Poster Programme

Poster Session I
Wednesday, 25 May 2016
10:20-11:00, 12:45-14:00, 15:15-16:00, 17:30-19:00

[P1.001]	**Redox-active monolayers for probing biomolecular interactions** E. Koutsoumpeli[1], J. Murray[2], D. Langford[1], R.S. Bon[2], S. Johnson*[1], *[1]University of York, UK, [2]University of Leeds, UK*
[P1.002]	**Probing cancer epigenetics: Multiplex-based sensor for the detection of DNA methylation and acetylation** S. Rodrigues Teixeira*[1,2], I. Mendes Pinto[2], R.S. Conlan[1], *[1]Swansea University, UK, [2]International Iberian Nanotechnology Laboratory (INL), Portugal*
[P1.003]	**Development of a label-free immunosensor using ion sensitive field effect transistor for antigen 85 detection** P. Saengdee*[1], W. Bunjounpru[2], W. Chaisriwattanakul[2], C. Hruanun[2], A. Poyai[2], P. Phunpae[3], S. Pata[3], W. Kasinreak[3], W. Jeamsaksiri[2], C. Promptmas[1], *[1]Mahidol University, Thailand, [2]National Electronics and Computer Technology Center, Thailand, [3]Chiang Mai University, Thailand*
[P1.004]	**A label-free biosensor for analysis of Escherichia coli and Salmonella in potable water** S. Bhand*, U. Roy, G.K. Mishra, R. Deshmukh, G. Bacher, *BITS Pilani, India*
[P1.005]	**Ultrasensitive biosensors based on enhanced SPR for detection of AFM1 in milk and OTA in red wine** A. Karczmarczyk*[1], J. Dostalek[2], K-H. Feller[1], *[1]University of Applied Sciences Jena, Germany, [2]AIT Austrian Institute of Technology GmbH, Austria*
[P1.006]	**Enhanced sensitivity of lateral flow immunoassay using enzyme-mimetic nanoparticles** M. Kim, M.S. Kim, S.H. Kweon, J. Lee, J. Doh*, *POSTECH, Republic of Korea*
[P1.007]	**Sensitive amperometric immunosensors for metabolites detection based on multifunctional dumbbell-like metal-magnetite heterostructures** R.A. Doong*[1,2], G.K. Parshetti[2], Y.H. Liao[2], *[1]National Chiao Tung University, Taiwan, [2]National Tsing Hua University, Taiwan*
[P1.008]	**Simultaneous determination of multiple tumor markers using antibody-QDs conjugates-based signal amplification for an SPR biosensor** X. Wang*, H. Wang, W. Fu, *Southwest Hospital, China*
[P1.009]	**Easy immunoassay technology with smartphone readout for cost-effective point-of-care diagnostics** A.G. Venkatesh[1], E.M. Schneider[2], J.H.T. Luong[3], S.K. Vashist*[4], *[1]UCSD, USA, [2]University Hospital Ulm, Germany, [3]University College Cork, Ireland, [4]RMIT University, Australia*
[P1.010]	**Detection of Campylobacter jejuni using surface plasmon resonance sensor** N.A. Masdor*[1,2], Z. Altintas[1], I.E. Tothill[1], *[1]Cranfield University, UK, [2]Malaysian Agricultural Research and Development Institute, Malaysia*
[P1.011]	**Development of a point-of-care sensor for breast cancer diagnosis** S. Wignarajah*, J. Ashley, I.E. Tothill, *Cranfield University, UK*
[P1.012]	**Antibody immobilization on gold nanoparticles coated with a synthetic functional copolymer** M. Chiari*, L. Sola, C. Finetti, M. Pezzullo, *National Research Council of Italy, Italy*
[P1.013]	**Monitoring growth and antibiotic susceptibility of *Escherichia coli* with photoluminescence emitting semiconductor biochips** E. Nazemi, W.M. Hassen, E.H. Frost, J.J. Dubowski*, *Université de Sherbrooke, Canada*
[P1.014]	**Gold nanostructures modified electrode for development of electrochemical immunosensor for detection of ovarian cancer** S.R. Torati*[1], V. Reddy[2], S.S. Yoon[3], C.G. Kim[1], *[1]Daegu Gyeongbuk Institute of Science and Technology, Republic of Korea, [2]University of Hyderabad, India, [3]Andong National University, Republic of Korea*
[P1.015]	**Surface plasmon resonance signal amplification using secondary antibody interaction for illegal compound detection** S. Suherman*[1], D.C. Kabiraz[2], K. Morita[3], T. Kawaguchi[2], *[1]Universitas Gadjah Mada, Indonesia, [2]Hokkaido University, Japan, [3]USHIO INC., Japan*
[P1.016]	**A hybrid organic GaAs-based biosensor for detecting gastrointestinal haemorrhages** Y-K. Yen*, E. Capua, R. Naaman, *Weizmann Institute of Science, Israel*
[P1.017]	**A microarray platform for quantitation and phenotyping of intact exosomes** M. Cretich*[1], P. Gagni[1], F. Damin[1], L. Sola[1], L. Benussi[2], R. Ghidoni[2], M. Chiari[1], *[1]Consiglio Nazionale delle Ricerche, Italy, [2]IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Italy*

[P1.018]	**Impedimetric immunosensor for the label-free and direct detection of botulinum neurotoxin serotype A using Au nanoparticles/graphene-chitosan composite** A. Afkhami[1], P. Hashemi[1], H. Bagheri*[2], J. Salimian[2], *[1]Bu-Ali Sina University, Iran, [2]Baqiyatallah University of Medical Sciences, Iran*
[P1.019]	**Phage templated immunoassay on gold microspheres** C.S. Jeon, J. Rho*, I. Hwang, T.D. Chung, *Seoul National University, Republic of Korea*
[P1.020]	**Glycomic approach for early-stage cancer diagnosis: label-free electrochemical lectin-based immunosensor strategy** D. Pihikova*[1], P. Kasak[2], J. Tkac[1], *[1]Slovak Academy of Sciences, Slovakia, [2]Qatar University, Qatar*
[P1.021]	**Peripheral monocytes as biosensors to monitor type I interferon responses in viral infection and autoimmunity** A. Gruetzkau*[1], C. Kyogoku[1,3], B. Smiljanovic[2], *[1]German Rheumatism Research Centre (DRFZ), An Institute of the Leibniz Association, Germany, [2]Humboldt University of Berlin, Germany, [3]Kobe University, Japan*
[P1.022]	**Effect of mixing on magnetic particle based biosensing** G. Ruiz-vega[1], E. Baldrich*[1,2], *[1]Institut de Recerca Hospital Vall d'Hebron, Spain, [2]CIBER de Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Spain*
[P1.023]	**An SPR based sensor for allergens detection** J. Ashley*[1], M. Piekarska[1], C. Segers[1], L. Trinh[2], T. Rodgers[2], R. Willey[3], I.E. Tothill[1], *[1]Cranfield University, UK, [2]The University of Manchester, UK, [3]SEAC, UK*
[P1.024]	**A self-assembled terthiophene monolayer gold surface for detection of progesterone using surface plasmon resonance** Y.J. Wang*[1,2], A. Partridge[1], Y. Wu[2], *[1]The University of Auckland, New Zealand, [2]The New Zealand Institute for Plant & Food Research Ltd, New Zealand*
[P1.025]	**Ultrasensitive and highly reliable transistor biosensor for diagnosis of acute myocardial infarction (AMI)** Y.K. Oh*[1,2], I.K. Lee[1], C.M. Lim[4], K.J. Lee[1], W.J. Cho[4], M.G. Kim[3], Y.B. Shin[1,2], *[1]KRIBB, Republic of Korea, [2]UST, Republic of Korea, [3]GIST, Republic of Korea, [4]KWU, Republic of Korea*
[P1.026]	**Development of new immunochromatographic biosensor for implementation of automatic sequential reactions by water-swellable polymer** K. Kim*[1], H-A. Joung[1], G-R. Han[1], M-G. Kim[1,2], *[1]GIST, Republic of Korea, [2]INGIbio Co. Ltd., Republic of Korea*
[P1.027]	**Detection of infectious virus using metal nanohole** N.R. Jo*[1,2], K.J. Lee[2], Y.B. Shin[1,2], *[1]University of Science and Technology, Republic of Korea, [2]Korea Research Institute of Bioscience and Biotechnology, Republic of Korea*
[P1.028]	**Surface plasmon resonance immunoassay for biotin determination on a home-made instrument** X. Chen*, L.L. Zhang, D.F. Cui, *Institute of Electronics, Chinese Academy of Sciences, China*
[P1.029]	**Washing-free electrochemical immunosensor using redox cycling** G. Dutta, H. Yang*, *Pusan National University, Republic of Korea*
[P1.030]	**Kinetic analysis of a high-affinity antibody/antigen interaction performed by planar waveguide fluorescence immunosensor** H.L. Guo*[1], X.H. Zhou[1], Y. Zhang[2], C.M. Gu[1], B.D. Song[1], H.C. Shi[1], *[1]Tsinghua University, China, [2]Hebei Institute of Food Quality Supervision Inspection & Research, China*
[P1.031]	**Multiplexed electrochemical immunosensor for obesity-related hormones using grafted graphene-modified electrodes as platforms for antibodies immobilization** G. Martínez-García*, V. Serafín, L. Agüí, P. Yáñez-Sedeño, J.M. Pingarrón, *University Complutense of Madrid, Spain*
[P1.032]	**Real-time QCM analysis of Campylobacter jejuni in food samples** N.A. Masdor*[1,2], Z. Altintas[1], I.E. Tothill[1], *[1]Cranfield University, UK, [2]Malaysian Agricultural Research and Development Institute, Malaysia*
[P1.033]	**Silica nanoparticles coated paper-based immunosensor for electrochemical detection of influenza virus** S. Devarakonda*, R. Singh, J. Jang, *Ulsan National Institute of Science and Technology, Republic of Korea*
[P1.034]	**Multiplex surface plasmon resonance biosensing and its transferability towards imaging nanoplasmonics for detection of mycotoxins in barley** S. Joshi*[1,2], A. Segarra Fas[1], J. Peters[3], T.A. van Beek[1], H. Zuilhof[1], M.W.F. Nielen[1,3], *[1]Wageningen University, The Netherlands, [2]TI-COAST, The Netherlands, [3]RIKILT Wageningen UR, The Netherlands*
[P1.035]	**Graphene based immunosensor for detection of proteins** S. Novikov*[1], N. Lebedeva[1], A.A. Lebedev[2], Y. Makarov[3], V. Klimovich[4], *[1]Aalto University, Finland, [2]Ioffe Physical-Technical Institute, Russia, [3]Nitride Crystals Inc., USA, [4]Russian Research center for Radiology and Surgical Technologies, Russia*
[P1.036]	**Recyclable structure of surface plasmon resonance-based sensor surfaces for routine clinical immuno-analysis of AMI biomarker**

	D-H. Kim*, S-M. Seo, J-N. Park, S-H. Paek, *Korea University, Republic of Korea*
[P1.037]	**Fluorescent immunosensor for high-sensitivity cardiac troponin I using spatially-controlled polymeric, nano-scale tracer against quenching** S-M. Seo*[1], S-W. Kim[1], J-H. Cho[2], R-S. Mok[2], S-H. Paek[1], *[1]Korea University, Republic of Korea, [2]Digital Optics, Republic of Korea*
[P1.038]	**Mucin 4 immunosensor based on p-aminophenylacetic acid grafting on carbon electrodes as immobilization platform** O. Hosu*, M. Tertis, G. Melinte, R. Sandulescu, C. Cristea, *University of Medicine and Pharmacy, Romania*
[P1.039]	**Multiplex detection of biothreat agents using an automated electrochemical ELISA platform** C. Pöhlmann*[1], L. Bellanger[2], M. Drevinek[3], T. Elßner[1], *[1]Bruker Daltonik GmbH, Germany, [2]CEA Laboratoire Innovations technologiques pour la Détection et le Diagnostic, France, [3]National Institute for Nuclear, Biological and Chemical Protection, Czech Republic*
[P1.040]	**Direct detection of cancer biomarker in physiological salt concentration using GaN high electron mobility transistors** I. Sarangadharan*, Y.W. Chen, A. Regmi, C.P. Hsu, Y.L. Wang, *National Tsing Hua University, Taiwan*
[P1.041]	**A high sensitive fluorescence immunosensor based on magnetic beads for detection of okadaic acid** Y. Pan*, J. Fang, K. Su, Y. Tlan, N. Hu, P. Wang, *Zhejiang University, China*
[P1.042]	**Simplified immuno-assay for rapid dengue serotype diagnosis based on surface plasmon resonance sensing** F.C.L. Loureiro[1], A.M.N. Lima[1], H. Neff[1], M. Borre[2], C. Thirstrup*[3], *[1]UFCG, Brazil, [2]SSI, Denmark, [3]DFM, Denmark*
[P1.043]	**Phage-display-based SERS nanoporous materials: Application for triplex assay in sepsis diagnostics** A.H. Nguyen, X. Ma*, S-J. Sim, *Korea University, Republic of Korea*
[P1.044]	**Detection of amyloid-beta protein derived from neuronal exosome using graphene biosensors for blood-based Alzheimer's disease diagnosis** M.S. Chae[1,2], J. Kim[1], D. Jeong[1,2], T.G. Kim[2], Y. Kim[1], J.H. Lee[3], K.S. Hwang[1], S. Han*[3], *[1]Korea Institute of Science and Technology, Republic of Korea, [2]Korea University, Republic of Korea, [3]Kwangwoon University, Republic of Korea*
[P1.045]	**Photothermal biosensor for c-reactive protein (CRP) detection from human saliva** S. Lee*[1], S. Choi[1], K. Kwon[1], N. Bae[2], S. Lee[2], H. Jung[1], *[1]Yonsei University, Republic of Korea, [2]ResearcherNational NanoFab Center, Republic of Korea*
[P1.046]	**Electrochemical immunosensor for sensitive determination of TGF β1 in urine** E. Sánchez-Tirado*, A. González-Cortés, P. Yáñez-Sedeño, J.M. Pingarrón, *University Complutense of Madrid, Spain*
[P1.047]	**New approach for fish stress monitoring: A novel enzyme-functionalized label-free immunosensor system for detecting cortisol levels in fish** H. Wu*, S. Ota, H. Ohnuki, H. Ren, H. Endo, *Tokyo University of Marine Science and Technology, Japan*
[P1.048]	**Detection of pregnancy associated plasma protein A2 in clinical samples** M. Bocková*[1], X. Chadtová Song[1], E. Gedeonová[1], K. Levová[2], M. Kalousová[2], T. Zima[2], J. Homola[1], *[1]Institute of Photonics and Electronics of the AS CR, v.v.i., Czech Republic, [2]Charles University in Prague and the General University Hospital in Prague, Czech Republic*
[P1.049]	**Impedimetric immunosensors for 2,4-dichlorophenoxy acetic acid detection** G. Fusco[1], C. Tortolini[1], P. Bollella[1], A. De Mico[1,2], G. Sanzò[1], R. Antiochia[1], G. Favero*[1], F. Mazzei[1], *[1]Sapienza University of Rome, Italy, [2]National Research Council, Italy*
[P1.050]	**Highly sensitive detection of food poisoning toxin using SERS-based lateral flow immunosensor** J. Hwang*, S. Lee, J. Ko, H. Chon, J. Choo, *Hanyang University, Republic of Korea*
[P1.051]	**The research of biosensor and bionic e-eye for rapid detection of okadaic acid on site** X.X. Qiu[1,2], K.Q. Su[1], Q.C. Zou[1], Y.X. Pan*[1], R. Li[1], P. Wang[1,2], *[1]Zhejiang University, China, [2]Chinese Academy of Sciences, China*
[P1.052]	**Targeting the limits of optical fiber absorption biosensors** Y. Wu*, K. Li, M. Li, F. Dai, W. Zhou, M. Chi, P. Hao, *Chinese Academy of Sciences, China*
[P1.053]	**High Q phononic crystal sensor with mode selective detection** Y. Wu*, P. Li, F. Shu, Y. Liu, F. Li, J. Wu, Y. Deng, *Chinese Academy of Sciences, China*
[P1.054]	**An array fluorescent biosensor based on planar waveguide for multi-analyte determination in water samples** L.H. Liu*, M.F. Lu, C. Yang, X.H. Zhou, H.C. Shi, Y. Qian, *Tsinghua University, China*
[P1.055]	**Application of planar waveguide fluorescence immunosensor for simultaneous detection of four different contaminants in milk and water** H.L. Guo*[1], X.H. Zhou[1], Y. Zhan[2], C.M. Gu[1], B.D. Song[1], H.C. Shi[1], *[1]Tsinghua University, China, [2]Hebei*

	Institute of Food Quality Supervision Inspection & Research, China
[P1.056]	**Transparent polymeric lateral flow platform for imprinted nanoparticle immunoassay** J.F. Engels*[1,2], D. Piché[2], R. Daly[2], R. Renneberg[1], E.A.H. Hall[2], [1]*Hong Kong University of Science and Technology, Hong Kong,* [2]*Cambridge University, UK*
[P1.057]	**Micro-capillary based molecular sensor: a simple and ultra low cost electronic approach for label-free biosensing** A. Dev*[1], J. Horak[1], A. Kaiser[1], X. Yuan[2], A. Perols[1], R. Afrasiabi[1], P. Björk[3], A. Eriksson Karlström[1], P. Kleimann[3], J. Linnros[1], [1]*KTH Royal Institute of Technology, Sweden,* [2]*Institut de Nanotechnologies de Lyon, France,* [3]*Swedish ICT Acreo AB, Sweden*
[P1.058]	**Innovative methods for the integration of immunosensors based on magnetic nanoparticles in lab-on-chip** O. Lefebvre*, F. Mbock Nkot, C. Smadja, E. Martincic, M. Woytasik, M. Ammar, *Université Paris Saclay, France*
[P1.059]	**Rapid detection of complicated cases of malaria through vertical flow microarrays** P. Reuterswärd*, J. Gantelius, H. Andersson Svahn, *KTH Royal Institute of Technology, Sweden*
[P1.060]	**Immunoassays, optical and electrochemical immunosensorsfor tetrodotoxin determination in puffer fish samples** L. Reverté*[1], P. de la Iglesia[1], V. del Río[1], M. Rambla[1], K. Campbell[2], C.T. Elliott[2], K. Kawatsu[3], P. Katikou[4], J. Diogène[1], M. Campàs[1], [1]*IRTA, Spain,* [2]*Institute for Global Food Security, UK,* [3]*Osaka Prefectural Institute of Public Health, Japan,* [4]*National Reference Laboratory on Marine Biotoxins, Greece*
[P1.061]	**Comparing nucleic acid lateral flow and electrochemical genosensing for the simultaneous detection of foodborne pathogens** A. Ben Aissa*, J.J. Jara, R.M. Sebastian, A. Vallribera, S. Campoy, M.I. Pividori, *Universitat Autònoma de Barcelona, Spain*
[P1.062]	**Highly reproducible and sensitive detection of mycotoxins by label-free interferometric biosensors** A.V. Orlov[1], A.G. Burenin[2], M.P. Nikitin*[2,1], P.I. Nikitin[1], [1]*Russian Academy of Sciences, Russia,* [2]*Moscow Institute of Physics and Technology (State University), Russia*
[P1.063]	**New biochemical engineering for self-assembled Alzheimer's biomarkers in lab-on-chip** M. Ammar*[1,3], C. Smadja[1,3], H. Cao[1,3], D. Tandjigora[1,3], E. Dufour-Gergam[1,3], E. Martincic[1,3], M. Woytasik[1,3], M. Taverna[1,3], J. Vigneron[2,3], A. Etcheberry[2,3], [1]*University of Paris Sud, France,* [2]*University of Saint Quentin Yvelines, France,* [3]*CNRS, France*
[P1.064]	**A new electrochemical immunosensor for detection of atrazine in water** R.A. Hernández Guzman, M.T. Castañeda Briones*, M. Ávila Jiménez, M. Espinoza-Castañeda, R. Cruz Colín, *Universidad Autónoma Metropolitana-Unidad Azcapotzalco, Mexico*
[P1.065]	**Surface plasmon resonance immunosensing of protein tau: an Alzheimer's disease biomarker** S. Lisi*[1,2], S. Scarano[1], C. Ravelet[2], E. Peyrin[2], M. Minunni[1], [1]*University of Florence, Italy,* [2]*University of Grenoble Alpes, France*
[P1.066]	**A printer-free, vertical flow based, colorimetric planar bead array for point of care applications** G. Svedberg*, J. Gantelius, H. Andersson Svahn, *KTH Royal Institute of Technology, Sweden*
[P1.067]	**Towards cardiac marker point-of-care testing devices** B. Prieto-Simón*[1], D.P. Chew[2], N.H. Voelcker[1], [1]*University of South Australia, Australia,* [2]*Flinders Medical Centre, Australia*
[P1.068]	**Signal amplification method for semiconductor biosensing by addition of charged surfactants** S. Hideshima*[1], K. Fujita[1], S. Kuroiwa[1], T. Nakanishi[1], Y. Harada[2], M. Tsuna[2], T. Osaka[1], [1]*Waseda University, Japan,* [2]*Nippon Flour Mills Co. Ltd., Japan*
[P1.069]	**Sensitivity enhancement of impedimetric immunosensor by simple protein preconcentration method for an early diagnosis of Alzheimer's disease** H.J. Kim[1,2], J. Kim[1], Y.K. Yoo[1], Y. Kim[1], J.H. Park[2], K.S. Hwang[1], S. Han*[1], [1]*Korea Institute of Science and Technology, Republic of Korea,* [2]*Korea University, Republic of Korea*
[P1.070]	**The enhancement of capacitive biosensor detection limit by modulating the surface potential in submicron gap of coplanar electrodes** M.S. Tsai*, H.T. Hsueh, C.T. Lin, *National Taiwan University, Taiwan*
[P1.071]	**Point-of-care dual-immunosensor for Ca^{2+} and parathyroid hormone in serum** J-N. Park*, S-H. Paek, D-H. Kim, S-H. Paek, *Korea University, Republic of Korea*
[P1.072]	**Single cytosine-based electrochemical biosensor for low-cost detection of silver nanoparticles** J.H. Kim*[1], J.W. Kim[1], K.B. Kim[1], C.W. Park[2], N.K. Min[1], [1]*Korea University, Republic of Korea,* [2]*Kangwon National University, Republic of Korea*
[P1.073]	**Material-binding antibody: Spontaneous immobilization of detecting antibody on plasmonic biosensor** T. Sugino*[1], H. Nakazawa[1], K. Tawa[2], I. Kumagai[1], M. Umetsu[1], [1]*Tohoku University, Japan,* [2]*Kwansei Gakuin,*

	Japan
[P1.074]	**Towards a handheld blood-based traumatic brain injury (TBI) diagnostic** B.A. Cardinell*[1], J.T. La Belle[1,2], *[1]Arizona State University, USA, [2]Mayo Clinic School of Medicine, USA*
[P1.075]	**Optical detection of immunoreaction based on optical fiber evanescent wave sensor for determining insulin** G. Lv*[2], J. Mo[1], X. Lv[1], *[1]Xinjiang University, China, [2]The First Teaching Hospital of Xinjiang Medical University, China*
[P1.076]	**Flow immunobiosensor system with electrode replacement unit for continuous cortisol monitoring for fish** H. Wu, H. Ohnuki, H. Ren, H. Endo*, *Tokyo University of Marine Science and Technology, Japan*
[P1.077]	**Microfluidic electrochemical immunosensor for cocaine monitoring** N. Abdelshafi*, U. Panne, R.J. Schneider, *BAM (Bundesanstalt für Materialforschung und -prüfung), Germany*
[P1.078]	**Paper-based diagnostic devices for enzyme immunoassays with a single-step sample dropping** M-G. Kim*[1,2], H-A. Joung[1], K. Kim[1], M-B. Song[2], *[1]Gwangju Institute of Science and Technology, Republic of Korea, [2]INGIbio Co. Ltd, Republic of Korea*
[P1.079]	**Paper based electrochemical biosensor for the immunoassay** J. Yang*, S. Choi, H. Jung, *Yonsei University, Republic of Korea*
[P1.080]	**Electrochemical impedance spectroscopy for monitoring of alkaline phosphatase reaction with substrate** A. Ferncova*, M. Hattuniemi, S. Pääkkönen, P. Tervo, E. Ohtonen, A.M. Sesay, J. Räty, V. Virtanen, *University of Oulu, Finland*
[P1.081]	**Direct electrochemical immunoassay for azaspiracids detectionusing magnetic beads as antibody supports** S. Leonardo*[1], I.A. Samdal[2], J. Kilcoyne[2], C.O. Miles[2], M. Rambla[1], J. Diogène[1], C.K. O'Sullivan[3,4], M. Campàs[1], *[1]IRTA, Spain, [2]Norwegian Veterinary Institute, Norway, [3]Universitat Rovira i Virgili, Spain, [4]Institució Catalana de Recerca i Estudis Avançats, Spain*
[P1.082]	**An automatic miniature surface plasmon resonance system for cortisol detection** L.L. Zhang*[1], X. Chen[1], W. Wei[2], S.L. Deng[2], C.F. Xu[1], D.F. Cui[1], *[1]Chinese Academy of Sciences, China, [2]Beijing Zhong Long Yi Cheng Technology Co.,Ltd, China*
[P1.083]	**A surface acoustic wave (SAW) immunosensor with a regeneratable surface enabling repetitive measurement of dust mite allergens** K. Toma[1], D. Miki[1], C. Kishikawa[1], N. Yoshimura[2], K. Miyajima[1,3], T. Arakawa[1], H. Yatsuda[3,4], K. Mitsubayashi*[1], *[1]Tokyo Medical and Dental University, Japan, [2]Japan Radi Co. Ltd., Japan, [3]Japan Society for the Promotion of Science, Japan, [4]OJ-Bio Ltd., UK*
[P1.084]	**A binding-releasing strategy for magnetic immunosensors to eliminate the nonspecific binding signal** Y. Du*, P.W.T. Pong, *The University of Hong Kong, Hong Kong*
[P1.085]	**Addressable immunoarrays: singlet oxygen-induced cross-linking of short furan-modified DNA oligonucleotides** C. Veliz Montes*[1,2], R-J. Schneider[1,2], T. Torres[3], A. Madder[1], *[1]Bundesanstalt für Materialforschung und -prüfung (BAM), Germany, [2]Technische Universität Berlin, Germany, [3]Universidad Autónoma de Madrid, Spain, [4]Universiteit Gent, Belgium*
[P1.086]	**Myoglobin impedance immunosensing with oriented anti-body immobilization** K. Tsugimura*[1], H. Ohnuki[1], D. Tsuya[2], H. Endo[1], M. Izumi[1], *[1]Tokyo Univ. of Marine Sci & Tech, Japan, [2]National Institute for Material and Science, Japan*
[P1.087]	**Early Alzheimer's disease diagnosis by an immunomagnetic biosensor of magnetic nitrogen-doped graphene nanocomposite.** C.W. Lin*[1], S.S. Li[1], K.C. Wei[2], C.Y. Huang[2], H.W. Yang[3], C.C. Ma[1], *[1]National Tsing Hua University, Taiwan, [2]Chang Gung Memorial Hospital, Taiwan, [3]National Sun Yat-sen University, Taiwan*
[P1.088]	**Biomarkers detection with nanoprinted-antibodies plasmonic optical fiber immunosensors** C. Ribaut*, P. Mégret, R. Wattiez, C. Caucheteur, *University of Mons, Belgium*
[P1.089]	**Rapid detection and quantification of the marine toxic algae, *Alexandrium minutum*,using a super-paramagnetic immunochromatographic strip test** F. GAS*[1], B. BAUS-LAGARDE[1], J. QUERE[2], A. CHAPELLE[2], C. DREANNO[2], *[1]CEA, France, [2]IFREMER, France*
[P1.090]	**Ultra-low fouling biorecognition platform for label-free biosensing in complex samples** E. Brynda*[1], H. Vaisocherová-Lísalová[2], F. Surman[1], I. Víšová[2], H. Šípová[2], T. Špringer[2], M. Ermini[2], O. Pop-Georgievski[1], M. Houska[1], J. Homola[2], *[1]Institute of Macromolecular Chemistry CAS, Czech Republic, [2]Institute of Photonics and Electronics CAS, Czech Republic*
[P1.091]	**Aluminum-based V-trench biosensor for plasmon-assisted fluoroimmunoassay of norovirus virus-like particles**

	H. Ashiba*[1], Y. Sugiyama[2], Y. Ohki[2], X. Wang[1], M. Fujimaki[1], *[1]National Institute of Advanced Industrial Science and Technology (AIST), Japan, [2]Waseda University, Japan*
[P1.092]	**Development of metallic nanoparticle conjugate-based lateral flow assay combined with surface enhanced Raman spectroscopy** L. Blanco Covián[1], V. Montes García[2], J. Pérez Juste[2], I. Pastoriza Santos[2], D. Graham[3], M.T. Fernández-Abedul[1], C. Blanco López*[1], *[1]Universidad de Oviedo, Spain, [2]Universidad de Vigo, Spain, [3]University of Strathclyde, UK*
[P1.093]	**Rapid test kits for house dust mites (*Der f II*) using SAW device** N. Yoshimura*[1], H. Yatsuda[1,2], K. Toma[3], K. Mitsubayashi[3], *[1]Japan Radio Co., Ltd.,, Japan, [2]OJ-Bio Ltd.,, UK, [3]Tokyo Medical and Dental University, Japan*
[P1.094]	**Binding mechanism and energetics of ochratoxin A to synthetic peptides: Factors influencing the affinity and specificity of peptide-biosensor system** I. Bazin*, A. Thyparambil, A. Guiseppi-Elie, *Ecole des mines d'Ales, France*
[P1.095]	**An antimicrobial peptide-based colorimetric immunosensor for the detection of *E. coli* O157:H7** Z.H. Qiao*[1], C.Y. Lei[1], Y.C. Fu[1], Y.B. Li[1,2], *[1]Zhejiang University, China, [2]University of Arkansas, Armenia*
[P1.096]	**Rapid and label-free detection of human butyrylcholinesterase using micro-ring resonators** B.M. de Boer*, R.H. Mars, S.M.C. Abdulla, J.H. van den Berg, A. Abutan, R.A.J. Hagen, M. Mota, P.L.M.J. van Neer, P.J. Harmsma, *TNO, The Netherlands*
[P1.097]	**Evanescent wave absorbance based U-bent fiber optic plasmonic sandwich immunobiosensor with 3 attomol analyte detection limit** B. Ramakrishna, V.V.R. Sai*, *Indian Institute of Technology Madras, India*
[P1.098]	**New approaches to cultural heritage diagnosis and conservation: a two-steps method coupling painted surfaces cleaning to optical biosensing for protein analysis of paints** S. Scarano*[1], E. Carretti[1,2], P. Baglioni[1,2], L. Dei[1,2], M. Minunni[1,2], *[1]Università degli Studi di Firenze, Italy, [2]Università degli Studi di Firenze, Italy*
[P1.099]	**Application of protein A/G-based sensor surface functionalization for the detection of individual biological nano-particles by surface plasmon resonance imaging (SPRi) technique** V. Shpacovitch*[1], A. Zybin[1], V. Temchura[2], F. Weichert[3], H. Müller[3], A. Schramm[4], K. Überla[2], R. Hergenröder[1], *[1]Leibniz Institute für Analytische Wissenschaften-ISAS, Germany, [2]Friedrich-Alexander University Erlangen-Nürenberg, Germany, [3]Technical University of Dortmund, Germany, [4]University Clinic Essen, Germany*
[P1.100]	**Application of amorphous indium gallium zinc oxide thin film transistor biosensors in Creatine Kinase detection** H.C. Lu*[1], Y.T. Chueh[1], T. Tseng[1], C.Y. Wang[2], C.H. Chaou[3], *[1]Chang Gung University, Taiwan, [2]Tatung University, Taiwan, [3]Chang Gung Memorial Hospital, Taiwan*
[P1.101]	**A highly sensitive and selective capacitance electrochemical biosensor for ochratoxin A detection based magnetic nanoparticles modified silicon nitride substrate** M. Bougrini[2,1], A. Barakat[2], T. Jamshaid[2], A. El aissari[2], J. Bausells[3], N. El Bari*[1], B. Bouchikhi[1], N. Jaffrezic-Renault[2], A. Errachid[2], N. Zine[2], *[1]Moulay Ismaïl University, Morocco, [2]Claude Bernard Lyon1 University, France, [3]Institut de Microelectronica de barcelona, Spain*
[P1.102]	**Novel strategy for detection of sulfapyridine and SA2-BSA using a fully integrated bio-MEMS: application to honey analysis** N. El Alami El Hassani[1,2], N. EL Bari*[1], *[1]Moulay Ismaïl University-Faculty of Sciences, Morocco, [2]Claude Bernard Lyon 1 University, France, [3]Institute of Advanced Chemistry of Catalonia, Spain, [4]Instituto de Ciencia de Materiales de Madrid, Spain*
[P1.103]	**Optical micro-bubble resonators for immunosensing application** S. Berneschi[1], F. Baldini[1], A. Cosci[2,1], F. Cosi[1], D. Farnesi[2,1], G.N. Conti[1,2], S. Pelli[1,2], S. Tombelli[1], C. Trono[1], A. Giannetti*[1], *[1]CNR-IFAC, Italy, [2]Centro Fermi, Italy*
[P1.104]	**A novel immunosensor based on polypyrrole electroless deposition on silicon nitride substrates: Interleukine-10 detection** F. Nessark[1], P. Marote[2], A. Bonhomme[2], A. Baraket*[2], N. Zine[2], J. Bausells[3], A. Errachid[2], *[1]Université Ferhat Abbas Sétif 1, Algeria, [2]Université Claude Bernard Lyon 1, France, [3]Centro Nacional de Microelectróica (IMB-CSIC) Campus UAB, Spain*
[P1.105]	**Development of adhiron-based impedimetric biosensors for detection of myoglobin** P. Thangsunan*, M. McPherson, D. Tomlinson, P.A. Millner, *University of Leeds, UK*
[P1.106]	**Electrochemical impedance spectroscopy biosensor for the detection of immunoglobulin G: the effect of mixed self-assembled monolayer** H. Ohnuki*[1], K. Tsugimura[1], Y. Kusaka[1], H. Wu[1], H. Endo[1], D. Tsuya[2], M. Izumi[1], *[1]Tokyo University of Marine Science and Technology, Japan, [2]National Institute for Materials Science, Japan*

[P1.107]	**A facile nanoparticle immunoassay for magnetic immunosensor using nanoparticle protein corona** Y. Du*, P.W.T. Pong, *The University of Hong Kong, Hong Kong*
[P1.108]	**Comparison of optomagnetic and AC susceptibility readouts in a magnetic nanoparticle agglutination assay for detection of C-reactive protein** J. Fock*[1], M. Parmvi[1], M. Strömberg[1], P. Svedlindh[1], M. Donolato[1], M.F. Hansen[1], *[1]Technical University of Denmark, Denmark, [2]Uppsala University, Sweden*
[P1.109]	**B-type natriuretic peptide (bnp) detection using electrochemical immunosensor based on sandwich elisa with horseradish peroxidase-tetramethylbenzidine system** Y.W. Hartati*, S. Gaffar, R. Nurmalasari, T. Subroto, *UniversitasPadjadjaran, Indonesia*
[P1.110]	**Capacitive biosensor based evaluation of target-receptor interactions** N.V. Beloglazova*, A. Foubert, P. Lenain, S. De Saeger, *Ghent University, Belgium*
[P1.111]	**Functional gold nanoparticles for highly sensitive optical detection of cancer biomarker** T. Špringer*, X.C. Song, M.L. Ermini, J. Lamacova, J. Homola, *Institute of Photonics and Electronics of the AS CR, v.v.i., Czech Republic*
[P1.112]	**Development of nano-magnetic bioassay for detection of pandemic influenza** A. Kalabukhov[1], A. Jesorka[1], D. Winkler*[1], J. Schneiderman[2], J. Blomgren[3], C. Johansson[3], A. Ahlford[4], M. Nilsson[4], M. Strømme[6], J. Albert[5], *[1]Chalmers University of Technology, Sweden, [2]MedTech West and the University of Gothenburg, Sweden, [3]Acreo Swedish ICT AB, Sweden, [4]Stockholm University, Sweden, [5]Karolinska Institutet, Sweden, [6]Uppsala University, Sweden*
[P1.113]	**Magnetic bead fluorescence immunoassay for the rapid detection of the novel inflammation marker YKL40 at the point-of-care** M. Schmalenberg*[1], C. Beaudoin[1], L. Bulst[1], G. Czilwik[2], P.B. Luppa[1], *[1]Institut für Klinische Chemie und Pathobiochemie, Germany, [2]Hahn-Schickard, Germany*
[P1.114]	**Modification of SPR gold sensors with graphene oxide towards antibody immobilization** C.M. Miyazaki*[1], F.M. Shimizu[2], M. Ferreira[1], *[1]Federal University of São Carlos, Brazil, [2]University of São Paulo, Brazil*
[P1.115]	**Ultrasensitive detection of 17β-Estradiol in water using electrochemical impedance spectroscopy** S. Bhand*, A.C. Singh, G. Bacher, *BITS, Pilani-KK Birla Goa Campus, India*
[P1.116]	**Modification of gold-electrode surface for evaluation of mycotoxin protein conjugates by using a capacitive immunosensor** A. Foubert*[1], N. Beloglazova[1], P. Lenain[1], M. Hedström[2], S. De Saeger[1], *[1]Ghent University, Belgium, [2]Capsenze HB, Sweden*
[P1.117]	**Micro-sensor arrays on discs for multiplex determination of food allergens** S. Morais, A. Ali, A. Maquieira*, *Universitat Politecnica de Valencia, Spain*
[P1.118]	**Assessment of the coeliac allergen content in beers** S. Morais, A. Ali, A. Maquieira*, *Universitat Politecnica de Valencia, Spain*
[P1.119]	**A real-time affinity biosensor based on nanofluidic fluorescence microscopy for the determination of protein binding kinetics** P. Teerapanich[1], M. Pugnière[2], Y.L. Lin[3], C.F. Chou[3], T. Leichle*[1], *[1]LAAS-CNRS, France, [2]IRCM, France, [3]Academia Sinica, Taiwan*
[P1.120]	**Biosensors for prostate cancer biomarkers glycoprofiling** S. Belicky*, J. Tkac, *Slovak Academy of Sciences, Slovakia*
[P1.121]	**Detection of small molecules by automated real-time surface plasmon resonance based immunosensor** C.Y. Chain*[1], M.A. Daza Millone[1], E.A. Ramirez[1], D. Romanin[2], M.D. Cocco[3], J. Montoya[4], M. Rumbo[2], G. Docena[2], A. Fainstein[1], M.E. Vela[1], *[1]INIFTA (CONICET-UNLP)- La Plata, Argentina, [2]IIFP (CONICET-UNLP)- La Plata, Argentina, [3]Centro Atómico Bariloche, Instituto Balseiro- Bariloche, Argentina, [4]EEA Anguil (INTA)- Anguil, Argentina*
[P1.122]	**Optical biosensor for Salmonella typhi detection using gold nanoparticles** M. Espinoza-Castañeda*, M.T. Castañeda Briones, R. Cruz Colín, M. Ávila Jiménez, *Universidad Autónoma Metropolitana, Mexico*
[P1.123]	**Complementary techniques for the detection of measles antibodies using piezoelectric and impedimmetric immune(bio)sensors** P.N. Mashazi, *Rhodes University, South Africa*
[P1.124]	**Towards an immunoanalytical systems for hepatitis A virus determination** L. Micheli*[1,2], A. Fasoli[1], A. Attar[3], D.T. Donia[4], M. Divizia[4], G. Palleschi[1,2], P.A. Salazar Carballo[5], D. Moscone[1,2], *[1]University of Rome "Tor Vergata, Italy, [2]Consorzio Interuniversitario Biostrutture e Biosistemi "INBB", Italy, [3]University Hassan II of Casablanca, Morocco, [4]University of Roma "Tor Vergata", Italy, [5]University of La Laguna, Campus de Ofra s/n, 38071 La Laguna, Tenerife (Spain), Spain*
[P1.125]	**Design of an SPR imaging system to study novel self-assembling carbene monolayers on gold**

	A.G. MacLean*, A.S. Lehnert, M.A. Thomas, A. Al Rashed, H. Horton, C. Crudden, C. Escobedo, H-P. Loock, *Queen's University, Canada*
[P1.126]	**Label-free detection of the human cardiac troponin using a nanoimmunosensor based on nanohybrid of polymer-carbon nanotubes** C.E. Silva, C.E.L. Menezes, B.V.M. Silva, R.F. Dutra*, *Biomedical Engineering Laboratory, Federal University of Pernambuco, Brazil*
[P1.127]	**Signal amplification method for immunosensor using photo-responsive micro-capsules** M. Yamaguchi*[1,2], H. Katagata[2], S. Mochizuki[1], K. Katagiri[3], *[1]Shinshu University, Japan, [2]Iware University, Japan, [3]Hiroshima University, Japan*
[P1.128]	**Detection of amyloid β oligomer by same antibody sandwich assay (SAS) with highly sensitive bead-based electrochemical impedance sensor (BEIS) for Alzheimer disease diagnosis** Y.H. Heo[1,2], J.H. Ji[1,3], K.S. Shin[1], S-H Lee*[1], K.W. Shin[1], J.Y. Kang[1], *[1]Korea Institute of Science and Technology, Republic of Korea, [2]Sogang University, Republic of Korea, [3]Yonsei University, Republic of Korea*
[P1.129]	**An electrochemical immunosensors for the detection of pepsin utilizing polypyrrole/Au composites on screen printed electrodes** D.Y. Lee*, Y.J. Ahn, Y.J. Lee, H.K. Park, G.J. Lee, *Kyung Hee University, Republic of Korea*
[P1.130]	**A point-of-care capacitive immunosensor for cardiac troponin T detection using polypyrrole interdigitated electrode** M.C.M. Araújo, E.T. Cavalcante, L.F. Colaço, C.E. Silva, B.A. Rodríguez, R.F. Dutra*, *Biomedical Engineering Laboratory, Federal University of Pernambuco, Brazil*
[P1.131]	**New approach for immunoassay based on porous antibody microparticles** M. Vdovenko*[1,2], D. Volodkin[1,2], *[1]Fraunhofer IZI-BB, Germany, [2]Lomonosov Moscow State University, Russia, [3]Nottingham Trent University, UK*
[P1.132]	**Detection of helicobacter pylori bacterial pathogen in very complex media (stool) using magnetic nanoparticles** C.E. Nwankire*, B. Dolan, A. Hermant, M. Clyne, G.U. Lee, *University College Dublin, Ireland*
[P1.133]	**Composite magnetic-fluorescent nanoparticles for bioassays: CRP** S. KC*[1], A. Ranzoni[1], W. Phetsang[1], M.F. Hansen[2], M.A. Cooper[1], *[1]Institute for Molecular Bioscience, 306 Carmody Road, The University of Queensland, Australia, [2]Department of Micro- and Nanotechnology, Technical University of Denmark, DTU Nanotech, Building 345 East, DK-2800 Kongens Lyngby, Denmark*
[P1.134]	**Enhancing the capabilities of a biosensor for microcystin-LR** C. Murphy*[1], E.C. Stack[1], M. Lochhead[2], G. Husar[2], F. Regan[1], R.J. O'Kennedy[1], *[1]Dublin City University, Ireland, [2]Mbio Diagnostics Inc., USA*
[P1.135]	**Micropattern-enhanced hydrophobicity of centrifugal fluid valve in Ii mmunosensor** M. Yamaguchi[1], Y. Machida*[1], V. Shetty[2], *[1]Shinshu University, Japan, [2]UCLA, USA*
[P1.136]	**Nanoscale immunsensor based on non-covalent functionalized graphene oxide platform and numerous ferritin labels on carbon nanotubes** R. Akter, B. Jeong, A. Rahman*, *Chungnam National University, Republic of Korea*
[P1.137]	**Rapid diagnostic system based on nucleic acid amplification technique for detection of parasites** Y. Shin[1], *[1]A*STAR, Singapore, [2]University of Ulsan College of Medicine, Republic of Korea*
[P1.138]	**An electrochemical immuno-sensor based on screen printed carbon electrode for the detection of influenza Virus** R.Z. Hao*, J.Y. Wang, Y. Li, X. Lu, R.L. Wang, R.T. Zhao, W.M. Yang, H.B. Song, *AMMS, China*
[P1.139]	**Multiplex lateral flow detection and binary encoding enables a molecular colorimetric 7-segment display** J.L. Jia*, J.M. Macdonald, *University of the Sunshine Coast, Australia*
[P1.140]	**Evaluation of label-free interferometric biosensor for rapid detection of norovirus using virus like particles** X. Dong, L. Yang*, *North Carolina Central University, USA*
[P1.141]	**Development of an immunosensor for the detection of Malaria** A. Hemben*, J. Ashley, I. Tothill, *Cranfield University, UK*
[P1.142]	**Engineered MgMnFe2O4 nanoprobe-assisted miniaturized NMR system for highly sensitive detection of viral infectious diseases** M. Jeun*[1], K.H. Lee[1], H. Lee[2], *[1]Korea Institute of Science and Technology, Republic of Korea, [2]Massachusetts General Hospital, Harvard Medical School, USA*
[P1.143]	**Sensor for early detection of wound infection** M. Hajnsek*[1], D. Schiffer[2], G. Guebitz[3], F. Sinner[1,4], *[1]Joanneum Research, Austria, [2]ACIB, Austria, [3]University of Natural Resources and Life Sciences, Austria, [4]Medical University of Graz, Austria*
[P1.144]	**Rapid diagnosis of a Candida bloodstream infection** S.I. Preus*[1], D. Kwasny[1], K.B. Andersen[1,2], M. Dimaki[1], W.E. Svendsen[1], *[1]DTU nanotech, Denmark, [2]Delta,*

	Denmark
[P1.145]	**Inexpensive and fast pathogenic bacteria screening using field-effect transistors** N. Formisano[1], N. Bhalla[1], M. Heeran[2], J. Reyes Martinez[2], M. Laabei[1], P. Jolly[1], C.R. Bowen[1], J.T. Taylor[1], S. Flitsch[2], P. Estrela*[1], *[1]University of Bath, UK, [2]University of Manchester, UK*
[P1.146]	**Effects of different interfaces for S. aureus capture on magneto-elastic biosensor performance** C. Menti[1], M. Beltrami[1], A.L. Possan[1], S.T. Martins[1], J.A.P. Henriques[1], A.D. Santos[2], F.P. Missell[1], M. Roesch-Ely*[1], *[1]Universidade de Caxias do Sul, Brazil, [2]Universidade de São Paulo, Brazil*
[P1.147]	**A fully integrated electrochemical BioMEMS fabrication process for cytokine detection: Application for heart failure** A. Baraket*[1], M. Lee[1], N. Zine[1], M. Sigaud[1], M. Zabala[2], J. Bausells[2], A. Errachid[1], *[1]Université de Claude Bernard Lyon 1, France, [2]Centro Nacional de Microelectrónica (IMB-CSIC), Spain*
[P1.148]	**Rapid molecular diagnosis of bacterial infection using integrated lab-on-a-disc** F.C. Loo*, C.H. Leung, H.C. Kwok, S.Y. Wu, L.G. Law, S.K. Kong, H.P. Ho, *The Chinese University of Hong Kong, Hong Kong*
[P1.149]	**A fluorescent immunomagnetic biosensor for the rapid and sensitive detection of foodborne pathogen** Y.J. Sung*[1], T. Li[2], Y-B. Shin[1], M-G. Kim[3,4], *[1]Korea Research Institute of Bioscience and Biotechnology(KRIBB), Republic of Korea, [2]Nanjing Forestry University(NJFU), China, [3]Gwangju Institute of Science and Technology(GIST), Republic of Korea, [4]Advanced Photonics Research Institute(APRI), Republic of Korea*
[P1.150]	**Micro bead-beatable sample preparation module for the nucleic acid detection of airborne pathogen in the air** C. Baek*, S.H. Chung, J. Min, *Chung-Ang University, Republic of Korea*
[P1.151]	**Simple but effective nucleic acid isolation tools for highly sensitive detection of pathogen in stool using two syringe system including functional micro beads** S.H. Chung*, C. Beak, T.N. Nguyen, J. Min, *Chung-Ang University, Republic of Korea*
[P1.152]	**Colony fingerprinting toward rapid detection and classification of microbial species** Y. Maeda*[1], H. Dobashi[1], T. Saeki[1], T. Lim[2], M. Harada[2], T. Matsunaga[1], T. Yoshino[1], *[1]Tokyo University of Agriculture and Technology, Japan, [2]Malcom Co., Ltd., Japan*
[P1.153]	**On site detection of H5N1 virus from avian feces** S. Park, M. Jeun*, K.Y. Lee, S. Lee, K.H. Lee, *Korea Institute of Science and Technology, Republic of Korea*
[P1.154]	**Continuous enrichment, nucleic acid extraction and detection of foodborne pathogens using a multifunctional microfluidic chip** K. Kwon*, K.A. Hyun, H.I. Jung, *Yonsei University, Republic of Korea*
[P1.155]	**Highly-sensitive label-free differential pulse voltammetric immunosensor for diagnosis of infectious diseases based on electrospun copper doped ZnO nanofiber biosensing platform** K. Brince Paul*, S. Jaiswal, S. Tripathy, V. Singh, S.R.K. Vanjari, S.G. Singh, *IIT Hyderabad, India*
[P1.156]	**Early diagnosis of bacterial infections** F.A.Z. Alatraktchi*[1], S. Molin[1], H. Krogh Johansen[1,2], W. E. Svendsen[1], *[1]Technical University of Denmark, Denmark, [2]Rigshospitalet, Denmark*
[P1.157]	**Chip-based Isolation of Pathogens for Subsequent Raman Spectroscopic Identification** S.P. Pahlow*[2,3], S.S. Stoeckel[2,3], P.R. Roesch[2], D.C. Cialla-May[1,2], K.W. Weber[1,3], J.P. Popp[1,2], *[1]Leibniz Institute of Photonic Technology, Germany, [2]Friedrich-Schiller-University Jena, Germany, [3]InfectoGnostics Forschungscampus Jena e.V.,, Germany*
[P1.158]	**Rapid and low-cost paper-based nanobiosensor for pathogens detection** M. Zourob*[1], G. Suaifan[2], S. Alhogail[1], *[1]Alfaisal University, Saudi Arabia, [2]The university of Jordan, Jordan*
[P1.159]	**The effect of self-assembled monolayer composition on a Toll-Like Receptor bacterial biosensor** R.M. Mayall*, M. Renaud-Young, V.I. Birss, *University of Calgary, Canada*
[P1.160]	**Impedance spectroscopy analysis for spoilage yeast detection using interdigitated microelectrodes biosensors** I. Tubia*[1], S. Arana[1], E. Perez-Lorenzo[1], C. Abadin[2], M. Zumarraga[2], I. Oyanguren[2], F. Barbero[2], J. Paredes[1], *[1]CEIT and Tecnun (University of Navarra), Spain, [2]Polígono Industral de Júndiz, Spain*
[P1.161]	**Detection of bacterial volatiles using surface-enhanced Raman spectroscopy** R.K. Lauridsen*[1], T. Rindzevicius[1], S. Molin[1], H.K. Johansen[2], S. Knøchel[3], K.G. Nielsen[2], S.B. Engelsen[3], A. Boisen[1], *[1]Technical University of Denmark (DTU), Denmark, [2]Copenhagen University Hospital, Denmark, [3]University of Copenhagen, Denmark*
[P1.162]	**Application of the portable SPR biosensor for rapid detection of Mycobacterium tuberculosis** D.A. Berillo*[2], D.A. Kanaeva[1,2], *[1]Nazarbayev University, Kazakhstan, [2]National Laboratory Astana PI, Kazakhstan*
[P1.163]	**Multi-parameter sensor system for continuous and non-invasive online monitoring and control in**

	bioreactors G. Piraux*[1], H. Staaf[1], V. Di Fonzo[1], S. Ciyako[1], P.B. Pateel[2], C. Rusu[3], S. Sumitran-Holgersson[2], P. Enoksson[1], *[1]Chalmers University of Technology, Sweden, [2]Gothenburg University, Sweden, [3]Acreo AB, Sweden*
[P1.164]	**Development of field-effect-transistor and electrochemical impedance spectroscopy based immunosensors for animal disease diagnostics** D. Gray*[1], A. Tarasov[2], N. Shields[1], M. Tsai[2], A. Montrose[3], N. Creedon[3], P. Lovera[3], A. O'Riordan[3], E. Vogel[2], M. Mooney[1], *[1]Queen's University Belfast, UK, [2]Georgia Institute of Technology, USA, [3]Tyndall National Institute, Ireland*
[P1.165]	**Development of a compact flow cytometer system for detection of tuberculosis** D. Ilver, C. Zörgibel, K. EngelHardt, J. Stigvall, C. Rusu*, *Sensor Systems, Acreo Swedish ICT AB, Sweden*
[P1.166]	**Potentiometric lytic phage-sensing for Listeria monocytogenes in food products** J.M.C.S. Magalhães*[1], V. Ferreira[2], N. Komora[2], H.K.S. Souza[1], P. Teixeira[2], M.P.F. Gonçalves[1], *[1]LAQV-REQUIMTE, Universidade do Porto, Portugal, [2]CBQF, Centro Regional do Porto da Universidade Católica Portuguesa, Portugal*
[P1.167]	**Diagnose pathogens in drinking water via magnetic Surface-Enhanced Raman Scattering (SERS) assay** H. Li[1], L. Cui[2], F.L. Martin[1], D. Zhang*[1], *[1]Lancaster University, UK, [2]Chinese Academy of Sciences, China*
[P1.168]	**Redox metal ion-triggered fluorescent oligomeric dopamine biosensor for highly sensitive detection of foodborne bacterial pathogen** T. An, N.H. Lee, J.I. Ryu, S-M. Lee*, *Kangwon National University, Republic of Korea*
[P1.169]	**Voltammetricdna biosensor using gold electrode modified by self assembledmonolayer of thiol for detection of mycobacteriumtuberculosis** S. Gaffar*, R. Nurmalasari, . Yohan, Y.W. Hartati, *Padjadjaran University, Indonesia*
[P1.170]	**Development of novel biomolecular diagnostic sensors using M13 bacteriophage** H. Little*, J. Carr-Smith, G. Bullen, J.H.R. Tucker, T.R. Dafforn, *University of Birmingham, UK*
[P1.171]	**Bio-transducer assisted multisensor approach for protein A purity evaluation** E. Voitechovic*[1], A. Korepanov[2], D. Kirsanov[1,3], A. Legin[1,3], *[1]St. Petersburg State University, Russia, [2]Protein Contour LLC, Russia, [3]ITMO University, Russia*
[P1.172]	**Valid online prediction for a large set of essential oils with measures of confidence and reliability using electronic nose** J. Miao*, L. Liu, K. Zhang, Y. Wang, R. Hu, G. Li, *Zhejiang University, China*
[P1.173]	**A sensor system for capturing the volatile phenotype of chronic degenerative disorders** M. Santonico[1], G. Pennazza*[1], C. Pedone[1], A. De Vincentis[1], S. Scarlata[1], C. Vernile[1], A. Zompanti[1], A. D'Amico[2], A. Picardi[1], R. Antonelli Incalzi[1], *[1]Università Campus Bio-Medico di Roma, Italy, [2]University of Rome Tor Vergata, Italy*
[P1.174]	**Evaluation the odour of nutrient product by human and electronic nose system** T. Uchida*, T. Haraguchi, M. Yoshida, H. Kojima, *Mukogawa Women's University, Japan*
[P1.175]	**Cost-effective electronic nose for quantitative ethylene detection in the presence of water vapour for real-life consumer applications** R. Leitner*[1], M. Krivec[1], F. Überall[2], J. Gostner[2], R. Waldner[3], D. Maier[3], *[1]CTR AG, Austria, [2]University Innsbruck, Austria, [3]Philips Austria, Austria*
[P1.176]	**Solvent vapour detection with gold nanoparticles and cyclodextrin thin layers** T. Szabó, N. Molnár, E. Orosz, L. Nyikos*, *Research Centre for Natural Sciences, Hungarian Academy of Sciences, Hungary*
[P1.177]	**Tailoring gas sensor arrays via the design of short peptides sequences as binding elements** D. Compagnone*, D. Pizzoni, E. Chiarappa, M. Mascini, *Università di Teramo, Italy*
[P1.178]	**e-Eyes and Internet-Of-Things for detection of pyrrolizidine alkaloids. Colorimetric and mathematical implementation for automatic recognition of a signal** G. González-Aguilar, *INESC TEC, Portugal*
[P1.179]	**An olfaction-navigated rat-robot based on implantable electrode array and brain-computer interface** B. Zhang*, Z. Qin, T. Guo, K. Su, P. Wang, *Zhejiang University, China*
[P1.180]	**Construction of peptide probe for detection of volatile explosive compounds** M. Muto*[1,2], K. Yanai[1,2], M. Tanaka[1,2], H. Ueda[1], T. Onodera[2,3], K. Toko[2,3], M. Okochi[1,2], *[1]Tokyo Institute of Technology, Japan, [2]JST ImPACT, Japan, [3]Kyushu University, Japan*
[P1.181]	**Investigation of insect excitable cell lines for use in biosensing** M.O. Dias*, N.A. Willoughby, E.R. Brown, *Heriot-Watt University, UK*
[P1.182]	**Mycelium extracts as sensitive element for acoustoelectronic gas sensor** I.E. Kuznetsova*[1], B.D. Zaitsev[1], A.M. Shikhabudinov[1], O.M. Tsivileva[2], A.N. Pankratov[3], *[1]Kotel'nikov Institute of Radio Engineering and Electronics of RAS, Russia, [2]IBFRM of RAS, Russia, [3]Saratov State*

	University, Russia
[P1.183]	**Geographical classification and adulteration detection of cumin by using electronic sensing coupled to multivariate analysis** K. Tahri[1], C. Tiebe[2], N. El Alami-El Hassani[3], T. Saidi[1], M. Bougrini[1], N. El Bari[3], T. Hübert[2], B. Bouchikhi*[1], *[1]Moulay Ismaïl University, Morocco, [2]BAM Federal Institute for Materials Research and Testing, Germany, [3]Moulay Ismaïl University, Morocco*
[P1.184]	**An electronic nose based on a micromechanical cantilever array for Volatile Organic Compounds (VOC) detection** M. Possas Abreu*[1], F. Ghassemi[1], L. Rousseau[1], G. Lissorgues[1], M. Habchi[2], E. Scorsone[2], *[1]ESIEE, France, [2]CEA, France*
[P1.185]	**Development of aptamer/graphene oxide FRET biosensor for one-step ultrasensitive detection of bisphenol A and analogues** S. Gupta*, R. Wood, *Western Kentucky University, USA*
[P1.186]	**Electrochemical aptasensor for allergen Der p2 detection using a polycarbonate based double-generation gold nanoparticle chip** M-C. Shen, G-J. Wang*, *National Chung-Hsing University, Taiwan*
[P1.187]	**Development of electrochemical biosensors based on aptamer for pesticide detection** G. Aydogdu Tig, M.B. Kocer, E.O. Bolat, S. Pekyardimci*, *Ankara University, Turkey*
[P1.188]	**A MEMS electrochemical aptasensor for norovirus detection** N. Wang*[1], M. Kitajima[2], K. Mani[2], E. Kanhere[1], A.J. Whittle[3], M.S. Triantafyllou[3], J.M. Miao[1], *[1]Nanyang Technological University, Singapore, [2]Center for Environmental Sensing and Modeling, Singapore, [3]Massachusetts Institute of Technology, USA*
[P1.189]	**Exploring size-dependent properties of a target-responsive hydrogel aptasensor embedded with QDs for rapid fluorescent detection of viruses** L. Xu*[1,2], R. Wang[2], L.C. Kelso[2], Y. Li[1,2], *[1]Zhejiang University, China, [2]University of Arkansas, USA*
[P1.190]	**Feasibility of capacitive aptasensor on paper to detect pathogenic bacteria responsible for nosocomial infections** T. Rabelam, M. Balde, H. Marchandin, A. Vena, S. Hantova, B. sorli*, *Universite Montpellier, France*
[P1.191]	**Ultrasensitive electrochemical detection of Hg^{2+} based on Hg^{2+}-triggered exonuclease III-assisted target and secondary target recycling amplification** S. Liu*, W. Xu, Y. Wang, J.H. Yu, Y.N. Guo, H.Z. Wang, X.J. Cui, X.Q. Leng, J.D. Huang, *University of Jinan, China*
[P1.192]	**Detection of the peanut allergen Ara h1 by electrochemical impedance spectroscopy and the heat-transfer method** G. Wackers[1,2], M. Khorshid*[1,2], P. Losada-Perez[2], M. Peeters[3], W. De Ceuninck[2], E. Pérez-Ruiz[1], J. Lammertyn[1], P. Wagner[1], *[1]KU Leuven, Belgium, [2]Hasselt University, Belgium, [3]Manchester Metropolitan University, UK*
[P1.193]	**Low-cost, electrical aptasensor based on dielectrophoretic assembly of reduced graphene oxide sheets for detection of Troponin-T** A. Sharma*, J. Jang, *Ulsan National Institute of Science and Technology (UNIST), Republic of Korea*
[P1.194]	**Evanescent wave based simultaneous detection of Ag+ and Hg2+ using a streptavidin-stoichiometric assisted post-conjugation strategy** R.Y. Wang, X.H. Zhou*, H.C. Shi, *Tsinghua University, China*
[P1.195]	**Label-free and signal-enhanced localized surface plasmon resonance (LSPR) aptasensor for small molecule detection** J-H. Park*[1], J-Y. Byun[1], M-G. Kim[1,2], *[1]GIST, Republic of Korea, [2]APRI, Republic of Korea*
[P1.196]	**Ultrasensitive electrochemical detection of Hg^{2+} based on Hg^{2+}-triggered exonuclease III-assisted target and secondary target recycling amplification** Y. Wang, Y. Xu, X.L. Song, Y.N. Guo, H.Z. Wang, Q.Q. Pei, S. Liu, J.H. Yu, J.D. Huang*, *University of Jinan, China*
[P1.197]	**A novel sandwich-type electrochemical aptasensor for sensitive detection of oxytetracycline based on GR-3D Au and aptamer-AuNPs-HRP** S. Liu, W. Xu, Y. Wang, J.H. Yu, Y.N. Guo, H.Z. Wang, X.J. Cui, X.Q. Leng, J.D. Huang*, *University of Jinan, China*
[P1.198]	**Split spinach aptamer for fluorescent analysis of specific nucleic acids** N. Kikuchi*, D. Kolpashchikov, *University of Central Florida, USA*
[P1.199]	**Application of DNA aptamers as recognition layers for detection of potassium ions** M. Jarczewska*, L. Górski, E. Malinowska, *Warsaw University of Technology, Poland*
[P1.200]	**Studies on the use of aptamer-modified electrodes for the electrochemical detection of dopamine**

	M. Jarczewska*, S.R. Sheelam, R. Ziolkowski, L. Gorski, E. Malinowska, *Warsaw University of Technology, Poland*
[P1.201]	**A novel fluorescent biosensor based on photochrome switch of fluorophore on aptamer** Y. Zhou*[1], Y. Wu[1], O. Pokholenko[1], R.S. Marks[2], T.W.J. Steele[1], *[1]Nanyang Technological University, Singapore, [2]Ben Gurion University of the Negev, Israel*
[P1.202]	**Label-free impedimetric Salmonella aptasensor based on pyrrole (pyrrole -3-carboxyl acid) copolymer and its application in apple juice analysis** E. Sheikhzadeh*[1,2], M. Golabi[1], M. Chamsaz[2], M. Housaindokht[2], A.P.F. Turner[1], E.W.H. Jager[1], V. Beni[1], *[1]Linkoping University, Sweden, [2]Ferdowsi University of Mashhad, Iran*
[P1.203]	**Novel nanofluid design and nanoslit arrays for AMACR aptasensing** D.K. Yang*[1,4], Y.L. Lin[1], M.Y. Pan[1], C.F. Chou[1], P.K. Wei[1,2], L.C. Chen[4], C.H. Hsu[4], *[1]Academia Sinica, Taiwan, [2]National Taiwan Ocean University, Taiwan, [3]National Yang-Ming University, Taiwan, [4]National Taiwan University, Taiwan*
[P1.204]	**Impedance based aptasensor for the detection of immunogenic protein mpt64** M. Sypabekova*[1], T. Ayupova[1], D. Berillo[1], D. Kanayeva[1,2], *[1]NLA, Nazarbayev University, Kazakhstan, [2]School of Science and Technology, Nazarbayev University, Kazakhstan*
[P1.205]	**Diazobenzene-containing conjugated polyelectrolytes and their application in biomolecule sensing** Y. Lv*, J. Wu, C. Tan, *Tsinghua University, China*
[P1.206]	**Novel DNA aptamer-based sandwich microfluidic assays for dual quantification and multi-glycan profiling of prostate cancer biomarkers** P. Jolly[1], P. Damborsky[2], N. Madaboosi[3], R.R.G. Soares[3], J. Katrlik[2], V. Chu[3], J.P. Conde[3], P. Estrela*[1], *[1]University of Bath, UK, [2]Slovak Academy of Sciences, Slovakia, [3]INESC Microsystems & Nanotechnologies, Portugal*
[P1.207]	**Utilization of unmodified gold nanoparticles for label-free detection of Hg2+: Insight into rational design of aptamer** A.G. Memon*[1,2], J. Liu[1], R. Wang[1], L. Zhang[1], L. Liu[1], M. He[1], X. Zhou[1], *[1]Tsinghua University, China, [2]NED University of Engineering and Technology, Pakistan*
[P1.208]	**Novel saw sensor for oa detection with a lower detect limit and low cost** Y.L. Tian[1,2], R. Li[1], Y.X. Pan*[1], C.S. Wu[1,2], P. Wang[1,2], *[1]Zhejiang University, China, [2]State Key Laboratory of Transducer Technology, Chinese Academy of Sciences, China*
[P1.209]	**Detection of prostate specific antigen by localized surface plasmon resonance of polyethylene glycol coated gold nanoparticles on glass substrates** P. Zhurauski*, A. Miodek, P. Jolly, N. Bhalla, P. Estrela, *University of Bath, UK*
[P1.210]	**Signal off aptamer-based evanescent wave aptasensor using a molecular structure-switch for fast detection of cocaine** Y.F. Tang*, C.M. Gu, M. He, C. Wang, *Tsinghua University, China*
[P1.211]	**Interaction between G-quadruplex (G4)-forming aptamers and heme protein** Y. Yamagishi*[1], T. Saito[1], M. Kanazashi[2], H. Kuno[2], K. Tsukakoshi[1], N. Savory[1], K. Ikebukuro[1], *[1]Tokyo University of Agriculture and Technology, Japan, [2]DENSO Corporation, Japan*
[P1.212]	**Development of a QCM based SELEX for DNA aptamer selection** R.W. Wang[1], L.W. Wang[1], L.X. Xu[2], Y.L. Li*[1,2], *[1]University of Arkansas, USA, [2]Zhejiang University, China*
[P1.213]	**Aptamer for protein tau biosensing: Comparison of SELEX and NON-SELEX approach** S. Lisi*[1,2], C. Ravelet[2], S. Scarano[1], M. Minunni[1], E. Peyrin[2], *[1]University of Florence, Italy, [2]University of Grenoble, France*
[P1.214]	**Graphene quantum dots based switch-on aptasensors for monitoring cytokine secretion in live cells** G.Z. Liu*[1,2], K. Zhang[1,3], K.X. Zhang[1], E.M. Goldys[1], *[1]Macquarie University, Australia, [2]Central China Normal University, China, [3]Jilin University, China*
[P1.215]	**Development of selection strategies to generate highly sensitive aptamers capable of binding steroid hormones and its application on colorimetric biosensing** S. Kumar*[1,2], K.P. McNatty[1], D.C. Eckery[1,3], J. Jones[2], *[1]Victoria University of Wellington, New Zealand, [2]Auramer Bio Limited, New Zealand, [3]United States Department of Agriculture, Animal and Plant Health Inspection Service, USA*
[P1.216]	**Improvement of binding affinity of G-quadruplex forming aptamers** Y. Ikuta*[1], K. Tsukakoshi[1], K. Abe[1], T. Saito[1], T. Yokoyama[1], K. Iida[2], K. Nagasawa[1], K. Ikebukuro[1], *[1]Tokyo University of Agriculture and Technology, Japan, [2]Saitama University, Japan*
[P1.217]	**Label-free detection of small-molecule antibiotics based on aptamer-modified buried-metallic-gate graphene field-effect transistor** C. Wang*, Y. Li, M. He, *Tsinghua University, China*
[P1.218]	**Vitamin D binding aptamer-based lateral flow strip aptasensor**

	B.H. Lee*, V.T. Nguyen, M.B. Gu, *Korea University, Republic of Korea*
[P1.219]	**Real-time detection of Escherichia coli and Salmonella by aptamer-based capacitance sensor** N.A. Han, B.J. Kim*, S.W. Lee, K.H. Yoo, *Yonsei University, Republic of Korea*
[P1.220]	**Screen printed flexible aptasensor based on MoS_2 nanopaticles for detection of *E. coli*** K.S. Eom, Y.J. Lee, M.H. Kim, M.Y. Song, B.C. Kim, S.H. Lee*, *Korea Institute of Science and Technology, Republic of Korea*
[P1.221]	**Label free impedimetric aptasensor for Bacillus anthracis spores** D. Neagu[1], V. Mazzaracchio[1], A. Porchetta[1], D. Moscone[1], G. Palleschi[1], A. Pomponi[2], G. Faggioni[2], F. Lista[2], F. Arduini*[1], *[1]Università di Roma Tor Vergata, Italy, [2]Centro Studi e Ricerche Sanità Esercito, Italy*
[P1.222]	**Oligonucleotide-based biosensor for lead ion determination using anionic redox marker** L. Górski*, A. Bala, E. Malinowska, *Warsaw University of Technology, Poland*
[P1.223]	**Development of quantitative PCR technology (qPCR and RT-qPCR) as a high-resolution detection system for DNA or RNA aptamer-based biosensors** M. Moreno*[1], A.M. de Lucas[1], J. Fernández-Chamorro[2], J. Ramajo[2], M. Fernandez[1], E. Martínez-Salas[2], C. Briones[1,3], *[1]Centro de Astrobiologia, Spain, [2]Centro de Biología Molecular "Severo Ochoa", Spain, [3]Centro de Investigación Biomédica en Red de Enfermedades Hepáticas y Digestivas, Spain*
[P1.224]	**Reduced graphene-oxide thin-film transducers as in-line impedimetric biosensors** X-L. Lu*[1], A. Moidek[2], W.M. Munief[1], P. Jolly[2], R. Lanche[1], V. Pachauri[1], P. Estrela[2], S. Ingebrandt[1], *[1]University of Applied Sciences Kaiserslautern, Germany, [2]University of Bath, UK*
[P1.225]	**Optimization studies of the functionalization of optical aptasensors to increase signal response** G. Tsekenis*[1], L. Gounaridis[2], M. Massaouti[2], C. Kouloumentas[2], F. Schreuder[3], H. Leeuwis[3], I. Zergioti[2], *[1]Biomedical Research Foundation of the Academy of Athens, Greece, [2]National Technical University of Athens, Greece, [3]Lionix BV, The Netherlands*
[P1.226]	**Lossy mode resonance-based aptasensor for CRP detection** P. Sanchez*[1], P. Zubiate[1], F.J. Munoz[2], F.J. Arregui[1], I.R. Matias[1], C.R. Zamarreño[1], *[1]Public University of Navarra, Spain, [2]Agrobiotechnology Institute, Spain*
[P1.227]	**Recognition of PTK7 receptors on the Jurkat cells using aptamer-modified AFM tips** A. Poturnayova*[1,2], I. Karpisova[2], M. Leitner[3], M. Snejdarkova[1], J. Bizik[1], A. Ebner[4], T. Hianik[2], *[1]Slovak Academy of Sciences, Slovakia, [2]Comenius University, Slovakia, [3]Center for Advanced Bioanalysis GmbH, Austria, [4]Johannes Kepler University, Austria*
[P1.228]	**Towards building a biosensor for the detection of early-stage ovarian cancer: Optimization of novel DNA aptamers for the capture of biomarker HSP10** J.B. Chen*[1], M.A.D. Neves[1], A. Romaschin[2], M. Thompson[1], *[1]University of Toronto, Canada, [2]Keenan Research Center, Canada*
[P1.229]	**Aptasensor for detection of Neisseria meningitidis and Streptococcus pneumoniae cell surface-associated proteins** J.M. Escolano*, B. Díaz-Durán, M. DeMiguel-Ramos, J. Olivares, M.A. Geday, E. Iborra, *Universidad Politécnica de Madrid, Spain*
[P1.230]	**Fabrication of a novel aptasensor based on three-dimensional reduced graphene oxide/poly aniline/Au nanoparticle composite as an effective platform for high sensitive and specific cocaine detection** H. Bagheri*[1], A. Afkhami[2], P. Hashemi[2], *[1]Baqiyatallah University of Medical Sciences, Iran, [2]Bu-Ali Sina University, Iran*
[P1.231]	**Carbon nanotube based flexible aptasensors for thrombin detection** I. Komarov*[1], I. Bobrinetskiy[1], E. Rubtsova[1], A. Golovin[2], A. Zalevsky[2], T. Kholina[2], *[1]National Research University of Electronic Technology, Russia, [2]Lomonosov Moscow State University, Russia*
[P1.232]	**Self-assembled aptamer modified redox activated gold nanoparticles for cancer biomarker detection** P. Zhurauski*[1], P. Jolly[1], S. Liébana[2], T. Bertok[3], G-A. Drago[2], J. Tkac[3], P. Estrela[1], *[1]University of Bath, UK, [2]Gwent Group Ltd., UK, [3]Slovak Academy of Sciences, Slovakia*
[P1.234]	**A novel and ultrasensitive impedimetric aptasensor by ds-DNA antibody based on Au-S and GR–AuNPs for kanamycin** F.L. Li, X. Sun*, X.Y. Wang, *Northeast Agricultural University, China*
[P1.235]	**A turn-on aptamer-based fluorescence biosensor for highly sensitive detection of arsenic (III)** H.Y. Li*, S.T. Han, X.H. Zhou, M. He, *State Key Joint Laboratory of ESPC, School of Environment, Tsinghua University, China*
[P1.236]	**Automated single cell isolation from suspension with computer vision** R. Ungai-Salánki[1,2], T. Gerecsei*[3], P. Fürjes[2], N. Orgovan[2,3], N. Sándor[4], E. Holczer[2], R. Horvath[2], B. Szabó[3,5], *[1]University of Pannonia,, Hungary, [2]Hung. Acad. Sci., Hungary, [3]Eötvös University, Hungary, [4]MTA-ELTE Immunology Research Group, Hungary, [5]CellSorter Company for Innovations, Hungary*
[P1.237]	**Graphene interfaced label-free electrical biochip platform for detecting foodborne pathogenic *E. coli***

	O157:H7 P. Ashish, O. Volkan, Y. Gurbuz, J.H. Niazi, Q. Anjum*, *Sabanci University, Turkey*
[P1.238]	**Isolation and photothermal lysis of single circulating tumor cell (CTC) by ferrofluidic droplet array** J.M. Kim*, K.A. Hyun, H.G. Gwak, H.I. Jung, *Yonsei University, Republic of Korea*
[P1.239]	**Picoliter-sized droplets for low-bias and contamination-free reactions in whole genome amplification of single bacterial cells** Y. Nishikawa*, M. Hosokawa, M. Kogawa, H. Takeyama, *Waseda University, Japan*
[P1.240]	**Mitochondria-based biosensors with RELS, fluorescence and electrochemical transduction for mitochondrial drug development** M. Stobiecka*[1], S. Jakiela[1], A. Chalupa[2], B. Dworakowska[1], *[1]Warsaw University of Life Sciences (SGGW), Poland,[2]Institute of Nanoparticle Nanocarriers, Poland*
[P1.241]	**Optical fibre probes for hydrogen peroxide and pH in reproductive health** M.S. Purdey*[1], M.L. Sutton-McDowall[1], E.P. Schartner[1], J.G. Thompson[1], T.M. Monro[1,2], A.D. Abell[1], *[1]The University of Adelaide, Australia,[2]University of South Australia, Australia*
[P1.242]	**Cell microarray chip for accurate detection of circulating tumor cells** S. Yamamura*[1], Y. Hashimoto[1], S. Yatsushiro[1], Y. Baba[1,2], M. Kataoka[1], *[1]National Institute of Advanced Industrial Science and Technology (AIST), Japan,[2]Nagoya University, Japan*
[P1.243]	**A graphene quantum dot based intracellular fluorescence resonance energy transfer (FRET) assay for monitoring caspase-3 protease activity during apoptosis process in single cells** J. Lyu*, J.Y. Shi, F. Tian, M. Yang, *The Hong Kong Polytechnic University, Hong Kong*
[P1.244]	**Qdot-antibody probe-based high content sensing of siRNA silenced proteins in breast cancer stem cells for the determination of anti-cancer activity** J.M. Song, *Seoul National University, Republic of Korea*
[P1.245]	**Identification of breast cancer cell subtypes based on magneto-electrochemical detection technique** K.J. Kim*[1], H.Y. Cho[1], T.H. Kim[2], J.W. Choi[1], *[1]Sogang University, Republic of Korea,[2]Chung-Ang University, Republic of Korea*
[P1.246]	**Rapid single-cell detection and identification of pathogens by using surface-enhanced Raman spectroscopy** N.E. Dina*[2], A. Colnita[2], N. Leopold[1], C. Haisch[3], *[1]Babes-Bolyai University, Faculty of Physics, Cluj-Napoca, Romania,[2]National Institute of Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania,[3]Institute of Hydrochemistry, Technische Universitat Munchen, Munchen, Germany*
[P1.247]	**High efficiency detection of cytoskeletal proteins in living cells using antibody immobilized nanoneedle and AFM** K. Shimizu[1], R. Kawamura[2], M. Iijima[3], S. Kuroda[3], K. Fukazawa[4], K. Ishihara[4], C. Nakamura*[1,2], *[1]TUAT, Japan,[2]AIST, Japan,[3]OU, Japan,[4]UT, Japan*
[P1.248]	**Macromolecule transfer by mechanoperforation using nanoneedle array for single cell analysis** D. Matsumoto[1,2], M. Saito[1], R.R. Sathuluri[2], Y.R. Silberberg[2], F. Iwata[3], T. Kobayashi[2], C. Nakamura*[1,2], *[1]Tokyo University of Agriculture and Technology, Japan,[2]National Institute of Advanced Industrial Science and Technology, Japan,[3]Shizuoka University, Japan*
[P1.249]	**Rare-event detection based on time-gated luminescence and automated scanning microscopy** X. Zheng[1], N. Sayyadi[1], D. Jin[1,2], J.A. Piper[1], Y. Lu[1], L. Jiang*[1], *[1]Macquarie University, Australia,[2]University of Technology Sydney, Australia*
[P1.250]	**Detection of cancer cells using on-chip gene expression analysis utilizing a magnetic beads-droplet-manipulation system** M. Okochi*[1,2], S. Koike[3], M. Tanaka[1,2], H. Honda[3], *[1]Tokyo Institute of Technology, Japan,[2]JST ImPACT, Japan,[3]Nagoya University, Japan*
[P1.251]	**Application of the QCM-D method in the diagnosis of malignant melanoma** A. Sobiepanek*[1], M. Milner-Krawczyk[1], M. Bretner[1], M. Lekka[2], T. Kobiela[1], *[1]Institute of Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Poland,[2]Laboratory of Biophysical Microstructures Institute of Nuclear Physics, Polish Academy of Sciences, Poland*
[P1.252]	**Bio-functionalization and modeling of microsensors for on chip single cell extracellular flux and intracellular biocatalysis** J. Nolan*[1], J. Rivera-Miranda[1], S.V. Sridharan[1], L. Kahyaoglu[1], R. Madangopal[2], B. Hope[2], D. Janes[1], J. Rickus[1], *[1]Purdue University, USA,[2]National Institute on Drug Abuse, USA*
[P1.253]	**PDMS microwell array with buried microfluidic channels for cell manipulation and analysis** P. Fürjes*[1], E. Holczer[1], R. Ungai-Salánki[2], B. Szabó[2], R. Horváth[3], *[1]BioMEMS Group – Centre for Energy Research – HAS, Hungary,[2]Eötvös University, Hungary,[3]Nanobiosensorics Group – Centre for Energy Research – HAS, Hungary*
[P1.254]	**Direct ligand to whole cell binding interaction analysis**

	J. Nyagilo[1], S. Chirvi[1], R. Bachoo[2], D.P. Dave*[1,2], *[1]University of Texas, USA, [2]University of Texas Southwestern Medical Center, USA*
[P1.255]	**An enhanced digital time-lapse bright field technology for higher throughput bioanalytical research** C. Canali*, E. Spillum, M. Valvik, N. Agersnap, T. Olesen, *Philips BioCell A/S, Denmark*
[P1.256]	**Glycan biosensors as a successful tool for sensitive detection of glycan-protein interactions** A. Hushegyi*, J. Tkac, *Slovak Academy of Sciences, Institute of chemistry, Slovakia*
[P1.257]	**High-performance human dopamine receptor-decorated CNT nanohybrids for analysis of G protein-coupled receptor agonism and antagonism** H. Yang*[1], S.J. Park[1,2], J. Jang[1], T.H. Park[1,3], *[1]Seoul National University, Republic of Korea, [2]Samsung Semiconductor R&D Center, Republic of Korea, [3]Advanced Institutes of Convergence Technology, Republic of Korea*
[P1.258]	**Interleukin-2/anti-interleukin-2 immune complexes inhibits arthritis by induction of regulatory T cells in collagen-induced arthritis model** T. Iwasaki*, S. Shibasaki, *Hyogo University of Health Sciences, Japan*
[P1.259]	**Towards the development of surface plasmon resonance sensors with synthetic recognition elements for detection of contaminants in power transformer oil** M. Pesavento*[1], N. Cennamo[2], L. De Maria[3], D. Merli[1], L. Zeni[2], *[1]University of Pavia, Italy, [2]Second University of Naples, Italy, [3]RSE Research on Energetic system, Italy*
[P1.260]	**Molecularly imprinted electrochemical sensor based on gold nanoparticle modified screen-printed carbon electrode for selective nitrofurantoin detection** D. Dechtrirat*[1], B. Sookcharoenpinyo[1], P. Prajongtat[1], C. Sriprachuabwong[1,2], A. Tuantranont[2], S. Hannongbua[1], *[1]Kasetsart University, Thailand, [2]National Electronics and Computer Technology Center (NECTEC), National Sciences and Technology Development Agency (NSTDA), Thailand*
[P1.261]	**Non-invasive detection of biomarkers for inflammatory bowel disease, using adhirons in impedimetric biosensors** J.A. Goode*[1,2], P.A. Millner[1], D.G. Jayne[2], *[1]University of Leeds, UK, [2]St James' University Hospital, UK*
[P1.262]	**Membrane applications of pharmaceuticals removal using synthetic receptors** Z. Altintas*[1], I. Chianella[1], S. Paulussen[2], N. Gaeta[3], I.E. Tothill[1], *[1]Cranfield University, UK, [2]VITO-Flemish Institute for Technological Research, Belgium, [3]GVS Filter Technology, Italy*
[P1.263]	**Size does matter for cholesterol sensing with analogous synthetic macrocycles** B. Sookcharoenpinyo*[1], P. Charoensumran[1], B. Kongkathip[1], A.P. Davis[2], *[1]Kasetsart University, Thailand, [2]University of Bristol, UK*
[P1.264]	**Molecularly imprinted polymer (MIP): a promising recognition system for development of optical sensor for textile dyes** M.V. Foguel, N.T.B. Pedro, M.V.B. Zanoni, M.D.P.T. Sotomayor*, *Unesp-Universidade Estadual Paulista, Brazil*
[P1.265]	**Biomimetic sensors - quantification of protein adsorption and cell-matrix interaction using soft colloidal probes** S. Martin*[1], H. Wang[2], T. Rathke[1], U. Anderegg[3], S. Schmidt[1,2], T. Pompe[1], *[1]Universität Leipzig, Germany, [2]Heinrich-Heine-Universität, Germany, [3]Universitätsklinikum Leipzig, Germany*
[P1.266]	**Pro-PSA peptide biomarker detection using electrochemical MIP sensor** V.K. Tamnoli*, J.L. Bowen, C.J. Allender, *Cardiff University, UK*
[P1.267]	**Development of paper-based biosensor for detection of antibiotics targeting protein synthesis** D. Tran*[1,2], K. Ujiie[1], M. Muraoka[1], K. Harada[1], H. Matsuura[1], K. Hirata[1], *[1]Osaka University, Japan, [2]Can Tho University, Viet Nam*
[P1.268]	**Smart Naturally Plastic Antibody based on α-Poly-Cyclodextrin polymer for β-amyloid42 soluble oligomer detection** F. Moreira*, G. Sales, *BioMark-CINTESIS/ISEP, School of Engineering, Polytechnic Institute of Porto, Portugal, Portugal*
[P1.269]	**A smart potential-gated mimetic electrode for nicotinamide analysis** N. Karimian*, A.P.F. Turner, A. Tiwari, *Linköping University, Sweden*
[P1.270]	**A simple approach to dynamic light scattering** T. Vaessen, A. Ericsson, D. Ilver, J. Wipenmyr, A. Krozer*, *Acreo Swedish ICT AB, Sweden*
[P1.271]	**Plastic Antibody for the electrochemical detection of bacterial Flagella** A.R. Khan*[1], A.R.A. Cardoso[2], S. Merino[3], J. Riu[1], M.G.F. Sales[2], *[1]Universitat Rovira i Virgili, Spain, [2]Polytechnic Institute of Porto, Portugal, [3]Universitat de Barcelona, Spain*
[P1.272]	**Computationally designed cyclic peptide for the selective analysis of phenolic acids** D. Compagnone*[1], D. Capoferri[1], I. Gladich[2], F. Guida[3], C. Forzato[3], M. Del Carlo[1], L. Navarini[4], A. Laio[2], F. Berti[3], *[1]Università di Teramo, Italy, [2]SISSA, Italy, [3]Università di Trieste, Italy, [4]IllyCaffe S.p.A, Italy*

[P1.273]	**Design of synthetic receptors for monitoring of ATS-based stimulants** K. Graniczkowska*, N. Beloglazova, S. De Saeger, *Ghent University, Belgium*
[P1.274]	**Nature-inspired high-uniformity functionalization of nanostructured porous silicon for highly sensitive glucose optical detection** E. Mazzotta*[1], A. Turco[1], C. Malitesta[1], P.M. Goki[2], L.M. Strambini[2], G. Barillaro[2], *[1]Università del Salento, Italy, [2]Università di Pisa, Italy*
[P1.275]	**Restorable and adaptable biomimetic surfaces for the recognition and sensing of influenza virus via multivalent interactions** S.Y. Yeung*, V. Chaturvedi, B. Sellergren, *Malmö University, Sweden*
[P1.276]	**Hierarchical materials for molecular recognition through molecular imprinting in liquid crystalline media** N. Ndizeye*[1], S. Suriyanarayanan[1], I.A. Nicholls[1,2], *[1]Linnaeus University, Sweden, [2]Uppsala University, Sweden*
[P1.277]	**Development of piezoelectric sensors on the basis of electrosynthesized molecularly imprinted polymers for β-lactam antibiotics' detection** N. Karaseva*, E. Belyaeva, V. Levkina, I. Soboleva, T. Ermolaeva, *Lipetsk State Technical University, Russia*
[P1.278]	**Fluorescent, soluble molecularly imprinted nanoparticles as sensors for anticancer drug monitoring** M. Tommasini*[1], E. Pellizzoni[1], N. Belfiore[1], M. Cespugli[1], G. Toffoli[3], M. Resmini[2], F. Berti[1], *[1]Università di Trieste, Italy, [2]Queen Mary University of London, UK, [3]CRO - National Cancer Institute Aviano, Italy*
[P1.279]	**Phenylboronic acid-functionalised electrode interface for whole bacterial cell imprinting** M. Golabi*, E.W.H. Jager, A.P.F. Turner, *Linköping University, Sweden*
[P1.280]	**3D Molecularly Imprinted polymer sensors synthesized by 2-photon stereolithography** F. Bokeloh*[1,3], L. Chia-Gomez[2], J.P. Malyal[2], B. Tse Sum Bui[1], O. Soppera[2], A. Spangenberg[2], C. Ayela[3], K. Haupt[1], *[1]Université de Technologie de Compiègne, France, [2]Université de haute-Alsace, France, [3]Universite de Bordeaux, France*
[P1.281]	**Utilizing light interference phenomena for the development of intuitive optical biosensing** H.J. Chun*, Y.D. Han, S.H. Im, H.C. Yoon, *Ajou university, Republic of Korea*
[P1.282]	**Smart Forensic Phone: Real-time colorimetric estimation of post-mortem interval from bloodstains by using a smartphone** J. Shin*[1], S. Choi[1], J. Yang[1], J. Song[2], H. Jung[1], *[1]Yonsei University, Republic of Korea, [2]Sevrance Children's Hospital, Republic of Korea*
[P1.283]	**Magnetic-particle based signal amplification method integrated with mobile-devices for low cost biosensing** O. Mzava, Z. Tas;, V. Lafci, M.A. Cakar, I. Ozdur, K. Icoz*, *Abdullah Gul University, Turkey*
[P1.284]	**A simple smartphone based device towards biomedical fluorescence signal detection** G.Z. Liu*[1], P. Wargocki[1], A. Anwer[1], W. Deng[1], M. Yamabhai[2], *[1]Macquarie University, Australia, [2]Suranaree University of Technology, Thailand*
[P1.285]	**Stain-free mammalian cell counting and viability measurement platform** D. Seo*[1], M. Roy[1], S. Oh[1,2], J. Lee[3], Y. Kim[3], Y. Hwang[1], J. Kim[1], K. Ann[1], S. Seo[1], *[1]Korea University, Republic of Korea, [2]Korea Research Institute of Ships & Ocean Engineering, Republic of Korea, [3]Gyrogen Co., Ltd., Republic of Korea*
[P1.286]	**Ultra-fast hemolysis analysis for diagnosis of pregnancy complications** E. Archibong*, K. Konnaiyan, A. Pyayt, *University of South Florida, USA*
[P1.287]	**An array of individually addressable needles for mapping chemical distributions during heart ischaemia** C. Zuliani*, F.S. Ng, K. Mirza, A. Eftekhar, A. Alenda, N.S. Peters, C. Toumazou, *Imperial College London, UK*
[P1.288]	**Low-cost, label-free, and self-contained magnetic platform for diagnosis and monitoring of sickle cell disease** B. Yenilmez, S. Knowlton, S. Tasoglu*, *University of Connecticut, USA*
[P1.289]	**Single molecule detection of amyloid beta peptide in cerebrospinal fluid using evanescent illumination and a smartphone camera** M. Elmeskog, B. Agnarsson*, A. Lundgren, F. Höök, *Chalmers University of technology, Sweden*
[P1.290]	**Cyto-encryption: BioMEMS based cryptography for secure medical diagnostic devices** T. Le*, G. Salles_Loustau, M. Javanmard, L. Najafizadeh, S. Zonouz, *Rutgers University, USA*
[P1.291]	**Simplified, dedicated biosensor devices operated by wireless control using smart-phone, PAD or PC with less hardware and more software** B. Danielsson*[1], S. Bhand[1], *[1]Acromed AB, Sweden, [2]BITS Pilani Goa Campus, India*
[P1.292]	**SO2SAFE-Enzymatic SO_2 biosensor for rapid food safety monitoring** E. Jubete[1], A. Jaureguibeitia[2], L. Añorga*[1], P.J. Lamas-Ardisana[1], G. Martínez[1], V. Serafín[1], G. Cabañero[1], E. Ramos[2], H.J. Grande[1], A. Albizu[2], *[1]IK4-CIDETEC, Spain, [2]Biolan, Spain*
[P1.293]	**RTILs based enzymatic biosensors: a useful tool for construction of lab-on-chip and portable devices**

	M.L. Antonelli*[1], R. Caminiti[1], L. Campanella[1], A. Negri[2], M. Perelli[2], C. Sadun[1], C. Tortolini[1], D. Zappi[1], *[1]La Sapienza Rome University, Italy, [2]IMT Ingegneria Marketing Tecnologia, Italy*
[P1.294]	**Detection of small amounts of yests, bacteria and phages particles as biological objects in agarose gel samples using uncoated acoustic plate wave sensors** V-I. Anisimkin[1], I-E. Kuznetsova[1], V-V. Kolesov[1], V-V. Sorokin[2], D-A. Skladnev[2], C. Caliendo[3], E. Verona*[4,1], *[1]Kotel'nikov Institute of Radio Engineering and Electronics of RAS, Russia, [2]Vinogradsky Institute of Micorobiology RAS, Russia, [3]Institute of Acoustics and Sensors, IDASC-CNR, Italy, [4]Institute for Photonics and Nanotechnologies, IFN-CNR, Italy*
[P1.295]	**Towards a model of electrochemical immunosensor using silver nanoparticles** S. Felici[1], T. Lavecchia[1], M. Angjellari[1], L. Micheli*[1,2], S. Orlanducci[1], M.L. Terranova[1], G. Palleschi[1,2], *[1]Department of Chemical Sciences and Technologies, University of Rome "Tor Vergata", Italy, [2]Consorzio Interuniversitario Biostrutture e Biosistemi "INBB", Italy*

Poster Session II
Thursday, 26 May 2016
09:50-10:30, 12:20-14:00, 15:20-16:20, 17:55-19:00

[P2.001]	**Endocrine biomarker label free detection using a Quantum-Dot (QD) optoelectronic assay: A rapid and specific ex-vivo detection of cortisol** O. Miranda[1], P. Gurman[1], K. Whitaker[2], K. MacDowell[2], M. Bawendi[1], N. Elman*[1], *[1]Massachusetts Institute of Technology, USA, [2]US Army Research Laboratory, USA*
[P2.002]	**Instrument-free digital measurements in a three-dimensional microfluidic paper chip** S.G. Jeong*, S.H. Lee, C.S. Lee, *Chungnam National University, Republic of Korea*
[P2.003]	**A paper microfluidic immunoassay for detection of microcystin-LR** T. Teerinen*[1], S. Akter[2], M. Vehniäinen[2], U. Lamminmäki[2], L. Hakola[1], *[1]VTT Technical Research Centre of Finland Ltd, Finland, [2]University of Turku, Finland*
[P2.004]	**Study on improving thickness uniformity of microfluidic chip mould in electroforming process** L.Q. Du*, T. Yang, M. Zhao, Y.S. Tao, *Dalian University of Technology, China*
[P2.005]	**A microwave split ring resonator (SRR) with hydrogel based biofunctionalization for sensor applications** M. Brandl[1], L. Wagner[1], A. Prince*[1], E. Melnik[2], M. Wellenzohn[3], *[1]Danube University Krems, Austria, [2]AIT Austrian Institute of Technology, Austria, [3]FH Campus Vienna, University of Applied Sciences, Austria*
[P2.006]	**Optical detection of glucose using 3D-printed microfluidic platform** A.M. Tothill*, M.C. Partridge, S.W. James, R.P. Tatam, *Cranfield University, UK*
[P2.007]	**A hydrophobic ionic liquid compartmentalized sampling/labeling and its separation techniques in polydimethylsiloxane microchip capillary electrophoresis** H.H. Quan[1], M. Li*[1], Y. Huang[2], J-H. Hahn[2], *[1]Yangzhou University, China, [2]Pohang University of Science and Technology, Republic of Korea*
[P2.008]	**High-throuput alternating current electrohydrodynamic particle separator having convection and separation electrodes** C.H. Han*, J. Jang, *Ulsan National Institute of Science and Technology, Republic of Korea*
[P2.009]	**Ultrafast miniaturized DNA amplification on an aluminum-PDMS PCR chip: 30 cycles in less than five minutes** H. Yaku*, M. Iyoda, Y. Miyamoto, H. Tanaka, M. Hishida, *Panasonic Corporation, Japan*
[P2.010]	**3D pyramide cell chip for detection of anticancer effect on cancer cell using cyclic voltammetry and surface enhanced Raman spectroscopy** K.J. Lee*[1], J.S. Shin[1], K.S. Lee[2], J.H. An[3], *[1]Daejeon University, Republic of Korea, [2]Hannam University, Republic of Korea, [3]Konkuk University, Republic of Korea*
[P2.011]	**A low cost, scalable microfluidic approach to concentrate micron-sized cells in dilute suspentions** L. Wang, D.S. Dandy*, *Colorado State University, USA*
[P2.012]	**Surface modification procedure for biosensor chips made of chemically sensitive polymers** C. Heinemeyer, M. van der Loh, M-N. Wagner, K. Länge*, *Karlsruhe Institute of Technology (KIT), Germany*
[P2.013]	**Membrane-based sample inlet for pathogen-containing whole blood on a centrifugal microfluidic platform (LabDisk)** S. Hin[1], M. Loskyll[1], V. Klein[2], M.Keller [1,2],O. Strohmeier[1,2], F. von Stetten*[1,2], R. Zengerle[1,2], K. Mitsakakis[1,2], *[1]University of Freiburg, Germany, [2]Hahn-Schickard Freiburg, Germany*
[P2.014]	**Cheap and simple device for multiplexed electrochemical detection of magneto-bioassays** A. García-Robaina[1], F.J. del Campo[2], E. Baldrich*[1,3], *[1]Institut de Recerca Hospital Vall d'Hebron (VHIR), Spain, [2]Institut de Microelectrònica de Barcelona (IMB-CNM, CSIC), Spain, [3]CIBER de Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Spain*

[P2.015]	**Microfluidic platform for dynamic in vitro cytotoxicity analysis of free methotrexate and methotrexate-lipid nanoparticles to improve osteosarcoma therapies** O. Mitxelena-Iribarren*[1,2], C.L. Hisey[1,3], Y. González-Fernández[4,2], E. Imbuluzqueta[4,2], M. Mujika[1,2], M.J. Blanco-Prieto[4,2], S. Arana[1,2], *[1]CEIT and Tecnun-University of Navarra, Spain, [2]Centro de Ingeniería Biomédica-University of Navarra, Spain, [3]The Ohio State University, USA, [4]School of Pharmacy (University of Navarra) and Instituto de Investigación Sanitaria de Navarra-IdiSNA, Spain*
[P2.016]	**Circular mag-gradient chip: Magnetic nanoparticle-mediated circulating tumor cell sorting system by difference of EpCAM expression level** J.H. Lee[1], D.K. Lee[1], K.T. Park[1], S.W. Kang[2], B.S. Kwak*[1], *[1]Korea Institute of Machinery and Materials, Republic of Korea, [2]Kyungpook National Univerisity, Republic of Korea*
[P2.017]	**Monitoring aggregation of amyloid-β protein with piezoelectric-driven microcantilever sensor** M.S. Chae[1,2], J. Kim[1], D. Jeong[1,2], J.H. Lee[3], K.S. Hwang[1], S. Han*[3], *[1]Korea Institute of Science and Technology, Republic of Korea, [2]Korea University, Republic of Korea, [3]Kwangwoon University, Republic of Korea*
[P2.018]	**Electrochemical biosensors for point-of-care monitoring in mental health** H. Ben-Yoav*[1,2], T.E. Winkler[2], S.E. Chocron[2], E. Kim[2], D.L. Kelly[3], G.F. Payne[2], R. Ghodssi[2], *[1]Ben-Gurion University of the Negev, Israel, [2]University of Maryland, USA, [3]University of Maryland School of Medicine, USA*
[P2.019]	**A diffusion-based microfluidic device for gentle Oocyte zona-removal and accommodation** C. Chang*[1], R-G. Wu[1], L-C. Pan[2], F-G. Tseng[1,3], *[1]National Tsing Hua University, Taiwan, [2]Taipei Medical University and Hospital, Taiwan, [3]Academia Sinica, Taiwan*
[P2.020]	**A microfluidic device for minimum inhibitory concentration (MIC) determination of antimicrobial susceptibility testing (AST) by using liquid broth dilutions** W.B. Lee*[1], C.Y. Fu[1], W.H. Chang[1], C.H. Wang[1], J.J. Wu[2], H.L. You[3], M.S. Lee[3], G.B. Lee[1], *[1]National Tsing Hua University, Taiwan, [2]National Yang-Ming University, Taiwan, [3]Kaohsiung Chang Gung Memorial Hospital, Taiwan*
[P2.021]	**An optical POCT device for multiple sepsis biomarkers detection** S. Tombelli*[1], B. Adinolfi[1], S. Berneschi[1], R. Bernini[2], F. Chiavaioli[1], J. Eugen-Olsen[3,4], A. Giannetti[1], I.A. Grimaldi[2], G. Persichetti[2], G. Testa[2], *[1]Istituto di Fisica Applicata "Nello Carrara", Italy, [2]Institute for Electromagnetic Sensing of the Environment, Italy, [3]Virogates A/S, Denmark, [4]Clinical Research Centre 136, Hvidovre Hospital, Denmark*
[P2.022]	**Improving the analytical sensitivity of lateral flow immunoassays with new luminescent labels** T. Salminen*, E. Juntunen, T. Savukoski, K. Pettersson, *University of Turku, Finland*
[P2.023]	**A new biosensing system composed of arrayed cell structure for dielectric dispersion analysis of interaction with phospholipid membrane of liposome** T. Yoshikawa, M. Kawasaki, K. Yamashita, M. Noda*, *Kyoto Institute of Technology, Japan*
[P2.024]	**The dynamics of viscoelastic layered systems studied by surface acoustic waves (SAW) sensors operated in a liquid phase** A. Vikström*[1], M.V. Voinova[1], *[1]Chalmers University of Technology, Sweden, [2]National Technical University, Ukraine*
[P2.025]	**Single interdigital transducer as surface acoustic wave impedance sensor** V.H. Nguyen*[1], S. Richert[1], H. Park[2], A. Böker[3], U. Schnakenberg[1], *[1]RWTH Aachen University, Germany, [2]DWI Leibniz Institut, Germany, [3]Universität Potsdam, Germany*
[P2.026]	**Lectin-based lateral flow assay for protein glycoprofiling** P. Damborsky*[1], K. Koczula[2], A. Gallotta[2], J. Katrlik[1], *[1]Institute of Chemistry Slovak Academy of Sciences, Slovakia, [2]Xeptagen SpA, Italy*
[P2.027]	**Electrochemical biosensor integration in a microfluidic platform for on-line biocatalytic reaction monitoring** A.C. Fernandes[1], D. Semenova*[1], P. Panjan[2], U. Krühne[1], K.V. Gernaey[1], A.M. Sesay[2], *[1]Technical University of Denmark, Denmark, [2]Kajaani University Consortium, Finland*
[P2.028]	**Fast size-determination of intact bacterial plasmids using nanofluidic channels** K. Frykholm*[1], L.K. Nyberg[1], E. Lagerstedt[2], C. Noble[2], J. Fritzsche[1], N. Karami[3], T. Ambjörnsson[2], L. Sandegren[4], F. Westerlund[1], *[1]Chalmers University of Technology, Sweden, [2]Lund University, Sweden, [3]University of Gothenburg, Sweden, [4]Uppsala University, Sweden*
[P2.029]	**Passive biochip for automated red blood cells agglutination measurement and blood typing** M. Huet*[1,2], M. Cubizolles[1,2], A. Buhot[1,2], *[1]CEA, Grenoble, France, [2]Université Grenoble Alpes, France*
[P2.030]	**Fiber-based, injection-molded optofluidic systems: characterization and applications** M. Matteucci*[1], M. Triches[2,1], G. Nava[3], A. Kristensen[1], M.R. Pollard[2], K. Berg-Sørensen[1], R. Taboryski[1], *[1]Technical University of Denmark, Department of Micro- and Nanotechnology Ørsteds Plads,*

	Building 345B, 2800 Kgs. Lyngby, Denmark, [2]DFM A/S Matematiktorvet, Denmark, [3]Universita degli Studi di Milano, Italy
[P2.031]	**Timing of a centrifugally automated, multi-step chemiluminescent CRP assay towards a point-of-care for early-stage detection of cardiovascular disease** B. Henderson[1], D.J. Kinahan[1], J. Rio[1], R. Mishra[1], D. King[1], S. Torres-Delgado*[2], D. Mager[3], J. Korvink[3], J. Ducree[1], *[1]Dublin City University, Ireland, [2]University of Freiburg, Germany, [3]Karlsruhe Institute of Technology, Germany*
[P2.032]	**Microfluidic biochip for studying cellular response to non-homogeneous DC electric fields** M. Rio*, S. Bola, R.H.W. Funk, G. Gerlach, *Technische Universität Dresden, Germany*
[P2.033]	**Particle focusing pattern in micro fluidic systems from interference of bulk waves exited by two facing IDTs** S. Wege*, F. Kiebert, C. Faust, H. Schmidt, *IFW Dresden, Germany*
[P2.034]	**Generating alternating droplets from different solutions in star-shaped microchannel junctions** M. Xu*[1], G. Molema[2], E. Verpoorte[1], *[1]University of Groningen, The Netherlands, [2]University Medical Centre Groningen, The Netherlands*
[P2.035]	**Facile detection of polycyclic aromatic hydrocarbons from complex samples using Surface-Enhanced Raman spectroscopy coupled with thin layer chromatography on photonic biosilica** X. Kong, X.Y. Chong, A.X. Wang*, *Oregon State University, USA*
[P2.036]	**Lab-on-a-disc device for screening of genetically engineered E.coli cells via electrochemical detection of p-Coumaric acid** K. Sanger*, K. Zor, L. Amato, R. Burger, A. Boisen, *Denmark Technical University, Denmark*
[P2.037]	**Biomimetic tactile sensor for polished surface discrimination** P.T. Huynh, Y.L. Zhang*, Y. Cohen, Y. zhengkun, Z. Yilei, *Nanyang Technological University, Singapore*
[P2.038]	**A high throughput lab-on-a-chip system for label free quantification of breast cancer cells under continuous flow** M.K. Aslan*[1], Y. Demircan[1,2], E. Ozgur[2], U. Gunduz[1], S. Eminoglu[3], H. Kulah[1,2], T. Akin[1,2], *[1]Middle East Technical University, Turkey, [2]METU MEMS Center, Turkey, [3]Mikro-Tasarim LLC, Turkey*
[P2.039]	**Surface plasmon resonance-based immunoassay for procalcitonin** S.K. Vashist*[1], J.H.T. Luong[2], *[1]RMIT University, Australia, [2]University College Cork, Ireland*
[P2.040]	**Sub-femtomolar DNA and SNP detection on a digital microfluidic chip** L. Tripodi*[1], M. Kuhnemund[2], D. Witters[1,3], T. Kokalj[1,4], R. Puers[1], J. Lammertyn[1], *[1]University of Leuven, Belgium, [2]Uppsala University, Sweden, [3]Caltech California Institute of Technology, USA, [4]IMT, Slovenia*
[P2.041]	**A facile one-step method for bacterial cell lysis and DNA extraction in a microchip** V. Kamat*, D. Bodas, K. Paknikar, *Agharkar Research Institute, India*
[P2.042]	**Development of PCR device driven by centrifugation assisted thermal convection and POCT-oriented simplified chip** M. Saito*, K. Takahashi, K. Yamanaka, E. Tamiya, *Osaka University, Japan*
[P2.043]	**The effect of interdigitated microelectrode transducer geometry in bacterial detection** S. Kalpana[1], C-J. Chen[2], J-T. Liu[2], J-Z. Tsai*[1], *[1]National Central University, Taiwan, [2]University of Chinese Academy of Sciences, China*
[P2.044]	**An electrically tunable asymmetrical liquid lens system for optical coherent tomography** P-W. Hu*[1], F-G. Tseng[1,3], R-Y. Tsai[2], H-L. Ho[1], *[1]National Tsing Hua University, Taiwan, [2]Industrial Technology Research Institute, Taiwan, [3]Academia Sinica, Taiwan*
[P2.045]	**Microfluidic rapid selection of microalgal strains with superior photosynthetic productivity using competitive phototaxis** H.S. Kwak, S. Song*, S-J. Sim, *Korea University, Republic of Korea*
[P2.046]	**Miniaturized gas analysis system for low-concentration exhaled VOC gas detection** J.H. Lee*, H.S. Kang, T.H. Park, S.H. Lim, *Kookmin University, Republic of Korea*
[P2.047]	**Hydrodynamic circulating tumor cell separation using jet zozzle shape array microchannel** S.H. Lee[1], Y.S. Heo[1], K.H. Lee[2], B.S. Kwak*[2], *[1]Keimyung University, Republic of Korea, [2]Korea Institute of Machinery and Materials, Republic of Korea*
[P2.048]	**Efficient enrichment of microalgae based on acoustophoretic microfluidics** J.W. Park*[1], S.H. Kim[1], T. Ito[3], S.Y. Kim[1], T. Fujii[1], T. Laurell[2,4], S.W. Lee[1], K. Goda[1,5], *[1]University of Tokyo, Japan, [2]Lund University, Sweden, [3]Keio University, Japan, [4]Dongguk University, Republic of Korea, [5]University of California, USA, [6]Japan Science and Technology Agency, Japan*
[P2.049]	**Enzyme immobilization on CNT wrapped porous PLGA microsphere prepared using microfluidic device** C.M. Kim*, J.H. Choi, G.M. Kim, *Kyungpook National University, Republic of Korea*
[P2.050]	**SERS detection of amyloid-β peptides on an electrode nanogap enabled platform** K. Vu*[1,2], L. Lesser-Rojas[3], C-Y. Chen[2], Y-R. Chen[1], C-F. Chou[2], *[1]National Tsing Hua University, Taiwan,*

	[2]Academia Sinica, Taiwan, [3]Universidad de Costa Rica, Costa Rica
[P2.051]	**Development of a stationary liquid phase lab-on-a-chip as a simple platform for enzyme-linked immunosorbent assay** S-J. Choi, *Gangneung-Wonju National University, Republic of Korea*
[P2.052]	**A high-throughput microfluidic rare cell enrichment system based on dielectrophoresis and filtering** G. Ozkayar*, Y. Demircan Yalcin, E. Ozgur, U. Gunduz, H. Kulah, *METU, Turkey*
[P2.053]	**Optimization of a mixing time of a magnetically actuated acid-base microdroplets for microcalorimetric measurement** M.K. Khaw*, F. Mohd-Yasin, N.T. Nguyen, *Griffith University, Australia*
[P2.054]	**Micro-fluidic integrated toolkit for micro-bioreactors and biocatalytic processes** P. Panjan, A.M. Sesay*, V. Virtanen, *University of Oulu, Finland*
[P2.055]	**Facilitating passive mixing of small amounts of compound on paper** N.N. Hamidon*, Y. Hong, G.I.J. Salentijn, E. Verpoorte, *University of Groningen, The Netherlands*
[P2.056]	**On-chip plasma separation with shape-memory vacuum modulefor on-site rapid detection from whole blood samples** Z. Wang*[1], C. Hong[2,3], C. Hong[1], *[1]National Tsing Hua University, Taiwan, [2]Chang Gung Memorial Hospital, Taiwan, [3]Chang Gung University of Science and Technology, Taiwan*
[P2.057]	**Paper-based enzymatic sensor with stencil-free ink and wire electrodes** O. Amor Gutiérrez, E. Costa Rama, A. Costa-García, M.T. Fernández-Abedul*, *Universidad de Oviedo, Spain*
[P2.058]	**Rapid Circulating Tumor Cells Diagnosis on Self-Assembled Cell Array (SACA) Chip By in-parallel Image Analysis** H.Y. Chen*, Y.H. Weng, F.G. Tseng, *National Tsing Hua University, Taiwan*
[P2.059]	**Self-rolled polymer film: a route to microfluidic devices** R. Brossard, B. Sarrazin, P. Guenoun, F. Malloggi*, *CEA Saclay, France*
[P2.060]	**A novel fluorescence polarization technology for monitoring the production of recombinant proteins** D. Prim*[1], E. Condemi[1], F. Jonathan[1], R. Brönnimann[2], S. Crelier[1], O. Mamula[2], J-M. Segura[1], *[1]University of Applied Sciences and Arts Western Switzerland Valais, Switzerland, [2]Institute ChemTech, School of Engineering and Architecture of Fribourg, Swaziland*
[P2.061]	**3D printed electrokinetic microfluidic devices** K. Bengtsson*, P.G. Erlandsson, N.D. Robinson, *Linköping University, Sweden*
[P2.062]	**Microfluidic Concentration Gradient for Toxicity Studies of Lung Carcinoma Cells** N. Zaidon[1], W.C. Mak[2], A.F. Mansor[1], A.N. Nordin[1], A.F. Ismail*[1], *[1]International Islamic University Malaysia, Malaysia, [2]Linkoping University, Sweden*
[P2.063]	**Integration of droplet microfluidics with silicon nanoribbon field-effect transistors for pH sensing** R. Afrasiabi[1], L.M. Söderberg*[1,2], H.N. Jönsson[1,2], P. Björk[3], H. Andersson Svahn[1,2], J. Linnros[1], *[1]KTH Royal Institute of Technology, Sweden, [2]Science for Life Laboratory, Sweden, [3]3Acreo Swedish ICT AB, Sweden*
[P2.064]	**Dynamic gates based on polypyrrole for microfluidic bioanalytical applications** M. Fathollahzadeh*[1,2], M. Tyagi[1], A. Maziz[1], D. Filippini[3], B. Haghighi[4], A.F.P. Turner[1], W.C. Mak[1], E.W.H. Jager[1], *[1]Biosensors and Bioelectronics Centre, Dept. of Physics, Chemistry and Biology (IFM), Linköping University, Linkoping, Sweden, [2]College of Chemistry, Institute for Advanced Studies in Basic Sciences, Gava Zang, Zanjan, Iran, [3]Chemical and Optical Sensor Systems, Dept. of Physics, Chemistry and Biology (IFM), Linköping University, Linkoping, Sweden, [4]Department of Chemistry, College of Sciences, Shiraz University, Shiraz, Iran*
[P2.065]	**LOC-SERS as bioanalytical tool: drug detection in spiked human urine sampels** I.J. Hidi[1,2], M. Jahn[1,2], K. Weber*[1,2], D. Cialla-May[1,2], J. Popp[1,2], *[1]Friedrich-Schiller-University, Germany, [2]Leibniz Institute of Photonic Technology, Germany, [3]Zentrum für Angewandte Forschung, Germany*
[P2.066]	**Flow-induced Dissolution of Oil Microdroplets under Planar Extensional Flow** M. Tanyeri*[1], A. Kiraz[2], M. Muradoglu[2], A. Erten[2], O. Kayillioglu[2], M. Irfan[2], *[1]Istanbul Sehir University, Turkey, [2]Koc University, Turkey*
[P2.067]	**Image Processing Optimization for Absorption Spectroscopy in PDMS Spectroscopy System Built upon the Smart Tablets** H.N. Nomada*[1], H.H. Higuchi[1], H.K. Kuboyama[1], H.Y. Yoshioka[1], K.M. Morita[2], Y.O. Oki[1], *[1]Kyusyu University, Japan, [2]USHIO Inc., Japan*
[P2.068]	**A sensitive colorimetric sensor for microfluidic devices** R. Gupta*[1], N.J. Goddard[1], *[1]University of Hull, UK, [2]University of Manchester, UK*
[P2.069]	**Low temperature co-fired ceramic package with microfluidic system for lab-on-a-chip applied in cell viability monitoring** N. Halonen*[1], J. Kilpijärvi[1], M. Sobocinski[1], B. Senevirathna[2], A. Hassinen[1], S.B. Prakash[3], P. Möller[4], P. Abshire[2], E. Smela[2], S. Kellokumpu[1], *[1]University of Oulu, Finland, [2]University of Maryland, USA, [3]Intel*

	Corporation, USA,[4]Linköping University, Sweden
[P2.070]	**Numerical studies of dynamic droplet moving for fluid analysis of biosensor** M. Yamaguchi[1], T. Sakata*[1], K. Yokoi[2], *[1]Shinshu University, Japan,[2]Cardiff University, UK*
[P2.071]	**Polysilicon nanowire field effect transistors for biosensing applications** A. Zulfiqar, C. Papakonstantinopoulos*, F. Patou, A. Pfreundt, A. Abi, W.E. Svendsen, M. Dimaki, *Technical University of Denmark, Denmark*
[P2.072]	**The journey forward to smart pen biosensors** G.J. Barbante*[1], F. Lapierre[1], H-J. Wirth[3], E.F. Hilder[1,2], A. Gooley[3], M.C. Breadmore[1], *[1]University of Tasmania, Australia,[2]University of South Australia, Australia,[3]Trajan Scientific and Medical, Australia*
[P2.073]	**PHOCNOSIS: a European project for early detection of cardiovascular diseases (CVD) based on label-free nanophotonic biosensing** M-J. Bañuls*[1], J. García-Rupérez[2], R. Carosselli[2], A. Griol[2], R. Puchades[1], A. Maquieira[1], *[1]Universitat Politècnica de València, Spain,[2]Universitat Politècnica de València, Spain*
[P2.074]	**Mid-infrared spectroscopy for rapid analgesic identification in whole blood from poisoned patients** D.J. Rowe*, J.S. Wilkinson, *University of Southampton, UK*
[P2.075]	**Simple and fast separation of blood plasma from whole blood utilizing agglutination of blood cells** K.H. Chung*, Y.H. Choi, C-G. Ahn, *Electronics and Telecommunications Research Institute (ETRI), Republic of Korea*
[P2.076]	**Simultaneous interrogation of multiple targets using a magnetoresistive biochip platform** E. Fernandes*[1], V. Martins[2], D.Y. Petrovykh[1], T. Dias[2], J. Germano[2], T. Sobrino[3], J. Castillo[3], J. Rivas[1], S. Cardoso[2], P.P. Freitas[1,2], *[1]INL–International Iberian Nanotechnology Laboratory, Portugal,[2]INESC-MN–Instituto de Engenharia de Sistemas e Computadores-Microsistemas e Nanotecnologias and IN-Institute of Nanoscience and Nanotechnology, Portugal,[3]Clinical Neurosciences Research Laboratory, Neurovascular Area, Department of Neurology, Hospital Clínico Universitario, IDIS, University of Santiago de Compostela, Spain*
[P2.077]	**Acoustical streaming in microfluidic CMUT integrated chip** D. Pelenis*, D. Barauskas, E. Sapeliauskas, G. Vanagas, M. Mikolajunas, D. Virzonis, *Kaunas university of technology, Lithuania*
[P2.078]	**Microfluidic enrichment chip using inertial microfluidics for rare cell isolation** T.Y. Lee*[1], Y. Shin[1], *[1]Chungnam National University, Republic of Korea,[2]University of Ulsan College of Medicine, Republic of Korea*
[P2.079]	**Biosensing based on a microfabricated impedance flow cytometer** D. Cadario[1], A. Abi*[1], C.H. Clausen[1], C.V. Bertelsen[1,2], M. Denk[1], M. Dimaki[1], W.E. Svendsen[1], *[1]Technical University of Denmark (DTU), Denmark,[2]SBT Aqua ApS, Denmark*
[P2.080]	**Interdigital diffraction grating made from nanofluidic channels for point-of-care-diagnostics with all-optical background cancellation** F. Jürgens*[1,2], A. Meyer[3], M. Stehr[3], M. Singh[3], T.P. Burg[2], A. Dietzel[1], *[1]Technische Universität Braunschweig, Germany,[2]Max-Planck-Institute for Biophysical Chemistry, Germany,[3]LIONEX Diagnostics & Therapeutics, Germany*
[P2.081]	**Centrifugal microfluidic platform for surface enhanced Raman scattering based detection of melamine in milk products** O. Durucan*, T. Rindzevicius, M.S. Schmidt, R. Burger, A. Boisen, *Technical University of Denmark, Denmark*
[P2.082]	**Micromagnet arrays for on-chip focusing, switching, and separation of superparamagnetic beads and single cells** G.U. Lee*, S. Rampini, P. Li, D. Klinic, *University College Dublin, Ireland*
[P2.083]	**A smartphone-based optical platform for colorimetric analysis of microfluidic device** U.M. Jalal, S.C. Kim, S.B. Im, J.S. Shim*, *Kwangwoon University, Republic of Korea*
[P2.084]	**A nanofluidic mixing device for high-throughput fluorescence sensing of single molecules** K. Mathwig*[1], C. Fijen[2], M. Fontana[2], S.G. Lemay[3], J. Hohlbein[2], *[1]University of Groningen, The Netherlands,[2]Wageningen UR, The Netherlands,[3]University of Twente, The Netherlands*
[P2.085]	**Hybrid lab-on-a-chip using acousto-optical real-time integrated biosensing analysis dedicated to biomolecules positioning and characterization: application to rare cells** A. Renaudin*[1,2], M-I.R. Gaso[1], M. Canva[2], P. Charette[2], F. Sarry[1], *[1]Université de Lorraine, France,[2]Université de Sherbrooke, Canada*
[P2.086]	**Highly sensitive magnetic array-based platform for neuronal signal recording** P.P. Sharma[1], *[1]Politecnico di Milano, Italy,[2]Italian Institute of Technology, Italy*
[P2.087]	**Integration of enhancement substrates and microfluidics in FT-IR microscopy for biosensing** C. Kratz*, D. Janasek, K. Hinrichs, *Leibniz-Institut fuer Analytische Wissenschaften -ISAS- e.V., Germany*

[P2.088]	**An electrochemical/ microfluidic device for the quantitative detection of glucose uptake in myoblasts grown on paper patches** R. Trouillon*, M.A.M. Gijs, *EPFL, Switzerland*
[P2.089]	**Polymer based microfluidic impedance spectroscopy sensor for in-line proteins monitoring** M-P. Schmidt*[1], A. Oseev[1], A. Brose[1], C. Engel[2], S. Hirsch[3], *[1]Institute of Micro and Sensor Systems (IMOS), Otto-von-Guericke-University Magdeburg, Germany, [2]TEPROSA GmbH, Germany, [3]Department of Engineering, University of Applied Sciences Brandenburg, Germany*
[P2.090]	**Screen printed electromechanical micro-total analysis system (µTAS) for sensitive and rapid detection of infectious diseases** A.N. Nordin*[1], A.A. Zainuddin[1], R. Ab Rahim[1], I. Voiculescu[2], W.C. Mak[3], *[1]International Islamic University Malaysia, Malaysia, [2]City College of New York, USA, [3]Linkoping University, Sweden*
[P2.091]	**Particle sorting in DLD arrays using asymmetric post shapes** K. Punyani*[1], Z. Zhang[2], J. Beech[1], G. Gompper[2], J. Tegenfeldt[1], *[1]Lund University, Sweden, [2]Forschungszentrum Juelich GmbH, Germany*
[P2.092]	**Attachable paper-based preconcentrator onto lateral flow assay platform** S.I. Han*[1], J. Lee[1], Y.K. Yoo[1], C. Kim[1], K.S. Hwang[2], R. Kwak[2], J.H. Lee[1], *[1]Kwangwoon University, Republic of Korea, [2]Korea Institute of Science and Technology (KIST), Republic of Korea*
[P2.093]	**Supported liquid membrane extraction on a disc for combined sample clean-up and enrichment of trace analytes** S.Z. Andreasen*, R. Burger, J. Emneus, A. Boisen, *Technical University of Denmark, Denmark*
[P2.094]	**Fabrication of cost-effective and lithographically patterned flexible paper-based microfluidic device using Photo-PDMS for point of care application** O.K. Siva Prakasam*, D. Das, K. Chaudhury, S. Das, *Indian Institute of Technology Kharagpur, India*
[P2.095]	**Glycan profiling analysis of membrane glycoproteins from leukemic cell lines using various lectin-based biosensing approaches** M. Zamorova*[1], P. Damborsky[1], A. Holazova[1], L. Pavlikova[2], Z. Sulova[2], J. Katrlik[1], *[1]Istitute of Chemistry SAS, Slovakia, [2]Institute of Molecular Physiology and Genetics SAS, Slovakia*
[P2.096]	**Using microfluidics to study biofilm formation and disruption** S. Rismani Yazdi, C. Stevens, P. Davies, C. Escobedo*, *Queen's University, Canada*
[P2.097]	**Development of a plastic membrane containing micro-hole(s) for a potential bio-sensing application** V. Krikstolaityte*[1], T. Ruzgas[1,2], A. Heiskanen[1], C. Canali[1], J. Emnéus[1], *[1]Technical University of Denmark, Denmark, [2]Malmo University, Sweden*
[P2.098]	**Density-based particle fractionation** S.H. Holm*, J.P. Beech, J.O. Tegenfeldt, *Lund University, Sweden*
[P2.099]	**Hydrogel capsules for sensing of individual bacterial secretion** S.H. Holm*, A. Syntychaki, J.P. Beech, J.O. Tegenfeldt, *Lund University, Sweden*
[P2.100]	**Lab-on-a-chip technologies for the adaptation of padlock probe and rolling circle amplification assays to next generation diagnostics** I. Hernandez-Neuta*[1], M. Kuhnemnud[1], I. Pereiro[2], A. Ahlford[1], S. Descroix[2], M. Nilsson[1], *[1]Stockholm University, Sweden, [2]PSL Research University, France*
[P2.101]	**Microfluidic concentration of rolling circle amplification products - A new method to simply count more molecules** M. Kuhnemund*[1], I. Hernandez-Neuta[1], M.I. Sharif[1], M. Cornaglia[2], M. Gijs[2], M. Nilsson[1], *[1]Science for life laboratory, Sweden, [2]EPFL, Switzerland*
[P2.102]	**Variable magnetization state sensor for biosensing application** M. Volmer*[1], M. Avram[2], M.A. Avram[2], *[1]Transilvania University of Brasov, Romania, [2]National Institute for Research and Development in Microtechnologies, Romania*
[P2.103]	**Electrochemical follow-up of proteolytic enzyme activity in a thrombus model** E. Orosz*[1], I. Varjú[2], G. Mészáros[1], Z. Fekete[3], G. Mez[4], A. Csámpai[4], L. Nyikos[1], K. Kolev[2], Z. Keresztes[1], *[1]Research Centre for Natural Sciences, Hungarian Academy of Sciences, Hungary, [2]Semmelweis University, Hungary, [3]Centre for Energy Research, Hungarian Academy of Sciences, Hungary, [4]Eötvös L. University, Hungary*
[P2.104]	**Enabling high information content on-CMOS-Chip read-out to improve large-scale monitoring of neural activity** H. Amin*, L. Berdondini, *Fondazione Istituto Italiano di Tecnologia (IIT), Italy*
[P2.105]	**Electrically induced orientation of red blood cells in bumper array device** B.D. Ho*, H. Yavari, S.H. Holm, T.S.H. Tran, J.P. Beech, J.O. Tegenfeldt, *Lund University, Sweden*
[P2.106]	**Use of a reconfigurable microelectrode array to examine the effect of geometry on electrode sensitivity** V. Srinivasaraghavan, H. Zhao, P. Ghassemi, J. Strobl, M. Agah*, *Virginia Tech, USA*

[P2.107]	**Characterization of hormone therapy resistance in breast cancer using single-cell mechanoelectrical properties** V. Srinivasaraghavan[1], H. Babahosseini[1], P. Ghassemi[1], A. Shajahan-Haq[2], R. Clarke[2], J. Strobl[1], M. Agah*[1], *[1]Virginia Tech, USA, [2]Georgetown University, USA*
[P2.108]	**Self-assembled diffraction grating biosensor for rapid detection of arsenic in water in a limited resource setting** K.M. Arif*, J.A. Nassar, *Massey University, New Zealand*
[P2.109]	**Microwave WGM resonantor biosensing of antioxidant specific biomarkers** N.V. Naumova*, H. Hlukhova, S.A. Vitusevich, *Forschungszentrum Juelich, Germany*
[P2.110]	**A disposable on-chip micro valve and pump for programmable microfluidics** S.B. Im*, M.U. Jalal, S.C. Kim, J.S. Shim, *kwangwoon University, Republic of Korea*
[P2.111]	**Flowrate control in paper based microdevices using regulation of microparticle size in super absorbent polymer** J.H. Lee, H.K. Chang, J. Park*, *Sogang University, Republic of Korea*
[P2.112]	**Development of electrochemical detecting platform for quantitative immunochromatography** W. Iwasaki*[1], M. Ryu[1], R.R. Sathuluri[1], R. Kurita[1], O. Niwa[1,2], M. Miyazaki[1], *[1]National Institute of Advanced Industrial Science and Technology, Japan, [2]Saitama Institute of Technology, Japan*
[P2.113]	**Facile electrochemical and hydrothermal co-deposition of graphene-cobalt oxide nanohybrids as advanced electroanalytical platforms for enzymeless glucose detection** S. Gupta*[1], S.B. Carrizosa[1], J. Jasinski[2], *[1]Western Kentucky University, 1906 College Heights Blvd. Bowling Green, KY 42101-3576, USA, [2]University of Louisville, USA*
[P2.114]	**Developing silica nanoparticles for bacteria detection** G. Giovannini*, A.J. Hall, V. Gubala, *University of Kent, UK*
[P2.115]	**Design of nanoporous gold/alumina platforms as SERS-active substrates for highly sensitive monitoring of biomolecules** W.A. El-Said[1], J.W. Choi*[1], *[1]Assiut University, Egypt, [2]Sogang University, Republic of Korea*
[P2.116]	**The development of biosensing interfaces based on electrospun fibers** Y.Y. Long, C.S. Zhou*, C.M. Wang, *Sichuan University, China*
[P2.117]	**Fe3O4 magnetic Nanoparticles modified with Mmlecularly imprinted polymers as a label-free sensing platform** A. Zamora-Gálvez*[1], E. Morales-Narváez[1], A. Merkoçi[1,2], *[1]Catalan Institute of Nanoscience and Nanotechnology (ICN2), Spain, [2]ICREA—Institució Catalana de Recerca i Estudis, Spain*
[P2.118]	**Development of fluorescent sensor based on molecularly imprinted technology for detction of sulfamethazine** Z.X. Gao, *Insititue of Health and Enverionmental Medicine, China*
[P2.119]	**A novel hydrogen peroxide biosensor based on Pt nanoparticles-decorated Fe_3O_4/graphene nanocomposite** X.L. Zhao, Z.H. Li, C. Chen, Z.G. Zhu*, *Shanghai Second Polytechnic University, China*
[P2.120]	**SPR Imaging analysis with plasmonic nanochips and trehalose-assisted preservation of supported lipid membrane arrays in dry state** Q. Cheng*, S. Hinman, C. Ruiz, *University of California Riverside, USA*
[P2.121]	**A S-layer protein of Bacillus anthracis as a building block for functional protein arrays by in vitro self-assembly** D.B. Wang*[1], X.Y. Wang[1,2], Z.P. Zhang[1], L.J. Bi[1], J.B. Zhang[1], W. Ding[1], X.E. Zhang[1], *[1]Chinese Academy of Sciences, China, [2]Huazhong Agricultural University, China*
[P2.122]	**Influence of surfactant bilayers on the refractive index sensitivity of anisotropic gold nanoparticles** E. Martinsson*[1], M.M. Shahjamali[2], N. Large[2], N. Zaraee[2], Y. Zhou[2], G.C. Schatz[2], C.A. Mirkin[2], D. Aili[1], *[1]Linköping University, Sweden, [2]Northwestern University, USA*
[P2.123]	**A readable chromatic biosensor with a tunable detection threshold** C-H. Tsai, Y-C. Hung*, J-H. Huang, P. Chang, T-R. Yew, *National Tsing-Hua University, Taiwan*
[P2.124]	**One step microwave assisted synthesis of gold nanoparticles using tyrosine as a reagent for dual sensing of spermine and spermidine in biological samples** K.A. Rawat*, S.K. Kailasa, *S. V. National Institute of Technology, India*
[P2.125]	**Novel nanoparticle-based colorimetric probes and sensors for determining phenolic antioxidants, biothiols, nitrite and hydrogen peroxide** R. Apak*, E. Ercag, M. Ozyurek, K. Guclu, A. Uzer, S.E. Celik, B. Bekdeser, Z. Can, S. Saglam, *Istanbul University, Turkey*
[P2.126]	**Molecular imprinting of peptides of regenerating protein 1B for the epitope urinary electrochemical sensing**

	H.Y. Lin[1], C.L. Lia[2], T. Crnogorac-Jurcevic[3], M.H. Lee*[2], *[1]National University of Kaohsiung, Taiwan, [2]I-Shou University, Taiwan, [3]Queen Mary University of London, UK*
[P2.127]	**Towards single molecule detection: Enumeration of gold nanorod as 1:1 labelling probe for single strand DNA** S. Sun*, G. Li, Z. Wu, *Tsinghua University, China*
[P2.128]	**Fabrication of testosterone-imprinted electronically conductive polymers coated electrodes for electrochemical sensing in urine** M-H. Lee[1], D. O'Hare[2], H-Z. Guo[3], C-H. Yang[3], H-Y. Lin*[3], *[1]I-Shou University, Taiwan, [2]Imperial College, UK, [3]National University of Kaohsiung, Taiwan*
[P2.129]	**Bacterial oxidation of mutli-walled carbon nanotubes into biocompatible nanostructures** R.S. Chouhan, Q. Anjum, V. Ozguz, J.H. Niazi*, *Sabanci University, Turkey*
[P2.130]	**Biosensor based on a nanowire field-effect transistor for the determination of prostate specific antigen** M. Rubtsova*[1], G. Presnova[1], V. Krupenin[1], D. Presnov[1,2], V. Grigorenko[1], A. Egorov[1], *[1]Lomonosov Moscow State University, Russia, [2]Skobeltsyn Institute of Nuclear Physics, Russia*
[P2.131]	**Self-assembly of ferritin nanoparticles into an enzyme nanocomposite with tunable size for ultrasensitive immunoassay** D. Men*[1,3], T-T. Zhang[1,3], J. Zhou[1], X-E. Zhang[2], *[1]Wuhan Institute of Virology, Chinese Academy of Sciences, China, [2]Institute of Biophysics, Chinese Academy of Sciences, China, [3]Henan University, China*
[P2.132]	**Nanostructured films based on polymeric azaporphines for biosensor application** S. Krutovertsev*[1], O. Ivanova[1], A. Sherle[2], E. Oleinik[2], *[1]JSC Ecological sensors and systems, Russia, [2]Institute of Chemical Physics of RAS, Russia*
[P2.133]	**Versatile biosensing platform using natural bionanomaterials with various dimensions** X.E. Zhang, *Chinese Academy of Sciences, China*
[P2.134]	**A nanoporous alumina membrane based impedance biosensor for histamine detection with magnetic nanoparticles separation and amplification** W.W. Ye*[1], Y.T. Ding[1], Y. Sun[1], F. Tian[2], M. Yang[2], *[1]Zhejiang University of Technology, China, [2]The Hong Kong Polytechnic University, Hong Kong*
[P2.135]	**Amplified multiplexed detection of microRNAs and viral RNA for influenza diagnostics using quantum dots and duplex specific nuclease** Y. Wang*, P. Howes, E. Kim, C. Spicer, M. Thomas, M. Stevens, *Imperial College London, UK*
[P2.136]	**Optical fiber sensor for the detection of triclosan by using surface plasmon resonance and molecular imprinting** B.D. Gupta*, A.M. Shrivastav, *Indian Institute of Technology Delhi, India*
[P2.137]	**Colorimetric-based detection of TNT explosives using functionalized silica nanoparticles** N. Idros*[1,2], M.Y. Ho[1,3], M. Pivnenko[1], M.M. Qasim[1], H. Xu[4], Z. Gu[4], D. Chu[1], *[1]University of Cambridge, UK, [2]Universiti Malaysia Perlis, Malaysia, [3]Schlumberger Cambridge Research, UK, [4]Southeast University, China*
[P2.138]	**Proteome analysis with a unique long monolithic capillary column of rheumatoid arthritis-related molecules in synovium** S. Shibasaki*[1], S. Aburaya[2], W. Aoki[2], M. Ueda[2], T. Iwasaki[1], *[1]Hygo University of Health Sciences, Japan, [2]Kyoto University, Japan*
[P2.139]	**Enhanced electrochemical sensitivity of electrochemical deposited platinum nandendrites with applications in non-enzymatic glucose sensing** Y.H. Wei*[1], C.H. Tsai[1], C.K. Hsieh[2], F.G. Tseng[1], *[1]National Tsing Hua University, Taiwan, [2]Ming Chi University of Technology, Taiwan*
[P2.140]	**Highly selective and sensitive determination of cadmium (Ⅱ) based on the ion imprinted polymer membrane and catalytic kinetic spectrophotometric method** B. Li, K. Huang*, F. Zhou, T. Jing, *Huazhong University of Science and Technology, China*
[P2.141]	**Pd/Ag nanocomposites for sensing of hydrazine utilizing fiber optic localized surface plasmon resonance sensor** A. Pathak*, B.D. Gupta, *Indian Institute of Technology Delhi, India*
[P2.142]	**Real-time monitoring of self-assembling monolayer formation using the heat-transfer method HTM** M. Khorshid*[1,2], P. Losada-Pérez[2], P. Cornelis[1], F.U. Renner[2], W. De Ceuninck[2], P. Wagner[1,2], *[1]KU Leuven, Belgium, [2]Hasselt University, Belgium*
[P2.143]	**Polystyrene-core silica-shell nanoparticles for scintillation proximity assays in biological samples** C. Janczak*, I. Calderon, E. Noviana, Z. Mokhtari, C. Aspinwall, *University of Arizona, USA*
[P2.144]	**Tuning electrochemical properties for neurotransmitter detection using CNT fiber microelectrodes** C. Yang*[1], E. Trikantzopoulos[1], C. Jacobs[2], B. Venton[1], *[1]University of Virginia, USA, [2]Oak Ridge National Laboratory, USA*
[P2.146]	**Long-term evaluation of black Pt deposited stimulating cuff electrode in sciatic nerve implant**

	Y.J. Lee[1], H.J. Kim[2], S.H. Do[2], J.Y. Kang[1], S.H. Lee*[1], *[1]Korea Institute of Science and Technology, Republic of Korea, [2]Konkuk University, Republic of Korea*
[P2.147]	**Paper-based flexible sensor for sensitive determination of bisphenol A based on ion sputtering coating and carbon nanotubes** Q. Zhang*, H.Y. Li, W. Wang, Q. LV, Z.J. Wang, H. Bai, *Chinese Academy of Inspection and Quarantine, China*
[P2.148]	**Pulsed laser ablation (PLA) and confined atmospheric-pulsed laser deposition (CA-PLD) based nano-biosensor production** C. Hughes*[1,2], R. McCann[1,2], K. Bagga[1,2], R. Groarke[1,2], D. Brabazon[1,2], *[1]Dublin City University, Ireland, [2]Advanced Processing Technology Research Centre, Ireland*
[P2.149]	**Facile method for the detection of Troponin i using platinum nanoparticles and glass capillary tube indicators** S. Lee*, D. Kwon, C. Yim, S. Jeon, *POSTECH, Republic of Korea*
[P2.150]	**Label-free optical biosensor based on photonic crystal surface waves reveals binding kinetics of antibodies to living bacterial cells in real time** E. Rostova*, S. Sekatskii, G. Dietler, *École Polytechnique Fédérale de Lausanne, Switzerland*
[P2.151]	**A highly sensitive and color-indicating protein assay method based on cholesteric liquid crystals** Y.C. Hsiao[2], Y.C. Sung[2], M.J. Lee*[1], W. Lee[2], *[1]Chang Jung Christian University, Taiwan, [2]National Chiao Tung University, Taiwan*
[P2.152]	**Polymer surface properties control the function of surface immobilised molecular motors** K.L. Hanson[1], F. Fulga[2], S. Dobroiu[2], G. Solana[1], V. Vaidyanathan[1], D.V. Nicolau*[1,3], *[1]Swinburne University of Technology, Australia, [2]University of Liverpool, UK, [3]McGill University, Canada*
[P2.153]	**Electrochemical sensor for dopamine based on electropolymerized molecularly imprinted poly aminothiophenol and gold nanoparticles** B. Ciui*, M. Tertis, A. Florea, O. Hosu, D. Peia, R. Sandulescu, C. Cristea, *University of Medicine and Pharmacy, Romania*
[P2.154]	**A colorimetric assay of lipopolysaccharides based on unmodified gold nanoparticles and lipopolysaccharides-binding peptide** C.Y. Lei*[1], Z.H. Qiao[1], Y.C. Fu[1], Y.B. Li[1,2], *[1]Zhejiang University, China, [2]University of Arkansas, USA*
[P2.155]	**Magnetic nano- and microstructures fabricated by selective plating for bio-medical applications** V.M. Dubin*, A.L. Gindilis, M.O. Lisunova, *NANO3D SYSTEMS LLC, USA*
[P2.156]	**Renewable and ultralong nanoelectrochemical sensor: Nanoskiving fabrication and monitoring cell release** M. Zhang, *Renmin University of China, China*
[P2.157]	**3D-RISM-KH molecular theory of solvation predicts molecular mechanisms and ligand binding modes of maltose binding protein for metabolite biosensors** A. Kovalenko[1,2], *[1]National Institute for Nanotechnology, Canada, [2]University of Alberta, Canada*
[P2.158]	**PtW/MoS_2 hybrid nanocomposite for electrochemical sensing of H_2O_2 released from living cells** X.H. Gao[1,2], Y. Zhang[1], P.C. Xu*[2], X.X. Li[2], J.Q. Xu[3], *[1]Materials Genome Institute of Shanghai University, China, [2]Shanghai Institute of Microsystem and Information Technology, China, [3]Shanghai University, China*
[P2.159]	**Hyphenation of surface plasmon resonance optical sensing to size exclusion chromatography for analysis of antibody preparations** D. Lakayan*[1,2], R. Haselberg[1], J. Tuppurainen[3], N. Granqvist[3], J. Sadowski[3], W.M.A. Niessen[1], G.W. Somsen[1], J. Kool[1], *[1]VU university Amsterdam, The Netherlands, [2]TI-COAST, The Netherlands, [3]BioNavis Ltd, Finland*
[P2.160]	**Wireless-electrodeless quartz crystal microbalance with dissipation (QCM-D) functionalized by nanostructured nickel hydroxide for plasticizer detection** D. Chen*[1], Y. Wang[1], K. Zhang[1], G. Fan[2], R. Hu[1], G. Li[1], *[1]Zhejiang University, China, [2]Yangzhou University, China*
[P2.161]	**Assessment of monohydrate formation by micromembrane-based infrared spectroscopy** A. Casci Cecaccci*[1], L. Carnevali[1], P. Marizza[1], S. Schmid[1], J. Rantanen[2], A. Boisen[1], *[1]Technical University of Denmark, Denmark, [2]Copenhagen University, Denmark*
[P2.162]	**Amplification of gold nanoparticle-based colorimetry: Its application to enzyme activity assays** G.B. Kim*, Y-P. Kim, *Hanyang University, Republic of Korea*
[P2.163]	**Tackling antibody cross-reactivity in point-of-care multiplex sandwich detection assays** J.T. Dias*, L. Lama, J. Gantelius, H.A. Svahin, *Science for life Lab, Sweden*
[P2.164]	**Nanomaterials/graphite fibre hybrid electrode for electrochemical biosensing** A.X. Li, *Beijing Research Center of Intelligent Equipment for Agriculture, China*
[P2.165]	**Graphene dots based nonvolatile photo-sensing transistor for high sensitivity x-ray radiography application**

	Z. Pei[1], Y.H. Chang*[1], F.C. Shih[1], H.C. Lai[1], J.Y. Wang[1], W.H. Chiang[2], *[1]National Chung Hsing University, Taiwan, [2]National Taiwan University of Science and Technology, Taiwan*
[P2.166]	**A FRET-based lysine sensor toolbox with different affinity and sensitivity** V. Steffen*, J. Otten, A. Radek, S. Engelmann, W. Wiechert, S. Noack, M. Pohl, *Forschungszentrum Jülich GmbH, Germany*
[P2.167]	**Non-enzymatic biosensor based on SiO_2/C/CuO-nanostructure electrode for detection of glucose** Z. Ur-Rehman*[2,1], S. Ullah Mir[2], A.A. Chaudhry[1], S.A. Siddiqui[1], A. Rahim[1], R. Shahid[1], *[1]Interdisciplinary Research Centre in Biomedical Materials (IRCBM) COMSATS Institute of Information Technology, Pakistan, [2]COMSATS Institute of Information Technology, Pakistan*
[P2.168]	**Conducting polymer nanostructures on PEDOT planar electrodes for implantable biosensing applications** B. Smit, L. Sasso*, *Delft University of Technology, The Netherlands*
[P2.169]	**Particle motion analysis reveals nanoscale bond characteristics and enhances dynamic range for biosensing** E.W.A. Visser*[1,2], L.J. van IJzendoorn[1], M.W.J. Prins[1], *[1]Eindhoven University of Technology, The Netherlands, [2]Institute for Complex Molecular Systems, The Netherlands*
[P2.170]	**Nanostructured platforms based on graphene-polypyrrole composite for immunosensor fabrication** A. Cernat, M. Tertis, N. Papara, E. Bodoki, R. Sandulescu*, *Iuliu Hatieganu University, Romania*
[P2.171]	**bBosensors for plant pathogen detection** M. Kahter*[1], A. de la Escosura-Muñiz[1], A. Merkoçi[1,2], *[1]Catalan Institute of Nanoscience and Nanotechnology (ICN2), Spain, [2]ICREA - Institucio Catalana de Recerca i Estudis Avançats, Spain*
[P2.172]	**Ultra-clean carbon nanotube thin film technologies for high-performance, flexible bio-electronics** N.X. Viet, T. Ushiyama, S. Kishimoto, Y. Ohno*, *Nagoya University, Japan*
[P2.173]	**Chitosan cryogel with embedded gold nanoparticles-decorated multiwalled carbon nanotubes modified electrode for a highly sensitive flow based glucose monitoring in human plasma** T. Kangkamano*, A. Numnuam, W. Limbut, P. Kanatharana, P. Thavarungkul, *Prince of Songkla University, Thailand*
[P2.174]	**A fluorescence resonance energy transfer (FRET) biosensor based on graphene quantum dot (GQD) and graphene oxide (GO) for detection of circulating tumour cells in vitro** J.Y. Shi*, F. Tian, J. Lyu, M. Yang, *The Hong Kong Polytechnic University, Hong Kong*
[P2.175]	**Bioinspired plasmonic nanostructures** G. Emilsson*[1], K. Xiong[1], R.L. Schoch[2], R.Y.H. Lim[2], A.B. Dahlin[1], *[1]Chalmers University of Technology, Sweden, [2]University of Basel, Switzerland*
[P2.176]	**Colorimetric sensor based on gold nanoparticles for diuron detection and water treatment control** C.S. Espinel[1], V.G. Bonavia[1], F.R. Lorenzo*[2], A.A. Campazas[2], S.F. Reboredo[2], L.H. Castilla[2], P.V. Sola[2], *[1]Nanoimmunotech, Spain, [2]AIMEN, Spain*
[P2.177]	**Multiple micropollutants detection of water sources using surface plasmon resonance sensors** Z. Altintas, M.J. Abdin, I.E. Tothill*, *Cranfield University, UK*
[P2.178]	**Graphene quantum dot - magnetic nanoparticle conjugates for simultaneous dual modal imaging and drug delivery sensing based on fluorescence resonance energy transfer** X.Q. Su*, C.Y. Chan, J.Y. Shi, F. Tian, J. Lyu, M. Yang, *The Hong Kong Polytechnic University, Hong Kong*
[P2.179]	**Label-free colorimetric sensor for protein recognition by molecularly imprinted hollow spheres array** W. Chen, Z.H. Meng*, M. Xue, *Beijing Institute of Technology, China*
[P2.180]	**Engineered thermosensitive hydrogel photonic crystals as humidity sensors** Z. Wang, D. Yi, Z. Meng, M. Xue*, L. Qiu, *Beijing Institute of Technology, China*
[P2.181]	**Application of semiconductor nanostructures for light-triggered bioanalysis** M. Riedel[1], S. Lippert[2], M. Eickhoff[2], W.J. Parak[3], F. Lisdat*[1], *[1]Technical University Wildau, Germany, [2]Justus-Lieblig-Universität Gießen, Germany, [3]Philipps University Marburg, Germany*
[P2.182]	**Surface enhanced raman spectroscopy detection of p-coumaric acid from cell supernatant using gold-capped silicon nanopillar substrates** L. Morelli*, C. Bille Jendresen, R. Burger, T. Rindzevicius, M. Stenbæk Schmidt, A. Toftgaard Nielsen, A. Boisen, *Technical University of Denmark, Denmark*
[P2.183]	**Gold nanoparticle based enzyme biosensor for the detection of chloramphenicol** R. Sharma*[1], U.S. Akshath[1,2], P. Bhatt[1,2], M.S. Thakur[2], K.S.M.S. Raghavarao[1], *[1]CSIR-Central Food Technological Research Institute (CSIR-CFTRI), India, [2]University of Mysore, India*
[P2.184]	**Detection of influenza miRNA biomarker via DNA-mediated liposome fusion assays** C. Jumeaux*[1], P.D. Howes[1], E. Kim[1], R. Chandrawati[2], M.M. Stevens[1], *[1]Imperial College London, UK, [2]The University of Sydney, Australia*
[P2.185]	**Wheatstone bridge integration of SiNW-FETs as highly-sensitive biosensor platform** A. Müller*[1,2], X.T. Vu[2], V. Pachauri[1], L.A. Francis[3], D. Flandre[3], S. Ingebrandt[1,2], *[1]Hochschule Kaiserslautern,*

	Germany, [2]RAM Group GmbH, Germany, [3]Université catholique de Louvain, Belgium
[P2.186]	**Enzyme-induced aggregation of plasmonic nanoparticles for the development of label-free and ultrasensitive detection of bacterial DNA** C. McVey, Z. Zhang, F. Huang, C. Elliott, C. Cao*, *Queen's University of Belfast, UK*
[P2.187]	**Preparation of molecularly imprinted nanoparticle for the selective determination of haemoglobin with uv-visible spectrometer** G. Aylaz*[1], M. Duman[1], M. Andaç-Özdil[1], C. Çiçek[2], *[1]Hacettepe University, Turkey, [2]Yüksek Ihtisas University, Turkey*
[P2.188]	**Molecularly imprinted polymer based micromechanical cantilever sensor system for the selective determination of ciprofloxacin** M. Okan*, M. Duman, *Hacettepe University, Turkey*
[P2.189]	**Preparation of molecularly imprinted polymer nanoparticle for the selective determination of ciprofloxacin with surface plasmon resonance** M. Duman*, A. Denizli, E. Sari, R. Süzek, *Hacettepe University, Turkey*
[P2.190]	**Synthesis and characterization of "green" metallic nanoparticles for electrochemical biosensors development** P. Bollella*[1], G. Bollella[1], F. Mazzei[1], L. Gorton[2], R. Antiochia[1], *[1]Sapienza University of Rome, Italy, [2]Lund University, Sweden*
[P2.191]	**Electroanalysis of date-rape drug in beverages using nanosized composites** C. Singhal, D. Chakraborty*, N. Malhotra, N. Chauhan, A.I. Ingle, J. Narang, *Amity University, India*
[P2.192]	**Highly sensitive electrospun multiwalled carbon nanotubes embedded zinc oxide nanowire based interface for label free biosensing** K. Brince Paul*, S.G. Singh, S.R.K. Vanjari, *IIT Hyderabad, India*
[P2.193]	**Ultrasensitive label-free detection of protein using nanostructured porous silicon** S. Mariani*, L.M. Strambini, G. Barillaro, *University of Pisa, Italy*
[P2.194]	**Multiparametric dry-reagent immunomagnetic biosensors based on volumetric detection of nanolabels on 3D structures** S.L. Znoyko[1], A.V. Orlov[1], V.R. Cherkasov[2], M.P. Nikitin*[2,1], P.I. Nikitin[1], *[1]Russian Academy of Sciences, Russia, [2]Moscow Institute of Physics and Technology (State University), Russia*
[P2.195]	**Design and preparation of highly-oriented immobilized enzyme-carbon nanotube complex** H. Sakamoto*, A. Koto, S. Matsuzaki, T. Satomura, S. Suye, *University of Fukui, Japan*
[P2.196]	**Copper detection in biological samples based on click chemistry and resonance energy transfer between graphene oxides and fluorescent dyes** W.S. Zheng*, X.Y. Jiang, *National Center for NanoScience and Technology, China*
[P2.197]	**Development of molecularly imprinted polymer-based field effect transistor for lactate sensing** S. Nishitani*[1], T. Kajisa[2], T. Sakata[1], *[1]University of Tokyo, Japan, [2]PROVIGATE Inc., Japan*
[P2.198]	**Electrochemical detection of nitrite content in exhaled breath condensate using reduced graphene oxide electrodes** A. Gholizadeh, D. Voiry, C. Weisel, H. Kipen, R. Laumbach, M. Chhowalla, M. Javanmard, T. Le*, *Rutgers - The State University of New Jersey, USA*
[P2.199]	**Electrochemical sensing by photonic crystal nanolaser sensors** T. Watanabe*, Y. Furuta, S. Hachuda, Y. Nishijima, T. Baba, *Yokohama National University, Japan*
[P2.200]	**Label-free protein sensor by using blue phase liquid crystal** C.H. Chang*[1], Y.C. Hsiao[1], M.J. Lee[2], W. Lee[1], *[1]National Chiao Tung University, Taiwan, [2]Chang Jung Christian University, Taiwan*
[P2.201]	**Saccharides specific sensing using molecularly imprinted gel coated gate-field effect transistor** T. Kajisa*[1], T. Sakata[1], *[1]PROVIGATE Inc., Japan, [2]The University of Tokyo, Japan*
[P2.202]	**Plasmonically enhanced fluorescence for cancer diagnostics applications** S. Fossati*, S. Hageneder, M. Bauch, W. Knoll, J. Dostalek, *AIT - Austrian Institute of Technology Biosensor Technologies, Austria*
[P2.203]	**Surface enhanced Raman spectroscopy (SERS) biosensors based on self-assembled colloidal photonic crystal** X.W. Zhao*, Z.Z. Gu, *Southeast University, China*
[P2.204]	**Carbon nanodots prepared from polyethylenimine as an effective fluorescent sensing platform for the label-free detection of periodate ions and uric acid** W-C. Wu*[1,2], S-C. Lin[1], F-R. Chen[1], H-T. Chang[3], F-G. Tseng[1], *[1]National Tsing Hua University, Taiwan, [2]Academia Sinica, Taiwan, [3]National Taiwan University, Taiwan*
[P2.205]	**Electronic nose for recognition of volatile vapor mixtures using a nanoporous microresonator** D. Lee*, O. Kwon, *Korea Institute of Machinery and Materials, Republic of Korea*

[P2.206]	**Magnetic MIPs for biotin and biotinylated biomolecules: A promising material for magneto actuated devices** M.D.P.T. Sotomayor*[1], R.R. Pupin[1], A. Herrera[2], A. Ben Aissa[2], M.I. Pividori[2], *[1]Universidade Estadual Paulista, Brazil, [2]Universitat Autònoma de Barcelona, Spain*
[P2.207]	**Plain to point network glucose treated reducedgraphene oxide and activated carbon composites with platinum nanoparticles for electrochemicalglucose detection** M.F. Hossain, X. Xuan*, J.Y. Park, *Kwangwoon University, Republic of Korea*
[P2.208]	**A highly selective and efficient electrochemical sensor for creatinine based on molecular imprinted polymer** S.A. Zaidi*, J.H. Shin, *Kwangwoon University, Republic of Korea*
[P2.209]	**Fabrication of mediator-free glucose oxidase immobilized hybrid nano-interfaced electrochemical biosensor for monitoring cancer cell proliferation** M. Sasya*, K. Jayanth Babu, S. Swaminathan, R. John Bosco Balaguru, K. Uma Maheswari, *SASTRA University, India*
[P2.210]	**Cancer protein marker detection using immuno-nanoplasmonics at single nanoparticle scale** Y. Hong*, J. Yang, *Yonsei University, Republic of Korea*
[P2.211]	**Quantum dot-based luminescent nanobiolabels: synthesis and bioapplication** V.V. Goftman*[1,2], I.Y. Goryacheva[2], S. De Saeger[1], *[1]National Research Saratov State University, Russia, [2]Ghent University, Belgium*
[P2.212]	**Gold nanostructuration in paper-based electrodes** E. Nunez-Bajo, M.C. Blanco-López*, A. Costa-García, M.T. Fernández-Abedul, *Universidad de Oviedo, Spain*
[P2.213]	**Site-specific immobilizatio of proteins on non-conventional substrates via solvent-free initiated chemical vapour deposition (iCVD) process** S.G. Im*, G.M. Jeong, H. Seong, K.J. Jeong, *Korea Advanced Institute of Science and Technology, Republic of Korea*
[P2.214]	**A fast method to evaluate the electrical properties and chemical functionalization of CVD graphene for biosensing applications** E. Prats-Alfonso*[1,2], E. Masvidal[1,2], A. Gallemí[1], M. Álvarez[1,2], X. Illa[1,2], A. Guimerà[1,2], R. Villa[1,2], *[1]Institut de Microelectrònica de Barcelona, IMB-CNM (CSIC), Spain, [2]Centro de Investigacion Biomedica en Red, Biomateriales y Nanomedicina (CIBER-BBN), Spain*
[P2.215]	**Novel qcm-based method to predict in vivo behaviour of nanoparticles** M. Gianneli*[1], Y. Yan[2], E. Polo[2], S. Altun[1], T. Aastrup[1], K.A. Dawson[2], *[1]Attana AB, Björnnäsvägen 21, SE-11419 Stockholm, Sweden, [2]Centre for BioNano Interactions, School of Chemistry and Chemical Biology, University College Dublin, Belfield, Dublin 4, Ireland*
[P2.216]	**Electrocatalytic evaluation of a horseradish peroxidase biosensor based on a novel Bi-Ag bimetallic nanocomposite** C. Van der Horst[1,2], B. Silwana[1,2], E.I. Iwuoha[1], V.S. Somerset*[2], *[1]University of the Western Cape, Bellville, South Africa, [2]CSIR, NRE, Stellenbosch, South Africa*
[P2.217]	**An innovative detection method for nanoparticle-protein interactions study dedicated to nanomedicine assessment** C. Desmet, A. Valsesia*, R. La Spina, P. Urbán, F. Rossi, P. Colpo, *European Commission Joint Research Centre, Italy*
[P2.218]	**Silicon nanowire biosensors: Implications of multiparametric transducer principles and down-scaling for precise biosensing applications beyond Debye limit** S. Ingebrandt[1], *[1]University of Applied Sciences Kaiserslautern, Germany, [2]RAM Group DE GmbH, Germany*
[P2.219]	**Nanostructured photoelectrochemical biosensing platforms for cancer biomarker detection** I. Palchetti*[1], D. Voccia[1], L. Falciola[2], C. Ingrosso[3], *[1]Università di Firenze, Italy, [2]Università di Milano, Italy, [3]CNR-IPCF Istituto per i Processi Chimici e Fisici, Italy*
[P2.220]	**Direct quantification of surface energy components of nanomaterials** A. Valsesia*, C. Desmet, A. Oddo, R. La Spina, P. Colpo, I.O. Jimenez, F. Rossi, *Institute for Health and Consumer Protection, Italy*
[P2.221]	**Label-free self-amplified nanophotonic biosensor for early cancer diagnosis by miRNA detection** M-J. Bañuls*[1], D. González-Lucas[1], J. García-Rupérez[2], R. Puchades[1], A. Maquieira[1], *[1]Universitat Politècnica de València, Spain, [2]Universitat Politècnica de València, Spain*
[P2.222]	**Preparation and characterisation of a sensing system for wireless pH measurements in vivo, in a rumen of a cow** C. Schanzenbach[1], D. Ilver[1], J. Blomgren[1], C. Jonasson[1], C. Johansson[1], A. Krozer*[1], L. Ye[2], O. Shagor[3], B-O. Rustas[3], *[1]Acreo Swedish ICT AB, Sweden, [2]Lund University, Sweden, [3]Swedish University of Agricultural Sciences, Sweden*

[P2.223]	**Novel multisensing optical nanomaterials and indicator systems for fluorescent and SERS-determination of neurotransmitter metabolism indicators in biological samples** I.A. Veselova*[1,2], M.I. Makedonskaya[1,2], O.E. Eremina[1,2], A.V. Sidorov[1,2], E.A. Goodilin[1], T.N. Shekhovtsova[1], *[1]M.V. Lomonosov Moscow State University, Russia, [2]National Research centre "Kurchatov Institute", Russia*
[P2.224]	**Structuring graphene oxide and MoS_2 thin-films – Label-free biosensors realization on wafer-scale** W.M. Munief*, X-L. Lu, V. Pachauri, S. Ingebrandt, *University of Applied Sciences Kaiserslautern, Germany*
[P2.225]	**Carbon nanopillars for enhanced stem cell differentiation and dopamine detection** A-I. Bunea*[1], L. Amato[1], A. Valsesia[2], P. Pellacani[2], A.C. Ceccacci[1], S.S. Keller[1], N.B. Larsen[1], A. Heiskanen[1], J. Emneus[1], *[1]Technical University of Denmark, Denmark, [2]Institute for Health and Consumer, Italy*
[P2.226]	**Design of gold nanoparticle-based colorimetric biosensors for Staphylococcal Enterotoxin A (SEA) detection** M.B. Haddada*[1], S. Boujday[1,2], B. Liedberg[2], Y. Wang[2], M. Salmain[1], *[1]UPMC Univ Paris 6, France, [2]Nanyang Technological University, Singapore*
[P2.227]	**Nanoplasmonic sensing of soft matter interfaces: dynamics of vesicle deformation and sensing of virus-like particles** P. Bjöörn*[1], O. Anderson[1], J.A. Jackman[2], N-J. Cho[2], *[1]Insplorion AB, Sweden, [2]Nanyang Technological University, Singapore*
[P2.228]	**Nanoparticle size-shifted assay using synthetic binding proteins - a new analytical platform** T. Mahatnirunkul*, D. Tomlinson, M. McPherson, P.A. Millner, *University of Leeds, UK*
[P2.229]	**Plasmon-optical detection of the rotation dynamics of hybrid nanoparticles for biomolecular diagnostics** A. Shoshi*, J. Schinerl, H. Brückl, *Danube University Krems, Austria*
[P2.230]	**Sensitive biomolecular detection using photochemical reactions induced by visible laser beams** H. Yoshikawa*, M. Yoshinaga, E. Tamiya, *Osaka University, Japan*
[P2.231]	**High-density peptide microarrays combined with nano-plasmonic imaging platform towards multiplex biosensing** R. Bombera*[1], A. Valsesia[1], G. Marchesini[2], C. Schafer-Nielsen[3], T. Østerbye[4], P. Colpo[1], *[1]European Commission, Italy, [2]Plasmore srl, Italy, [3]Schafer-N, Denmark, [4]University of Copenhagen, Denmark*
[P2.232]	**Functionalization of surfaces for specific analyte capturing and sensing** K. Fogel*, A. Krozer, D. Illver, K. Reimhult, C. Rusu, *Acreo Swedish ICT, Sweden*
[P2.233]	**Finding optimal gold and silver nanorods for sensing applications** U. Pal[1], O. Peña-Rodríguez*[2], *[1]Universidad Autónoma de Puebla, Mexico, [2]Universidad Politécnica de Madrid, Spain*
[P2.234]	**LSRP biosensor based on nanostructured gold films: detection of mycotoxins** A.G. Al-Rubaye[1], A. Nabok*[1], A. Tsargorodska[2], *[1]Materials and Engineering Research Institute, UK, [2]The University of Sheffield, UK*
[P2.235]	**Electrochemistry coupled localized surface plasmon resonance monitoring of neurotransmitters on nanostructured surfaces** N. Li, D. Zhang, Q. Zhang, Y. Lu, S. Li, Q. Liu*, *Zhejiang University, China*
[P2.236]	**Label-free biological sensing based on composites of graphene oxide and gold nanoparticles** Q. Zhang*, G. Xu, D. Zhang, Y. Lu, Q. Liu, *Zhejiang University, China*
[P2.237]	**A single probe based impedimetric biosensor for the label free, real time monitoring of microRNA-21 biomarker** S. Azzouzi*[1,2], K. Kor[1,3], M.B. Ali[2], A.P.F. Turner[1], W.C. Mak[1], V. Beni[1], *[1]Linköping University, Sweden, [2]University of sousse, Tunisia, [3]Damghan University, Iran*
[P2.238]	**Smart polymerisable terbium(III) complex-based fluorescent MIP nanoparticles** E. Ozgur[1,2], H.K. Patra[1,3], L. Uzun*[1,2], A.P.F. Turner[1], *[1]Linköping University, Sweden, [2]Hacettepe University, Turkey, [3]Linköping University, Sweden*
[P2.239]	**A fundamental study of microsquare nanoband edge electrodes (MNEE) and their use in biosensing** A. Piper*, J.G. Terry, A.J. Walton, A.R. Mount, *University of Edinburgh, UK*
[P2.240]	**Te nanotubes decorated with Pt nanoparticles for fuel cell applications** D. Chirizzi, E. Filippo, M.R. Guascito*, A. Tepore, *Università del salento, Italy*
[P2.241]	**Graphene-Metal nanostructures as surface enhanced raman scattering substrates for biosensing** P. Rivolo*, S. Bianco, A. Lamberti, A. Chiadò, C. Novara, F. Giorgis, *Politecnico di Torino, Italy*
[P2.242]	**Argon gas cluster ion beam (GCIB) depth profiling of biosensor materials** J.J. Pireaux[1], P. Louette[1], P. Mack[2], T.S. Nunney[2], M. Mannsberger*[2], *[1]Université de Namur, Belgium, [2]Thermo Fisher Scientific, UK*
[P2.243]	**Electroactive nanoparticles of molecularly imprinted polymers for indirect electrochemical sensing of vancomycin**

	A. Turco*[1], E. Mazzotta[1], I. Chianella[2], A. Guerreiro[3], S.A. Piletsky[3], C. Malitesta[1], *[1]University of Salento, Italy, [2]University of Cranfield, UK, [3]University of Leicester, UK*
[P2.244]	**Functionalization of gold-plasmonic devices with peptides for protein capture** E. Battista*[1,2], P.L. Sconamiglio[1], G. Das[3], G. Manzo[1,5], F. Causa[1,2], E. Di Fabrizio[3,4], P.A. Netti[1,2], *[1]Center for Advanced Biomaterials for Healthcare@CRIB, Istituto Italiano di Tecnologia (IIT), Italy, [2]University Federico II, Italy, [3]King Abdullah University of Science and Technology, Saudi Arabia, [4]Università Magna Graecia di Catanzaro, Italy, [5]Politecnico di Torino, Italy*
[P2.245]	**Enhanced performance electrochemical sensors based on nanosized NiO particles** M. Carbone[1], A. Nesticò[1], N. Bellucci[1], L. Micheli*[1,2], G. Palleschi[1,2], *[1]University of Rome Tor Vergata, Italy, [2]Consorzio Interuniversitario Biostrutture e Biosistemi "INBB", Italy*
[P2.246]	**Studies on electrobiocatalytic behaviour of acetylene sourced CVD-synthesised graphene bioelectrodes** A. Olugbenga Osikoya*[1,2], O. Parlak[1], R. Bhatia[1], N. Arul Murugan[1,3], E. Dixon Dikio[2], H. Moloto[2], L. Uzun[1], A. P F Turner[1], A. Tiwari[1,4], *[1]Linköping University, Sweden, [2]Vaal University of Technology, South Africa, [3]Royal Institute of Technology, Sweden, [4]Tekidag AB, Sweden*
[P2.247]	**Nanostructured platform based on polyaniline/ cellulose nanocrystal composite for biosensor application** M.M. Abdi*, R. Liyana, P. Md. Tahir, *University Putra Malaysia, Malaysia*
[P2.248]	**Release and inhibition of virus by subunit of toxin protein** N. Parveen*[1], S. Block[1], V. Zhadnov[1,2], F. Höök[1], *[1]Chalmer University of Technology, Sweden, [2]Russian Academy of Sciences, Russia*
[P2.249]	**Therapeutic drug monitoring with nanobiosensors** J-F. Masson[1], *[1]Universite de Montreal, Canada, [2]Affinite Instruments, Canada*
[P2.250]	**Diffusion of guest molecules in three-dimensional DNA hydrogels** T. Nöll, H. Schönherr, D. Wesner, T. Paululat, G. Nöll*, *Siegen University, Germany*
[P2.251]	**Optophysiology: Plasmonic nanosensing for monitoring cell secretion events** J-F. Masson*, F. Lussier, T. Brule, H. Zhu, *Universite de Montreal, Canada*
[P2.252]	**Chiral separation using biopolymeric nanostructures** S. Suriyanarayanan*[1], I.A. Nicholls[1,2], *[1]Linnaeus, Sweden, [2]Uppsala University, Sweden*
[P2.253]	**Characteristics of diamond based electrolyte solution-gate FET (SGFET) with common gate and without gate electrode** M.S. Shaili*[1], T. Naramura[1], K. Igarashi[1], Y. Shintani[2], H. Kawarada[1], *[1]Waseda University, Japan, [2]Yokogawa Electrical Corporation, Japan*
[P2.254]	**Bio-inspired artificial muscle based on chemical sensors** G. Marrazza*[1], A. Ravalli[1], C. Rossi[2], *[1]University of Florence, Italy, [2]University of Madrid, Spain*
[P2.255]	**WO_3 nanoparticles based electrodes for nitrite biosensing** L. Santos*[3], C. Silveira[1], R. Martins[3], M.G. Almeida[1,2], E. Fortunato[3], *[1]REQUIMTE, Portugal, [2]Instituto Superior de Ciências da Saúde Egas Moniz, Portugal, [3]I3N/CENIMAT, Portugal*
[P2.256]	**Bioelectrocatalysis of laccase from *Trametes versicolor* on anodized epitaxial graphene** M.Y. Vagin*[1], A.N. Sekretaryova[1], A. Håkansson[1], I. Lundström[1], M. Syväjärve[1,2], R. Yakimova[1,2], M. Eriksson[1], *[1]Linköping University, Sweden, [2]Graphensic AB, Sweden*
[P2.257]	**Nanostructures of biopolymers: Molecularly imprinted zein (MIZ) nanowires for selective determination of biotin derivatives** S. Suriyanarayanan*[1], I.A. Nicholls[1,2], *[1]Linnaeus University, Sweden, [2]Uppsala University, Sweden*
[P2.258]	**Graphene-based lectin biosensor, a possible way for early stage diagnostics?** L. Klukova*, J. Filip, J. Tkac, *Slovak Academy of Sciences, Slovakia*
[P2.259]	**Magnesium zinc oxide nanostructure-modified quartz crystal microbalance for dynamic monitoring of antibiotic effects and antimicrobial resistance** P.I. Reyes[1], K.Y. Yang[1], A. Zheng[1], R. Li[1], G.Y. Li[1], Y. Lu*[1], C.K. Tsang[2], S.X.F. Zheng[2], *[1]Rutgers University, USA, [2]Cancer Institute of New Jersey, USA*
[P2.260]	**Electrochemical biosensor technology for multiple target detection** R.B. Queirós*, H. Fonseca, J. Gaspar, A. Geraldes, J. Piteira, P.P. Freitas, *INL - International Iberian Nanotechnology Laboratory, Portugal*
[P2.261]	**Biofunctionalization effectiveness of titanium oxide thin films obtained with physical and chemical vapour deposition methods for optical label-free biosensing applications** M. Dominik*[1], M. Smietana[1], J. Niedziólka-Jönsson[2], E. Rozniecka[2], L. Wachnicki[3], M. Godlewski[3], *[1]Warsaw University of Technology, Poland, [2]Institute of Physical Chemistry, Polish Academy of Sciences, Poland, [3]Institute Physics, Polish Academy of Sciences, Poland*
[P2.262]	**Acoustic wave sensors for liquid environments** C. Caliendo[1], E. Verona*[2,3], V.I. Anisimkin[3], I.E. Kuznetsova[3], *[1]Institute of Acoustics and Sensors, IDASC-*

	CNR, Italy, [2]Institute for Photonics and Nanotechnologies, IFN-CNR, Italy, [3]Kotel'nikov Institute of Radio Engineering and Electronics of RAS, Russia
[P2.263]	**Application of a real-time thermal sensor system for the evaluation of anti-microbial surface coatings** O. Behrmann, T. Wieland*, M. Bergmann, D-F. Reyes-Romero, G. Dame, G. Urban, *University of Freiburg, Germany*
[P2.264]	**Disposable SnO_2 NPs-based modified electrodes for monitoring of neurochemical substances** N. Lavanya*[2], C. Sekar[2], S. Ficarra[1], S.G. Leonardi[1], G. Neri[1], *[1]University of Messina, Italy, [2]Alagappa University, India*
[P2.265]	**Capacitive based paper biosensor** C. Martínez-Domingo*[1,2], E. Ramon[1], A. Merkoçi[2], *[1]Nanobioelectronics & Biosensors Group, Catalan Institute of Nanotechnology (ICN), Universitat Autònoma de Barcelona, Catalonia, Spain, [2]Institut de Microelectrònica de Barcelona IMB-CNM (CSIC), Catalonia, Spain*
[P2.266]	**Gold and silver nanoparticles biosynthesis and its application in the design of a biosensor for E. coli detection** E. Castillo Campos[1], M.T. Castañeda Briones*[1], M.R. Cruz Colín[1], V. Sánchez Monroy[2], M. Espinoza-Castañeda[1], M. Ávila Jiménez[1], *[1]Metropolitan Autonomous University, Mexico, [2]Militar School of Graduates in Health, Mexico*
[P2.267]	**Development of albendazole biosensor based on porous silicon photonic crystal for the enhancement of fluorescence** X. Lv*[1,2], G. Lv[3], Z. Gao[1], *[1]Institute of Health and Environmental Medicine,Academy of Military Medical Science, China, [2]College of Information Science and Engineering, Xinjiang University, China, [3]Key Laboratory of Xinjiang Hydatid Institute, The First Teaching Hospital of Xinjiang Medical University, China*
[P2.268]	**Molecularly imprinted polymer chemosensors for selective determination of chosen heteroaromatic amine and nitrosoamine toxins in food products of animal origin** W. Kutner*[1,2], P.S. Sharma[1], Z. Iskierko[1], M. Cieplak[1], P. Lach[1], F. D'Souza[3], *[1]Institute of Physical Chemistry, Polish Academy of Sciences, Poland, [2]Cardinal Stefan Wyszynski University in Warsaw, Poland, [3]University of North Texas, USA*
[P2.269]	**CMOS-compatible copper-based plasmonic biosensing** Y.V. Stebunov*, D.I. Yakubovsky, O.A. Aftenieva, A.V. Arsenin, *Moscow Institute of Physics and Technology, Russia*
[P2.270]	**An improved analytical model of AlGaN/GaN HEMT biosensor with temperature compensation** H.F. Huq*, B. Polash, J.C. Castillo, *University of Texas Rio Grande Valley, USA*
[P2.271]	**Intracellular cargo delivery by virus capsid protein-based vehicles: From nano to micro** D. Gao, X-P. Lin, Z-P. Zhang*, W. Li, D. Men, X-E. Zhang, Z-Q. Cui, *Wuhan Institute of Virology, Chinese Academy of Sciences, China*
[P2.273]	**Influence of the ferroelectric nature of niobate/tantalate lithium on the photocatalytic process for the reduction of oxygen in the microbial fuel cell** N. Touach[1], *[1]Mohammed V University of Rabat, Morocco, [2]Polytechnic University of Cartagena, Spain*
[P2.274]	**Carbohydrate functionalized high value gold nanotriangles: Synthesis from waste for novel voltametric detection of Salmonella typhimurium** G. Deokar*, A. Ingale, *North Maharashtra University, India*
[P2.275]	**Gravimetric biosensors based on 1.3 GHz AlN shear mode solidly mounted resonators** M. DeMiguelRamos, B. Díaz-Durán*, J.M. Escolano, M. Barba, T. Mirea, J. Olivares, M. Clement, E. Iborra, *Universidad Politécnica de Madrid, Spain*
[P2.276]	**Fabrication of nickel oxide urease-based biosensor for urea detection** H.D. Mai, G.Y. Sung*, H. Yoo, *Hallym University, Republic of Korea*
[P2.277]	**Increased SPR sensitivity enables fragment screening and kinetic characterization at lower surface densities** A. Moberg*, A. Larsson, E. Pol, O. Rönn, *GE Healthcare Bio-Sciences AB, Sweden*
[P2.278]	**Celiac disease diagnosis based on the use of a deaminated magnetic peptide** O. Montoya*, V. Kergaravat, M. Martí, S. Alegret, M.I. Pividori, *Universidad Autonoma de Barcelona, Spain*
[P2.279]	**Core-shell structured upconversion luminescent graphene/quantum dots for photodynamic therapy** S.Y. Choi*, S.H. Baek, T.J. Park, *Chung-Ang University, Republic of Korea*
[P2.280]	**Biochips for enhanced fluorescence based detection via low cost plasmonics** A. Farhang*, M.C. George, B. Williamson, M. Black, T. Wangensteen, J. Fraser, R. Petrova, K. Prestgard, *Moxtek Inc, USA*
[P2.281]	**Evaluation of Calibration-Free Concentration Analysis as implemented in Biacore™ systems** R. Karlsson*[1], E. Pol[1], H. Roos[1], F. Markey[1], F. Elwinger[1], A. Shaw[2], *[1]GE Healthcare Bio-Sciences AB, Sweden, [2]Karolinska Institutet, Sweden*

[P2.282]	**Direct comparison of SPR binding curves for characterization of protein interactions and for analysis of screening data.** R. Karlsson*, E. Pol, A. Frostell, *GE Healthcare Bio-Sciences AB, Sweden*
[P2.283]	**A novel neural probe for simultaneous electrical recording and local thermal measurements in sleep spindle oscillation studies** Z. Fekete*[1], K. Kocsis[2], A. Horvath[1], P. Bartho[2], *[1]MTA EK NAP B Research Group for Implantable Microsystems, Hungary, [2]MTA TTK NAP B Research Group of Sleep Oscillations, Hungary*
[P2.284]	**Disposable interdigitated array electrode for highly sensitive amperometric enzyme sensors** W. Tsugawa*, M. Hatada, N. Loew, K. Sode, *Tokyo university of agriculture and technology, Japan*
[P2.285]	**Inkjet printing technology for low-cost paper-based electrochemical biosensor** C.S. Yen*, C.B. Tao, J.T. Liu, C.J. Chen, *University of Chinese Academy of Sciences, China*
[P2.286]	**Rapid and ultrasensitive HEATSENS based Lab-on-chip: Application of asymmetric nanomaterials in pathogens detection** S. Puertas*[1], N. Tomas[1], C. Sanchez[2], V. Grazu[1,3], M. Parracino[1], *[1]Nanoimmunotech S.L., Spain, [2]CSIC-University of Zaragoza, Spain, [3]Aragon Institute of Nanoscience University of Zaragoza, Spain*
[P2.287]	**Evaluation of crude oil's influence on infochemical signalling of ulva lactuca by using modified nanostructure titanium** T. Alsufyani*[1], S. Fadlallah[1,2], *[1]Taif university, Saudi Arabia, [2]Materials and Corrosion Lab, Egypt*
[P2.288]	**Reliable biosensor systems for metabolic monitoring** I. Moser*, G. Jobst, *Jobst Technologies GmbH, Germany*
[P2.289]	**High performance plasmonic and photonic crystals for label-free and fluorescence-based biosensing** M.C. George[1], A. Farhang*[1], B. Williamson[1], M. Black[1], C. Race[2], T. Wangensteen[1], J-N. Liu[2], M. Foreman[2], B.T. Cunningham[2], *[1]Moxtek, Inc., USA, [2]University of Illinois at Urbana-Champaign, USA*
[P2.290]	**Towards functional contact lens for diagnosis of dry eye syndrome** S. Tinku[1,2], R. Dahiya[3], L. Lorenzelli*[2], *[1]University of Trento, Italy, [2]Fondazione Bruno Kessler, Italy, [3]University of Glasgow, UK*
[P2.291]	**PlexZymes: Universal biosensors for molecular diagnostics** E.M. Linardy[1], E. Mokany[1], N.J. Hasick*[2], A.V. Todd[1,2], *[1]SpeeDx Pty Ltd, National Innovation Centre, Australia, [2]The University of New South Wales, Australia*
[P2.292]	**Electrochemical determination of vitamin C in the presence of NADH using a CdO nanoparticle/ ionic liquids modified carbon paste electrode as a sensor** V.K. Gupta[1], *[1]UJ, South Africa, [2]IIT, India*
[P2.293]	**A novel non-invasive sensor based on electric field detection for cardio-electrophysiology in zebrafish embryos** E. Rendon-Morales*[1], R. Prance[1], H. Prance[1], R. Aviles-Espinosa[2], *[1]University of Sussex, UK, [2]The Institute of Photonic Sciences, Spain*
[P2.294]	**Ultra-sensitive determination of ochratoxin A by molecular imprinted voltammetric sensor** V.K. Gupta*, S. Agarwal, *UJ, South Africa*
[P2.295]	**Miniaturized all-solid-state coated wire ion selective electrode based on poly(3,4-ethylenedioxythiophene) for in vivo acetylcholine determination** C. He*, Y. He, Y. Wang, Z. Wang, G. Li, *Institute of Cyber System and Control, China*
[P2.296]	**Skin-mountable energy harvesters using silk and wet-stretched PVDF nanofibers** R. Najjar[1], Y. Luo[2], V. Beachley[1], X. Hu[1], W. Xue*[1], *[1]Rowan University, USA, [2]Hangzhou Dianzi University, China*
[P2.297]	**Cellduino - An Arduino based multiparamteric biosensing platform** L. Birkner*[1], W. Wirths[2], A. Kamp[2], J. Kübler[2], C. Weber[2], D. Baasner[3], E. Kottkamp[3], *[1]InnoME GmbH, Germany, [2]Technische Universität München, Germany, [3]Erwin Quarder Systemtechnik GmbH, Germany*
[P2.298]	**Nerve electrode using electrospinning polyimide nanofiber to realize intimate contact and enhanced oxygen permeability** Y.J. Lee[1], D.N. Heo[2], I.K. Kwon[2], J.Y. Kang[1], S.H. Lee*[1], *[1]Korea Institute of Science and Technology, Republic of Korea, [2]Kyung Hee University, Republic of Korea*
[P2.299]	**Portable biosensor for cortisol stress sensing based on nanosized molecular imprinted polymer** S. Klangphukhiew*[1], R. Srichana[2], R. Patramanon[1], *[1]KhonKaen University, Thailand, [2]Prince of Songkla University, Thailand*
[P2.300]	**Detection of multiple analytes by conducting polymer-based electrochemical-surface plasmon resonance biosensor** A. Baba*, C. Lertvachirapaiboon, K. Shinbo, K. Kato, F. Kaneko, T. Yamamoto, *Niigata University, Japan*
[P2.301]	**All-inkjet-printed dissolved oxygen electrochemical sensors on flexible plastic substrates** A. Moya*[1,4], E. Sowade[2], F.J. del Campo[1], R. Villa[1,4], E. Ramon[1], R.R. Baumann[2,3], G. Gabriel[1,4], *[1]Instituto*

	de Microelectrónica de Barcelona (CSIC), Spain, [2]Technische Universität Chemnitz, Germany, [3]Fraunhofer ENAS, Germany, [4]CIBER-BBN, Spain
[P2.302]	**Application of hierarchically-structured latex polymer coatings and self-supporting films in the fabrication of cell culture platforms** E. Rosqvist*, E. Niemelä, A. Määttänen, A.P. Venu, H. Abdelkader, P. Kankaanpää, J. Eriksson, J. Peltonen, P. Ihalainen, *Åbo Akademi University, Finland*
[P2.303]	**Ammonia sensing for enzymatic urea detection with organic field effect transistors** F.X. Werkmeister*, B. Nickel, *Ludwig-Maximilians-Universität München, Germany*
[P2.304]	**Non-Faradaic impedimetric detection of dopamine using reduced graphene oxide nanoribbons field effect transistors** H-P. Nguyen*[1], Y-C. Tsai[1], C-L. Sun[2], S-P. Lin[1], *[1]National Chung Hsing Univeristy, Taiwan, [2]Chang Gung University, Taiwan*
[P2.305]	**Rapid prototyping of a low cost graphene-based impedance biosensor** S. Popescu*[1], J. Hedley[1], N. Keegan[1], B. Ghosh[2], R. Kaner[3], *[1]Newcastle University, UK, [2]Jadavpur University, India, [3]University of California Los Angeles, USA*
[P2.306]	**An novel antibody-like material assembled on novel screen-printed electrodes for screening CEA cancer biomarker** A.P. Tavares*, M.G. Sales, *BioMark-CINTESI/ISEP, Portugal*
[P2.307]	**Integrated flexible thin film sensor around angiographic catheter for flow detection** D. Maji, S. Das, S. Prakasam*, *Indian Institute of Technology Kharagpur, India*
[P2.308]	**Conducting polymer imprinted electrochemical biosensor platform using nanoimprint lithography** J. Ahn*[1], S. Jung[1], H. Lim[1], K. Park[2], Y.B. Shin[2], J. Lee[1], *[1]Korea Institute of Machinery and Materials, Republic of Korea, [2]Korea Research Institute of Bioscience and Biotechnology, Republic of Korea*
[P2.309]	**Myoglobin imprinted polymer on CdTeMPA quantum dots as a fluorescent biosensor** A. Piloto*[1], M. Frasco[1], S. Rodrigues[2], D. Ribeiro[2], J. Santos[2], M. Sales[1], *[1]ISEP - Instituto Superior de Engenharia do Porto, Portugal, [2]REQUIMTE/FFUP, Portugal*
[P2.310]	**Combining electrochemical bio-sensing, hybrid printed electronics and wireless communication for enabling real-time and remote monitoring of lactate.** D. Nilsson*[1], L. Theuer[1,2], V. Beni[1], P. Dyreklev[1], P. Norberg[1], P. Arven[3], A.P.F. Turner[2], J. Wikner[2], G. Gustafsson[1], *[1]Acreo Swedish ICT, Sweden, [2]Linköping University, Sweden, [3]Elect Engn J2 Holding AB, Sweden*
[P2.311]	**Point-of-use simultaneous electrochemical detection of lead and cadmium using low-cost screen-printed transparency electrodes** D. Martín Yerga[1], I. Álvarez Martos[2], C. Blanco-López*[1], C.S. Henry[3], M.T. Fernández-Abedul[1], *[1]Universidad de Oviedo, Spain, [2]Aarhus University, Denmark, [3]Colorado State University, USA*
[P2.312]	**Organic electrochemical transistors for biosensing: evaluation and application** F. Hempel*[1], V. Pachauri[1], J.K.Y. Law[2], S. Ingebrandt[1,2], *[1]University of Applied Sciences Kaiserslautern, Germany, [2]RAM Group DE GmbH, Germany*
[P2.313]	**Effective surface functionalization of inkjet printed graphene oxide supporting system based multiplex biosensor for protein detection** D-H. Lee[1], H-S. Cho[2], R. Chand[1], D. Han[1], T-J. Yoon[2], Y-S. Kim*[1], *[1]Sungkyunkwan University, Republic of Korea, [2]Cha University, Republic of Korea*
[P2.314]	**Portable impedance sensing of glycated haemoglobin based on reduced graphene oxide functionalized screen-printed electrodes** S. Li*, D. Zhang, Q. Zhang, Y. Lu, Q. Liu, *Zhejiang University, China*
[P2.315]	**Copper phthalocyanine (CuPc) transistors gated with aqueous electrolytes: Operation and detection of glutathione S-transferase** R.F. de Oliveira*[1], L. Merces[1,2], T.P. Vello[1,2], C.C. Bof Bufon[1,2], *[1]Brazilian Nanotechnology National Laboratory (LNNano), Brazil, [2]University of Campinas (UNICAMP), Brazil*
[P2.316]	**Electrical properties of vitreous-electrode interface** T.A. Silue, N. Peixoto*, *George Mason University, USA*
[P2.317]	**Experimental characterization of enzyme activity embedded into conductive polymer films for printed biosensor applications** A-L. Riegel*, P. Scharfer, W. Schabel, *Karlsruhe Institute of Technology, Germany*
[P2.318]	**Flexible and inexpensive pH sensor for wearable applications** L. Santos, A.C. Marques*, S. Filipe, R. Martins, E. Fortunato, *CENIMAT, Portugal*
[P2.319]	**Conformational change detection by surface acoustic wave biosensors** A.J. Gupta, M. Molnar*, T. Hallström, D. Breitsprecher, *NanoTemper Technologies GmbH, Germany*

Poster Session III
Friday, 27 May 2016
10:20-11:00, 12:35-14:00, 15:20-16:20

[P3.001]	**Electrochemistry of laccase at multi-walled carbon nanotube modified electrodes: investigation of various immobilisation conditions and electrode configurations** M. Hämmerle*, K. Hilgert, R. Moos, *University of Bayreuth, Germany*
[P3.002]	**A starch biofuel cell based on hybrid enzymatic and non-enzymatic cascade bioanode** Z.H. Wang*, L. Xia, J.F. Xia, J.H. Li, F.F. Zhang, S.D. Gong, *Qingdao University, China*
[P3.003]	**Fabrication of an atom-thick graphene bioanode for biofuel cell applications** N. Rawat[1], P. Mishra*[1], M. Ashaduzzaman[1], R. Yazdi[1], M. Syväjärvi[1], A. P. F. Turner[1], A. Tiwari[1,2], *[1]Linkoping University, Sweden, [2]Tekidag AB UCS Mjärdevi Science Park, Sweden*
[P3.004]	**Photoelectrochemical biofuel cell with the function of CO_2 conversion to formic acid coupled thylakoid membrane from Spirulina *platensis* and enzyme immobilized electrodes** Y. Amao*[1,2], M. Fujimura[1,2], M. Miyazaki[1,2], *[1]Osaka City University, Japan, [2]Japan Science and Technology Agency, Japan*
[P3.005]	**Construction of bioanode using Glutamate dehydrogenase from Pyrobaculum islandicum and polymerized coenzyme** S. Suye*[1], K. Yamazaki[1], H. Sakamoto[1], T. Satomura[1], H. Sakuraba[2], T. Ohshima[3], *[1]University of Fukui, Japan, [2]Kagawa University, Japan, [3]Osaka Institute Technology, Japan*
[P3.006]	**A novel membrane-free microbial fuel cell for rapid characterization of exoelectrogenic bacteria** T.C. Dang*[1], Y. Yin[1], Y.Y. Yu[1], B. Cao[1], H. Song[2], Y.J. Kang[1], *[1]Nanyang Technological University, Singapore, [2]Tianjin University, China*
[P3.008]	**Carbon electrodes for enzymes in microfluidics used for a gravity driven biofuel cell** M. Jönsson-Niedziolka*, M.S. Filipiak, M. Kundys, E.W. Nery, *Institute of Physical Chemistry, Polish Academy of Sciences, Poland*
[P3.009]	**Transparent electrodes for biofuel cell applications** E. González Arribas*, D. Pankratov, S. Shleev, *Malmö University, Sweden*
[P3.010]	**Novel high-throughput sensing platform for screening microbial fuel cell components** A.S. Vishwanathan*[1], K.S. Aiyer[1], S. Siva Sankara Sai[1], G. Rao[2], *[1]Sri Sathya Sai Institute of Higher Learning, India, [2]University of Maryland, Baltimore County, USA*
[P3.011]	**Development of implantable non-enzymatic glucose/oxygen biofuel cell using bimetallic FePt nanoparticles as an effective anodic electrocatalyst** A. Salimi*, A. Navaee, S. Salimi, *University of Kurdistan, Iran*
[P3.012]	**Performance of using MWCNT on carbon cloth as an anode for enzymatic fuel cells** A. Kangalli[1], Y.S. Baler[1], A. Alkan[1,2], S. Mutlu*[1], *[1]Hacettepe University, Turkey, [2]Sage, Turkey*
[P3.013]	**Toward the development of a universal SPR nano-enhancer for the label-free detection of miRNAs related to the progression of Multiple Sclerosis** R. Vanna*[1], C. Morasso[1], A. Artiga Folchc[3], S. Picciolini[1], S. Agostini[2], R. Mancuso[2], A. Hernis[2], A. Gualerzi[1], M. Bedoni[1], J. M. de la Fuente[3], F. Gramatica[1], *[1]Laboratory of Nanomedicine and Clinical Biophotonics (LABION), Italy, [2]Laboratory of Molecular Medicine and Biotechnologies, IRCCS Fondazione Don Carlo Gnocchi, Italy, [3]CSIC/University of Zaragoza, Spain*
[P3.014]	**An Isothermal DNA amplification/detection technique based on Helicase DNA Amplification and Silicon Microring Resonator complex** T.Y. Lee[1,2], Y. Shin*[1], *[1]University of Ulsan College of Medicine, Republic of Korea, [2]Chungnam National University, Republic of Korea*
[P3.015]	**Designing anthraquinone-Pyrrole redox intercalating probes for electrochemical gene detection** S-T. Huang, *National Taipei University of Technology, Taiwan*
[P3.017]	**Electrochemically synthesized biosensors for high resolution multiplexing** K. Levrie*[1,2], K. Jans[1], C.M. Lopez[1], P. Van Dorpe[1,2], L. Lagae[1,2], C. Van Hoof[1,2], T. Stakenborg[1], *[1]Imec, Belgium, [2]KU Leuven, Belgium*
[P3.018]	**Denaturing strategies for detection of double stranded PCR products on GMR magnetic sensors** G. Rizzi*[1], J-R. Lee[2], P. Guldberg[3], M. Dufva[1], S.X. Wang[2], M.F. Hansen[1], *[1]Technical University of Denmark, Denmark, [2]Stanford University, USA, [3]The Danish Cancer Society, Denmark*
[P3.019]	**Flexible, label-Free DNA sensor using Platinum Dioxide as the sensing element** N. Basu*[1], A.K. Konduri[2], P. Basu[3], M. Varma[1], N. Bhat[1], *[1]Indian Institute of Science, India, [2]Instituto Italiano di Technologia, Italy, [3]Indian Institute of Space Science and Technology, India*
[P3.020]	**An electrochemical DNA biosensor for nitrofurantion determination based on poly-(2,6 pyridinedicarboxylic acid) coated glassy carbon electrode**

	G. Aydogdu Tig, S. Pekyardimci*, *Ankara University, Turkey*
[P3.021]	**DNA microarray-based solid-phase PCR on copoly (DMA-NAS-MAPS) silicon coated slides: an example of relevant clinical application** F. Damin*[1], S. Galbiati[2], M. Ferrari[3,4], M. Chiari[1], *[1]Istituto di Chimica del Riconoscimento Molecolare CNR, Italy, [2]IRCCS San Raffaele Scientific Institute, Italy, [3]IRCCS Ospedale San Raffaele, Italy, [4]Università Vita-Salute San Raffaele, Italy*
[P3.022]	**Heat transfer resistance as a tool to quantify hybridization efficiency of DNA on nanocrystalline diamond surfaces** P. Cornelis[1], T. Vandenryt[2], G. Wackers[1,2], E. Kellens[2,3], P. Losada-Pérez[2], K. Eersels[1], S. Drijkoningen[2], M. Peeters[4], B. van Grinsven[5], P. Wagner[1], M. Khorshid*[1], *[1]KU Leuven, Belgium, [2]Hasselt University, Belgium, [3]IMOMEC, Belgium, [4]Manchester Metropolitan University, UK, [5]Maastricht University, The Netherlands*
[P3.024]	**Isothermal multiple ligase reaction linked fluorescence amplification on gold nanoparticle for a cost effective companion diagnostics with attomole sensitivity** J.H. Kim, *Daegu-Gyeongbuk Medical Innovation Foundation, Republic of Korea*
[P3.025]	**Label-free electrochemical biosensor composed of Ag^+ substituted recombinant azurin/DNA Hybrid to detect Apo E4 for Alzheimer's disease diagnosis** S-U. Kim*[1], M. Mohammadniaei[1], J. Min[2], J-W. Choi[1], *[1]Sogang University, Republic of Korea, [2]Chung-Ang University, Republic of Korea*
[P3.026]	**Novel polymeric coatings with tailored hydrophobicity to control spot size and morphology in DNA microarray** L. Sola*, F. Damin, M. Cretich, M. Chiari, *Consiglio Nazionale delle Ricerche, Italy*
[P3.027]	**Silicon photomultipliers application to gene analysis** M.F. Santangelo*[1,2], E.L. Sciuto[3], A.C. Busacca[2], S. Petralia[4], S. Conoci[4], S. Libertino[1], *[1]CNR, Italy, [2]University of Palermo, Italy, [3]University of Catania, Italy, [4]STMicroelectronics, Italy*
[P3.028]	**An electrochemical detection strategy for the screening and optimisation of RNA/ligands interactions** H. Guyon*[1,3], F. Mavré[3], C. Tisné[2], L. Micouin[1], B. Limoges[3], *[1]Laboratoire de Chimie et Biochimie Pharmacologiques et Toxicologiques, France, [2]Laboratoire de Cristallographie et RMN Biologiques, France, [3]Laboratoire d'Electrochimie Moleculaire, France*
[P3.029]	**A colorimetric rapid test, based on gold nanoparticles, for the personalized therapy of psoriasis** A. Marsella[1,2], P. Valentini*[1], P. Tarantino[3], M. Congedo[3], P.P. Pompa[1], *[1]Istituto Italiano di Tecnologia (IIT), Italy, [2]University of Salento, Italy, [3]Vito Fazzi Hospital, Italy*
[P3.030]	**Electronic hybridization detection in microarray format and DNA genotyping** A. Blin, I. Cisse, U. Bockelmann*, *ESPCI ParisTech, France*
[P3.031]	**Development of colorimetric lateral flow dipstick DNA-sensor test kit for detection of dengue virus** S. Srisurapanon, P. Khawsak, A. Pakpitchareon, S. Areekit, T. Kaewphinit, S. Santiwatanakul, K. Chansiri*, *Srinakharinwirot University, Thailand*
[P3.032]	**Paper-based nucleic acid microarray for bacterial meningitis detection** L. Rivas*, J. Gantelius, H. Andersson-Svahn, *KTH Royal Institute of Technology, Sweden*
[P3.034]	**Gold nanoparticle PCR for rapid and enhanced DNA detection in a vertical flow assay** L. Lama*, J.T. Dias, L. Rivas, J. Gantelius, H. Andersson Svahn, *KTH Royal Institute of Technology, Sweden*
[P3.035]	**Low voltage, OFET-based sensor tailored for sub-picomolar, DNA hybridization detection** S. Lai*[1], M. Barbaro[1], A. Bonfiglio[1,2], *[1]University of Cagliari, Italy, [2]CNR - Institute of Nanoscience, Italy*
[P3.036]	**Capture and amplification of BCR-ABL gene on primer-immobilized microparticle - simple and efficient molecular diagnosis** E.H. Oh*, W.J. Kim, S. Jung, S.K. Kim, *Korea Institute of Science and Technology, Republic of Korea*
[P3.037]	**Paper-based molecular diagnostic sensor on the basis of isothermal amplification for simultaneous detection of infectious diseases** Y. Seok*[1], H-A. Joung[1], H.S. Han[3], H. Jeon[4], S.J. Shin[4], M-G. Kim[1,2], *[1]Gwangju Institute of Science and Technology, Republic of Korea, [2]Advanced photonics research institute, Republic of Korea, [3]Kyungpook National University, Republic of Korea, [4]Mmonitor incorporation, Republic of Korea*
[P3.038]	**Simultaneous detection of four human pathogenic flu viruses based on different redox dyes as electrochemical DNA labels** N. Cheeveewattanagul*, P. Rijiravanich, W. Surareungchai, M. Somasundrum, *King Mongkut's University of Technology Thonburi (Bangkhuntien Campus), Thailand*
[P3.039]	**Highly improved specificity for hybridization-based microRNA detection by multi-DNA probes in a 3D surface** H.R. Yoon*, J.M. Lee, Y. J, *KAIST, Republic of Korea*
[P3.040]	**Intermediate range frequency dependent studies on random and aligned buckypaper based bionanosensor**

	S. Sinha, S. Kaewyoo, Y. You, S. Kasireddy, A. Mastromarino*, *University Of New Haven, USA*
[P3.041]	**Development of a graphene-based passive DNA hybridization sensor** S. Sinha, A. Mastromarimo, D. Landry*, *University Of New Haven, USA*
[P3.042]	**A biosensor for detecting VEGF and PSA simultaneously in early prostate cancer diagnosis based on graphene oxide/ssDNA/polymer nanoparticles** T.Y. Lin*, L.H. Pan, H.W. Yang, *National Sun Yat-sen University, Taiwan*
[P3.043]	**Thrips species identification in multiplexing nanoslit DNA sensor** L.K. Yu*[1,2], W.P. Chen[4], W.B. Yeh[3], C.F. Chou[1], *[1]Academia Sinica, Taiwan, [2]National Tsing Hua University, Taiwan, [3]National Chung Hsing University, Taiwan, [4]Yeastern Biotech Co. Ltd., Taiwan*
[P3.044]	**Quantitative bacterial detection using rapid DNA detection method based on microbeads dielectrophoresis** Z.H. Ding*, H. Kasahara, M. Nakano, J. Suehiro, *Kyushu University, Japan*
[P3.045]	**Electrochemical studies of Chromium(VI) –induced DNA damage** E. Malinowska*, M. Jarczewska, R. Ziolkowski, L. Gorski, *Warsaw University of Technology, Poland*
[P3.046]	**Isothermal DNA amplification and microarray-based hybridization for a rapid on-site detection of pathogens** K.W. Weber*[1,2], L.S. Schwenkbier[1,2], D.C. Cialla-May[1,2], J.P. Popp[1,2], *[1]Leibniz Institute of Photonic Technology, Germany, [2]Friedrich-Schiller-University Jena, Germany, [3]InfectoGnostics Forschungscampus Jena e.V.,, Germany*
[P3.047]	**Electrochemical determination of metal ion using phosphorothioated oligonucleotide as receptor layer** L. Górski*, A. Bala, E. Malinowska, *Warsaw University of Technology, Poland*
[P3.048]	**Continued and sustained improvement in electrochemical genosensors for toxic algal monitoring** J. Orozco, E. Villa, C.L. Manes*, L. Medlin, D. Guillebault, *Microbia Environnement, France*
[P3.049]	**A universal, multiplexed DNA chip for viral diagnostics as a quick response to emerging infectious diseases** E. Seymour[1], G.G. Daaboul[2], S.M. Scherr[2], J.T. Trueb[2], J.H. Connor[2], M.S. Unlu*[2], *[1]ASELSAN, Turkey, [2]Boston University, USA*
[P3.050]	**Rolling circle DNA amplification on magnetic particles and electrochemical genosensing of foodborne pathogens** S. Carinelli[1], M. Kuhnemund[2], A. Mezger[3], M. Nilsson[3], M.I. Pividori*[1], *[1]Group de Sensors i Biosensors, Departament de Química, Universitat Autònoma de Barcelona, Spain, [2]Science for Life Laboratory, Department of Immunology, Genetics and Pathology, Uppsala University, Sweden, [3]Science for Life Laboratory, Department of Biochemistry and Biophysics, Stockholm University, Sweden*
[P3.051]	**AFM force spectroscopy and surface plasmon resonance study of single stranded DNA-binding (SSB) protein complexes with DNA, PNA and LNA** V. Hornakova*, A. Hlavacek, P. Skladal, *CEITEC Masaryk University, Czech Republic*
[P3.052]	**Effects of DNA length on dielectrophoresis of DNA-labeled microbeads: Crossover frequency and zeta potential** M. Nakano*, H. Kasahara, Z. Ding, J. Suehiro, *Kyushu University, Japan*
[P3.053]	**Nanomaterials based on metalloporphyrins-graphene for elaboration of electrochemical DNA biosensor** Y. Wang, H. Sauriat-Dorizon*, H. Korri-Youssoufi, *Universite Paris Saclay, France*
[P3.054]	**Automated microsystem with integrated multiplexed DNA amplification and PCB-based electrochemical detection for genetic profiling of cancer cells** J.L. Acero*[1], D. Latta[2], H. Joda[1], L. Kvastad[3], E. Johansson[3], J. Lundeberg[3], D. Ramakrishnan[4], I. Riley[4], T. Röser[5], C. Schwind[2], R. Himmelreich[1], C.K. O'Sullivan[1], *[1]Universitat Rovira i Virgili, Spain, [2]Fraunhofer (ICT-IMM), Germany, [3]KTH Royal Institute of Technology, Science for Life Laboratory, Sweden, [4]Labman Automation Ltd, UK, [5]ThinXXS Microtechnology AG, Germany, [6]Institució Catalana de Recerca i Estudis Avançats, Spain*
[P3.055]	**Three methods predict THz oscillations in DNA monomers, dimers, and trimers** A. Morphis[1], K. Lambropoulos[1], M. Tassi[1], K. Kaklamanis[1], R. Lopp[1,2], G. Georgiadis[1], M. Theodorakou[1], M. Chatzieleftheriou*[1,3], C. Simserides[1], *[1]National and Kapodistrian University of Athens, Greece, [2]Georg-August-Universität Göttingen, Fakultät für Physik, Germany, [3]University of Copenhagen, Niels Bohr Institute, Denmark*
[P3.056]	**Catalytic signal amplification methods for electrochemical detection of nucleic acids and proteins** S. Berényi*, R.E. Gyurcsányi, *Budapest University of Technology and Economics, Hungary*
[P3.057]	**Polymethylmethacrylate nanoparticles promote the survivin molecular beacon internalization in A549 cells** A. Giannetti*[1], B. Adinolfi[1], M. Ballestri[2], C. Domenici[3], M. Pellegrino[4], G. Sotgiu[2], S. Tombelli[1], C. Trono[1], G. Varchi[2], F. Baldini[1], *[1]IFAC-CNR, Italy, [2]ISOF-CNR, Italy, [3]IFC-CNR, Italy, [4]University of Pisa, Italy*

[P3.058]	**Printable functional polymers for the modification of symmetric Mach-Zender Interferomtric biosensors** E. Melnik*[1], P. Muellner[1], R. Koppitsch[2], J. Kraft[2], F. Schrank[2], R. Hainberger[1], M. Laemmerhofer[3], *[1]Austrian Institute of Techlogoy Gmbh, Austria, [2]ams AG, Austria, [3]University of Tübingen, Germany*
[P3.059]	**Respiratory virus detection based on loop-mediated isothermal amplification on graphene FET microfluidic chip** D. Han, R. Chand, D-H. Lee, G. Kim, Y-S. Kim*, *Sungkyunkwan University, Republic of Korea*
[P3.060]	**A ready-to-use electrochemical kit design for the diagnosis of single nucleotide polymorphisms** D. Ozkan-Ariksoysal[1], Y.U. Kayran[1], B. Tezcanli[1], H. Subak*[1,2], B. Kosova[1], *[1]Ege University, Turkey, [2]Yuzuncu Yil University, Turkey, [3]Gediz University, Turkey*
[P3.061]	**Electrochemical detection of interaction between verbascum sp. and DNA by using disposable biosensors** D. Ozkan-Ariksoysal[1], A. Dalar[2], H. Subak*[1,2], *[1]Ege University, Turkey, [2]Yuzuncu Yil University, Turkey*
[P3.062]	**Gold nanoparticle modified DNA sensor for GM-plant detection** P. Na Nakorn, *Thammasat University, Thailand*
[P3.063]	**On-chip DNA isothermal amplification and detection using a Quartz Crystal Microbalance (QCM) device** A. Grammoustianou*[1,2], G. Papadakis[1], E. Gizeli[1,2], *[1]IMBB, FORTH, Greece, [2]University of Crete, Greece*
[P3.064]	**Biofunctionalization as key step in biosensor and microfluidic based applications** W. Weigel*, G. Bared, H. Dijk, H. Eickhoff, *SCIENION AG, Germany*
[P3.065]	**Label-free attomolar DNA biosensing with highly integrated tubular electrodes** B. Ibarlucea*[1], M. Medina-Sánchez[2], N. Pérez[2], D.D. Karnaushenko[2], L. Baraban[1], D. Makarov[2], G. Cuniberti[1], O.G. Schmidt[2,3], *[1]Technische Universität Dresden, Germany, [2]Institute for Integrative Nanosciences, Germany, [3]Chemnitz University of Technology, Germany*
[P3.066]	**Effect of salt on gold nanoparticles - DNA detection colorimetric sensor** P. Na Nakorn, *Thammasat University, Thailand*
[P3.067]	**Rapid molecular deiagnostics based on isothermal amplification and electrochemical detection** S. Almadhagi*, H. joda, I. Katakis, C. O'Sullivan, *Interfibio Research Group, Department of Chemical Engineering, Universitat Rovira i Virgili, Spain*
[P3.068]	**Quantifying protein concentration using designed DNA carriers and solid-state nanopores** J. Kong*, N.A.W. Bell, U.F. Keyser, *University of Cambridge, UK*
[P3.069]	**Carbon-dot/Au nanoparticles fluorescence resonance energy transfer system for ultrasensitive detection of HIV1 DNA sequences** A. Salimi*, S. Hamd-Ghadareh, S. Salimi, *University of Kurdistan, Iran*
[P3.070]	**Rapid optical tracking and analysis of rolling circle products for disease discovery** J. Junesch*[1], B. Agnarsson[1], T. Ebai[2], U. Landegren[2], F. Höök[1], *[1]Chalmers University of Technology, Sweden, [2]Uppsala University, Sweden*
[P3.071]	**DNA nanotechnology for nucleic acid analysis: Smart nanostructure sensors for probing of nucleic acid structures** R. Karadeema*, D. Kolpashchikov, *University of Central Florida, USA*
[P3.072]	**Phylochips: A tool for routine monitoring of toxic and pathogens in aquatic ecosystems** L.K. Medlin[1], D. Guillebault[2], J. Baudart*3, *[1]MBA, UK, [2]Microbia Environnement, France, [3] UPMC, France*
[P3.074]	**Ultra-Trace level detection of heavy metals and pesticides using whole cell biosensors** S. Mittal, *Thapar University, India*
[P3.075]	**Development of a fructose biosensor using graphite nanoparticles** P.H. Nicholas*[1], R.W. Pittson[1], J. Hart[2], *[1]The Gwent Group, UK, [2]University of West England, UK*
[P3.076]	**Catalytic kinetics and propertise of Fenneropenaeus merguiensis alkaline phosphatase immobilized on gold nanorods as a potential enzymatic biosensor** A. Homaei, *Hormozgan University, Iran*
[P3.077]	**Electrical sensing of solid-state hemoglobin networks** A. Holovchenko*, H.S.J. van der Zant, *Delft University of Technology, The Netherlands*
[P3.078]	**Development of a multibiosensor system for detectionof biogenic amines** I.M. Apetrei, C. Apetrei*, *Dunarea de Jos University of Galati, Romania*
[P3.079]	**Sensors based on new electrochemical platforms as detectors in FIA systems** H. Kanso*[1], M. González-García[1], L. Fernández-Llano[1], S. Ma[2], R. Ludwig[2], P. Fanjul-Bolado[1], D. Hernández-Santos[1], *[1]DropSens, Spain, [2]BOKU-University of Natural Resources and Life Sciences, Austria*
[P3.080]	**Fabrication of a ratiometric fluorescent creatine biosensor based on the immobilization of creatinase and urease on the oxazine 170 perchlorate-ethyl cellulose membrane** H.D. Duong*, J.I. Rhee, *Chonnam National University, Republic of Korea*
[P3.081]	**SPR based fiber optic sensor for the detection of cholesterol using gel entrapment** V. Semwal*, A.M. Shrivastav, B.D. Gupta, *IIT Delhi, India*

[P3.082]	**Carbon nanostructure based platform for enzymatic biosensors** N. Isoaho*, S. Sainio, V. Protopopova, T. Palomäki, E. Peltola, J. Koskinen, T. Laurila, *Aalto University, Finland*
[P3.083]	**Peptide-mediated immobilization of P450 BM3 on ITO and gold** S. Zernia*[1], F. Ott[1], K. Bellmann-Sickert[1], R. Frank[1], M. Klenner[1], A. Prager[2], B. Abel[1], A. Robitzki[1], A.G. Beck-Sickinger[1], *[1]Leipzig University, Germany, [2]Leibniz Institute of Surface Modification (IOM), Germany*
[P3.084]	**Can the properties and activity of P450 be tuned within surfactant films on carbon electrodes?** A.K. Udit*, M.G. Hill, *Occidental College, USA*
[P3.085]	**Dual biosensor based on carboxylated polyaniline and polyelectrolyte thin films for label-free and simultaneous detection of glucose and human serum albumin** S. Sriwichai*[1], R. Janmanee[3], S. Phanichphant[1], K. Shinbo[2], K. Kato[2], F. Kaneko[2], T. Yamamoto[2], A. Baba[2], *[1]Chiang Mai University, Thailand, [2]Niigata University, Japan, [3]Pibulsongkram Rajabhat University, Thailand*
[P3.086]	**Development of the optical biosensor prototype for hydrogen sulfide detection** D.G. Kamenev*[1], E.A. Pislyagin[1], Y.N. Shkryl[1], A.A. Sergeev[1], I.V. Postnova[1], D.L. Aminin[1], V.P. Bulgakov[1,2], *[1]FEB Russian Academy of Sciences, Russia, [2]Far Eastern Federal University, Russia*
[P3.087]	**Graphene-titanium dioxide nanocomposite based hypoxanthine sensor for assessment of meat freshness** J.A. Albelda*[1,2], A. Uzunoglu[1], G. Santos[2], L. Stanciu[1], *[1]Purdue University, USA, [2]De La Salle University, The Philippines*
[P3.088]	**Low potential amperometric biosensor for sulfite based on human sulfite oxidase and synthetic iron complexes** P. Kalimuthu*[1], A.A. Belaidi[2], G. Schwarzb[2], P.V. Bernhardt[1], *[1]University of Queensland, Australia, [2]Cologne University, Germany*
[P3.089]	**Incorporation of Ionic Liquid [1-(2-ethoxyethyl)-1-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide] for Triglyceride Determination In Olive Oil** Z. Mohd Zain*, M. Ahmad, N.H. Rosli, M.A. Abd RAni, *Universiti Teknologi Mara, Malaysia*
[P3.090]	**Fabrication of 3-dimensional Cross-linked redox enzyme/Nanomaterials** A.K.M. Kafi*, M. Yusoff, S. Nina, *Universiti Malaysia Pahang, Malaysia*
[P3.091]	**Reagentless colorimetric detection of glucose using a composite entrapping glucose oxidase and cerium oxide nanoparticles immobilized in agarose hydrogel** D.H. Kim[1], J. Hur[1], H.G. Park[2], M.I. Kim*[1], *[1]Gachon University, Republic of Korea, [2]Korea Advanced Institute of Science and Technology, Republic of Korea*
[P3.092]	**A droplet-free digital ELISA using horse radish peroxidase with tyramide signal amplification system** K. Akama*, K. Shirai, S. Suzuki, *Sysmex corporation, Japan*
[P3.093]	**Monitoring of pH and metabolites in wound healing processes** D. Jankowska[1], M. Bannwarth[2], G. Faccio*[1], C. Schulenburg[1], K. Maniura-Weber[1], R. Rossi[2], M. Richter[1], L. Boesel[2], *[1]Empa, Biointerfaces, Switzerland, [2]Empa, Protection and Physiology, Switzerland*
[P3.094]	**Miniaturized enzymatic based biosensors for electrochemical detection of non-electroactive neurotransmitters with high temporal resolution** J. Bergman*[1], Y. Wang[2], A-S. Cans[2], *[1]Gothenburg University, Sweden, [2]Chalmers University of Technology, Sweden*
[P3.095]	**Graphene based biosensors for dopamine determination** L. Fritea[1,2], M. Tertis[1], R. Sandulescu[1], A. Le Goff[2], S. Cosnier[2], C. Cristea*[1], *[1]University of Medicine and Pharmacy, Romania, [2]CNRS Université Joseph Fourie, France*
[P3.096]	**Fluorescent carbon nanotube biosensors for probing intracellular kinase hyperactivation in human cancer** C-M. Tîlmaciu[1], M. Pellerano[1], D. Bhimareddy[2], C. Menard-Moyon[2], A. Bianco[2], V. Josserand[3], J-L. Coll[3], M.C. Morris*[1], *[1]Institut des Biomolécules Max Mousseron, France, [2]Institut de Biologie Moléculaire et Cellulaire, Immunopathologie et Chimie Thérapeutique, France, [3]Institut Albert Bonniot INSERM, France*
[P3.097]	**Optical enzymatic sensors for continuous monitoring of microbial cultivations** K.F. Reardon*[1,2], X. Huang[1], M. Mirsiaghi[1], Z. Menard[1], B. Heinze[1], *[1]OptiEnz Sensors, LLC, USA, [2]Colorado State University, USA*
[P3.098]	**A Study on the gas phase biosensors with immobilized enzymes for analysis of the gaseous compounds** F. Ostadakbari*, H. Rashedi, F. Yazdian, S. Mirzababaei, *University of Tehran, Iran*
[P3.099]	**Electrochemical-enzymatic redox cycling based glucose sensing using selectively functionalized dual carbon nanoelectrodes** D. Sharma*, Y. Lim, J. Lee, H. Shin, *Ulsan National Institute of Science and Technology, Republic of Korea*
[P3.100]	**Antioxidant activity of fullerenols: Bioluminescent monitoring in vitro**

	A.S. Sachkova*[1,2], E.S. Kovel[2,3], N.S. Kudryasheva[2,3], [1]*Tomsk Polytechnic University, Russia,* [2]*Institute of Biophysics SB RAS, Russia,* [3]*Siberian Federal University, Russia*
[P3.101]	**Development of ultra-fast nanostructured glucose biosensor** Y. Wang*, A-S. Cans, *Chalmers University of Technology, Sweden*
[P3.102]	**Label-free fluorometric detection of chymotrypsin activity using graphene oxide/nucleic-acid-stabilized silver nanoclusters hybrid materials** S. Li, L. Wang, X. Ma, Y. Zhang*, *Shaanxi Normal University, China*
[P3.103]	**An integrated Caco-2TC7cells/biosensors device for the real time monitoring of intestinal glucose absorption and glucose transport inhibition by hypoglycemic phytochemicals** A. Barberis*[1], A. Garbetta[1], A. Cardinali[1], G. Bazzu[2], I. D'Antuono[1], G. Rocchitta[2], A. Fadda[1], G. D'Hallewin[1], P.A. Serra[2,1], F. Minervini[1], [1]*National Research Council, Italy,* [2]*University of Sassari, Italy*
[P3.104]	**A label-free fluorescent assay of deoxyribonuclease I activity utilizing DNA-templated silver nanocluster/graphene oxide nanocomposite** C.Y. Lee*[1], K.S. Park[1], Y.K. Jung[2], H.G. Park[1], [1]*Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea,* [2]*UNIST, Republic of Korea*
[P3.105]	**Graphene based biosensors for dopamine determination** L. Fritea[1,2], M. Tertis[1], C. Cristea*[1], A. Le Goff[2], S. Cosnier[2], R. Sandulescu[1], [1]*Iuliu Hatieganu University, Romania,* [2]*Alpes Grenoble University, France*
[P3.106]	**Fluorescent DNA-Cu/Ag nanoclusters for adenosine detection based on target-mediated inhibition of s-adenosylhomocysteine hydrolase activity** J.K. Ahn*, S. Baek, H.G. Park, *KAIST, Republic of Korea*
[P3.107]	**Universal fluorescent assay for enzyme activity based on target-controlled polymerase activity** K.S. Park, C.Y. Lee, H.G. Park*, *Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea*
[P3.108]	**Dual-mode electrochemical biosensor based on MoS_2 nanoparticle-graphene oxide hybrid to detect NO & H_2O_2** J.W. Choi*, T. Lee, J. Yoon, *Sogang University, Republic of Korea*
[P3.109]	**Nanostructured NiO based mediator free biosensor for total cholesterol and low density lipoprotein detection** G. Kaur*, M. Tomar, V. Gupta, *University of Delhi, India*
[P3.110]	**Fructose-sensitive multilayer electrodes based on efficient reaction between cytochrome c and fructose dehydrogenase** C. Wettstein*[1], K. Kano[2], U. Wollenberger[3], F. Lisdat[1], [1]*Technical University Wildau, Germany,* [2]*Kyoto University, Japan,* [3]*Potsdam University, Germany*
[P3.111]	**Chitosan-ferrocene-platinum nanoparticles composite cryogel modified electrode cholesterol biosensor** A. Numnuam*, P. Thavarungkul, P. Kanatharana, *Prince of Songkla University, Thailand*
[P3.112]	**Glucose sensing for CtCDH hosted in cubic phase** V. Grippo*[1], R. Ludwig[2], L. Gorton[3], R. Bilewicz[1], [1]*University of Warsaw, Poland,* [2]*BOKU University, Austria,* [3]*Lund University, Sweden*
[P3.113]	**Plastic optical fiber with film of sol-gel for pH detection** D. Razo-Medina*, E. Alvarado-Méndez, M. Trejo-Dúran, *Universidad de Guanajuato, Mexico*
[P3.114]	**Third generation lactose biosensor based on Corynascus termophilus cellobiose dehydrogenase (CtCDH) immobilized on AuNPs and AgNPs synthesized through a green chemical reaction path** P. Bollella[1], R. Ludwig[3], G. Favero[1], F. Mazzei[1], L. Gorton[2], R. Antiochia*[1], [1]*Sapienza University of Rome, Italy,* [2]*Lund University, Sweden,* [3]*BOKU University, Austria*
[P3.115]	**AuNPs-Polyazetidine-Nanocomposite material for electron transfer based biosensors** C. Tortolini, G. Fusco, P. Bollella, G. Sanzò, R. Antiochia, G. Favero, F. Mazzei*, *Sapienza University of Rome, Italy*
[P3.116]	**Sensitive fluorescence assay and cell imaging for the detection of cytochrome c released from apoptotic cells based on conjugated-polyme** Y. Liu*, J.H. Jiang, C.Y. Tan, *Tsinghua University, China*
[P3.117]	**A new immobilization procedure based on gelling oligopeptides for biosensors development** G. Fusco*, A. D'Annibale, C. Tortolini, R. Antiochia, G. Favero, L. Chronopoulou, C. Palocci, F. Mazzei, *Sapienza University of Rome, Italy*
[P3.118]	**Simultaneous analysis of glucose and human IgG using electrochemical-surface plasmon resonance biosensor based on poly(pyrrole-3-carboxylic acid) thin films** R. Janmanee*[1], S. Sriwichai[2], S. Phanichphant[2], K. Shinbo[3], K. Kato[3], F. Kaneko[3], T. Yamamoto[3], A. Baba[3], [1]*Pibulsongkram Rajabhat University, Thailand,* [2]*Chiang Mai University, Thailand,* [3]*Niigata University, Japan*

[P3.119]	**Culture mediums and buffers effect on screen-printed carbon electrodes for continuous voltammetric monitoring of in vitro cell cultures lactate production** G. Rosati*[1], M. Scaramuzza[2], E. Pasqualotto[2], A. De Toni[2], C. Reggiani[1], A. Paccagnella[1], *[1]University of Padua, Italy, [2]A.R.C. - Centro Ricerche Applicate s.r.l., Italy*
[P3.120]	**Fabrication of a novel glucose sensor based on lanthanoid pthalocyanine/reduced graphene oxide conducting hydrogel** H. Al-Sagur*, K. Komathi, A. Khan, A. Hassan, *Sheffield Hallam University, UK*
[P3.121]	**A novel biocatalytical screening platform for optimizing electrode-enzyme interfaces for an efficient redox enzyme recycling** H.G. Jahnke*, R. Frank, M. Klenner, R. Azendorf, A. Robitzki, *Centre of Biomedicine and Biotechnology, Germany*
[P3.122]	**2D fluorometric sniff-cam with ADH immobilized mesh and UV-LED sheet for gaseous ethanol imaging from a palm skin** T. Arakawa*, K. Iitani, T. Sato, K. Toma, K. Mitsubayashi, *Tokyo Medical and Dental University, Japan*
[P3.123]	**Electrophoretic enzyme deposition on nano-structured conducting polymer substrates for high sensitivity biosensors** D.M.G. Preethichandra[1], E.M.I.M. Ekanayake[1], M. Onoda*[2], *[1]Central Queensland University, Australia, [2]University of Hyogo, Japan*
[P3.124]	**Micro thermocouple calorimetric biosensor for enzyme-catalyzed reaction integrated freestanding fluidic channel** Z.Q. Wang*[1], M.T. Kimura[1], T.H. Ono[2], *[1]Tohoku Gakuin University, Japan, [2]Tohoku University, Japan*
[P3.125]	**Enhanced nadh oxidation on polytyramine modified electrodes for use in an ethanol biosensor** T. Wilson*[1], J. Zhang[1], M. Musameh[2], A. Bond[1], M. Hearn[1], *[1]Monash University, Australia, [2]CSIRO, Australia*
[P3.126]	**Acetone biosniffer (gas-phase biosensor) by detecting NADH consumption on S-ADH reverse reaction for real-time breath monitoring** M. Ye*[1], P.J. Chien[1], T. Suzuki[1], K. Toma[1], S. Sawada[2], T. Arakawa[1], K. Akiyoshi[2], K. Mitsubayashi[1], *[1]Tokyo Medical and Dental University, Japan, [2]Kyoto University, Japan*
[P3.127]	**Shelf-life of enzymatic electrochemical biosensors: Developing a rapid predictive storage model** P. Panjan*, E. Ohtonen, P. Tervo, V. Virtanen, A.M. Sesay, *University of Oulu, Finland*
[P3.128]	**Ultra-rapid colorimetric method for the detection of proteases using magnetic nanoparticle-based biosensor** G. Suaifan*[1], M. Zourob[2,3], *[1]The University of Jordan, Jordan, [2]Cranfield University, UK, [3]Alfaisal University, Saudi Arabia*
[P3.129]	**Examination of factors affecting electrochemical performance of screen-printed acetaldehyde biosensor** S. Myllymaa*, K. Myller, O. Raatikainen, R. Lappalainen, *University of Eastern Finland, Finland*
[P3.130]	**Detection of lead with label-free DNAzyme based on GFET nanosensor** Y. Li*, C. Wang, M. He, *Tsinghua University, China*
[P3.131]	**Pin-based enzymatic electrochemical sensing** E. Costa Rama, A. Costa-García, M.T. Fernández-Abedul*, *Universidad de Oviedo, Spain*
[P3.132]	**Bio-inspired protein-polymer composite adhesive as ultra-highly efficient immobilization matrix for electrochemical biosensing** Y. Fu*[1,2], Z. Liu[2], Q. Xie[2], S. Yao[2], Y. Li[1,3], Y. Ying[1], *[1]Zhejiang University, China, [2]Hunan Normal University, China, [3]University of Arkansas, USA*
[P3.133]	**Detection of alkylphenol ethoxylates in detergents using an electrochemical biosensor** B. Pérez-López*[1], J. Arboledas-Navarro[1], L. Aubouy[1], D. Guitierrez-Tauste[1], J. Ricart-Campos[1], G. García-Ibáñez[2], *[1]Technological Center Leitat, Spain, [2]INDITEX S.A., Spain*
[P3.134]	**Electrochemical characterisation of topical drug delivery** T. Ruzgas, *Malmö University, Sweden*
[P3.135]	**Evaluation of a reduced graphene oxide antimony nanocomposite horseradish peroxidase biosensor matrix for hydrogen peroxide** B. Silwana[1,2], C. Van der Horst[1,2], E.I. Iwuoha[1], V.S. Somerset*[2], *[1]University of the Western Cape, Bellville, South Africa, [2]CSIR, NRE, Stellenbosch, South Africa*
[P3.136]	**Conducting Polymer Composite Based on Nanocellulose for Biosensing Application** M.M. Abdi*[1], C. Esmaeili[1], A. P. Mathew[1], M. Jonoobi[1], K. Oksman[1], P. Md Tahir[1], *[1]University Putra Malaysia, Malaysia, [2]Universiti Kebangsaan Malaysia, Malaysia, [3]Lulea University of Technology, Sweden, [4]University of Tehran, Iran*
[P3.137]	**Glucose Biosensor Based on the Hexacyanoferrate 11-Mercaptoundecyl-N',N'',N'''-trimethylammonium/6-(Ferrocenyl)hexanethiol** M.F.S. Teixeira*, T.A. Baldo, P.M. Seraphim, *São Paulo State University, Brazil*

[P3.138]	**A sensitive potentiometric assay for E. coli detection using the electroactive substrate 8-hydroxyquinoline-glucuronide** K. Zuser, J. Ettenauer*, K.H. Kellner, T. Posnicek, G. Mazza, S. Prazak, R. Koch, M. Brandl, *Danube University Krems, Austria*
[P3.139]	**Immobilisation of cytochrome P450 2D6 on a small-scale carbon nanotube-based biosensor for personalised therapeutics** M. Krivec*[1], R. Leitner[1], J. Hochleitner[2], F. Überall[2], A. Petrović[3], P. Žnidaršič Plazl[3], *[1]CTR Carinthian Tech Research AG, Austria, [2]Medical University of Innsbruck, Center for Chemistry and Biomedicine, Austria, [3]3Faculty of Chemistry and Chemical Technology, University of Ljubljana, Slovenia*
[P3.140]	**High throughput electrochemical assays for inhibitors screening : 96-well assays of Transketolase activity by intermittent pulse amperometry and electrochemiluminescence** C. Aymard*[1], M. Halma[2], C. Mousty[2], L. Hecquet[2], L.J. Blum[1], V. Prevot[2], F. Charmantray[2], B. Doumeche[1], *[1]Institut de Chimie et Biochimie Moléculaires et Supramoléculaires, University Claude Bernard Lyon 1, France, [2]Institut de Chimie de Clermont Ferrand, University Blaise Pascal, France*
[P3.141]	**Minimally invasive microprobe array electrodes employing direct electron transfer type glucose dehydrogenase for the development of continuous glucose monitoring sensors** S. Sharma*[1], E. Takagi[2], A.E.G. Cass[1], W. Tsugawa[2], K. Sode[2], *[1]Imperial College London, UK, [2]Tokyo University of Agriculture & Technology, Japan*
[P3.142]	**Use of carbon fibers for immobilisation of alkaline phosphatase for flow-injection microdetermination of zinc(II) ions based on the electrolytically regenerated apoenzyme reactivation** I. Satoh*, Y. Kanzaki, Y. Kawakami, *Kanagawa Institute of Technology, Japan*
[P3.143]	**Enzyme switches on SPR imaging sensor chip** M. Suzuki*, Y. Kobayashi, I. Murai, Y. Iribe, *University of Toyama, Japan*
[P3.144]	***In vivo* real-time brain biomonitoring with enzyme-based microbiosensors based on gold coated tungsten (W-Au) microelectrodes** C.A. Cordeiro*[1,2], G. Flik[1], T.I.F.H. Cremers[1], B.H.C. Westerink[1], *[1]University of Groningen, The Netherlands, [2]Brains On-Line, The Netherlands*
[P3.145]	**Label-free evaluation of carbon nanoparticles in Layer-by-Layer self-assembled enzyme-based biosensors** M. David[1], M. Florescu*[2], M.M. Barsan[3], C.M.A. Brett[3], *[1]University of Bucharest, Romania, [2]Transilvania University of Brasov, Romania, [3]University of Coimbra, Portugal*
[P3.146]	**An enzymatic paper-based potentiometric cell for glucose monitoring in decentralized settings** R.C. Martinez*, M.P. Pons, F.J. Andrade, *University Rovira i Virgili, Spain*
[P3.147]	**Disposable interdigitated array electrode employing high sensitive enzyme sensor for glycated albumin measurement** M. Hatada*, W. Tsugawa, K. Sode, *Graduate School of Engineering, Tokyo University of Agriculture and Technology, Japan*
[P3.148]	**Amperometric hydrogen peroxide biosensor based on TiO_2-carboxylated multiwalled carbon nanotube-graphene oxide modified glassy carbon electrode** D. Sogut[1], C. Kacar[2], B. Dalkiran[2], S. Kucukkolbasi[1], P.E. Erden[2], E. Kilic*[2], *[1]Selcuk University Faculty of Science, Turkey, [2]Ankara University Faculty of Science, Turkey*
[P3.149]	**Electrochemical biosensing platforms based on different metal oxide nanoparticles: a comparative study for the detection of histamine** I.O. Kocoglu*, P.E. Erden, E. Kilic, *Ankara University, Turkey*
[P3.150]	**Evaluation of a micro-electromechanical affinity sensor for the monitoring of bioprocess media** L. Theuer*[1], M. Lehmann[1], S. Junne[1], P. Neubauer[1], M. Birkholz[2], *[1]TU Berlin, Germany, [2]IHP Frankfurt(Oder), Germany*
[P3.151]	**UV/Vis-spectroelectrochemical investigation of cellobiose dehydrogenases (CDHs) from different ascomycetes** S. Vogt, O. Tiebe, M. Grzegorzek, G. Nöll*, *University of Siegen, Germany*
[P3.152]	**Protein kinase detection using an aptameric peptide on a flexible microchip with electrolyte-insulator-semiconductor sensor** R. Chand, D. Han, D-H. Lee, G. Kim, Y-S. Kim*, *Sungkyunkwan University, Republic of Korea*
[P3.153]	**Optimising electrochemical biosensors for protease detection** E. González-Fernández*, M. Staderini, N. Avlonitis, A.F. Murray, A.R. Mount, M. Bradley, *University of Edinburgh, UK*
[P3.154]	**Layer-by-layer film of graphene oxide for electrochemical glucose sensing** D.B.T. Mascagni[1], M. Ferreira*[2], *[1]São Paulo State University - UNESP, Brazil, [2]Federal University of São Carlos, Brazil*
[P3.156]	**Amperometric sensor for glucose base on carbon screen-printed electrode modified with glucose**

	oxidase and chitosan-nafion composite film W. Wonsawat*[1], W. Yuthithum[1], S. Pungpothong[1], R. Thaipratum[1], E. Punrat[2], C. Promptmas[3], *[1]Suan Sunandha Rajabhat University, Thailand, [2]Chulalongkorn University, Thailand, [3]Mahidol University, Thailand*
[P3.157]	**Flexible nanoband array electrodes for bioanalytical measurements** M. Falk*[1], M.J. Swann[1], A.R. Mount[2], N.J. Freeman[1], *[1]Nanoflex Limited, UK, [2]The University of Edinburgh, UK*
[P3.158]	**Electroactive polymer functionalized graphene nanocomposites as a biosensing platform** A. Halder*, M. Zhang, Q. Chi, *Technical University of Denmark, Denmark*
[P3.159]	**FMN-binding fluorescent proteins as versatile biosensors** M. Wingen*, C. Rupprecht, A. Woop, T. Drepper, *Heinrich-Heine University Düsseldorf, Germany*
[P3.160]	**Glucose and urea enzymatic biosensors using galvanostatic electrodeposited polyaniline matrices and fet devices** H. Dias Mello*, N. De Figueiredo, M. Mulato, *University of São Paulo, Brazil*
[P3.161]	**Detection of plasmin based on specific peptide substrate and casein using acoustic transducer** A. Poturnayova*, M. Tatarko, I. Karpisova, G. Castillo, Z. Keresztes, T. Hianik, *Comenius University, Slovakia*
[P3.162]	**Electrochemically reduced graphene and iridium oxide nanoparticles for inhibition based angiotensin-converting enzyme inhibitor detection and determination** S. Kurbanoglu*[1,2], L. Rivas[2], S.A. Ozkan[1], A. Merkoci[2,3], *[1]Ankara University, Turkey, [2]Catalan Institute of Nanoscience and Nanotechnology, Spain, [3]ICREA, Spain*
[P3.163]	**Nanomaterials -based biosensors operating through inhibition inducing biochemical reactions for drug analysis, safety and security applications** S. Kurbanoglu*[1], S.A. Ozkan[1], A. Merkoci[2,3], *[1]Ankara University, Turkey, [2]Catalan Institute of Nanoscience and Nanotechnology, Spain, [3]ICREA, Spain*
[P3.164]	**Construction of solid-state potentiometric urea biosensor based on ammonium-selective electrode** B. Balkis, A. Demirel Özel, H.E. Kormali Ertürün, E. Kilic*, *Ankara University, Faculty of Science, Department of Chemistry, Turkey*
[P3.165]	**Detection of short peptides using an E. coli alkaline phosphatase-based biosensor** N. Al-Shaikhly*, J. Robottom, M. Szymonik, M. McPherson, C. Wälti, *University of Leeds, UK*
[P3.166]	**Enzymatic assays based on ion-selective carbon nanotube field-effect transistors** K. Melzer*[1], V.D. Bhatt[1], E. Jaworska[2], K. Maksymiuk[2], A. Michalska[2], P. Lugli[1], *[1]Technische Universität München, Germany, [2]University of Warsaw, Poland*
[P3.167]	**Collision-based electrochemistry for investigation of direct electron transfer of a single enzyme molecule** A.N. Sekretaryova, M.Y. Vagin, A.P.F. Turner, M. Eriksson*, *Linköping University, Sweden*
[P3.168]	**Microdomain-based enzymatic sensors using multiple optical modes** A.B. Biswas, Y.Y. You, M.J. McShane*, *Texas A&M University, USA*
[P3.169]	**Paper-based Electrochemical Impedance Spectroscopy (ECIS) sensor to detect as low level cholesterol as in saliva** S.A. Kim[1,2], K.S. Shin[1], Y.H. Heo[1,3], S-H. Lee*[4], M.G. Kim[1], J.Y. Kang[1], *[1]Korea Institute of Science and Technology(KIST), Republic of Korea, [2]University of Science and Technology(UST), Republic of Korea, [3]Sogang University, Republic of Korea, [4]Gwangju Institute of Science and Technology(GIST), Republic of Korea*
[P3.170]	**Reusable glucose biosensor based on enzyme immobilized in egg-shell membrane** A. Roychoudhury, A. Singh, S.K. Jha*, *Indian Institute of Technology Delhi, India*
[P3.171]	**Characterization of amperometric laccase biosensor based on carbon nanotube** M. Romero-Arcos*, M. Garnica-Romo, H. Martinez-Flores, *Universidad Michoacana de San Nicolas de Hidalgo, Mexico*
[P3.172]	**String-based sensing platforms for the detection of hydrogen peroxide** S.H. Lee, S.W. Kang, J.M. Lee, H.K. Park, G.J. Lee*, *Kyung Hee University, Republic of Korea*
[P3.173]	**Modification of gold electrodes with bacterial reaction centres immobilized by Laser Induced Forward Transfer (LIFT) technique for amperometric herbicide detection** M.R. Guascito[1,4], M. Chatzipetrou[2], D. Chirizzi[1], M. Trotta[3], M. Massaouti[2], L. Giotta*[1], F. Milano[3], I. Zergioti[2], *[1]University of Salento, Italy, [2]Technical University of Athens, Greece, [3]CNR-IPCF, Italy, [4]CNR-ISAC, Italy*
[P3.174]	**Amperometric biosensor based on cerium oxide/Polyethylene Glycol/BmimNO$_3$/ Tyrosinase composite film for the detection of phenolic compounds** N.M. Ahmad*[1], J. Abdullah[2], N.A. Yusof[2], A.H. Abdul Rashid[3], S. Abdul Rahman[3], H. Hanibah[3], *[1]Universiti Putra Malaysia, Malaysia, [2]SIRIM Berhad, Malaysia, [3]Universiti Kebangsaan Malaysia, Malaysia*
[P3.175]	**Novel L-arginine amperometric assay based on recombinant arginine deiminase and Nafion/PANi composite**

	M.T. Zhybak[1], L.Y. Fayura[2], Y.R. Boretsky[2], E. Dempsey[3], M.V. Gonchar[2], A.A. Sibirny[2], A.P.F. Turner[4], Y.I. Korpan*[1], *[1]Institute of Molecular Biology and Genetics, NAS of Ukraine, Ukraine, [2]Institute of Cell Biology, NAS of Ukraine, Ukraine, [3]Centre for Research in Electroanalytical Technologies, Ireland, [4]Biosensors & Bioelectronics Centre, Linköping University, Sweden*
[P3.176]	**Electrochemical impedance spectroscopy sensing using silicon nanoforest** N. Hemed*[1], A. Convertino[2], Y. Shacham-Diamand[1,3], *[1]Tel Aviv University, Israel, [2]Istituto per la Microelettronica e i Microsistemi C.N.R, Italy, [3]Waseda University, Japan*
[P3.177]	**PEDOT:Nafion coated microelectrode biosensor for in vivo monitoring of glutamate release in brain** M. Ganesana*, E. Trikantzopoulos, B.J. Venton, *University of Virginia, USA*
[P3.178]	**Fungal space searching can outperform standard algorithms** H-Y. Lin, E. Asenova, E. Fu, D.V. Nicolau*, *McGill University, Canada*
[P3.179]	**Information storage device composed of metalloprotein/carbon nanotube heterolayer prepared by the protein-adsorption-precipitation-and crosslinking method** J. Yoon*[1], Y.H. Chung[2], T. Lee[1], J.H. Kim[3], J. Kim[3], J.W. Choi[1], *[1]Sogang University, Republic of Korea, [2]Hoseo University, Republic of Korea, [3]Korea University, Republic of Korea*
[P3.180]	**A current-mode delta-sigma ADC employing adaptive dynamic range scaling to measure sub-picoampere bio-sensor currents** K.J. Pol*[1], S. Ouzounov[2], H. Hegt[1], A. van Roermund[1], *[1]Eindhoven University of Technology, The Netherlands, [2]Philips Research Eindhoven, The Netherlands*
[P3.181]	**Highly scalable real time epilepsy diagnosis architecture via phase correlation and functional brain maps** J.B. Romaine*[1], L. Acasandrei[1], M. Delgado Restituto[1], A. Rodríguez-Vázquez[2], *[1]Institute of microelectronics Sevilla, Spain, [2]University of Seville-IMSE, Spain*
[P3.182]	**e-Eyes and Internet-Of-Things for detection of pyrrolizidine alkaloids. Colorimetric and mathematical implementation for automatic recognition of a signal** G. González-Aguilar, *Centre for Applied Photonics, INESC-TEC, Portugal*
[P3.183]	**Raman microspectroscopy and chemometrics: A combined approach to perform a rapid untargeted screening of bacteria present in food samples** A. Assaf*[1], E. Grangé[1], C.B.Y. Cordella[2,3], D.N. Rutledge[2,3], M. Lees[4], G. Thouand[1], *[1]University of Nantes, France, [2]INRA, France, [3]AgroParisTech, France, [4]Eurofins Analytics, France*
[P3.184]	**High depth imaging of refractive index changes in living cells by means of long-range SPR imaging** Y. Yanase*[1], T. Kawaguchi[1], K. Tamada[2], M. Hide[1], *[1]Hiroshima University, Japan, [2]Kyushu University, Japan*
[P3.185]	**An antinomy biosensor based on bacterial antimonite oxidase in Agrobacterium tumefaciens** G. Wang*, J. LI, X. X, *Huazhong Agricutural University, China*
[P3.186]	**In-vitro skin cells photo-pathology and photo-dynamic studied in a real-time manner using bioimpedance sensing platform** D. Bennet[1], S. Kim*[1,2], *[1]Gachon University, Republic of Korea, [2]Gil Medical Center, Republic of Korea*
[P3.187]	**Polyphenol biosensor based on glassy carbon electrode directly absorbed *Escherichia coli* cells with highly active surface-displayed bacterial laccase** Z. Zhang[1], Z.M. Zhang[1], Y.G. Hu[1], J. Liu[1], H. Ni[2], L. Li*[1], *[1]Huazhong Agricultural University, China, [2]Hubei University, China*
[P3.188]	**Label-free impedance sensor for oral cancer cell analysis** L. Yang, *North Carolina Central University, USA*
[P3.189]	**Facile detection of enrofloxacin using capillary tube indicators and microbial respiration** H. Lee*, S. Lee, D. Kwon, S. Jeon, *Pohang University of Science and Technology, Republic of Korea*
[P3.190]	**Development of an optical algal biosensor in a chip-based microfluidic system for pesticides detection in environmental samples** A. Gosset*, L. Renaud, J-F. Chateaux, R. Bayard, C. Durrieu, *Université de Lyon, France*
[P3.191]	**Hydrophobin-based surface functionalization for sensitive and robust quantification of a yeast pheromone** S. Hennig*, G. Rödel, K. Ostermann, *Technische Universität Dresden, Germany*
[P3.192]	**Towards 3D cell cultures as an alternative for irritation tests** K.H. Feller*, B. Büttner, S. Eisenhuth, M. Dubiak-Szepietowska, M. Büttner, *Ernst-Abbe-University Jena, Germany*
[P3.193]	**Transfected Cell Microarray enables HTS and identification of kinase genes related to cell migration** R. Nagasaki, A. Nagasaki, S. Fujita*, *National Institute of Advanced Industrial Science and Technology, Japan*
[P3.194]	**Real-time quartz crystal microbalance with dissipation monitoring of cancer cell death early events in a dynamic context** L. Nowacki[1], J. Follet[1], M. Vayssade[1], P. Vigneron[1], L. Rotellini[1], F. Cambay[1], C. Egles[1,2], C.

	Rossi*[1], [1]*Université de technologie de Compiègne, France,* [2]*Tufts University, School of Dental Medicine, USA*
[P3.195]	**An optical imaging system capable of monitoring oxygen consumption and oxygen gradients in monolayers of adherent mammalian cells** C. Schmittlein*[1], R.J. Meier[2], C. Hupf[1], J. Wegener[1], [1]*University of Regensburg, Germany,* [2]*PreSens GmbH, Germany*
[P3.196]	**Orthogonal signal-receptor pairs for intercellular signal processing in yeast** P. Zach*, A. Sosnova, D. Georgiev, *University of West Bohemia, Czech Republic*
[P3.197]	**A microbial electrode for rapid BOD detection based on electrodeposited carboxyl graphene** Y.J. Li[1,2], J.Z. Sun*[1], J.F. Wang[1], C. Bian[1], J.H. Tong[1], Y. Li[1], S.H. Xia[1], [1]*Chinese Academy of Sciences, China,* [2]*University of Chinese Academy of Sciences, China*
[P3.198]	**Cationic conjugated polyelectrolyte for lysosome imaging in living cells** P. Wu*, Z. Chen, Y. Tan, C. Tan, *Tsinghua University, China*
[P3.199]	**Real time monitoring of osteogenic differentiation using capacitance biosensor** J.H. Song*, S.M. Lee, N.A. Han, K.H. Yoo, *Yonsei University, Republic of Korea*
[P3.200]	**Evaluation the effect of chlorogenic acid on bitter drugs using taste sensor system and surface plasmon resonance (SPR)** T. Haraguchi*, S. Shiraishi, S. Nakamura, H. Kojima, M. Yoshida, T. Uchida, *Mukogawa Women's University, Japan*
[P3.201]	**Enhanced sensitivity of cantilever-based liposome biosensor for detection of Aβ aggregation and fibril growth by incorporating DPPC liposome with cholesterol** Z. Zhang*[1], Y. Murakami[1], T. Taniguchi[1], M. Sohgawa[2], K. Yamashita[1], M. Noda[1], [1]*Kyoto Institute of Technology, Japan,* [2]*Niigata University, Japan*
[P3.202]	**Development of a Lux-tagged cyanobacterial biosensor for the detection and quantification of phosphate bioavailability in water environment** W.L. Chen*[1], L. Wan[1], Y.Q. Wang[1], L. Wang[1], C.C. Zhang[2], [1]*Huazhong Agricultural University, China,* [2]*Aix-Marseille Université and Laboratoire de Chimie Bactérienne (UMR7283), France*
[P3.203]	**Performance of amorphous metal magneto sensors depending on excitation pulse** S. Nakayama*[1], N. Michizuki[1], S. Atsuta[2], S. Kato[2], H. Miyazaki[2], [1]*Nagoya University Graduate School of Medicine, Japan,* [2]*Fujidenolo Corporation, Japan*
[P3.204]	**Development of odorant sensor elements sensitive and selective to mold odorants based on Sf21 cell lines expressing insect odorant receptors** H. Mitsuno*[1], M. Termtanasombat[1], N. Misawa[2], Y. Nakajima[1], T. Sakurai[1], R. Kanzaki[1], [1]*The University of Tokyo, Japan,* [2]*Toyohashi University of Technology, Japan*
[P3.205]	**Real-time 3D cell culture monitoring using novel capacitance biosensor** S.M.L. Lee*, N.H. Han, K.H.Y. Yoo, *Yonsei University, Republic of Korea*
[P3.206]	**2D image of ion activity from epithelium cells cultured on Si_3N_4 LAPS** C.M. Yang*[1], C.T. Yeh[1], S.F. Tseng[1], T.R. Wu[1], H.C. Lai[1], W.C. Chin[2], C.C. Chen[1], Y.T. Xiao[1], C.H. Lo[3], T.L. Hwang[3], C-S. Lai[1], D.G. Pijanowska[4], [1]*Chang Gung University, Taiwan,* [2]*University of California, USA,* [3]*Chang Gung Memorial Hospital at Linkou, Taiwan,* [4]*Polish Academy of Sciences, Poland*
[P3.207]	**The modulation of human cell adhesion by oriented flagellin monolayers revealed by label-free optical biosensors** B. Kovacs*[1,2], N. Orgovan[1,3], D. Patko[1,2], I. Szekacs[1], S. Kurunczi[1], B. Toth[4], F. Vonderviszt[1,4], R. Horvath[1], [1]*Institute of Technical Physics and Materials Science, Centre for Energy Research, Hungarian Academy of Sciences, Hungary,* [2]*Doctoral School of Molecular- and Nanotechnologies, Faculty of Information Technology, University of Pannonia, Hungary,* [3]*Department of Biological Physics, Eötvös Loránd University, Hungary,* [4]*Bio-Nanosystem Laboratory, Research Institute of Chemical and Process Engineering, University of Pannonia, Hungary*
[P3.208]	**Real-time, label-free and high-resolution imaging of marine bioadhesion processes via integration of imaging SPR in a TIRF microscope** T. Ederth, *Linköping University, Sweden*
[P3.209]	**Integration of whole blood separation and ZnO nanowire microfluidic devices as fluorescence sensing system** C-H. Sang*[1], C-Y. Wang[1], J-T. Sheu[1,2], C-W. Chen[1], R-Z. Lin[1], [1]*Institute of Nanotechnology/Department of Materials Science and Engineering, National Chiao Tung University, Taiwan,* [2]*Institute of Biomedical Engineering/College of Electrical and Computer Engineering, National Chiao Tung University, Taiwan*
[P3.210]	**Low-cost biosensor chips for BOD and pesticides monitoring** M.A. Kashem, K. Kimoto, Y. Iribe, M. Suzuki*, *University of Toyama, Japan*
[P3.211]	**Whole-cell biosensor for screening enzymes and microbes displaying cellulolytic activity** K.K. Kwon[1,3], D.H. Lee[1,2], H. Kim[1], S.J. Yeom[1], S.G. Lee[1,2], G.H. Han*[1], [1]*Korea Research Institute of*

	Bioscience & Biotechnology, Republic of Korea, [2]University of Science and Technology, Republic of Korea, [3]KAIST, Republic of Korea
[P3.212]	**A fluorescence turn-on sensor for arginine/lysine and its application in virus labeling** C.C. Chang*, Y.S. Liou, *National Chung Hsing University, Taiwan*
[P3.213]	**A novel cell viability biosensor with portable smartphone-based colorimetric reader for marine toxin detection** K. Su[1,2], Y. Pan*[1], X. Qiu[1], J. Fang[1], H. Li[1], P. Wang[1,2], *[1]Zhejiang, China, [2]Chinese Academy of Sciences, China*
[P3.214]	**Facile synthesis and characterization of poly(γ-glutamic acid)-based FeSe nanoparticles for in vivo imaging** B.B. Kim*, E.B. Kim, T.J. Park, *Chung-Ang University, Republic of Korea*
[P3.215]	**Development of a cell biomarker based on photo-induce emission-switching fluorophore** J.W. Chen*[1], C.C. Chang[1], *[1]National Chung Hsing University, Taiwan, [2]National Chung Hsing University, Taiwan*
[P3.216]	**Simultaneous and online detection of crude oil contamination via biological-phase Microextraction and Biosensing (BPME-BS) device** O. Ejenavi[1], H. Li[1], Y. Liu[2], Y. Sun[2], A. Ding[2], D. Zhang*[1], *[1]Lancaster University, UK, [2]Beijing Normal University, China*
[P3.217]	**Entrapment of E. Coli in sol-gel matrices for use in Microarray-based biosensors** A. Capretta*, J.D. Brennan, S. Boudjabi, D. White, *McMaster University, Canada*
[P3.218]	**Inhibition biosensor based on DC and AC electrical measurements of bacteria samples** H. Abu-Ali[1], A. Nabok*[1], T. Smith[2], M. Al-Shanawa[3], *[1]Sheffield Hallam Univeristy, Materials and Engineering Research Institute, UK, [2]Sheffield Hallam Univeristy, Biomedical Research Centre, UK, [3]Basra University, Faculty of Scinces, Iraq*
[P3.219]	**A QCM-D based approach to study biomolecular and cellular interactions with hyaluronan** E. Nilebäck*[1], N. Altgärde[2], A. Kunze[2], L. Enochson[3], I. Pashkuleva[4,5], J. Becher[6], M. Schnabelrauch[6], R.L. Reis[4,5], A. Lindahl[3], S. Svedhem[2], *[1]Biolin Scientific, Sweden, [2]Chalmers University of Technology, Sweden, [3]Sahlgrenska Academy, Sweden, [4]University of Minho, Portugal, [5]ICVS/3B's, Portugal, [6]INNOVENT, Germany*
[P3.220]	**Analysis of thiol thin films using small load approximation and qcm in stopping and continuous flow mode for biosensing purposes** V.F. Martinez-Silva*, M.A. Ramirez-Salinas, H. Baez, S. Mendoza-Acevedo, V.H. Ponce-Ponce, L.A. Villa-Vargas, A. Martinez-Rivas, *Instituto Politécnico Nacional, Mexico*
[P3.221]	**An electrochemical high-content platform for analysis of cell proliferation and metabolism** W. Wirths*[1], M. Brischwein[1], J. Clauss[1], D. Baasner[2], L. Birkner[2], B. Wolf[1], *[1]Technische Universität München, Germany, [2]Erwin Quarder Systemtechnik GmbH, Germany*
[P3.222]	**Validation of biological recognition elements for signal transduction as first step in the development of whole cell biosensors** L.F. Spitta*, C. Baumstark-Khan, S. Diegeler, S. Feles, B. Henschenmacher, B. Konda, C.E. Hellweg, *DLR-Institute of Aerospace Medicine, Germany*
[P3.223]	**Robust microbial ureolysis system for the detection of urea in urine** M. Morales*, R. Martinez, C. Cabrera, *University of Puerto Rico, Rio Piedras Campus, Puerto Rico*
[P3.224]	**Microarray of autodisplayed Ro/SSA and La/SSB proteins for medical diagnosis of Sjoegren's syndrome and lupus erythematosus** J. Pyun*[1], G. Yoo[1], J. Bong[1], S. Kim[1], J. Jose[2], *[1]Yonsei University, Republic of Korea, [2]Muenster University, Germany*
[P3.225]	**A single-step viscometer applicable for point-of-care (POC) blood test** Y.J. Kim, W-J. Kim*, H.Y. Cho, B.K. Kim, C. Huh, *Electronic and Telecommunications Research Institute, Republic of Korea*
[P3.226]	**Point-of-care chips for recognition of steroid hormone using molecularly imprinted polymer beads and fluorescently labeled target molecule** S. Taniguchi*[1], N. Murase[2], Y. Kiytayama[2], T. Takeuchi[2], *[1]Hitachi Ltd., Japan, [2]Kobe University, Japan*
[P3.227]	**Objective assessment of motor function in Parkinson's disease: results from a clinical study** S. Aghanavesi[1], F. Bergquist[2], A. Ericsson[3], A. Medvedev[4], M. Memedi*[1], D. Nyholm[4], F. Ohlsson[3], M. Senek[4], J. Spira[5], J. Westin[1], *[1]Dalarna University, Sweden, [2]University of Gothenburg, Sweden, [3]Acreo Swedish ICT, Sweden, [4]Uppsala University, Sweden, [5]Sensidose AB, Sweden*
[P3.228]	**One-step ELISA in a micro-capillary tube** Y.J. Kim, W-J. Kim*, H.Y. Cho, B.K. Kim, C. Huh, *Electronic and Telecommunications Research Institute, Republic of Korea*
[P3.230]	**The development of a gas chromatography – sensor system towards the diagnosis of urological malignancies**

	C.S. Probert*[1], R. Aggio[1], T. Khalid[2], R. Persad[4], B.D. Costello[3], P. White[3], N.M. Ratcliffe[3], [1]*University of Liverpool, UK,* [2]*Imperial College, UK,* [3]*University of West of England, UK,* [4]*Bristol Urological Institute, UK*
[P3.231]	**Acceleration based activity metrics during subacute inpatient stroke rehabilitation** M. Alt Murphy*[1,2], S. Andersson[2], F. Ohlsson[3], J. Wipenmyr[3], A. Danielsson[1,2], [1]*University of Gothenburg, Sweden,* [2]*Sahlgrenska University Hospital, Sweden,* [3]*Acreo Swedish ICT AB, Sweden*
[P3.232]	**High selective voltammetric sensor based on molecularly imprinted polymer and carbon nanotubes to determine the dicloran pesticide in biological and environmental samples** S.J. Shahtaheri*[1], F. Faridbod[2], M. Khadem[1], A.R. Foroushani[1], [1]*School of Public Health, Tehran University of Medical Sciences, Iran,* [2]*University of Tehran, Iran*
[P3.233]	**Role of immuno magnetic biosensor technology for testing saliva samples for patients with Chronic Obstructive Pulmonary Disease (COPD)** M. Piano*[1], J. Kiely[1], P. Wraith[1], N. Patel[2], M. Spiteri[2], T. Cox[1], R. Luxton[1], G. Thorpe[2], [1]*University of the West of England, UK,* [2]*University Hospital of North Staffordshire, UK*
[P3.234]	**Ethylene glycol functionalized reduced graphene oxide based dry electrodes for ubiquitous long-term electrocardiogram monitoring system applications** P.S. Das*, M.F. Hossain, J.Y. Park, *Kwangwoon University, Republic of Korea*
[P3.235]	**Development of an optomechanical point-of-care device for erythrocyte sedimentation rate measurement** Z. Isiksacan*, C. Elbuken, *Bilkent University, Turkey*
[P3.236]	**A low-cost biomarker-based SAW-biosensor design for early detection of prostate cancer** A. Sisman*[1], E. Gur[1], B. Enez[2], B. Okur[1], O. Toker[2], [1]*Marmara University, Turkey,* [2]*Fatih University, Turkey*
[P3.237]	**Stretchable silver strain gauge for skin-attached characterization** R. Texidó*, J. Gilabert, B. Cortés, M. Cobo, V. Ramos, S. Borrós, *Universitat Ramon Llull, Spain*
[P3.238]	**Monitoring biomolecules and ions with an FET sensor for physiological balance** K. Ohashi*, S. Kuroiwa, T. Nakanishi, S. Hideshima, T. Osaka, *Waseda University, Japan*
[P3.239]	**Electrical characterization and modeling of hydrogel-coated screen-printed electrodes** S. Myllymaa[1], P. Lepola[2,1], R. Lappalainen[1], K. Myllymaa*[3], [1]*University of Eastern Finland, Finland,* [2]*Central Hospital of Päijät-Häme, Finland,* [3]*Kuopio University Hospital, Finland*
[P3.240]	**Development of pressure sensor for identifying guinea pig's large intestinal motility caused by drug** J. Park*, E. Kim, M.N. Dakurah, Y. Joung, *Hanbat National University, Republic of Korea*
[P3.241]	**Small-drug quantification from whole blood within paper- based microstructures for Point-Of-Care Therapeutic Drug Monitoring** D. Burghelea, D. Prim*, M.E. Pfeifer, J-M. Segura, *Institute of Life Technologies, University of Applied Sciences and Arts Western Switzerland Valais, Switzerland*
[P3.242]	**Rapid, low cost prototyping of transdermal devices for personal health monitoring** S. Sharma*[1], A. Saeed[2], C. Johnson[1], N. Gadegaard[2], A.E.G. Cass[1], [1]*Imperial College London, UK,* [2]*University of Glasgow, UK*
[P3.243]	**Towards a general diagnosis array for physiological screening of population health** R.V. Olkhov, A.M. Shaw*, *University of Exeter, UK*
[P3.244]	**Biological tissue diagnosis based on fluid-type tactile sensor** Y. Kim*[1], Y. Ito[2], G. Obinata[3], [1]*Korea Institute of Machinery & Materials, Republic of Korea,* [2]*Nagoya University, Japan,* [3]*Chubu University, Japan*
[P3.245]	**Low-cost microfluidics and mobile phone diagnostics for personalised care** C. Liedert*, M. Kurkinen, J-T. Mäkinen, A. Kokkonen, S. Pohjonen, L. Hakalahti, *VTT Technical research centre of Finland Ltd, Finland*
[P3.246]	**Biostability investigations of a silicone-encapsulated biosensor implant after 17 months of in vivo exposure** P. Glogener[1], M. Krause[1], J. Katzer[1], A.M. Schubert[1], M. Birkholz*[1], O. Bellmann[2], C. Weber[2], C. Metges[2], C. Welsch[3], R. Ruff[3], [1]*IHP, Germany,* [2]*FBN, Germany,* [3]*Fraunhofer IBMT, Germany*
[P3.247]	**Inertial motion capture costume** A. Szczesna*[1], P. Pruszowski[1], P. Skurowski[1], E. Lach[1], J. Slupik[1], D. Peszor[1,2], M. Paszkuta[1], A. Polanski[1,2], K. Wojciechowski[2], M. Janiak[2], [1]*Sliesian University of Technology, Poland,* [2]*Research Center of Polish-Japanese Academy of Information Technology, Poland*
[P3.248]	**New platforms for wearable potentiometric sensors using commercial carbon fibres as a substrate for monitoring sport performance** M. Parrilla*, J. Ferre, T. Guinovart, F.J. Andrade, *University Rovira i Virgili, Spain*
[P3.249]	**Rheological monitoring for tau protein aggregation process** P. Didier*[1], F. Razan[1], E. Caplain[2], C. Delamarche[3], S. Serfaty[2], P. Larzabal[1], [1]*ENS Cachan, France,* [2]*Université Cergy Pontoise, France,* [3]*Université Rennes 1, France*

[P3.250]	**Smart pad diagnostics: an automated paper-based DNA test for personal health monitoring** H. Sharma*, Y. Takamura, M. Biyani, *Japan Advanced Institute of Science and Technology, Japan*
[P3.251]	**Physiologically based models for optimization of sensors for personalized treatment in the intensive care unit** T. Herrgårdh*, R. Johansson, E. Nyman, A. Hjelm, F. Sjöberg, M. Chew, G. Cedersund, *Linköping University, Sweden*
[P3.252]	**A smart wearable and autonomous negative pressure device for wound monitoring** P. Salvo*, B. Melai, N. Calisi, C. Paoletti, V. Dini, M. Romanelli, A. Paolicchi, B. Lazzerini, A. Pucci, V. Mollica, A. Ceccarini, S. Bianchi, V. Castelvetro, R. Fuoco, F. Di Francesco, *Università di Pisa, Italy*
[P3.253]	**BioCom Lab – An intrabody network concept of biosensing and actuation integration** P. Kjäll*[1], D. Simon[2], G. Gustafsson[1], M. Berggren[2], *[1]ACREO Swedish ICT AB, Sweden, [2]Linköping University, Sweden*
[P3.254]	**Artificial sensory systems combined with uv-vis spectrophotometry as a robust approach for VOCs analysis of human urine and exhaled breath** T. Saidi[1], K. Tahri[1], N. El Alami El Hassani[1], M. Bougrini[1], N. El Bari[1], R. Ionescu[2], B. Bouchikhi*[1], *[1]Moulay Ismail University, Morocco, [2]Rovira i Virgili University, Spain*
[P3.255]	**System for mobile monitoring of vital functions and environmental context** R. Trobec[1], V. Avbelj[1], U. Stanic[3], M. Depolli[1], A. Rashkovska*[1], I. Tomasic[2], T. Kristofelc[1], K. Bregar[1], G. Kosec[1], *[1]Jozef Stefan Institute, Slovenia, [2]Mälardalen University, Sweden, [3]BRIS, Slovenia*
[P3.256]	**Endocrine biomarker label free detection using a Quantum Dot (QD) optoelectronic assay: A rapid and specific ex-vivo assay for detection of salivary cortisol** N. Elman*[1,2], P. Gurman[2], O. Miranda[2,3], *[1]Charles Stark Draper Laboratory, USA, [2]Massachusetts Institute of Technology, USA, [3]University of Texas - Dallas, USA*
[P3.257]	**A nW neural amplifier and G_m-C filter for EEG using g_m/I_D methodology** H.F. Huq*, S.A. Gallegos, *University of Texas Rio Grande Valley, USA*
[P3.258]	**Multisensing platform inside a microfluidic channel** S. Anastasova*, P. Kassanos, H. Ip, V. Curto, P. Bembnowicz, B. Lo, G-Z. Yang, *Imperial College London, UK*
[P3.260]	**Sensor-loaded erythrocytes for continuous bloodstream monitoring** S.C. Bustamante-Lopez*[1,2], A. Fisher[2], K.E. Meissner[1,2], *[1]Texas A&M University, USA, [2]Swansea University, UK*
[P3.261]	**Cell-on-chip stretchable platform for mammalian cells studies** X. Zhang[1], A.N. Nordin[2], F. Li[3], I. Voiculescu*[1], *[1]City College of New York, USA, [2]International Islamic University Malaysia, Malaysia, [3]New York Institute of Technology, USA*