

- 1 **Growing hierarchical structures in nanoparticulate polymers of intrinsic microporosity**
B.D.B Aaronson, D. He, M. Carta, R. Malpass-Evans, N. B. McKeown, F. Marken
- 2 **Integrated biosensors for cholesterol**
T. Ahmadraji, A.J. Killard
- 3 **AmBeR: Impedimetric quantification of ammonia in human breath using fully printed conducting polymer nanoparticle sensors**
T. Ahmadraji, A.J. Killard
- 4 **Modified pol(8-anilino-1-naphthalene sulphonic acid) platforms as nanobiosensors for TB treatment drugs**
R.F. Ajayi, A. Jonnas, E.I. Iwuoha
- 5 **Determination of Se(IV) in pharmaceutical products and tea by cathodic stripping voltammetry in the presence of copper ions and diethyl dithiophosphate**
V. Arancibia, E. Stegmann, C. Rojas-Romo, M. Valderrama
- 6 **Multivariate calibration in the analysis of hydroxybenzene isomers**
C. Ariño, A. Dago, M. Aragón, J.M. Díaz-Cruz, M. Esteban
- 7 **Electrochemical co-detection of As(III), Hg(II) and Pb(II) on a bismuth nanoparticle modified exfoliated graphite electrode**
O.A. Arotiba, J.P. Mafa, A.O. Idris, N.W. Maxakato, D. Nkosi, N. Mabuba
- 8 **Importance of ternary monolayer conformation on electrochemical genosensor performance**
J. Aupartova, M. Sánchez-Paniagua López, C.L. Manzanares Palenzuela, B. Martín-Fernández, B. López-Ruiz
- 9 **Treatment by oxygen plasma of platinized microelectrodes improves the detection of reactive oxygen-nitrogen species**
V. Badets, N. Sojic, S. Arbault
- 10 **Chemiresistive sensors based on metal phthalocyanine films and palladium membranes**
Tamara V. Basova, Svetlana I. Dorovskikh, Natalia S. Nikolaeva, Roman G. Parkhomenko, Maxim S. Polyakov, Natalia B. Morozova
- 11 **Pencil it in: exploring the feasibility of hand-made pencil drawn electrochemical sensors**
E. Bernalte, E. Pinilla-Gil, C.E. Banks
- 12 **Glutathione peroxidase based amperometric biosensor for glutathione determination in FIA system**
B. Bóka, O. Hudák, L. Girán
- 13 **L-glutamate determination in food products by glutamate oxidase based amperometric biosensor**
B. Bóka, V. Puizl, N. D. Kerezi, M. Korózs
- 14 **Green NPs based electrodes modified with *Corynascus thermophilus* cellobiose dehydrogenase for third generation lactose biosensor**
Paolo Bollella, Cristina Tortolini, Roland Ludwig, Gabriele Favero, Franco Mazzei, Lo Gorton, Riccarda Antiochia

- 15 **Optimisation and characterisation of polyaniline nanoparticle ink production for sensor fabrication**
N.T. Brannelly, J.P. Hamilton-Shield and A.J. Killard
- 16 **Films based on azulene-thiourea-like for heavy metal ions complexation**
G.-O. Buica, E.-M. Ungureanu, L. Birzan, G.-L. Arnold
- 17 **Interactions of metal nanoparticles with lipid membranes**
Y. Bunga, R. Kataký
- 18 **Simultaneous analysis of significant ovarian cancer biomarkers by flow-cell screen printed electrodes**
M. Cadkova, V. Dvorakova, A. Kovarova, R. Metelka, Z. Bilkova, L. Korecka
- 19 **Gravure-printed Pt-doped WO₃ nanocomposite/graphene nanosheets films for detection of acetone in exhaled breath**
L. Chen, Y. J. Lin, Z. Y. Zeng, Q. H. Chang, W. Z. Shi, Q. Chen, L. Huang
- 20 **Detailed study of a PS1-based photocathode by means of scanning photoelectrochemical microscopy**
F. Conzuelo, F. Zhao, N. Plumeré, V. Hartmann, M.M. Nowaczyk, M. Rögner, W. Schuhmann
- 21 **Amperometric detection of thiol compounds: considerations and some examples**
A. Dago, C. Ariño, N. Serrano, J.M. Díaz-Cruz, M. Esteban
- 22 **Smart tattoo for monitoring skin hydration using ac impedance**
K. De Guzman, A. Morrin
- 23 **Voltammetric determination of selected catecholamine metabolites using carbon paste electrode**
H. Dejmokova, H. Adamkova, J. Zima, J. Berek
- 24 **Analysis of aminothiols with a voltammetric electronic tongue based on screen-printed electrodes**
J.M. Díaz-Cruza, R.H.P. Pedroza, N. Serrano, C. Ariño, M. Esteban
- 25 **Prussian blue screen printed electrode as specific biosensor for K⁺**
S. Dixon, W. Yeh, D. Lee, S. Prabhulkar, C. Lee, V. Trieu
- 26 **A paper-based platform with pencil-drawn dual amperometric detector for the rapid quantification of ortho-diphenols in extravirgin olive oil**
N. Dossi, R. Toniolo, F. Impellizzieri, G. Bontempelli, F. Terzi, E. Piccin
- 27 **Electrochemical detection of β -lactam antibiotics using a boron-doped diamond electrode**
B. Feier, C. Cristea, R. Săndulescu
- 28 **Voltammetric and amperometric determination of homovanilic and vanilmandelic acid at a platinum electrode**
Jan Fischer, Foteini Roumani, Hana Dejmoková, Anastasios Economou, Jiří Berek
- 29 **Electrochemical and fluorescent properties of tetrazines in aqueous solution**
L. Fritea, K. Gorgy, A. Le Goff, L. Galmiche, R. Villalonga, P. Audebert, R. Săndulescu, S. Cosnier
- 30 **Imprinted nanolayers as sensor recognition elements grafted on gold microelectrodes, using a novel, dual function iniferter**
A. Gómez-Caballero, A. V. Goitiandia, D. García-Mutio, R. Gutiérrez-Climente, M.A. Goicolea, R.J. Barrio

- 31 **Voltammetric electronic tongue for quantification of 4-ethylphenol, 4-ethylguaiacol and 4-ethylcatechol mixtures**
A. González-Calabuig, S. Prat-García, M. del Valle
- 32 **Electrochemical immunosensor for 8-isoprostane using carbon-nanohorns modified electrodes**
A. González-Cortés, E. Sánchez-Tirado, P. Yáñez-Sedeño, J.M. Pingarrón
- 33 **Microfabrication of microbial fuel cells: Sensing perspectives**
L. Gonzalez-Macia, J. Winfield, I. Ieropoulos, A.J. Killard
- 34 **Chiral potentiometric sensing using imprinted nanomaterials**
R. Gutiérrez-Climente, A. Gómez-Caballero, D. García-Mutio, M.A. Goicolea, R.J. Barrio
- 35 **Nanogap devices for analytical applications**
Jules L. Hammond, Frank Marken, Pedro Estrela
- 36 **Nanoparticle composites of tungsten oxide and polyaniline for acetone sensing at room temperature**
S.M. Hicks, A.J. Killard
- 37 **Electrochemical characterization of chelidonic acid and its metal complexes**
D. Jadreško, M. Kakša, Z. Popović
- 38 **Potential pulse-assisted formation of thiol monolayers within minutes as a promising technique for fast and controlled electrode surface modification**
D. Jambrec, F. Conzuelo, A. Estrada-Vargas, W. Schuhmann
- 39 **All-solid state ion selective electrodes with porphyrinoids in solid contact layer**
E. Jaworska, M. Naitana, E. Stelmach, R. Paolesse K. Maksymiuk, A. Michalska
- 40 **Temperature compensation by calibration transfer for an AC voltammetric analyzer of electroplating baths**
A. Jaworski, K. Wikiel, H. Wikiel
- 41 **Highly sensitive multi-modal electrochemical platform for microrna detection**
P. Jolly, M.R. Batistuti, A. Miodek, M. Mulato, M.A. Lindsay, P. Estrela
- 42 **Electrochemistry-based determination of pungency level of hot peppers using the voltammetry of microparticles**
I. Novak Jovanović, L. Čížmek, Š. Komorsky – Lovrić
- 43 **Study and optimization of laccase adsorption on carbon nanotubes: towards a long-term stability of enzymatic electrodes**
N. Khalefa, A. Zebdab, J.-P. E. Mennac, T. Gattic, N. Vicentinic. A. Bakria
- 44 **Bile acids: possibilities of anodic oxidation in nonaqueous and mixed media**
J. Klouda, K. Nesměrák and K. Schwarzová-Pecková
- 45 **Fabrication and electrochemical properties of endocardial electrodes of pole tips**
Vasily V. Kokovkin, Svetlana I. Dorovskikh, Evgeniia S. Vikulova, Tamara V. Basova, Natalia B. Morozova
- 46 **Integrated resonator technology for haemostasis and thrombosis**
R. Lakshmanan, V. Efremov, A.J. Killard
- 47 **Simultaneous determination of Pb and Cd in low-cost jewelry using differential pulse voltammetry**
D. Lowinsohn, T. P. Ferreira, R. A de Sousa

- 48 **Electrochemical determination of selected tumor biomarkers using screen-printed electrodes**
A. Makrlíková, E. Ktena, A. Economou, J. Fischer, V. Vyskočil
- 49 **Carbon nanotube based flow-through system for the sensitive and fast detection of electroactive species in water**
D. Mandler, A. Buffa, Y. Erel
- 50 **Disposable electrochemical sensor for rapid biomarkers determination**
E. Martínez-Periñán, M. Revenga-Parra, B. Moreno, F. Pariente, E. Lorenzo
- 51 **Electrochemical microfluidic biosensors for rapid detection of prostate cancer biomarkers**
C. Mercer, B. Otieno, J. F. Rusling, D. Leech
- 52 **The role of functionalization of multi-walled carbon nanotubes on the amperometric determination of molecules of pharmaceutical and forensic interests**
R. A. A. Munoz, J. S. Stefano, R. M. Dornellas, R. H. O. Montes, E. M. Richter
- 53 **Phone operated electronic tuberculosis diagnostics**
Brian Murphy, Emmanuel Iwuoha, Priscilla Baker and Eithne Dempsey
- 54 **Improvement of mesoporous silica thin films adhesion to the surface of glassy carbon electrodes for paraquat detection**
T. Nasir, A. Walcarius, N. Vila, G. Herzog
- 55 **New strategies for the label-free optical detection of oligonucleotides or antibodies with surface plasmon fluorescence spectroscopy**
G. Nöll, Q. Su Nöll
- 56 **UV/vis-spectroelectrochemical investigation of cellobiose dehydrogenases from different ascomycetes**
G. Nöll*, S. Vogt, O. Tiebe, M. Grzegorzec
- 57 **Alternative fitting time-dependence of the agglomeration of silver (nano)particles**
Ladislav Novotný
- 58 **Sensitivity assessment of specific electrodes for purification monitoring of specific industrial water**
L. Novotný, V. Kočanová, L. Dušek, A. Kabutey, R. Petránková
- 59 **Voltammetric determination of arsenic at carbon paste electrode in presence of diethyl dithiophosphate**
C. Núñez, V. Arancibia
- 60 **Voltammetric and spectrophotometric studies on dna interacting with daunorubicin and its novel amidino derivatives**
A. Palinska-Saadi, M. Lukaszewicz, J. Oszczapowicz, M. Lukawska, I. Oszczapowicz, E. Zwierkowska, S. Achmatowicz, M. Maj-Zurawska
- 61 **Synergic effect of naphthalene nanotubes and gold nanoparticles on catalytic performance of bilirubin oxidase for the dioxygen reduction**
J. Pawłowska, V. Grippo, J. F. Biernat, R. Bilewicz
- 62 **Amperometric sandwich immunomagnetic sensor for the quantification of human P53 protein in complex samples**
M. Pedrera, F. J. Manuel de Villena, S. Campuzano, R. Barderas, J. M. Pingarrón

- 63 **New approaches to antimony film screen-printed electrodes using carbon-based nanomaterials substrates**
C. Pérez-Ràfols, N. Serrano, J.M. Díaz-Cruz, C. Ariño, M. Esteban
- 64 **Voltammetric electronic tongue for metal ions determination**
C. Pérez-Ràfols, N. Serrano, J.M. Díaz-Cruz, C. Ariño, M. Esteban
- 65 **Functional polymer brushes for on-chip electrochemical sensors**
V. Pifferi, G. Soliveri, G. Panzarasa, L. Falciola
- 66 **Determination of dopamine using modified electrodes with graphene, gold nanoparticles and gold nanorods by square wave voltammetry**
J. Pizarro, D. Tapia, A. Fajardo, R. Segura
- 67 **Electrochemical detection in HPLC determination of the allergens atranol and chloroatranol in cosmetics**
J. R. Procopio, G. Boeye, M.J. Gismera, M.T. Sevilla
- 68 **An adhesive conducting electrode material based on commercial mesoporous titanium dioxide as a support for horseradish peroxidase for bioelectrochemical applications**
Vanoushe Rahemia, Stanislav Trashina, Vera Meynenb, Karolien De Waela
- 69 **A portable electrochemical method for cocaine determination and detection of its most common adulterants**
E. M. Richter, J. M. Freitas, D. L. O. Ramos, T. R. L. C Paixão, M. H. P. Santana, R. A. A. Munoz
- 70 **Comparative performance of different types of gold based screen printed electrodes for stripping voltammetric determination of mercury**
D. Rodríguez-Gómez, E. Bernalte, E. Pinilla-Gil
- 71 **Simultaneous determination of the main peanut allergens in foods at a disposable amperometric magnetoimmunosensing platform**
V. Ruiz-Valdepeñas Montiel, A. Pellicanò, S. Campuzano, R.M. Torrente-Rodríguez, Á.J. Reviejo, M. Stella Cosio, J.M. Pingarrón
- 72 **Carbon nanotubes functionalized by click chemistry as platforms for antibodies immobilization. Application to the determination of TGF-beta 1 cytokine**
E. Sánchez-Tirado, A. González-Cortés, P. Yáñez-Sedeño, J.M. Pingarrón
- 73 **Electrochemical sensing of bitterness, sweetness and spiciness**
Matteo Scampicchio, Ksenia Morozova, Hana Dejmkova, Andrea Bulbarello
- 74 **Development of an electrochemical sensor for the determination of lead using modified electrodes with gold nanoparticles, aza crown ether and nafion**
R. Segura, A. Placencio, J. Pizarro, A. Fajardo, D. Tapia
- 75 **Voltammetric behavior of muscle relaxant dantrolene sodium on silver solid amalgam and bismuth film electrodes**
R. Šešlovská, P. Martínková, M. Štěpánková
- 76 **Innovative approach for electrochemical detection of biomarkers of multiple sclerosis at platinum electrodes**
C. Sella, W. Bellagha-Chenchah, F. Real-Fernandez, E. Peroni, A.M. Papini, C. Amatore, L. Thouin
- 77 **Detection of deoxinivalenol on a bismuth oxide screen printed electrode**
M.T. Sevilla, R. Maria-Hormigos, M.J. Gismera, J. R. Procopio

- 78 **Voltammetric determination of genotoxic 2-nitrofluorene at a glassy carbon electrode**
Š. Skalová, K. Stávková, V. Vyskočil
- 79 **Voltammetric behavior of folic acid on bismuth film electrode**
M. Štěpánková, R. Šelešovská, J. Chýlková, L. Janíková
- 80 **Engineering of supramolecular DNA/photosystem I electrodes for sustainable photocurrent generation**
K. R. Stieger, D. Ciornii, A. Kölsch, M. Hejazi, H. Lokstein, S. C. Feifel, A. Zouni, F. Lisdat
- 81 **Label-free electrochemical immunosensor for c-reactive protein**
Madasamy Thangamuthu, Christian Santschi, Olivier J.F. Martin
- 82 **Electrochemical detection coupled with functionalized magnetic micro-carriers: a promising alternative for food safety assesment and consumer protection**
R.M. Torrente-Rodríguez, V. Ruiz-Valdepeñas Montiel, S. Campuzano, Á.J. Reviejo, J.M. Pingarrón
- 83 **Dynamic speciation of cadmium in the presence of titanium dioxide nanoparticles in freshwater conditions**
G.Vale, C. Franco, A.M. Brunnert, M.M.C. Santos
- 84 **Reductive determination of 5-nitroquinoline with boron doped diamond electrode**
J. Vosahlová, K. Schwarzová-Pecková
- 85 **Crystal facet control for platinum microwire electrodes**
J. Weber, A. Wain, John M. Mitchels, F. Marken
- 86 **The influence of tyrosine on electrooxidation of A β 4-16-Cu(II) complex**
M. Z. Wiloch, 1,U. E. Wawrzyniak, A. Bonna, W. Bal, S. C. Drew, W. Wróblewski
- 87 **An open circuit potential biosensor array with flow control**
L.C.C. Wong, P. Jolly, P. Estrela
- 88 **Self-assembled aptamer modified redox activated gold nanoparticles for cancer biomarker detection**
P. Zhuravski, P. Jolly, S. Liébana, T. Bertok, G.A. Drago, J. Tkac, P. Estrela