

	Posters Monday
1	Temperature controlled microfluidic valve system fabricated from thermosensitive poly-NIPAM-DEGMA hydrogel copolymer Benedek Zentai¹, Anita Bányai², Miklós Verner¹, Péter Fürjes², Barbara Beiler² ¹ HUN-REN Wigner Research Centre for Physics, Nanostructures and applied spectroscopy Research Group, Konkoly-Thege Miklós Str. 29-33, H-1121 Budapest, Hungary ² HUN-REN Centre for Energy Research, Microsystems Laboratory, Konkoly Thege Miklós Str. 29-33, H-1121 Budapest, Hungary
2	Microfluidic Impedance Tomography for Localized Microbead Mapping Lilia Bató^{1,2}, J.M. Bozorádi^{1,2}, Péter Fürjes¹, Zoltán Vizvári ¹Microsystems Lab., Inst. of Technical Physics and Materials Science, HUN-REN Centre for Energy Research, Budapest, Hungary ²Óbuda University Doctoral School on Materials Sciences and Technologies, Budapest, Hungary ³Bioimpedance Technologies Research Center, University Research and Innovation Center, Óbuda University, Budapest, Hungary
3	Microfluidic chamber optimization for fluorescent drug detection Dóra Bereczki^{1,2}, Zoltán Szabó¹, Péter Fürjes¹ ¹ HUN-REN Centre for Energy Research, Microsystems Laboratory, Konkoly Thege Miklós Str. 29-33, H-1121 Budapest, Hungary ² Óbuda University Doctoral School on Materials Sciences and Technologies, Bécsi str. 96/b, H-1034 Budapest, Hungary
4	Hydrogel-Encapsulated Nano-Optodes for Mitigating Protein Interference During Direct Analysis in Human Blood Nana Jin, Mingyue Xu, Xiaojiang Xie* Department of Chemistry, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, China.
5	Optimization of the membrane composition of a potentiometric sensor based on a molecularly imprinted polymer modified with nanoparticles for the determination of thiabendazole Mateja Budetić, Izabella Doris Panić, Mirela Samardžić, Andrea Dandić Department of Chemistry, Josip Juraj Strossmayer University of Osijek, Cara Hadrijana 8/A, 31000, Osijek, Croatia
6	Two-in-One 3D-Printed Microneedle-Based Sensors for <i>In-planta</i> Ca²⁺ Monitoring Yuxin Chen¹, Águeda Molinero-Fernández¹, Pietro Iannuzzo¹, Gastón A. Crespo^{1,2}, María Cuartero^{1,2} ¹ UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech, Avda. Andres Hernandez Ros 1, Murcia 30107, Spain ² Department of Chemistry, KTH Royal Institute of Technology, Teknikringen 30, Stockholm SE-114 28, Sweden
7	Potential-Controlled Electrochemical Sensing of Polystyrene Nanoplastics Maksimiljan Dekleva*, Gregor Marolt Department of Chemistry and Biochemistry, Faculty of Chemistry and Chemical Technology, University of Ljubljana, Slovenia
8	Self-calibrated potentiometric sensors Marie H. Farines, Eric Bakker Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, CH-1211, Geneva, Switzerland
9	Potentiometric Ion-Selective Membranes Integrated into Solid-Contact Electrodes for Bilirubin Detection Amparo Ferrer-Vilanova¹, Gastón A. Crespo^{1,2}, and María Cuartero^{1,2} ¹ Department of Chemistry, School of Engineering Science in Chemistry, Biochemistry and Health, KTH Royal Institute of Technology, SE-100 44 Stockholm, Sweden. ² UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech, Avda. Andres Hernandez Ros 1, Murcia 30107, Spain

10	Synthesis and characterization of TEMPO grafted poly(vinyl chloride) as potential ion to electron transducer in solid-contact ion-selective electrodes Geetansh Gupta, Eric Bakker Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, CH-1211 Geneva, Switzerland
11	MIP-Based Interdigitated Gold Electrode for Selective Electrochemical Sensing of Carbonaceous Nanoparticles Houra. Hadadi*, Peter. Lieberzeit University of Vienna, Austria, Faculty of Chemistry, Department of Physical Chemistry University of Vienna, Doctoral School of Chemistry (DoSCHEM), 1090 Vienna, Austria
12	Lipophilic salt/IL membranes for reference electrodes without liquid junction: equilibrium and transient modeling for design improvements George Horvai, Lajos Höfler Budapest University of Technology and Economics, Faculty of Chemical Technology and Biotechnology Department of Inorganic and Analytical Chemistry, Szent Gellért tér 4, H-1111 Budapest
13	Advancement and Integration of a Wearable Sweat-Based Glucose Sensor into a Multi-Parametric ICU Digital Monitoring Platform Olha Sarakhman¹, Isabel M. Diaz Lozano¹, Beatriz Perez Fernández¹, Maria Cuartero^{1,2}, Gastón A. Crespo^{1,2} ¹ UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech, Avda. Andres Hernandez Ros 1, 30107 Murcia, Spain ² Department of Chemistry, KTH Royal Institute of Technology, Teknikringen 30, SE-114 28 Stockholm, Sweden
14	Pyrene-PEG Functionalized Laser Induced Graphene Electrode for Lactate Biosensing Ipek Sarier¹, Arkadiusz Sobczak¹, Chirantan Das¹, Jarosław Judek², Marcin S. Filipiak¹ ¹ Centre for Advanced Materials and Technologies CEZAMAT, Warsaw University of Technology, 19 Poleczki St, 02-822 Warsaw, Poland ² Faculty of Electronics and Information Technology, Warsaw University of Technology, Nowowiejska 15/19, 00-665 Warsaw, Poland
15	CRISPR/Cas12-assisted DNA sensing: filter paper as a scaffold material to immobilize substrate ssDNA reporter Yohei Tanifuji¹, Željka Boček², Yuki Hiruta¹, Petar Kassal², Daniel Citterio^{1,3} ¹ Department of Applied Chemistry, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, 223-8522 Yokohama, Japan ² Faculty of Chemical Engineering and Technology, University of Zagreb, Trg Marka Marulića 19, HR-10000 Zagreb, Croatia ³ Faculty of Science, Ubon Ratchathani University, Ubon Ratchathani 34190, Thailand
16	A Wearable Single-Needle Sensor for Continuous Lactate Monitoring Jia Wang¹, Zhen Dai¹, Yuanfen Duan¹, Yiqin Fu¹, Wenrui Hu¹, Gabriel Junquetti², Nathalie Alther², Yu Qin¹ ¹Eaglenos Sciences, Inc, Nanjing 210044, China ²Eaglenos Sciences (Switzerland) AG, Bachtobelstrasse 5, 8810 Horgen, Switzerland
17	Application of a Modified Carbon Paste Electrode for Voltammetric Determination of Bisphenol A Marina S. Čobanov^a, Ana D. Đurović^a, Zorica S. Stojanović^a, Snežana Ž. Kravić^a, Amir M. Ashrafi^b, Lukáš Richtera^b ^aUniversity of Novi Sad, Faculty of Technology Novi Sad, Bulevar cara Lazara 1, 21000 Novi Sad, Serbia ^bDepartment of Chemistry and Biochemistry, Mendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic

18	Background current reduction by use of sodium 4-vinylbenzenesulfonate as additive László Kiss^{1,2}, Heng Li^{3,4}, Xiao Hang Chen^{3,4}, Sándor Kunsági-Máté^{1,2} ¹Institute of Organic and Medicinal Chemistry, Faculty of Pharmacy, University of Pécs, Honvéd Street 1, H-7624 Pécs, Hungary ²Green Chemistry Research Group, János Szentágothai Research Center, Ifjúság útja 20, H-7624 Pécs, Hungary ³Fujian Provincial Key Laboratory of Semiconductor Materials and Applications, Xiamen 361005, China ⁴Department of Physics, Xiamen University, Xiamen 361005, China
19	Spatial Visualisation of Ammonium Production by Urease using Voltammetric Ion Transfer Microscopy Justine A. Rothen, and Eric Bakker University of Geneva, Department of Inorganic and Analytical Chemistry, Quai E.-Ansermet 30, CH-1221, Geneva, Switzerland
20	Nanozymes with the record peroxidase-like activity as labels for electrochemical immunosensors Aleksandra A. Shneiderman*, Elena S. Povaga, Arkady A. Karyakin, Maria A. Komkova M.V. Lomonosov Moscow State University, Leninskie Gory, 1/3, Moscow, 119991, Russia
21	Voltammetric Determination of Moniliformin Using a Modified Carbon Paste Electrode Zorica S. Stojanović^a, Bojana Radić^b, Zuzana Bytešníková^c, Ana D. Đurović^a, Jovana Kos^b, Amir M. Ashrafi^c, Lukáš Richtera,^c ^aUniversity of Novi Sad, Faculty of Technology Novi Sad, Bulevar cara Lazara 1, 21000 Novi Sad, Serbia ^bUniversity of Novi Sad, Institute of Food Technology, Bulevar cara Lazara 1, Novi Sad, Serbia ^cInstitute of Photonic and Electronics of the Czech Academy of Sciences, Chaberská 57, Prague 8, Czech Republic ^dDepartment of Chemistry and Biochemistry, Mendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic
22	Oxygen Detection in Dermal Interstitial Fluid with Microneedles based on Platinum Nanoparticles Qikun Wei¹, Qianyu Wang¹, Águeda M. Fernández², Daniel Rojas², Rubén Z. Pérez³, Åsa K. Geuken⁴, Gastón A. Crespo^{1,2} and María Cuartero^{1,2} ¹ Department of Chemistry, KTH Royal Institute of Technology Teknikringen 30, SE-114 28 Stockholm, Sweden ² UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech Avda. Andres Hernandez Ros 1, 30107 Murcia, Spain ³ Group of Metabolism and Gene Regulation, UCAM HiTech Sport & Health Innovation Hub, Universidad Católica de Murcia, Murcia, Spain ⁴ Section of Neuropharmacology and Addiction Research, Department of Pharmaceutical Biosciences, Uppsala University, SE-751 05 Uppsala, Sweden

	Posters Tuesday
1	Distance-Based Microfluidic Analytical Devices for On-Site Coffee Analysis Qi Fan¹, Yuki Hiruta¹, Daniel Citterio^{1, 2} ¹ Department of Applied Chemistry, Faculty of Science and Technology, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-8522, Japan ² Faculty of Science, Ubon Ratchathani University, Ubon Ratchathani 34190, Thailand
2	On-demand sweat stimulation and visual quantification of chloride via a wearable integrated paperfluidic sensor for resource-limited cystic fibrosis screening Prakhar Singh, Bhanu Prakash* Microfluidics Research Laboratory, Institute of Nano Science and Technology, Sector-81, Knowledge City, Sahibzada Ajit Singh Nagar, Punjab, Pin – 140306
3	From Water-Soluble Dyes to Lipophilic Sensors: The Potential of Acidochromic Ionic Liquids Nadezhda V. Pokhvishcheva, Ilya S. Prozherin, Anna S. Menshova, Maria A. Peshkova Saint Petersburg State University, 7-9 Universitetskaya Emb., St. Petersburg, Russia, 199034
4	Toward pH-Independent Ion-Selective Optodes through Spectroelectrochemical Integration Martin R. Rasmussen^a * and Andrey V. Kalinichev^{a,b} ^a Department of Biology, Section for Microbiology, Aarhus University, Ny Munkegade 116, 8000 Aarhus C, Denmark ^b Aarhus Institute of Advanced Studies, Aarhus University, Høegh-Guldbergs Gade 6B, 8000 Aarhus C, Denmark
5	Portable 3D-Printed Hollow Microneedle-based platform for in Planta Multi-ion sensing Pietro Iannuzzo¹, Águeda Molinero-Fernández¹, Yuxin Chen¹, Gastón A. Crespo^{1,2}, María Cuartero^{1,2} ¹ UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech, Avda. Andres Hernandez Ros 1, 30107 Murcia, Spain ² Department of Chemistry, School of Engineering Science in Chemistry, Biochemistry and Health, KTH Royal Institute of Technology, Teknikringen 30, SE-100 44 Stockholm, Sweden
6	Planar solid-contact nanopore-based potentiometric ion sensors Gyula Jágérszki¹, Teodóra Takács¹, Róbert E. Gyurcsányi¹ ¹ Department of Inorganic and Analytical Chemistry, Faculty of Chemical Technology and Biotechnology, Budapest University of Technology and Economics, Műegyetem rkp. 3., H-1111 Budapest, Hungary
7	BUN Sensors Based on Novel Ammonium Ionophores Gabriel Junquetti, Junyu Zhou, Yu Qin, Eaglenos Sciences (Switzerland) AG, Bachtobelstrasse 5, Horgen, 8810, Switzerland Eaglenos Sciences, Inc., 73 Tanmi Road, BLDG B2-2, Nanjing, Jiangsu 210044, China
8	Beyond Mussel-Inspired Polydopamine Chemistry: Surface Modification of Polymeric Membrane Ion-Selective Electrodes with a Nature-Derived Material Zhe Liu, Xueliang Niu, Rongning Liang, Wei Qin* Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, Yantai 264003, P. R. China
9	EMF behaviors of carbonate melt oxidized lithium iridate as a pH sensor Miyuki Tabata^a, Hiroshi Yoshida^b, Ririko Kobayashi^c, Yoshiaki Sugimura^b, Nanae Yamashita^b, Yoshinori Negishi^b, Mai Yamada^c, Toshiro Saito^b and Yuji Miyahara^c ^a Graduate School of Advanced Interdisciplinary Science, Tokyo University of Agriculture and Technology, 2-24-16 Naka-cho, Koganei-shi, Tokyo 184-8588, Japan ^b Hitachi High-Tech Corporation, 882 Ichige, Hitachinaka, Ibaraki 312-8504, Japan ^c Institute of Integrated Research, Institute of Science Tokyo, 2-3-10 Kanda-surugadai, Chiyoda, Tokyo 101-0062, Japan

10	Development of potentiometric microelectrodes for the determination of bacterial contamination Balázs Zsolt Kállai, Elsada Neziri, Soma Papp, Róbert E. Gyurcsányi Chemical Nanosensors Research Group, Department of Inorganic and Analytical Chemistry, Faculty of Chemical Technology and Biotechnology, Budapest University of Technology and Economics Műegyetem rkp. 3, Budapest H-1111, Hungary
11	Novel Carbon Nanotube-Based Potentiometric Sensor for Ascorbic Acid Detection. Unveiling Evidence on Surface Interactions Christian Meinert Putnaergle-Bache¹, Ke Ye², Mårten S. G. Ahlquist², Gastón A. Crespo^{1,3} María Cuartero^{1,3} ¹UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech, Avda. Andres Hernandez Ros 1, 30107, Murcia, Spain ²Division of Theoretical Chemistry & Biology, Department of Chemistry, KTH Royal Institute of Technology, Teknikringen 14, SE-114 28, Stockholm, Sweden. ³Department of Chemistry, KTH Royal Institute of Technology, Teknikringen 30, SE-114 28 Stockholm, Sweden
12	Laser-Induced Double-Layer Capacitance Amplification for High-Stability 3D-Printed Solid-Contact Ion-Selective Electrodes Mahmoud Abdelwahab Fathy¹, Daniel Rojas², María Cuartero^{1,2}, Gastón A. Crespo^{1,2} ¹ Department of Chemistry, KTH Royal Institute of Technology Teknikringen 30, SE-114 28 Stockholm, Sweden ² UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech Avda. Andres Hernandez Ros 1, 30107 Murcia, Spain
13	Electronic Profiling of Neuronal Extracellular Vesicles Enables Early Prediction of Parkinson's Disease Tianrui Chang¹, Cheng Jiang^{2,3,4}, Shijun Yan^{2,3}, Shofarul Wustoni¹, Luca Salvigni¹, Rania Almaghrabi¹, George K. Tofaris^{2,3}, Keying Guo^{1,5}, Sahika Inal¹ ¹Organic Bioelectronics Laboratory, Biological and Environmental Science and Engineering Division, King Abdullah University of Science and Technology (KAUST), Thuwal 23955-6900, Saudi Arabia. ²Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, United Kingdom. ³Kavli Institute for Nanoscience Discovery, University of Oxford, Oxford, United Kingdom. ⁴School of Medicine, Life and Health Sciences, Chinese University of Hong Kong, Shenzhen, China. ⁵Department of Biotechnology and Food Engineering, Guangdong Technion – Israel Institute of Technology (GTIIT), Guangdong 515063, China.
14	Label-free Sensing of Oxytocin Using Supported Lipid Bilayer Nicole P. Jara, Shofarul Wustoni, Adel Hama, Johanne Uribe, Sahika Inal King Abdullah University of Science and Technology (KAUST), Biological and Environmental Science and Engineering Division, Organic Bioelectronics Lab, Thuwal 23955-6900, Saudi Arabia
15	Designing Nanobody-Functionalized Surfaces in Organic Electrochemical Transistors Biosensors Shofarul Wustoni, Keying Guo, Anil Koklu, Tianrui Chang, Escarlet Diaz-Galicia, Raik Grunberg, Stefan T. Arold, and Sahika Inal Biological and Environmental Science and Engineering, King Abdullah University of Science and Technology (KAUST), Saudi Arabia.
16	Fe₃O₄@Pt@Polylevodopa Core-Shell Nanozymes for Sensitive Detection of Chosen Antigens ¹Lorico Delos Santos Lapitan Jr., ^{1,2} Jan Górniaszek, ¹Maciej Trzaskowski, ³ Rafał Wróblewski, ^{1,2,†} Mariusz Pietrzak ¹Department of Medical Diagnostics, Centre for Advanced Materials and Technologies CEZAMAT, Poleczki 19, Warsaw 02-822, Poland ²Chair of Medical Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Noakowskiego 3, Warsaw 00-664, Poland ³Faculty of Materials Science and Engineering, Warsaw University of Technology, Wołoska 141, Warsaw 02-507, Poland

17	Exhaled breath aerosol admittance as a diagnostic parameter for pulmonary disorders Egor A. Andreev^a, Vera A. Shavokshina^a, Vita N. Nikitina^a, Daniil E. Borisov^a, Anastasia I. Alekseeva^a, Darya D. Pozdnyakova^b, Ilya V. Vavilov^b, Irina A. Baranova^b, Stanislav A. Krasovskiy^c, Alexander G. Chuchalin^b, Arkady A. Karyakin^a ^a Chemistry faculty of M.V. Lomonosov Moscow State University, 119991, Moscow, Russia ^b Pirogov Russian National Research Medical University, Hospital Therapy Department 117513, Moscow, Russia ^c Federal State Budgetary Institution “Pulmonology Scientific Research Institute” under Federal Medical and Biological Agency of Russian Federation, 115682, Moscow, Russia.
18	Prussian Blue-NiHCF modified Carbon Nanopipettes: a Methodological Approach for Hydrogen Peroxide Sensing in Thin-Layer Regime Antonino B. Carbonaro¹, Gregorio Laucirica¹, Gastón A. Crespo^{1,2}, Maria Cuartero^{1,2} ¹ UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech, Avda. Andrés Hernández Ros, 1, 30107, Murcia, Spain ² Department of Chemistry, KTH Royal Institute of Technology, Teknikringen 30, SE-114 28 Stockholm, Sweden
19	Improving Antifouling of Protein Biosensing Surface by Surface Optimization and Electrical Pulsing Sumaya Ishtiaq, Maria Ai Kristine Tolentino, Essam Ibrahim, ¹Ying Yang, J. Justin Gooding School of Chemistry, Australian Centre for NanoMedicine, The University of New South Wales, Sydney, NSW, 2052 Australia
20	Trace-Level Electrochemical Detection of Carbendazim in Environmental Samples Using an NH₂-rGO/PProDOT/Au Hybrid Nanocomposite modified SPCE Kavitha Lakavath, Yugender G Kotagiri Indian Institute of Technology Palakkad, Kerala, India, 678623
21	Green biochar-based electrochemical platform for direct antibiotic sensing in biomedical and environmental applications Diana G. Macovei¹, Ariana Grăban¹, Maria Șanta¹, Ancuța Balla², Mihaela Tertiș¹, Radu Oprean¹, Cecilia Cristea¹ ¹Department Pharmacy 1, Analytical Chemistry and Instrumental Analysis, Faculty of Pharmacy, “Iuliu Hațieganu” University of Medicine and Pharmacy, Cluj-Napoca, Romania ²National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania
22	Biomass-Derived Luffa Sponge-Templated Amorphous Carbon/CuO Composites for Chemiresistive Sensing of Triethylamine Sachin T. Navale, María García-Sánchez, Sergio Morales-Torres, Luisa M. Pastrana-Martínez, Francisco J. Maldonado-Hódar Nanomaterials and Sustainable Chemical Technologies (NanoTech), Department of Inorganic Chemistry, Faculty of Sciences, University of Granada, Granada 18071, Spain

	Posters Thursday
1	Single Solid-State Ion Channels as Potentiometric Nanosensors Gergely T. Solymosi*, Gyula Jágerszki*, Levente Illés†, Péter Fürjes†, Róbert E. Gyurcsányi* *Chemical Nanosensors Research Group, Department of Inorganic and Analytical Chemistry, Budapest University of Technology and Economics, Műegyetem rkp. 3, H-1111 Budapest, Hungary †Institute of Technical Physics and Materials Science, HUN-REN Centre for Energy Research, Konkoly Thege Miklós út 29-33, H-1121 Budapest, Hungary
2	Electrochemical Imaging of Ion Transfer Using Charged Nanomaterials on Membranes for Dynamic Ion Behavior Analysis Yejin Son, Justine A. Rothen and Eric Bakker Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, CH-1211, Geneva, Switzerland
3	Development of smart sensing film with non-biofouling properties for potentiometric detection of local pH changes caused by bacterial infections Elena Tomšík^{1,*}, Kristýna Gunár¹, Tobiáš Judl², David Jahoda², Martin Hrubý¹ ¹Institute of Macromolecular Chemistry CAS, Heyrovský Sq. 2, 162 00 Prague 6, Czech Republic ²1st Department of Orthopaedics, 1st Faculty of Medicine, Charles University in Prague, and Motol and Homolka University Hospital, Czech Republic.
4	Novel 3D-Printed Sensor for Real-Time Sweat Rate and Sweat Loss Monitoring Katarzyna Trojanowska¹, Daniel Rojas¹, María Cuartero^{1,2}, Gastón A. Crespo^{1,2} ¹UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech, Avda. Andres Hernandez Ros 1, 30107 Murcia, Spain ²Department of Chemistry, KTH Royal Institute of Technology, Teknikringen 30, SE-114 28 Stockholm, Sweden
5	Precisely deposited carbon materials by spark discharge for solid contact ion-selective electrodes Thanawath Tuntiwongmetee^{a,b,c}, Stéphane Jeanneret^a, Thomas Cherubini^a, Yupu Zhang^a, Apon Numnuam^{b,c}, Suntisak Khumngern^{b,c}, Eric Bakker^a ^a Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, Geneva CH-1211, Switzerland ^b Division of Physical Science, Faculty of Science, Prince of Songkla University, Hat Yai, Songkhla, 90110, Thailand ^c Center of Excellence for Trace Analysis and Biosensor, Prince of Songkla University, Hat Yai, Songkhla 90110, Thailand
6	A Potentiometric Sensor for Sugar Sweetness Using Boronic-Acid-Modified Lipid/Polymer Membranes Xiao Wu*, Kiyoshi Toko** *Graduate School of Engineering, Fukuoka Institute of Technology, 3-30-1 Wajiro-higashi, Higashi-ku, Fukuoka 811-0295, Japan **Food and Health Innovation Center, Nakamura Gakuen University, 5-7-1 Befu, Fukuoka 814-0198, Japan
7	A One-Step Printed Wearable Sweat Rate Sensor for Hydration Monitoring: Validation via Iontophoresis and Cycling Trials Xing Xuan¹, Daniel Rojas¹, Silvia Pérez-Piñero², Vicente Ávila-Gandía², Isabel Maria Diaz Lozano¹, María Cuartero^{1,3,*}, Gastón A. Crespo^{1,3,*} ¹ UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM HiTech, Avda. Andres Hernandez Ros 1, 30107, Murcia, Spain ² Faculty of Medicine, Universidad Católica de Murcia (UCAM), Campus de los Jerónimos, Guadalupe, 30107 Murcia, Spain ³ Department of Chemistry, KTH Royal Institute of Technology, Teknikringen 30, SE-114 28, Stockholm, Sweden
8	Self-Calibrating Ion Sensing Based on Electrochemically Internal Standard Addition Yupu Zhang, Eva P. Caparros Rodriguez, Eric Bakker* Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, CH-1211 Geneva, Switzerland

9	Membrane Integrated Electronic Transistor for Glial Fibrillary Acidic Protein Detection Bayan Almarhoon, Shofarul Wustoni, Radoslaw Gorecki, Adel Hama, Atheer Alqatari, Raik Grünberg, Stefan Arold, Suzana Nunes, Sahika Inal King Abdullah University of Science and Technology (KAUST), Biological and Environmental Science and Engineering Division, Thuwal 23955-6900, Saudi Arabia
10	Combination of xanthine dehydrogenase with a light-sensitive semiconductor electrode G. Göbel¹, G. Steingelb², S. Leimkühler³, M. Eickhoff², F. Lisdat¹ ¹ Biosystems Technology, Institute of Life Sciences and Biomedical Technologies, Technical University Wildau, Hochschulring 1, D-15745 Wildau, Germany ² Institute of Solid State Physics, University of Bremen, Otto-Hahn-Allee 1, D-28359 Bremen, Germany ³ Department of Molecular Enzymology, Institute for Biochemistry and Biology, University of Potsdam, Karl-Liebknecht-Straße 24-25, D-14476 Potsdam, Germany
11	Electrochemical Monitoring of Cancer Biomarkers via Simultaneous Multiplexing with Gold-Coated Magnetic Nanoparticles Yu-Nan Lu, Essam Ibrahim, Chen Hu, Richard D. Tilley, J. Justin Gooding School of Chemistry, Australian Center for Nanomedicine, the University of New South Wales, NSW 2052, Australia
12	Bioinspired Chitosan-Stabilized CuO Nanozymes Exhibiting Laccase-Like Activity for Highly Selective Electrochemical Serotonin Biosensing Lakshmi R Panicker, Yugender G Kotagiri Department of Chemistry, Indian Institute of Technology, Palakkad, Kerala, India
13	Fe₃O₄@Pt@Pd Nanozymes as Multifunctional Platforms for Application in Bioanalysis ^{1,2} Paweł Stańczak, ² Zygmunt Drużyński, ^{1,2} Mariusz Pietrzak ¹ Chair of Medical Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Noakowskiego 3, Warsaw 00-664, Poland ² Department of Medical Diagnostics, Centre for Advanced Materials and Technologies CEZAMAT, Poleczki 19, Warsaw 02-822, Poland
14	Advanced Chemical Sensors for Biodetection Hasandara P. Sudangama¹, E. Dossi¹, G. Kister², I. Chianella^{3,4} ¹ Centre for Defence Engineering and Applied Science, Cranfield University, Defence Academy of United Kingdom, Shrivenham SN6 8LA, UK ² Centre for Energetics Technology, Cranfield University, Defence Academy of United Kingdom, Shrivenham SN6 8LA, UK ³ Austin Davis Biologics, Acorn Industrial Estate, Islip, Northants, NN14 3FD, UK ⁴ School of Engineering and Applied Science, Cranfield University, College Road, Cranfield MK43 0AL, UK
15	Application of the acoustic QCM-D method for detection of bacterial lipopolysaccharides using DNA aptamers and Concanavalin A Marek Tatarko, Tibor Hianik Department of Nuclear Physics and Biophysics, Faculty of Mathematics, Physics and Informatics, Comenius University, Mlynská dolina F1, 842 48 Bratislava, Slovakia
16	Revealing Nanocluster Charges by Titrimetric Permselectivity Change Andrea Nonis*, Alam Noohul†, Thomas Bürgi†, Eric Bakker* *Department of Mineral and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, 1205 Geneva. †Department of Physical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, 1205 Geneva.
17	Applications of electrochemical analysis in the development of new drug delivery systems Alexandra Pusta^{1,2}, Mihaela Tertis¹, Cătălina Ardușădan¹, Irina Bura¹, Cecilia Cristea¹ ¹Department of Analytical Chemistry, Faculty of Pharmacy, Iuliu Hațieganu University of Medicine and Pharmacy, 4 Louis Pasteur, 400349, Cluj-Napoca, Romania ²Department of Medical Devices, Faculty of Pharmacy, Iuliu Hațieganu University of Medicine and Pharmacy, 4 Louis Pasteur, 400349, Cluj-Napoca, Romania

18	Highly Sensitive Hydrogel-Protected Molecularly Imprinted Sensor on a Laser Induced Graphene Electrode for Label-Free Electrochemical Detection of Methotrexate Reshmi Azhiyakathu Sukumaran, Yugender Goud Kotagiri Department of Chemistry, Indian Institute of Technology Palakkad, Palakkad, Kerala, India.
19	Electrocatalytic Oxidation of Protein Amino Acids and Short-Chain Peptides by Prussian Blue and its Analogues Elena V. Suprun, Konstantin V. Bibik Chemistry Faculty of M.V. Lomonosov Moscow State University, Moscow, Russia
20	High Throughput Measurement Platform for Continuous Electrochemical Sensors Alwin R.M. Verschueren, Laura van Smeden, Thijl Boonen, Yawar Abbas, Van Anh Dam, Milou Jaspers, Marcel A.G. Zevenbergen, Jos F.M. Oudenhoven imec/Holst Centre, High Tech Campus 31, 5656 AE Eindhoven, The Netherlands
21	Ultra-stable biosensor transducer based on transition metal hexacyanoferrates Darya V. Vokhmyanina, Vita N. Nikitina, Svetlana I. Gainanova, Arkady A. Karyakin MSU, Faculty of Chemistry, Russia, 119991, Moscow 1, GSP-1, 1-3 Leninskiye Gory
22	Electrochemically Driven Acidification Using 3D PANI Mesh Arrays: A Reagent-Free Approach for Sustainable pH Control Chen Chen¹, Qikun Wei¹, Alexander Wiorek¹, Katarina A. Novčić¹, Ece Kendir Cakmak², Zeynep Cetecioglu Gurol², Gaston A. Crespo^{1,3} and Maria Cuartero^{1,3} ¹Department of Chemistry, KTH Royal Institute of Technology, Teknikringen 30, SE-114 28, Stockholm, Sweden. ²Department of Industrial Biotechnology, KTH Royal Institute of Technology, AlbaNova University Center, SE-114 21, Stockholm, Sweden ³UCAM-SENS, Universidad Católica San Antonio de Murcia, UCAM Hitech, Avda. Andres Hernandez Ros 1, 30107, Murcia, Spain.