Corporate Research Center, CH5405 Baden-Dättwil, Switzerland
9.30 - 9.50	WL.ACC-4-8408	Improved repeatability in planar water-gated field effect transistor (WG-FET) with 16-nm-thick single crystalline Si film	B.G. Sonmez(*), O. Ertop, S. Mutlu	Dept. of Electrical & Electronics Eng., Bogazici University, Istanbul, Turkey
9.50-10.10	WL.ACC-5-8049	A Degradation Preventing Method for the Organic Material in Gas Sensing Application by Using CMOS Submicron Wire Sensor	I-Shun Wang (a), Wen-Yu Chuang (a), Sou-Peng Yeh (a), Chih-Ting Lin (a,b,*)	(a) Graduate Institute of Electronics Engineering, National Taiwan University, No. 1, Sec. 4, Roosevelt Road, Taipei, 106, Taiwan (b) Graduate Institute of Biomedical Electronic and Bioinformatics, National Taiwan University, No. 1, Sec. 4, Roosevelt Road, Taipei, 106, Taiwan

Microfluidics II. Systems Room3: "LISZT"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
11.10-11.30	WL.FLU-7-8316	Free Flow Electrophoresis Separation of Proteins and DNA Using microfluidics and Polycarbonate Membranes	Pedro Novo (*), Matthias Jender, Margherita Dell'Aica, René P. Zahedi, Dirk Janasek	Protein Dynamics Group, Leibniz-Institut für Analytische Wissenschaften – ISAS – e.V., Otto-Hahn Str. 6b, 44227 Dortmund, Germany
11.30-11.50	WL.FLU-8-8063	Polymer Micro Chips for the Analysis of Calcification Risk	P. Maurer (a,*), S. Gräber (b), W. Jahn-Dechent (b), W. K. Schomburg (a)	(a) Lehr- und Forschungsgebiet Konstruktion und Entwicklung von Mikrosystemen (KEmikro), Aachen, Germany (b) Helmholtz-Institut für Biomedizinische Technik - Zell- und Molekularbiologie an Grenzflächen, Universitätsklinikum Aachen, Germany
11.50-12.10	WL.FLU-9-8159	Sensing Platform for Computational and Experimental Analysis of Blood Cell Mechanical Stress and Activation in Microfluidics	Markus Gusenbauer (a,*), Giulia Mazza (a), Martin Brandl (a), Thomas Schrefl (a), Renáta Tóthová (b), Iveta Jancigová (b), Ivan Cimrák (b)	(a) Center for Integrated Sensor Systems, Danube University Krems, Dr.-Karl-Dorrek-Strae 30, 3500 Krems, Austria (b) Department of Software Technologies, University of Zilina, Univerzitna 8215/1, 010 26 Zilina, Slovakia
12.10 - 12.30	WL.FLU-10-8363	Photoresist Micro-Chamber for the Diffracted X-Ray Tracking Method Recording Single-Molecule Conformational Changes	Kio Tahara, Yoshikazu Hirai (*), Hirohumi Shimizu, Toshiyuki Tsuchiya, Osamu Tabata	(a) Department of Micro Engineering, Kyoto University, C3 Kyoto daigaku-Katsura, Nishikyo-ku, Kyoto 615-8540, Japan (b) Faculty of Medical Sciences, Fukui University, 23-3 Matsuokashimoaizuki, Eiheiji-cho, Yoshida-gun, Fukui 910-1193, Japan
12.30-12.50	WL.FLU-11-8355	A Wearable MEMS Gas Chromatograph for Multi-Vapor Determinations	J. Wang (a), N. Nuñovero (b), Z. Lin (b), R. Nidetz (c), S. Buggaveeti (c), C. Zhan (b), K. Kurabayashi (c), W. H. Steinecker (d), E. T. Zellers (a,b,*)	(a) Department of Chemistry, University of Michigan, Ann Arbor, MI 48109, USA (b) Department of Environmental Health Sciences, University of Michigan, Ann Arbor, MI 48109, USA (c) Department of Mechanical Engineering, University of Michigan, Ann Arbor, MI 48109, USA (d) VGC Chromatography, Dayton, OH, USA

Optical I., Room4: "LEHAR"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
8.30-8.50	WL.OPT-1-8235	Measurements Performance of a Bioradar for Human Respiration Monitoring	G. Gennarelli (a), F. Soldovieri (a), L. Marciano (b), G. Cerasuolo (b), O. Petrella (b,*)	(a) IREA-CNR, Institute for Electromagnetic Sensing of the Environment - National Research Council, via Diocleziano 328, 80124 Napoli, Italy (b) CIRA, Italian Aerospace Research Center, via Maiorise, 81043 Capua (CE), Italy
8.50-9.10	WL.OPT-2-8349	MEMS Infrared Emitter and Detector for Capnography Applications	M.F. Chowdhury (a,*), R. Hopper (a), S. Z. Ali (a), J. W. Gardner (a,b), and F. Udrea (a,c)	(a) Cambridge CMOS Sensors, Cambridge, United Kingdom (b) School of Engineering, Warwick University, Warwick, United Kingdom (c) Department of Engineering, University of Cambridge, Cambridge, United Kingdom
9.10-9.30	WL.OPT-3-8333	CMOS Integrated UV-Photodiodes	Daniel Gäbler (*), Christoph Henkel, Sebastian Thiele	X-FAB Semiconductor Foundries AG, Erfurt, Germany
9.30 - 9.50	WL.OPT-4-8057	Modeling of a Highly Optimizable Vertical-Cavity Thermal Emitter for the Mid-Infrared	Gerald Pühringer (*), Bernhard Jakoby	Johannes Kepler University, Altenbergerstrae 69, 4040 Linz, Austria
9.50-10.10	WL.OPT-5-8151	Impact of a Non-Linear Transfer Characteristic on the Evaluation of Static Displacements with a MOEMS Transducer	H. Steiner (a,*), W. Hortschitz (a), A. Kainz (b), M. Stiffer (a), A. Jachimowicz (b), J. Schalko (b), F. Keplinger (b), F. Kohl (a)	(a) Center for Integrated Sensor Systems, Danube University Krems, Wr. Neustadt, Austria (b) Institute of Sensor and Actuator Systems, TU Wien, Vienna, Austria
10.10 - 10.30	WL.OPT-6-8510	Nondispersive infrared photometer based on a rotating interference filter for investigation of climacteric fruit ripening	André Eberhardt(a, *), Katrin Schmitt(b) , Sven Rademacher(b) , Jochen Huber(b) ,Marie-Luise Bauersfeld (b) , Jürgen Wöllenstein (a,b)	(a) Department of Microsystems Engineering - IMTEK, University of Freiburg, Freiburg, Germany (b) Fraunhofer Institute for Physical Measurement Techniques IPM, Freiburg, Germany

Optical II., Room4: "LEHAR"

Presentation time	Presentation code	Paper Title	Authors list	Affiliations
11.10-11.30	WL.OPT-7-8203	Fiber Optic Lateral Coupling Force Sensor for Biomedical Applications	Jang Ah Kim (a), Atul Kulkarni (b), Changmin Kim (b), Kihong Park (c), Taesung Kim (a,b,c,*)	(a) SKKU Advanced Institute of Nano Technology (SAINT), Sungkyunkwan University, 2066 Seobu-ro, Suwon 16419, Republic of Korea (b) School of Mechanical Engineering, Sungkyunkwan University, 2066 Seobu-ro, Suwon 16419, Republic of Korea (c) Department of Convergence Mechanical Engineering, Sungkyunkwan University, 2066 Seobu-ro, Suwon 16419, Republic of Korea
11.30-11.50	WL.OPT-8-8314	Chipless Wireless Temperature Sensor for Machine Tools Based on a Dielectric Ring Resonator	A. Jiménez Sáez (a,*), E. Polat (a), C. Mandel (a), M. Schüßler (a), B. Kubina (a), T. Scherer (b), N. Lautenschläger (b), R. Jakoby (a)	(a) Institute for Microwave Engineering and Photonics, Technische Universität Darmstadt, Darmstadt, Germany (b) Institut für Produktionsmanagement, Technologie und Werkzeugmaschinen, Technische Universität Darmstadt, Darmstadt, Germany
11.50-12.10	WL.OPT-9-8332	Colorimetric Gas Sensing with Enhanced Sensitivity	Katrin Schmitt (a,*), Karina Tarantik (a), Carolin Pannek (a), Gerd Sulz (a), Jürgen Wöllenstein (a,b)	(a) Fraunhofer Institute for Physical Measurement Techniques IPM, Heidenhofstr. 8, 79110 Freiburg, Germany (b) Department of Microsystems Engineering-IMTEK, University of Freiburg, Georges-Koehler-Allee 102, 79110 Freiburg, Germany
12.10 - 12.30	WL.OPT-10-8562	Implementation of CMOS-compatible metamaterial absorber for gas sensing application	E. Karimi Shahmarvandi, M. Ghaderi, P. Ayerden, G. de Graaf and R. F. Wolffenbuttel	Faculty EEMCS, Delft University of Technology, Mekelweg 4, 2628 CD Delft, Netherlands
12.30-12.50	WL.OPT-11-8512	Fiber Bragg Grating distributed chemical sensors	Arjen Boersma (a,*), Ray Cremers (a), Rob Jansen (b)	(a) TNO, De Rondom 1, 5612AP Eindhoven, The Netherlands (b) TNO, Oude Waalsdorperweg 63, 2597 AK, Den Haag, The Netherlands

Open session INCITE Room2: "BARTOK"

Presentation time	Presentation title	Authors list	Affiliations
14.00-16.00	INCITE: Smart solutions for advanced systems and minimally invasive interventions	Katia Donato	Philips Electronics Nederland B.V., The Netherlands
	Towards the next generation of Smart Catheters	Ronald Dekker and Vincent Henneken	Philips Electronics Nederland B.V., The Netherlands
	Ultrasound MEMS by SILEX - the TSV and PZT on C-SOI integration solutions	Samira Nik and Thorbjörn Ebefors	Silex Microsystems AB, Sweden
	Force feedback in Minimal Invasive Surgery robotics	Zbigniew Nawrat, Csaba Dűcső and Péter Fűrjes	Foundation of Cardiac Surgery Development, Poland HAS EK MFA Hungary
	Towards the next generation pressure sensor catheters	Anu Karkkainen, Heikki Kuisma	VTT Technical Research Centre of Finland, Finland Murata Electronics Oy, Finland
	Towards Shape Memory Alloy actuated steerable catheters	Jaap Haartsen	Philips Electronics Nederland B.V., The Netherlands
	Fabrication and characterization of printed EAP based actuators on flexible substrates	Albert van Breemen	TNO Netherlands Organisation for Applied Scientific Research, The Netherlands

Open session PIEZOMAT Room3:"LISZT"

Presentation time	Presentation title	Authors list	Affiliations
14.00-16.00	Introduction of the PiezoMAT EU FP7 project	Antoine Viana	CEA LETI
	Heterogeneous integration of nano-objects onto microelectronics chips in CEA clean rooms	Marjolaine Allain	CEA LETI
	High resolution fingerprint sensing – next generation in biometric identification	Stéphane Revelin	Safran Identity & Security
	On chip integration of piezoelectric nanowires	Janos Volk , Chris Sturm	MTA EK MFA, ULEI
	On demand Functional polymers and materials for optoelectronic devices and sensors	Alain Graillot	Specific Polymers
	Piezo-electro-mechanical characterization of nano-wire sensor structures	Vadim Lebedev	Fraunhofer IAF
	Nanowire devices for beyond CMOS technologies: lithography contacting challenges	Nikolai Petkov	Tyndall

Open session SENSIndoor Room3:"LEHAR"

Presentation time	Presentation title	Authors list	Affiliations
14.00-16.00	Introduction Application requirements and project goals: selective detection of hazardous VOCs at ppb level for IAQ	Andreas Schütze	Saarland University
	Pulsed Laser Deposition for improved metal-oxide gas sensing layers	Joni Huotari, Ville Kekkonen	University of Oulu Picodeon Ltd Oy
	Novel low-cost selective pre-concentrators based on metal organic frameworks	Isabel Wilhelm, Max Rieger, Christine Alépée	Fraunhofer ICT, SGX Sensortech SA
	SiC-FET sensors for selective and quantitative detection of VOCs down to ppb level	Donatella Puglisis, Maciej Sobocinski, Mike Andersson	Linköping University, University of Oulu, SenSiC AB
	Miniaturized integrated gas sensor systems combining metal oxide gas sensors and pre-concentrators	Martin Leidinger,Christine Alépée	Saarland University, SGX Sensortech SA
	Dynamic multi-sensor operation and read-out for highly selective gas sensor systems	Manuel Bastuck, Wolfhard Reimringer	Saarland University, 3S GmbH
	System calibration and evaluation under defined lab and real field conditions	Tilman Sauerwald, Olivier Martimort	Saarland University, NanoSense SARL