



Poster Programme

Poster Session 1

Monday 8th May 2017

10:50-11:30, 12:50-14:20 & 16:00-16:40

Kindly note- All posters can be put up throughout the conference however they should be presented during the respective sessions

[P001]	A droplet-based lab-on-a-chip for screening of cellular stress biochemical markers Y. Silina, <i>INM-Leibniz Institute for New Materials, Germany</i>
[P003]	p-Coumaric acid, a novel biomarker for quantifying cellular hypoxic stress by HILIC-DAD-ESI-MS assay Y. Silina*, C. Fink-Straube, <i>INM-Leibniz Institute for New Materials, Germany</i>
[P005]	Microfluidic hydrodynamic traps for electrical Impedance spectroscopy of Micro Beads A. El Hasni, U. Schnakenberg*, <i>RWTH Aachen University, Germany</i>
[P007]	Development of novel inhibition biosensor array based on bacteria for Water Pollution Detection H. Abu-Ali*, A. Nabok, T. Smith, M. Al-Shanawa, <i>Sheffield Hallam University, UK</i>
[P009]	Detection and determination of neuromediator's exchange markers for prognostics and diagnostics of neurodegenerative diseases in result of radiotherapy M.I. Makedonskaya* ^{1,2} , I.A. Veselova ^{1,2} , A.A. Bayzhumanov ¹ , S.N. Kalmykov ^{1,2} , T.N. Shekhovtsova ¹ , ¹ M.V. Lomonosov Moscow State University, Russia, ² National Research Centre "Kurchatov Institute", Russia
[P011]	Digital measurement of target sample in paper microfluidic device S-G. Jeong, K-K. Kang, C-S. Lee*, <i>Chungnam National University, Republic of Korea</i>
[P013]	A novel enzymatic approach to rapid, sensitive, and selective fluorescent determination of flavonoids I.A. Veselova, M.E. Barsukova, T.N. Shekhovtsova*, <i>Lomonosov Moscow State University, Russia</i>
[P015]	Two Electrodes System of 3D Interdigitated Electrode Array in Microchannel D. Lee ¹ , S. Lee ¹ , T.D. Chung* ^{1,2} , ¹ Seoul National University, Republic of Korea, ² Advanced Institutes of Convergence Technology, Republic of Korea
[P017]	Silver-polymer layers as a novel platform for determination of hemoproteins by surface enhanced Raman spectroscopy E.A. Sergeeva* ¹ , O.E. Eremina ^{1,2} , A.V. Sidorov ^{1,2} , I.A. Veselova ^{1,2} , T.N. Shekhovtsova ¹ , E.A. Goodilin ^{1,3} , ¹ Moscow State University, Russia, ² National Research Centre Kurchatov Institute, Russia, ³ Institute of General and Inorganic Chemistry, Russia
[P019]	Voltammetric behaviour of zinc at a 3-D printed carbon nanofiber-graphite-polystyrene electrode and its anodic stripping voltammetric determination in water K.C. Honeychurch* ¹ , Z. Rymansaib ² , P. Iravani ² , ¹ University of the West of England, UK, ² University of Bath, UK
[P021]	Hometropically aligned chromonic liquid crystals and "sandwich" bio-species for rapid and accurate pathogen detection L. Tortora, <i>Crystal Diagnostics, USA</i>
[P023]	Chemical induction of cell membrane leakage measured under ammonia superfusion conditions using whole cell-based pH sensing transistors T. Goda*, Y. Miyahara, <i>Tokyo Medical and Dental University, Japan</i>
[P025]	Development of epinephrine screen printed amperometric biosensor modified with palladium nanoparticles and superoxide dismutase enzyme M. Barquero-Quirós*, J. Arcos - Martínez, <i>University of Costa Rica, Costa Rica</i>
[P027]	Aptamer-mediated biosensing: from malaria diagnosis to DNA nanostructure dynamics Y.W. Cheung, S.C.C. Shiu, L.A. Fraser, S. Liang, R.M. Dirkwager, A.B. Kinghorn, M.S.L. Tang, J.A. Tanner*, <i>University of Hong Kong, Hong Kong</i>
[P029]	Development of carbon quantum dot-based nano-hybrid materials and their application as



	electrochemical biosensors V. Buk* ¹ , M. Pemble ^{1,2} , K. Twomey ¹ , ¹ Tyndall National Institute, Ireland, ² University College Cork, Ireland
[P031]	Multi-Parametric Potentiometric Sensing Platforms with Rigid and Flexible PCB Electrodes for Low-Cost, Disposable Chemical Sensing S. Ivanova*, P. Kassanos, G-Z. Yang, <i>Imperial College, UK</i>
[P033]	Low-cost and on-site microbial fuel cell biosensors for water quality monitoring M. Di Lorenzo*, J. Chouler, S. Rengaraj, <i>University of Bath, UK</i>
[P035]	Real-time low-cost soil diagnostics using innovative field-based based biosensors R. Saravanan*, D.L. Mirella, <i>University of Bath, UK</i>
[P037]	Zinc oxide based bio-surface for detection of C-reactive protein L. Cao*, J. Kiely, M. Piano, R. Luxton, <i>Institute of Bio-sensing Technology, University of the West of England, UK</i>
[P039]	Planar membrane displaying IgGs in an oriented immobilization manner for biosensor surface M. Iijima*, S. Kuroda, <i>ISIR-Sanken, Osaka University, Japan</i>
[P041]	Colorimetric detection of pathogenic bacteria using peroxidase-like nanodiamonds D. Lee* ¹ , D. Kwon ² , S. Jeon ² , O. Kwon ¹ , K-H. Lee ¹ , ¹ Korea Institute of Machinery and Materials (KIMM), Republic of Korea, ² Pohang University of Science and Technology (POSTECH), Republic of Korea
[P043]	Non-invasive blood sensor using super-resolution technique on Multi-channel Fourier-transform Spectroscopy A. Watanabe*, H. Furukawa, <i>National Institute of Advanced Industrial Science and Technology (AIST), Japan</i>
[P045]	Magnetoinmunosensor for the detection of important breast cancer biomarkers in serum, cell lysates and intact cells U. Eletxigerra* ¹ , J. Martinez-Perdiguero ² , S. Merino ¹ , R. Barderas ³ , R.M. Torrente-Rodriguez ³ , V. Ruiz-Valdepeñas ³ , R. Villalonga ³ , J.M. Pingarron ³ , S. Campuzano ³ , ¹ IK4-Tekniker, Spain, ² Euskal Herriko Unibertsitatea, Spain, ³ Universidad Complutense de Madrid, Spain
[P047]	Lutetium phthalocyanine doped silica-polyaniline "bead-on-bead" nanostructures: A novel electrochemical probe for glucose biosensor application H. Al-Sagur* ¹ , S. Komathi ¹ , N. Farmilo ¹ , A.G. Gurek ² , D. Atilla ² , A.K. Hassan ¹ , ¹ Sheffield Hallam University, UK, ² Gebze Technical University, Turkey
[P049]	Novel three-dimensional impedance-based aptasensor for detection of E. coli O157:H7 S. Brosel-Oliu* ¹ , R. Ferreira ¹ , N. Uria ¹ , N. Abramova ¹ , R. Gargallo ² , F.X. Muñoz ¹ , A. Bratov ¹ , ¹ Institute of Microelectronics of Barcelona (IMB-CNM, CSIC), Spain, ² University of Barcelona, Spain
[P051]	A DNA sensor based on Impedance Spectroscopy using polyelectrolytes as the immobilization agent N. Basu*, N. Bhat, <i>Indian Institute of Science, India</i>
[P053]	Sub-nanomolar Rayleigh surface acoustic wave resonator biosensor with positive and negative reflectors M. Agostini* ^{1,2} , G. Greco ¹ , M. Cecchini ¹ , ¹ Scuola Normale Superiore di Pisa (SNS) and Consiglio Nazionale delle Ricerche (CNR), Italy, ² Istituto Italiano di Tecnologia (IIT), Italy
[P055]	Flexible, low cost histamine sensor for food quality tests using CNTFETs. S. Joshi* ¹ , V.D. Bhatt ¹ , P. Lugli ² , ¹ Technische Universität München, Germany, ² Free University of Bozen-Bolzano, Italy
[P057]	Binding of the His-tagged tail protein J of bacteriophage lambda with Escherichia coli K-12 H. Shin*, W. Lim, <i>Dongseo University, Republic of Korea</i>
[P059]	3D tumor spheroid fabrication system using droplet based microfluidics B.S. Kwak* ¹ , Y.H. Lee ^{1,2} , J.H. Lee ^{1,3} , J.S. Lim ³ , ¹ Korea Institute of Machinery and Materials, Republic of Korea, ² YOUNG NAM UNIVERSITY, Republic of Korea, ³ Kyungpook National University, Republic of Korea
[P061]	Circular magnetic activated cell sorting system for selective isolation of heterogeneous CTCs by EpCAM expression level differences B.S. Kwak* ¹ , J.H. Lee ^{1,2} , J.H. Lee ^{1,2} , S.W. Kang ² , ¹ Korea Institute of Machinery and Materials, Republic of Korea, ² Kyungpook National University, Republic of Korea
[P063]	Surface plasmon resonance based fiber optic caffeine biosensor utilizing reduced graphene oxide entrapped chitosan modified silica sol gel nanohybrid membrane R. Kant, R. Tabassum*, B.D. Gupta, <i>IIT Delhi, India</i>



[P065]	Electrochemical DNA biochips for detection of human papillomaviruses M. Bartosik*, H. Durikova, R. Hrstka, <i>Masaryk Memorial Cancer Institute, Czech Republic</i>
[P067]	Silica nanoparticles, a keystone for the design of an ultrasensitive biosensor for Escherichia coli bacteria M. Mathelié-Guinlet* ^{1,2} , I. Gammoudi ¹ , L. Beven ¹ , F. Moroté ¹ , C. Grauby-Heywang ¹ , M.H. Delville ² , T. Cohen-Bouhacina ¹ , ¹ Université de Bordeaux, France, ² Institut de Chimie de la Matière Condensée de Bordeaux, France, ³ INRA, France
[P069]	Cancer cell discrimination through nanofabricated 3D scaffolds with controlled stiffness E.D. Lemma* ^{1,2} , B. Spagnolo ¹ , V. Brunetti ¹ , L. Sileo ¹ , F. Rizzi ¹ , M. De Vittorio ^{1,2} , F. Pisanello ¹ , ¹ Istituto Italiano di Tecnologia, Italy, ² Università del Salento, Italy
[P071]	Comparison of a Capacitive Sensor Functionalized with Natural or Synthetic Receptors Selective towards Benzo(a)pyrene N. Beloglazova* ¹ , P. Lenain ¹ , M. Hedstrom ² , D. Knopp ³ , S. De Saeger ¹ , ¹ Ghent University, Belgium, ² Capsenze HB, Sweden, ³ Technical University München, Germany
[P073]	Selective cell swelling mediated by hypo-osmotic stress for high sensitive isolation of circulating tumor cells J. Bu*, Y-T. Kang, T.H. Lee, J.H. Choi, Y-H. Cho, <i>Korea Advanced Institute of Science and Technology, Republic of Korea</i>
[P075]	Exosome-mimetic nanovesicle generation using mass producible fabric chip J. Bu*, T.H. Lee, Y-H. Cho, <i>Korea Advanced Institute of Science and Technology, Republic of Korea</i>
[P077]	Simple and efficient multi-staining device for lung cancer screening T.H. Lee* ^{1,2} , J. Bu ¹ , Y-T. Kang ¹ , Y.J. Kim ¹ , B.H. Kim ^{3,4} , S. Hyun ² , I.S. Kim ² , Y-H. Cho ¹ , ¹ Korea Advanced Institute of Science and Technology, Republic of Korea, ² Eulji University, Republic of Korea, ³ Armed Forces Medical Research Institute, Republic of Korea, ⁴ Seoul National University College of Medicine, Republic of Korea
[P079]	Porous silicon photoluminescence biosensor for rapid and sensitive detection of Ochratoxin A I. Iatsunskyi* ¹ , V. Myndrul ² , R. Viter ³ , M. Taran ⁴ , M. Koval ² , N. Starodub ⁴ , V. Silamikelis ³ , V. Smyntyna ² , A. Ramanavicius ⁵ , S. Jurga ¹ , ¹ Adam Mickiewicz University, Poland, ² Odessa National I.I. Mechnikov University, Ukraine, ³ University of Latvia, Latvia, ⁴ National University of Life and Environmental Sciences, Ukraine, ⁵ State Research Institute Center for Physical Sciences and Technology, Lithuania
[P081]	ENFETs for real time biomonitoring of Urea and Creatinine in urine C.A. Cordeiro* ^{1,2} , M.B.J. Dieemer ³ , T. Koster ¹ , M. Nijsteen ⁵ , B. de Reuver ⁴ , G. Flik ¹ , ¹ Brains On-Line B.V., The Netherlands, ² University of Groningen, The Netherlands, ³ Sentron Europe B.V., The Netherlands, ⁴ Welling B.V., The Netherlands, ⁵ University Medical Hospital Groningen (UMCG), The Netherlands
[P083]	Label-free, Affinity based electrical double layer modulated biosensors on aptamer-functionalized MoS2 nanosheets K.C. Lin ¹ , B. Jagannath ¹ , R. Ghanta ¹ , S. Muthukumar ² , S. Prasad* ¹ , ¹ University of Texas, Dallas, USA, ² Enlisen LLC, USA
[P085]	Direct blood-based detection of miRNA for breast cancer in metastasis state using surface enhanced Raman scattering W.H. Kim*, J.U. Lee, S.J. Sim, <i>Korea University, Republic of Korea</i>
[P087]	CE-SELEX application for selection of DNA aptamers targeting small molecules M. Onodera* ^{1,2} , K. Sueyoshi ³ , M. Umetsu ² , ¹ Panasonic Corporation, Japan, ² Tohoku University, Japan, ³ Osaka Prefecture University, Japan
[P089]	An integrated sensor board for real-time optimization of the electrical settings of a microbial electrolysis cell T.R. Molderez* ^{1,2} , X. Zhang ² , M. Verhelst ¹ , K. Rabaey ² , ¹ KU Leuven, Belgium, ² Ghent University, Belgium
[P091]	A novel approach: Ultrasensitive enhancement of poly-silicon nanowire field-effect transistor for cervical cancer screening Y.B. Manga ¹ , J.Y. Hung ¹ , W.L. Yang ² , H.M. Huang ¹ , C.C. Wu* ² , ¹ Taipei Medical University, Taiwan, ² Feng Chia University, Taiwan
[P093]	Optical biosensor for detection of miRNA-155 as a potential biomarker for breast cancer screening F. Hakimian*, H. Ghourchian, M. Zarei Ghobadi, S. Hadian-Ghazvini, <i>University of Tehran, Iran</i>
[P095]	In-Channel electrowetting technology for lab-on-chip applications



	N. Lovecchio*, M. Nardecchia, A. Buzzin, G. Petrucci, F. Costantini, A. Nascetti, G. de Cesare, D. Caputo, <i>Sapienza University of Rome, Italy</i>
[P097]	Highly sensitive electrical detection and manipulation of microdroplets on a portable and low-cost microfluidic platform P.K. Isgor ¹ , D. Moschou ² , C. Elbuken* ¹ , ¹ <i>Bilkent University, Turkey</i> , ² <i>University of Bath, UK</i>
[P099]	Development of biomimetic receptors using computationally simulated targets for QCM-based disease detection Z. Altintas* ¹ , R. Schomäcker ¹ , R. Sussmuth ¹ , U. Wollenberger ² , F.W. Scheller ² , ¹ <i>Technical University of Berlin, Germany</i> , ² <i>University of Potsdam, Germany</i>
[P101]	Novel biophysical applications utilizing electro-switchable bio-surfaces - switchSENSE®: biophysical characterization of cell-like structures W. Kaiser*, H. Müller-Landau, U. Rant, <i>Dynamic Biosensors GmbH, Germany</i>
[P103]	Toward atomically-controlled dendrimer-encapsulated nanoparticles: Synthesis and useful properties in biosensing applications Y. Ju, J. Kwon, H. Lim, J. Kim*, <i>Kyung Hee University, Republic of Korea</i>
[P105]	Gas phase biosensor (bio-sniffer) using S-ADH (secondary alcohol dehydrogenase) for exhaled isopropanol as a potential volatile biomarker P.-J. Chien* ¹ , T. Suzuki ¹ , M. Tsujii ¹ , M. Ye ¹ , K. Toma ² , T. Arakawa ¹ , Y. Iwasaki ² , K. Mitsubayashi ¹ , ¹ <i>Tokyo Medical and Dental University, Japan</i> , ² <i>Kansai University, Japan</i>
[P107]	Engineered nanoarray biochip based on ordered gold nanorod self-assembly for plasmon-enhanced DNA detection L. Tang*, Z. Mei, <i>University of Texas at San Antonio, USA</i>
[P109]	Rapid and sensitive identification and quantification of illicit drugs by combining bottom up fabricated surface enhanced Raman scattering (SERS) substrates and chemometrics J. Raveendran*, H. Dies, C. Escobedo, A. Docoslis, <i>Queen's University, Canada</i>
[P111]	Application of mechanistic models to cyclic voltammograms for the optimization of biosensor design D. Semenova*, A. Zubov, A.C. Fernandes, U. Krühne, K.V. Gernaey, <i>DTU, Denmark</i>
[P113]	An Enzyme-loaded Paper Combined Impedimetric Flexible Sensor for Non-invasive Ultra Low-level Cholesterol Determination in Saliva Y.J. Lee*, K.S. Shin, J.Y. Kang, S.H. Lee, <i>Korea Institute of Science and Technology, Republic of Korea</i>
[P115]	Low power, highly sensitive nano-gap embedded TGRC-MOSFET for the detection of neutral biomolecules A. Kumar*, M.M. Tripathi, R. Chaujar, <i>Delhi Technological University, India</i>
[P117]	Graphene foam/Ag-ZnO ultra-sensitive plasmonic nanocomposite for optimal SERS sensing of organic pollutants S. Bharadwaj, A. Pandey, A. Qureshi*, <i>Sabancı University, Turkey</i>
[P119]	In situ control of analyte pH within a microfluidic electrochemical cell P.W. Ruch*, N. Ebejer, B. Michel, <i>IBM Research - Zurich, Switzerland</i>
[P121]	Photosynthetic reaction-center/graphene biohybrid for optoelectronics T. Szabó* ¹ , R. Panajotovic ² , T. Tijana Tomasevic ² , J. Vujin ² , A.E. Sarrai ¹ , G. Váró ³ , Z. Szegeletes ³ , G. Garab ³ , K. Hajdu ¹ , L. Nagy ¹ , ¹ <i>University of Szeged, Hungary</i> , ² <i>University of Belgrade, Serbia</i> , ³ <i>HAS Biological Research Center, Hungary</i>
[P123]	Full field polarization phase shifting interferometer for studying the cell osmosis behavior C.Y. Han*, D.F. Chen, H.B. Lai, Z.E. Liu, <i>National United University, Taiwan</i>
[P125]	Design and fabrication of different platinum microelectrodes morphologies for electrical impedance tomography in biomedical applications N. Jamil*, Y. Yang, J. Jia, S. Smith, A. Tsiamis, <i>The University of Edinburgh, UK</i>
[P127]	Highly sensitive antibody-coated superparamagnetic beads assay for rapid detection of cardiac troponin A. Beizaei, S. Boustal*, G.U. Lee, <i>University College Dublin, Ireland</i>
[P129]	Rapid detection of <i>Vibrio parahaemolyticus</i> using europium fluorescent particles in a stationary liquid phase lab-on-a-chip H.J. Kim*, H.G. Han, S.J. Choi, <i>Gangneung-Wonju National University, Republic of Korea</i>
[P131]	Magnetic beads-based biosensing platform for fluorescence microRNA detection



	K. Smerkova* ^{1,2} , M. Vaculovicova ^{1,2} , V. Adam ^{1,2} , ¹ Mendel University in Brno, Czech Republic, ² Central European Institute of Technology, Czech Republic
[P133]	An electrochemical immunosensor based on screen printed electrode for zearalenone detection J-L. Marty* ¹ , Y.K. Goud ^{1,2} , E. Takacs ³ , G. Catanante ¹ , K.V. Gobi ² , A. Szekacs ³ , ¹ Université de Perpignan Via Domitia, France, ² National Institute of Technology, India, ³ Agro-Environmental Research Institute, NARIC, Hungary
[P135]	Air bio-battery with a gas/liquid diaphragm cell for medical and health care devices R. Xie, F. Seshima, K. Toma*, T. Arakawa, K. Mitsubayashi, Tokyo Medica and Dental University, Japan
[P137]	Development of a novel cortisol sensor for health, wellbeing and stress management M. Piano*, R. Luxton, University of the West of England, UK
[P139]	Multi-Parametric SPR for challenging interaction studies of antibodies, drug Delivery Systems and living cells N.M. Granqvist, A.E. Jokinen, J. Kuncova-Kallio*, BioNavis Ltd, Finland
[P141]	Entrapment of <i>E. Coli</i> in sol-gel matrices as for use in bio-sensing platforms. S. Boudjabi ^{1,2} , D. White ^{1,2} , M. Karamane ^{1,2} , J.D. Brennan ^{1,2} , A. Capretta* ^{1,2} , ¹ Biointerfaces Institute, Canada, ² McMaster University, Canada
[P143]	Label and wash free DNA sensor using field-effect transistor and PNA probe layer on a gold surface A. Lehmusvuri*, M. Kaisti, A. Kerko, University of Turku, Finland
[P145]	High frequency biosensor based on a side coupled microstrip band pass filter H. Ashelaish*, J. Hedley, N. Keegan, Newcastle University, UK
[P147]	Fabrication of a vertical and a horizontal large surface area nanogap electrochemical sensor J.L. Hammond ¹ , M.C. Rosamond ² , S. Sivaraya ¹ , F. Marken ¹ , P. Estrela* ¹ , ¹ University of Bath, UK, ² University of Leeds, UK
[P149]	Electrochemical impedance spectroscopy biosensor for neuron specific enolase (NSE) biomarker for lung cancer detection M. Arabnejad*, I. Chianella, I.E. Tothill, Cranfield University, UK
[P151]	Regeneratable and antibody-immobilized surface architecture on surface plasmon biosensor for continuous immunosensing K. Toma*, C. Kishikawa, T. Arakawa, K. Mitsubayashi, Tokyo Medical and Dental University, Japan
[P153]	Bioelectronic tongue using MIP sensors for the determination of phenolic compounds A. Herrera-Chacon, A. González-Calabuig, I. Campos, M. del Valle*, Universitat Autònoma de Barcelona, Spain
[P155]	Simultaneous detection of <i>Salmonella</i> and <i>E. coli</i> by quadruple-tagging PCR and nucleic acid lateral flow assay A. Ben Aissa* ¹ , S. Campoy ¹ , M.I. Pividori ¹ , ¹ Universitat Autònoma de Barcelona, Spain, ² Universitat Autònoma de Barcelona, Spain, ³ Universitat Autònoma de Barcelona, Spain
[P157]	Rapid and sensitive immunosensor for malaria detection A.M. Hembem, J. Ashley, I.E. Tothill*, Cranfield University, UK
[P159]	Development of nanoMIP-SPR sensor for milk allergens detection R. D'Aurelio* ¹ , J. Ashley ¹ , T. Rodgers ² , J. Temblay ³ , R. Wiley ³ , I.E. Tothill ¹ , ¹ Cranfield University, UK, ² University of Manchester, UK, ³ SEAC, Colworth Science Park, Unilever plc, UK
[P161]	Development of bimodal instrumentation for the analysis of biomolecules at very low levels in complex media combining detection by nano-enhanced plasmonic imaging and identification by SERS-Raman K. Mercier ¹ , A. Olivero ^{1,3} , E. Maillart* ¹ , B. Bartenlian ² , M. Canva ³ , C. Frydman ¹ , M. Lamy de la Chapelle ⁴ , D. Rutledge ⁵ , E. Souteyrand ⁶ , ¹ HORIBA Scientifc, France, ² University Paris Sud, France, ³ Institute Optic Graduate School, France, ⁴ University Paris Nord, France, ⁵ AgroParisTech, France, ⁶ Institut des Nanotechnologies de Lyon, France
[P163]	A continuous flow microelectrophoretic module for protein separation A. Capuano* ^{1,2} , V. Mulloni ¹ , A. Adami ¹ , L. Lorenzelli ¹ , ¹ Fondazione Bruno Kessler, Italy, ² Università di Trento, Italy
[P165]	Optimizing an embedded portable biosensor system for bacterial concentration measurement in dairy products A. Biscotti*, R. Lazzarini, G. Virgilli, F. Ngatcha, A. Valisi, M. Rossi, Carpigiani Group - ALI S.P.A., Italy



[P167]	Fluorescent detection of silver ions using supramolecular structures M. Ouelhazi*, A. Noireau, P. Barthelemy, K. Gaudin, B. Alies, <i>ChemBioPharm - Université de Bordeaux - Inserm U1212 - UMR CNRS, France</i>
[P169]	Volatile analysis of wound associated bacteria by selected ion flow tube - mass spectrometry E.A. Slade* ¹ , R.M.S. Thorn ¹ , A. Young ² , D.M. Reynolds ¹ , ¹ University of the West of England, UK, ² Scar Free Foundation Children's Burns Research Centre, UK
[P171]	Composite material platinum nanoparticles / polypyrrole nanowires for selective detection of dopamine E. Mazzotta*, A. Caroli, C. Malitesta, <i>Dipartimento di Scienze e Tecnologie Biologiche e Ambientali (Di.S.Te.B.A.) - Università del Salento, Italy</i>
[P173]	A Novel Microfluidic Device for Cancer Screening and Single Cell Drug Response Study E. Altinagac*, S. Taskin, H. Kizil, <i>Istanbul Technical University, Turkey</i>
[P175]	Direct electrochemical DNA biosensor based on reduced graphene oxide and porphyrin nanocomposite Y.Q. wang*, H. Korri Youssoufi, H. Sauriat Dorizon, <i>University Paris sud, France</i>
[P177]	Detection of Salmonella DNA molecules using circle-to-circle amplification and magnetic nanoparticle-based readout T. Zardán Gómez de la Torre*, M. Strømme, <i>Uppsala University, Sweden</i>
[P179]	A high-affinity material-binding camel antibody: antibody engineering for one-step functionalization of material surfaces M. Umetsu*, T. Hattori, T. Nakanishi, S. Sawai, S. Kikuchi, R. Asano, I. Kumagai, <i>Tohoku University, Japan</i>
[P181]	Novel fabrication method for synthesis of nanostructures in sensor arrays J. Marques-Hueso*, M.P.Y. Desmulliez, <i>Heriot-Watt University, UK</i>
[P183]	Regeneration of long-period grating label-free DNA sensor K.H. Czarnecka ^{1,2} , M. Dominik ¹ , J. Niedziolka-Jonsson ³ , M. Janczuk ³ , E. Rozniecka ³ , W.J. Bock ⁴ , M. Smietana* ¹ , ¹ University of Technology, Poland, ² Medical University of Lodz, Poland, ³ Polish Academy of Sciences, Poland, ⁴ Université du Québec en Outaouais, Poland
[P185]	Investigation of the fibre optic interferometer based on a 3x3 coupler for totally implantable hearing aid Z. Djinovic* ¹ , M. Tomic ² , G. Sprinzl ³ , R. Pavelka ⁴ , ¹ ACMIT GmbH, Austria, ² University of Belgrade, Serbia, ³ University Hospital St. Pölten, Austria, ⁴ Dr. med. Robert Pavelka, Austria
[P187]	Click-chemistry functionalization of organic lasers for oligonucleotide-based sensing G. McConnell*, J. Carreira, S. Mabbott, O. Knibolotsky, P. Skabara, D. Graham, M. Dawson, G. Burley, N. Laurand, <i>University of Strathclyde, UK</i>
[P189]	Quantification of microparticle-bound proteins using the nonlinear acoustic response of a quartz crystal resonator C. Granja* ¹ , N. Sandström ² , I. Efimov ¹ , V. Ostanin ³ , W. van der Wijngaart ² , D. Klenerman ³ , S. Ghosh ¹ , ¹ Loughborough University, UK, ² KTH Royal Institute of Technology, Sweden, ³ University of Cambridge, UK
[P191]	Theoretical and experimental approach on thyroid hormone levothyroxine for its biomimetic recognition on magnetic-molecularly imprinted polymer S.L. Moura* ^{1,2} , L.F.A. Ferrão ² , M.I. Pividori ¹ , ¹ Universitat Autònoma de Barcelona, Spain, ² Aeronautics Institute of Technology, Brazil, ³ Universidade Estadual Paulista, Brazil
[P193]	Peptide aptamer-modified single-walled carbon nanotube field-effect-transistor-based biosensor for ultrasensitive cancer diagnostics N.T. Tung* ¹ , P.T. Tue ¹ , T.T.N. Lien ² , Y. Ohno ³ , K. Maehashi ⁴ , K. Matsumoto ⁵ , M. Biyani ¹ , Y. Takamura ¹ , ¹ Japan Advanced Institute of Science and Technology, Japan, ² Hanoi University of Science and Technology, Vietnam, ³ Tokushima University, Japan, ⁴ Tokyo University of Agriculture and Technology, Japan, ⁵ Osaka University, Japan
[P195]	DEP-On-Go: A portable device for rapid and real-time total viable count of food bacteria M. Biyani ^{1,2} , S. Michihata ¹ , H. Ushijima ¹ , E. Tamiya ¹ , M. Biyani* ^{2,3} , ¹ BioDevice Technology Ltd., Japan, ² Biyani BioSolutions Pvt Ltd., India, ³ Japan Advanced Institute of Science and Technology, Japan
[P197]	Magnetic NanoParticles-Potential in Bio Applications M. Dhiman* ^{1,3} , J.K. Sharma ³ , M. Singh ^{1,2} , ¹ IEC University, Himachal Pradesh, India, ² HPU Shimla, Himachal Pradesh, India, ³ MMU, Ambala, Haryana, India



[P199]	Sensitive detection of cardiac troponin I with magnetic particles and fluorescent particles in the stationary liquid phase lab-on-a-chip H.G. Han*, H.G. Shin, S.J. Choi, <i>Gangneung-Wonju National University, Republic of Korea</i>
[P201]	An investigation on the sensing characteristics of a graphene-decorated glucose biosensor A.C. Vallejo*, B.H. Huang, B.Y. Zhou, C.C. Lu, <i>National Taipei University of Technology, Taiwan</i>
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[P207]	Biochemical functionalization of PMMA foil for roll-to-roll fabrication of fluorescence based biosensors for environmental testing G. Nonglaton* ¹ , J. Hue ¹ , C. Fontelaye ¹ , D. Lauro ¹ , M. Domenes ¹ , T. Bastuck ² , C. Baum ² , ¹ CEA-Leti, France, ² Fraunhofer IPT, Germany
[P209]	A miniaturized high-throughput flow injection analysis system for electrochemiluminescence detection D. Hernandez-Santos*, M. Neves, M.B. Gonzalez-Garcia, P. Fanjul-Bolado, <i>DropSens S.L., Spain</i>
[P211]	AuNPs/Methylene Blue immuno-nanoconjugates for protein non-enzymatic DPV analysis in electrochemical biosensor platforms A. Lopez-Marzo ¹ , E. Baldrich* ^{1,2} , ¹ Vall d'Hebron Hospital Research Institute (VHIR), Spain, ² CIBER de Bioingenieria, Biomateriales y Nanomedicina (CIBER-BBN), Spain
[P213]	Supramolecular nanocontainers for encapsulation of quantum dots E.A. Vasilieva* ^{1,2} , A.M. Bekmukhametova ² , G.A. Gaynanova ¹ , R.R. Kashapov ¹ , L.Y. Zakharova ¹ , ¹ A. E. Arbuzov Institute of Organic and Physical Chemistry of Kazan Scientific Center of Russian Academy of Sciences, Russia, ² Kazan National Research Technological University, Russia
[P215]	Lab-on-paper based on acetylcholinesterase inhibition assay for determination of pesticides using TGA-capped CdTe QDs A. Apilux* ¹ , W. Siangproh ² , N. Insin ³ , O. Chailapakul ³ , V. Prachayasittikul ¹ , ¹ Mahidol University, Thailand, ² Srinakharinwirot University, Thailand, ³ Chulalongkorn University, Thailand
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[P219]	Development of a novel DNA-based biosensor for bacteria detection in environmental samples E. Da-Silva* ^{1,2} , J. Baudart ¹ , L. Barthelmebs ^{1,2} , ¹ Université Perpignan Via Domitia, France, ² Sorbonne Universités, France
[P221]	Label-free, in situ detection of cell-free expressed protein using plasmonic nanosensor J.Y. Byun* ¹ , Y.J. Sung ¹ , M.G. Kim ² , D.M. Kim ³ , Y.B. Shin ¹ , ¹ Korea Research Institute of Bioscience and Biotechnology(KRIBB), Republic of Korea, ² Gwangju Institute of Science and Technology(GIST), Republic of Korea, ³ Chungnam National University, Republic of Korea
[P223]	A Label-free Salmonella Typhimurium Detection Method Using Hairpin DNA Aptasensors J. Lee* ^{1,2} , T.H. Ha ^{1,2} , ¹ University of Science and Technology, Republic of Korea, ² Korea institute of Bioscience and Biotechnology, Republic of Korea
[P225]	Optimisation of electrochemical impedance spectroscopy for a biosensor to detect fungi D. Cserna ¹ , J. Ettenauer* ² , S. Pfeiffer ¹ , K. Zuser ² , M. Brandl ² , ¹ IMC FH Krems, Austria, ² Danube University Krems, Austria
[P227]	Magnetic lateral flow assay development for animal health applications D. West* ¹ , H. Ballantine Dykes ¹ , S. Gillespie ¹ , R. Luxton ² , J. Kiely ² , ¹ Clarity Biosolutions Ltd, UK, ² University of the West of England, UK
[P229]	Immobilization of fluorescent probes on mesoporous silica substrates for detection of cellular flux V. Lethuillier*, L.J. Brown, P.N. Bartlett, P.J.S. Smith, R.C.D. Brown, <i>University of Southampton, UK</i>
[P231]	Kras mutation testing on Q3 system M. Guarnaccia ¹ , R. Iemmolo ¹ , S. Conoci* ² , S. Petralia ² , S. Cavallaro ¹ , ¹ Institute of Neurological Sciences, Italy, ² STMicroelectronics, Italy
[P233]	Simple and accurate microfluidic impedance cytometer F. Caselli* ¹ , A. De Ninno ¹ , V. Errico ¹ , F.R. Bertani ² , L. Businaro ² , P. Bisegna ¹ , ¹ University of Rome Tor



	<i>Vergata, Italy, ²Institute for Photonics and Nanotechnologies, Italy</i>
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[P237]	Sensitive sensing through the triggering of an autocatalytic molecular and enzymatic reaction network. M. Branca, B. Limoges, F. Mavré, C. Rabin*, <i>Paris Diderot University, France</i>
[P239]	Engineered microgels by microfluidics: selective biomarkers detection in biological fluids A. Mazzarotta* ^{1,2} , T.M. Caputo ^{1,2} , E. Battista ¹ , F. Causa ^{1,2} , P.A. Netti ^{1,3} , ¹ Interdisciplinary Research Centre on Biomaterials (CRIB), University of Naples Federico II, Italy, ² Center for Advanced Biomaterials for Health Care@CRIB, Istituto Italiano di Tecnologia, Italy, ³ Università degli studi di Napoli Federico II, Italy
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[P247]	Characterization of breast cancer cell drug response using passivated-electrode insulator-based dielectrophoresis K. Kikkeri* ¹ , S. Soltanian-Zadeh ¹ , A.N. Shajahan-Haq ² , J. Strobl ¹ , R. Clarke ² , M. Agah ¹ , ¹ Virginia Tech, USA, ² Georgetown University, USA
[P249]	A compact lifetime fluorescence detector for clinical diagnosis A. Dieguez, J. Canals*, N. Franch, J. Dieguez, O. Alonso, M. Moreno, A. Vila, <i>University of Barcelona, Spain</i>
[P251]	A microfluidic chip made of multi-layered films for rapid and high sensitive immunoassay K.H. Chung*, E.J. Jeong, H-W. Song, Y.H. Choi, C-G. Ahn, B.K. Kim, <i>Electronics and Telecommunications Research Institute (ETRI), Republic of Korea</i>
[P253]	Rational designed peptide functionalized surface plasmon resonance sensor for direct TNT detection J. Wang* ¹ , T. Onodera ¹ , R. Yatabe ¹ , M. Muto ² , M. Tanaka ² , M. Okochi ² , K. Toko ¹ , ¹ Kyushu University, Japan, ² Tokyo Institute of Technology, Japan
[P255]	Multiple detection of circulating tumor DNAs: Closed microfluidic PCR-based SPRI W. Na ¹ , J. Kim ¹ , D. Jang ^{1,2} , S. Shin* ^{1,2} , ¹ Korea University, Republic of Korea, ² Mano-Biofluignostic Engineering Research Center, Republic of Korea
[P257]	Effect of varying pH, Ionic strength and Composition of buffer on a Dopamine Sensor based on a functionalized Electrolyte Gated CNTFET V.D. Bhatt* ¹ , S. Joshi ¹ , A. Märkl ¹ , P. Lugli ² , ¹ Technische Universität München, Germany, ² Mr., Germany
[P259]	NFC energy harvesting based amperometric glucose sensor C. Matoschitz*, R. Lurf, M. Bammer, <i>Austrian Institute of Technology GmbH, Austria</i>
[P261]	Analytical calculations of silicon micro-ring resonators for bio-sensing application F. Khozayemeh* ^{1,2} , M. Razaghi ¹ , T. Chalyan ² , L. Pavesi ² , ¹ University of Kurdistan, Iran, ² Nanoscience Laboratory, Department of Physics, University of Trento, Italy
[P263]	Synthesis of Double Sided Thienyl-Pyrrole Based Conductive Polymer and Their Incorporation in Sensor Platform Design M. Ak* ¹ , T. Soganci ¹ , H.C. Soyleyici ² , J. Hardy ³ , ¹ Pamukkale University, Turkey, ² Adnan Menderes University, Turkey, ³ Lancaster University, UK
[P265]	Direct, label-free and rapid transistor-based immunodetection in whole serum O. Gutierrez-Sanz* ¹ , N.M. Andoy ¹ , M.S. Filipiak ^{1,2} , N. Haustein ^{1,3} , A. Tarasov ^{1,2} , ¹ Biomed X GmbH, Germany, ² Universität Heidelberg, Germany, ³ Chair "Materials Science and Nanotechnology", Germany
[P267]	Development of an aptamer-microbead assay to remove 17β-estradiol from water supplies



	M. Zschätzsch* ¹ , A. Eishold ² , T. Bley ¹ , T. Walther ¹ , D. Labudde ² , E. Boschke ¹ , ¹ Technische Universität Dresden, Germany, ² Hochschule Mittweida, Germany
[P269]	Development of an amperometric assay for fructose in fruit juice based on a nanoparticle modified screen-printed carbon electrode P.H. Nicholas* ^{1,2} , J.P. Hart ² , R.W. Pittson ¹ , ¹ The Gwent Group, UK, ² University of West England, Bristol, UK
[P271]	Design of magnetic 8x and 96x immunosensor for the detection of beta-casomorphin-7 in watery part of white cheese E. Saatçi*, T. Özkaya, <i>Erciyes University, Turkey</i>
[P273]	Electrochemical study of oxidized purine bases by activated metronidazole metabolites produced in situ K. De la Cruz*, G. Alarcón, D. Valtierra, M. Gómez, J. Pérez, <i>Metropolitan Autonomous University, Mexico</i>
[P275]	Photo-thermal and opto-electric sensing properties of inkjet-printed copper based thin films J. Sarfraz ¹ , ¹ Åbo Akademi University, Finland, ² University of Milano-Bicocca, Italy
[P277]	Harnessing mechanical properties of DNA for gene-based detection of drug resistant pathogens C.M. Dominguez* ¹ , D. Ramos ² , J. Mingorance ³ , J. Tamayo ² , M. Calleja ² , ¹ Karlsruhe Institute of Technology (KIT), Germany, ² Instituto de Microelectronica de Madrid, Spain, ³ Hospital La Paz, idiPAZ, Spain
[P279]	Electrical monitoring of cathepsin L enzymatic activity for cancer prognosis and therapeutics T.W. Seong ¹ , S. Park ^{1,2} , K.H. Lee* ^{1,2} , ¹ Korea Institute of Science and Technology (KIST), Republic of Korea, ² Korea University of Science and Technology (UST), Republic of Korea
[P281]	A personal alcohol consumption lifestyle monitor through electrochemical detection of EtG in human sweat D. Kinnamon ¹ , S. Muthukumar ² , A. Panneer Selvam ¹ , S. Prasad* ¹ , ¹ University of Texas, Dallas, USA, ² Enlisen LLC, USA
[P283]	Smartphone based optical biosensor for the detection of urea in saliva A. Soni ^{1,2} , S.K. Jha ¹ , A.K. Singh* ¹ , ¹ Indian Institute of Technology Delhi, India, ² All India Institute of Medical Sciences, Delhi, India

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[P004]	Different microfabrication approaches in biosensor development A. Semeradova* ¹ , M. Stofik ¹ , P. Aubrecht ¹ , Z. Kolska ¹ , O. Nedela ² , P. Slepicka ² , O. Stanek ³ , J. Maly ¹ , ¹ J.E. Purkyne University in Usti nad Labem, Czech Republic, ² Institute of Chemical Technology, Czech Republic, ³ Institute of Microbiology of the Czech Academy and Sciences, Czech Republic
[P006]	Detection of ochratoxin A in aptamer assay using total internal ellipsometry A. Al-Rubaye, A. Nabok*, G. Catanante, J.L. Marty, E. Takacs, A. Szekacs, <i>MERI, UK</i>
[P008]	Ultra-sensitive Detection of Protein Biomarkers for Early Diagnosis of Alzheimer's Disease H.N. Chan*, D. Xu, S.L. Ho, M.S. Wong, H.W. Li, <i>Hong Kong Baptist University, Hong Kong</i>
[P010]	Optical Detection of Mycotoxins A. Nabok, <i>Sheffield Hallam University, Materials and Engineering Research Institute, UK</i>
[P012]	Impedimetric identification of bacterial biofilm antimicrobial tolerance using multielectrode arrays E. Goikoetxea* ^{1,2} , A. De Weert ¹ , J. Vanderleyden ¹ , H. Steenackers ¹ , D. Braeken ² , ¹ KU Leuven, Belgium, ² imec, Belgium
[P014]	Detection of Salmonella in food using electrochemical and surface plasmon resonance immunosensors Z. Farka*, T. Jurik, M. Pastucha, P. Skladal, <i>Masaryk University, Czech Republic</i>
[P016]	Laccase-based Electrochemical Biosensor for Epinephrine Detection S. Baluta*, J. Cabaj, <i>Wroclaw University of Science and Technology, Poland</i>
[P018]	Fluorescence Bio Sensor Towards Hazardous Hg²⁺ in Live HeLa Cells and Zebrafish Y.A. Son, H.S. Kim, S. Angupillai, <i>Chungnam National University, Republic of Korea</i>



[P020]	Research role of p53 gene network expression for estimation of oncogenic risk development in generations of habitants from radionuclide-contaminated regions L. Baleva, V. Sukhorukov, A. Sipyagina, N. Karakhan*, A. Voronkova, A. Sadykov, <i>Pirogov's Medical University, Russia</i>
[P022]	Conductive composites for oligonucleotide detection D.C. Ferrier* ¹ , J. Raeburn ¹ , G. Langford ¹ , D. Pritchard ² , M.P. Shaver ¹ , P.J.W. Hands ¹ , ¹ University of Edinburgh, UK, ² Axis-Shield Diagnostics Ltd., UK
[P024]	Pdms membranes as sensing element in optical sensors for gas detection in water S. Torino ¹ , L. Conte* ² , M. Iodice ¹ , G. Coppola ¹ , R. Prien ² , ¹ National Research Council, Italy, ² Leibniz Institute for Baltic Sea Research, Germany
[P026]	Fabrication of Label-Free Electrochemical Biosensor to Detect Biochemical Marker of Hepatocellular Carcinoma S. Damiaty* ^{1,2} , M. Baghdadi ³ , L. Damiaty ⁴ , M. Peacock ⁵ , ¹ University of Natural Resources and Life Sciences, Austria, ² King Abdulaziz University, Saudi Arabia, ³ King Faisal Specialist Hospital & Research Centre, Saudi Arabia, ⁴ University of Jeddah, Saudi Arabia, ⁵ Zimmer and Peacock Sensors, UK
[P028]	A three dimensional imaging based seesawed fluorescence quantitative biosensor on highly vertically aligned ZnO nanorods with remarkably enhanced detection accuracy S. Shrivastava*, N.M. Triet, Y.M. Son, W.I. Lee, N.E. Lee, <i>Sungkyunkwan University, Republic of Korea</i>
[P030]	Electrochemical site-specific functionalization for high resolution multi-target biosensors K. Levrie* ^{1,2} , K. Jans ¹ , G. Schepers ² , R. Vos ¹ , C.M. Lopez ¹ , P. Van Dorpe ^{1,2} , L. Lagae ^{1,2} , C. Van Hoof ^{1,2} , A. Van Aerschot ² , T. Stakenborg ¹ , ¹ imec, Belgium, ² KU Leuven, Belgium
[P032]	Nanoparticle size-shift assay using synthetic binding proteins T. Mahatnirunkul* ¹ , D.C. Tomlinson ² , M.J. McPherson ² , P.A. Millner ¹ , ¹ University of Leeds, UK, ² Leeds BioScreening Technology Group and Astbury Centre for Structural Molecular Biology, UK
[P034]	Towards fast and sensitive multi-analyte detection by hand-held devices A.S. Spehar* ¹ , S.A. Auer ¹ , J.L. Leinvuo ¹ , I.A. Antila ¹ , S.B. Buchholz ² , ¹ BioMensio Ltd, Finland, ² Siemens Technology Accelerator GmbH, Finland
[P036]	Electrochemical microRNA Detection Using a Zinc Finger Protein Specific to DNA-RNA Hybrid H. Yang, <i>Pusan National University, Republic of Korea</i>
[P038]	A Rapid and Easy Procedure of Biosensor Fabrication by Nanosecond Laser Processing of Si Wafer Coated by Gold Thin-film A. Kiani*, S. Hamza, <i>University of New Brunswick, Canada</i>
[P040]	Simultaneously Continuous Biosensing Technique for Glucose and Myoglobin Enabling Real-Time Monitoring for Early Diagnosis and Prognosis of Acute Myocardial Infarction D.H. Kim ¹ , I.H. Cho ² , H.M. Cho ¹ , W. Chegal ¹ , D.S. Kim ^{1,3} , S.W. O ^{1,4} , Y.G. Min ^{1,5} , S.H. Paek ^{1,4} , Y.J. Cho* ¹ , ¹ Korea Research Institute of Standards and Science, Republic of Korea, ² Eulji University, Republic of Korea, ³ Chosun University, Republic of Korea, ⁴ Korea University, Republic of Korea, ⁵ Hannam University, Republic of Korea
[P042]	A potentiometric sensor with DC offset cancellation for amplification-coupled detection of nucleic acids K-H. Lee, D. Lee*, J. Yun, O. Kwon, J. Lee, <i>Korea Institute of Machinery and Materials (KIMM), Republic of Korea</i>
[P044]	In situ real time monitoring of bacterial attachment using long period grating optical fibre sensors Y. Kurmoo*, S. Korposh, A.L. Hook, J.F. Dubern, R. Correia, M.R. Alexander, P. Williams, S.P. Morgan, <i>University of Nottingham, UK</i>
[P046]	Modified three-dimensional impedimetric transducer for bacterial endotoxin detection S. Brosel-Oliu*, D. Galyamin, N. Abramova, F.X. Muñoz, A. Bratov, <i>Institute of Microelectronics of Barcelona (IMB-CNM, CSIC), Spain</i>
[P048]	Cell refractive index sensing in rectangular glass micro-capillaries G. Rigamonti* ¹ , F. Caprignano ^{1,2} , G. Mazzini ^{1,3} , S. Merlo ¹ , ¹ Università di Pavia, Italy, ² Plasmore srl, Italy, ³ Istituto di Genetica Molecolare IGM-C.N.R., Italy
[P050]	Integration of bacterial concentration and detection immunoassay processes for the development of a rapid and portable biosensor J.J. Ezenarro* ¹ , N. Uria ^{1,5} , O. Castillo-Fernández ¹ , N. Párraga ^{2,4} , M. Sabriá ^{3,4} , F.X. Muñoz-



	Pascual ¹ , ¹ <i>Institut de Microelectrònica de Barcelona, Spain</i> , ² <i>Unitat de Malalties Infeccioses, Fundació Institut d'Investigació Germans Trias I Pujol, Spain</i> , ³ <i>Universitat Autònoma de Barcelona, Spain</i> , ⁴ <i>CIBER de Enfermedades Respiratorias, Spain</i> , ⁵ <i>Ghent University, Belgium</i>
[P052]	Immobilization of electrogenic bacteria on screen printed electrodes for rapid in situ biosensing N. Uria* ^{1,2} , E. Fiset ¹ , M. Aller Pellitero ² , A. PrévotEAU ¹ , F.X. Muñoz ² , F.J. del Campo ² , K. Rabaey ¹ , ¹ <i>Center for Microbial Ecology and Technology (CMET) – FBE – Ghent University, Belgium</i> , ² <i>Institut de Microelectrònica de Barcelona, IMB-CNM (CSIC), Spain</i>
[P054]	Surface acoustic wave driven fluid mixing accelerates biomolecules binding kinetics in a novel phase interrogation surface plasmon resonance biosensor G. Greco* ¹ , M. Agostini ^{1,2} , M. Travagliati ^{1,2} , A. Sonato ³ , G. Ruffato ⁴ , E. Gazzola ⁴ , D. Liuni ⁴ , F. Romanato ^{3,4} , M. Cecchini ¹ , ¹ <i>Scuola Normale Superiore di Pisa (SNS) and Consiglio Nazionale delle Ricerche (CNR), Italy</i> , ² <i>Istituto Italiano di Tecnologia (IIT), Italy</i> , ³ <i>Consiglio Nazionale delle Ricerche (CNR), Italy</i> , ⁴ <i>University of Padova, Italy</i>
[P056]	Novel SIS technique for effective biosensing D.S. Kim ^{1,2} , H.M. Cho* ¹ , Y.J. Cho ¹ , M.S. Diware ¹ , D.H. Kim ¹ , S.W. O ^{1,3} , S.H. Paek ³ , Y.G. Min ^{1,4} , J.H. Jo ³ , K.S. Kim ² , ¹ <i>Korea Research Institute of Standards and Science, Republic of Korea</i> , ² <i>Chosun University, Republic of Korea</i> , ³ <i>Korea University, Republic of Korea</i> , ⁴ <i>Hannam University, Republic of Korea</i>
[P058]	Hydrodynamic activated cell sorter using a fish-bone shape microchannel for circulating tumor cell enrichment B.S. Kwak* ¹ , S.H. Lee ^{1,2} , Y.S. Heo ² , ¹ <i>Korea Institute of Machinery and Materials, Republic of Korea</i> , ² <i>Keimyung University, Republic of Korea</i>
[P060]	Towards detection of neurotransmitter acetylcholine employing SPR and acetylcholinesterase functionalized Ta2O5 nanoflakes decorated on an optical fiber R. Kant*, B.D. Gupta, <i>IIT Delhi, India</i>
[P062]	Magnetic activated separation of heterogenic circulating tumor cells from peripheral blood using serpentine shaped microfluidic system B.S. Kwak* ¹ , J.H. Lee ^{1,2} , J.H. Lee ^{1,2} , S.W. Kang ² , ¹ <i>Korea Institute of Machinery and Materials, Republic of Korea</i> , ² <i>Kyungpook National University, Republic of Korea</i>
[P064]	Photoactive electrodes based on photosynthetic bionanocomposites K. Hajdu* ¹ , R.F. Balderas ² , V. Agarwal ² , C. Pacholski ³ , L. Nagy ¹ , ¹ <i>University of Syged, Hungary</i> , ² <i>Universidad Autonoma del Estado de Morelos, Mexico</i> , ³ <i>Universität Potsdam, Germany</i>
[P066]	Development of an electrochemical affinity biosensor using Affimer as biorecognition element for colorectal cancer biomarker detection S.H. Shamsuddin*, D.C. Tomlinson, M.J. McPherson, P.A. Millner, <i>University of Leeds, UK</i> ,
[P068]	An Affimer-based impedimetric biosensor: the analytical platform for the detection of human fibroblast growth factor receptor 3 (FGFR3) in urine P. Thangsunan*, D. Tomlinson, M.J. McPherson, P. Beales, P.A. Millner, <i>University of Leeds, UK</i>
[P070]	Ultrasensitive and low-volume point-of-care diagnostics on flexible strips - a study with cardiac troponin biomarkers N. Radha Shanmugam ¹ , S. Muthukumar ² , S. Prasad* ¹ , ¹ <i>University of Texas, Dallas, USA</i> , ² <i>Enlisen, USA</i>
[P072]	Biotemplate-based design and synthesis of nanoplasmonic particles for bio-sensing X.Y. Ma, M.J. Jeon*, S.J. Sim, <i>Korea University, Republic of Korea</i>
[P074]	Field Effect Sensor Integrated with Substrate-Gate for Label-Free Cortisol Detection System. A.S. Z. Abidin*, R. A. Rahim, N.N. M. Maidin, N.A. Ahmad, A. Rahmat, M.F. M. Fathil, M.K. Md. Arshad, V. C. Hong, N.K. S. Nordin, <i>University Malaysia Perlis, Malaysia</i>
[P076]	Potential double screening method using cells and extracellular vesicles induced by cytochalasin B on fabric culture sheet T.H. Lee* ^{1,2} , J. Bu ¹ , S. Hyun ² , Y-H. Cho ¹ , ¹ <i>Korea Advanced Institute of Science and Technology, Republic of Korea</i> , ² <i>Eulji University, Republic of Korea</i>
[P078]	Au and Pt deposition on Tungsten (W) based microelectrodes for in vivo continuous real-time brain biomonitoring with superior spatial resolution C.A. Cordeiro* ^{1,2} , H. al-Kutubi ² , T. Koster ¹ , K. Mathwig ² , T.I.F.H. Cremers ^{1,2} , ¹ <i>Brains On-Line B.V., The Netherlands</i> , ² <i>University of Groningen, The Netherlands</i>



[P080]	In vivo real-time glutamate biomonitoring with Gold-coated tungsten (W-Au) needle-type microelectrodes C.A. Cordeiro* ^{1,2} , T. Koster ¹ , G. Flik ¹ , T.I.F.H. Cremers ^{1,2} , ¹ Brains On-Line B.V., The Netherlands, ² University of Groningen, The Netherlands
[P082]	Novel DNA nanobiosensor for detection of methylated DNA based on silver nanoclusters M. Dadmehr* ¹ , M. Hosseini ² , S. Hosseinkhani ² , R. Sheikhnejad ³ , M. Ganjali ² , ¹ University of Tehran, Iran, ² Tarbat Modares University, Iran, ³ Tofigh Daru Co., Iran
[P084]	A miniaturized glutamate sensor array probe integrated with on-probe reference and counter microelectrodes N.Q.H. Le*, T.T.C. Tseng, National Taiwan University of Science and Technology, Taiwan
[P086]	Novel optical filtering technique for 260/280nm ultraviolet detection by polydimethylsiloxane/CaF₂ scattering material J. Shu ¹ , K. Nakakubo ¹ , H. Higuchi ¹ , H. Yoshioka ¹ , K. Morita* ^{1,2} , Y. Oki ¹ , ¹ Kyushu University, Japan, ² Ushio INC., Japan
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[P246]	<p>Development and characterisation of ssDNA aptamers capable of binding neonicotinoid family of pesticides in environmental samples. S. Kumar*^{1,2}, V. Guieu³, S. Li^{1,2}, W. Odey¹, E. Peyrin³, J. Pitman¹, K. McNatty¹, ¹Victoria University of Wellington New Zealand, New Zealand, ²AuramerBio Limited Wellington New Zealand, New Zealand, ³Université Grenoble Alpes – UFR de Pharmacie., France</p>
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[P266]	<p>Protein interaction analysis on silicon nanoribbon ion-sensitive field-effect transistors M. Wipf*, M. Baghernejad, O. Synhaivska, Y. Mermoud, M. Calame, <i>Empa (Swiss Federal Laboratories for Materials Science and Technology), Switzerland</i></p>
[P268]	<p>An enzyme/nanoparticle-based magnetogenosensor with dual colorimetric/electrochemical approach for <i>Vibrio cholerae</i> detection using shelf-ready reagents K-F. Low*¹, Z.M. Zain¹, C.Y. Yean², ¹Universiti Teknologi MARA, Malaysia, ²Universiti Sains Malaysia, Malaysia</p>
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[P272]	Color-coded quantum dot based detection of fusion genes for prostate cancer diagnosis H. Lee* ¹ , C. Kim ² , D. Lee ¹ , J.H. Park ^{1,2} , P.C. Searson ² , K.H. Lee ¹ , ¹ <i>Korea Institute of Science and Technology (KIST), Republic of Korea</i> , ² <i>Institute for Nanobiotechnology, Johns Hopkins University, USA</i>
[P274]	L-Lactate biosensor employing engineered lactate oxidase with minimized oxygen interference K. Hiraka* ^{1,3} , W. Tsugawa ¹ , R. Asano ¹ , K. Kojima ² , J. LaBelle ³ , K. Sode ^{1,2} , ¹ <i>Tokyo University of Agriculture and Technology, Japan</i> , ² <i>Ultizyme International Ltd., Japan</i> , ³ <i>Arizona State University, USA</i>
[P276]	Noninvasive saliva based glucose biosensor using transmission based optical detection technique A.K. Singh* ¹ , S.K. Jha ^{1,2} , ¹ <i>IIT Delhi, India</i> , ² <i>AllMS Delhi, India</i>
[P278]	Solid phase functionalization for immobilization of biomolecules through "clickable" hydrophilic polymers L. Sola, M. Cretich, F. Damin, M. Chiari*, <i>Istituto di Chimica del Riconoscimento Molecolare C.N.R, Italy</i>
[P280]	A new paradigm in sweat based wearable diagnostics biosensors using Room Temperature Ionic Liquids (RTILs) R. Munje ¹ , S. Muthukumar ² , B. Jagannath ¹ , S. Prasad* ¹ , ¹ <i>University of Texas, Dallas, USA</i> , ² <i>University of Texas, USA</i>
[P282]	Development of a novel nanocomposite based on dendrimer-quantum dot (den-qd) bioconjugate for signal amplification in designing of an electrochemical aptasensor for the ultra-sensitive detection of cocaine F. Shahdost-fard ¹ , M. Roushani ¹ , S. Haghjoo ² , <i>University of Ilam, Iran</i>