

# Vojtech Adam

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

526  
papers

14,358  
citations

57  
h-index

94  
g-index

590  
ext. papers

16,586  
ext. citations

4.7  
avg, IF

6.63  
L-index

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 526 | Detection of pesticides in food products using paper-based devices by UV-induced fluorescence spectroscopy combined with molecularly imprinted polymers.. <i>Food Chemistry</i> , <b>2022</b> , 380, 132141                                | 8.5  | 2         |
| 525 | Benefits of oxidation and size reduction of graphene/graphene oxide nanoparticles in biosensing application: Classification of graphene/graphene oxide nanoparticles. <i>Sensors and Actuators B: Chemical</i> , <b>2022</b> , 353, 131122 | 8.5  | 3         |
| 524 | UV-Induced fingerprint spectroscopy. <i>Food Chemistry</i> , <b>2022</b> , 368, 130499   | 8.5  | 0         |
| 523 | COVID-19: A challenge for electrochemical biosensors. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2021</b> , 136, 116192   | 14.6 | 35        |
| 522 | Mutual influence of selenium nanoparticles and FGF2-STAB on biocompatible properties of collagen/chitosan 3D scaffolds: in vitro and ex ovo evaluation. <i>Journal of Nanobiotechnology</i> , <b>2021</b> , 19, 103                        | 9.4  | 3         |
| 521 | Active Light-Powered Antibiofilm ZnO Micromotors with Chemically Programmable Properties. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101178   | 15.6 | 22        |
| 520 | Metabolic and Amino Acid Alterations of the Tumor Microenvironment. <i>Current Medicinal Chemistry</i> , <b>2021</b> , 28, 1270-1289   | 4.3  | 5         |
| 519 | Peptide-based electrochemical biosensors utilized for protein detection. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 180, 113087  | 11.8 | 15        |
| 518 | 2D transition metal dichalcogenide nanomaterial-based miRNA biosensors. <i>Applied Materials Today</i> , <b>2021</b> , 23, 101043  | 6.6  | 1         |
| 517 | Silver nanoparticles eliminate <i>Xanthomonas campestris</i> pv. <i>campestris</i> in cabbage seeds more efficiently than hot water treatment. <i>Materials Today Communications</i> , <b>2021</b> , 27, 102284                            | 2.5  | 0         |
| 516 | Efficient Protein Transfection by Swarms of Chemically Powered Plasmonic Virus-Sized Nanorobots. <i>ACS Nano</i> , <b>2021</b> ,   | 16.7 | 4         |
| 515 | UV-induced Zn:Cd/S quantum dots in-situ formed in the presence of thiols for sensitive and selective fluorescence detection of thiols. <i>Scientific Reports</i> , <b>2021</b> , 11, 13806   | 4.9  | 2         |
| 514 | Toward structure-based drug design against the epidermal growth factor receptor (EGFR). <i>Drug Discovery Today</i> , <b>2021</b> , 26, 289-295  | 8.8  | 4         |
| 513 | Graphene oxide as a novel tool for mycotoxin removal. <i>Food Control</i> , <b>2021</b> , 121, 107611  | 6.2  | 5         |
| 512 | The role of hypoxia-inducible factor 1 in tumor immune evasion. <i>Medicinal Research Reviews</i> , <b>2021</b> , 41, 1622-1643  | 14.4 | 44        |
| 511 | Metallothionein dimerization evidenced by QD-based Föster resonance energy transfer and capillary electrophoresis. <i>International Journal of Biological Macromolecules</i> , <b>2021</b> , 170, 53-60                                    | 7.9  |           |
| 510 | Detection of microbial contamination based on uracil-selective synthetic receptors. <i>Talanta</i> , <b>2021</b> , 224, 121813   | 6.2  | 3         |

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|-----|---|------|----|
| 509 | Mass Spectrometry-Based Structural Analysis of Cysteine-Rich Metal-Binding Sites in Proteins with MetaOdyssey R Software. <i>Journal of Proteome Research</i> , <b>2021</b> , 20, 776-785   | 5.6  | 8  |
| 508 | Passive Diffusion vs Active pH-Dependent Encapsulation of Tyrosine Kinase Inhibitors Vandetanib and Lenvatinib into Folate-Targeted Ferritin Delivery System. <i>International Journal of Nanomedicine</i> , <b>2021</b> , 16, 1-14   | 7.3  | 3  |
| 507 | Comparison of Metal Nanoparticles (Au, Ag, Eu, Cd) Used for Immunoanalysis Using LA-ICP-MS Detection. <i>Molecules</i> , <b>2021</b> , 26,  | 4.8  | 4  |
| 506 | Nanomedicine of tyrosine kinase inhibitors. <i>Theranostics</i> , <b>2021</b> , 11, 1546-1567   | 12.1 | 8  |
| 505 | Metallothionein-3 promotes cisplatin chemoresistance remodelling in neuroblastoma. <i>Scientific Reports</i> , <b>2021</b> , 11, 5496   | 4.9  | 2  |
| 504 | The Anti-Proliferative Activity of Coordination Compound-Based ZnO Nanoparticles as a Promising Agent Against Triple Negative Breast Cancer Cells. <i>International Journal of Nanomedicine</i> , <b>2021</b> , 16, 4431-4449 <sup>3</sup>  | 7.2  | 3  |
| 503 | Micellar electrokinetic chromatography as a powerful analytical tool for research on prebiotic chemistry. <i>Microchemical Journal</i> , <b>2021</b> , 167, 106022  | 4.8  | 1  |
| 502 | Paperfluidic devices with a selective molecularly imprinted polymer surface for instrumentation-free distance-based detection of protein biomarkers. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 341, 129999   | 8.5  | 5  |
| 501 | Signal transducer and activator of transcription 3 signaling in tumor immune evasion. <i>Pharmacology &amp; Therapeutics</i> , <b>2021</b> , 230, 107969  | 13.9 | 4  |
| 500 | An Integrated Mass Spectrometry and Molecular Dynamics Simulations Approach Reveals the Spatial Organization Impact of Metal-Binding Sites on the Stability of Metal-Depleted Metallothionein-2 Species. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 16486-16501 | 16.4 | 7  |
| 499 | A rotamer relay information system in the epidermal growth factor receptor-drug complexes reveals clues to new paradigm in protein conformational change. <i>Computational and Structural Biotechnology Journal</i> , <b>2021</b> , 19, 5443-5454   | 6.8  |    |
| 498 | Extending the Applicability of and Chicken Chorioallantoic Membrane Assays to Study Cytostatic Activity in Neuroblastoma Cells. <i>Frontiers in Oncology</i> , <b>2021</b> , 11, 707366   | 5.3  | 2  |
| 497 | In Situ Investigation of the Cytotoxic and Interfacial Characteristics of Titanium When Galvanically Coupled with Magnesium Using Scanning Electrochemical Microscopy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 43587-43596                                      | 9.5  | 1  |
| 496 | A critical comparison of natural enzymes and nanozymes in biosensing and bioassays. <i>Biosensors and Bioelectronics</i> , <b>2021</b> , 192, 113494  | 11.8 | 13 |
| 495 | New insights into mechanisms of copper nanoparticle toxicity in freshwater algae <i>Chlamydomonas reinhardtii</i> : Effects on the pathways of secondary metabolites. <i>Algal Research</i> , <b>2021</b> , 60, 102476  | 5    | 1  |
| 494 | Graphene Oxide as a Nanocarrier for Biochemical Molecules: Current Understanding and Trends. <i>Processes</i> , <b>2020</b> , 8, 1636   | 2.9  | 4  |
| 493 | The Effect of Synthesis Procedure on Hydrogen Peroxidase-Like Catalytic Activity of Iron Oxide Magnetic Particles. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 6756   | 2.6  | 1  |
| 492 | Nanomaterials with active targeting as advanced antimicrobials. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , <b>2020</b> , 12, e1636  | 9.2  | 13 |

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|-----|---|------|----|
| 491 | Soil protein as a potential antimicrobial agent against methicillin -resistant <i>Staphylococcus aureus</i> . <i>Environmental Research</i> , <b>2020</b> , 188, 109320   | 7.9  | 2  |
| 490 | Algal metabolites: An inevitable substitute for antibiotics. <i>Biotechnology Advances</i> , <b>2020</b> , 43, 107571   | 17.8 | 22 |
| 489 | Metallothionein isoforms as double agents - Their roles in carcinogenesis, cancer progression and chemoresistance. <i>Drug Resistance Updates</i> , <b>2020</b> , 52, 100691                                      | 23.2 | 18 |
| 488 | A chemometric-assisted voltammetric analysis of free and Zn(II)-loaded metallothionein-3 states. <i>Bioelectrochemistry</i> , <b>2020</b> , 134, 107501   | 5.6  | 4  |
| 487 | Ten quick tips for homology modeling of high-resolution protein 3D structures. <i>PLoS Computational Biology</i> , <b>2020</b> , 16, e1007449   | 5    | 35 |
| 486 | Zinc phosphate-based nanoparticles as alternatives to zinc oxide in diet of weaned piglets. <i>Journal of Animal Science and Biotechnology</i> , <b>2020</b> , 11, 59   | 6    | 12 |
| 485 | One-pot synthesis of natural amine-modified biocompatible carbon quantum dots with antibacterial activity. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 580, 30-48                             | 9.3  | 18 |
| 484 | Inkjet-printed electrochemically reduced graphene oxide microelectrode as a platform for HT-2 mycotoxin immunoenzymatic biosensing. <i>Biosensors and Bioelectronics</i> , <b>2020</b> , 156, 112109              | 11.8 | 27 |
| 483 | Complex cytotoxicity mechanism of bundles formed from self-organised 1-D anodic TiO nanotubes layers. <i>Journal of Hazardous Materials</i> , <b>2020</b> , 388, 122054   | 12.8 | 12 |
| 482 | The importance of selenium in fruit nutrition <b>2020</b> , 241-254   |      | 6  |
| 481 | Lycorine and UV-C stimulate phenolic secondary metabolites production and miRNA expression in <i>Chlamydomonas reinhardtii</i> . <i>Journal of Hazardous Materials</i> , <b>2020</b> , 391, 122088                | 12.8 | 5  |
| 480 | Fully automated process for histamine detection based on magnetic separation and fluorescence detection. <i>Talanta</i> , <b>2020</b> , 212, 120789   | 6.2  | 9  |
| 479 | Magnetic molecularly imprinted polymers used for selective isolation and detection of <i>Staphylococcus aureus</i> . <i>Food Chemistry</i> , <b>2020</b> , 321, 126673  | 8.5  | 27 |
| 478 | Determination of Trolox Equivalent Antioxidant Capacity in Berries Using Amperometric Tyrosinase Biosensor Based on Multi-Walled Carbon Nanotubes. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 2497 | 2.6  | 4  |
| 477 | Degradation of biogenic amines and in vitro evaluation of ruminal parameters of the ruminal fluid of Charolais sheep. <i>Revista Brasileira De Zootecnia</i> , <b>2020</b> , 49,                                  | 1.2  | 1  |
| 476 | Molecularly imprinted polymers and capillary electrophoresis for sensing phytoestrogens in milk. <i>Journal of Dairy Science</i> , <b>2020</b> , 103, 4941-4950   | 4    | 7  |
| 475 | Bis(2,2'-bipyridil)Copper(II) Chloride Complex: Tyrosinase Biomimetic Catalyst or Redox Mediator?. <i>Materials</i> , <b>2020</b> , 14,   | 3.5  | 3  |
| 474 | Antibacterial activity of AgNPs-TiO nanotubes: influence of different nanoparticle stabilizers.. <i>RSC Advances</i> , <b>2020</b> , 10, 44601-44610  | 3.7  | 2  |

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| 473 | Application of molecularly imprinted polymers as artificial receptors for imaging. <i>Acta Biomaterialia</i> , <b>2020</b> , 101, 444-458  | 10.8 | 27 |
| 472 | Encapsulation of Doxorubicin in Furcellaran/Chitosan Nanocapsules by Layer-by-Layer Technique for Selectively Controlled Drug Delivery. <i>Biomacromolecules</i> , <b>2020</b> , 21, 418-434   | 6.9  | 12 |
| 471 | Cytochrome P450 and flavin-containing monooxygenase enzymes are responsible for differential oxidation of the anti-thyroid-cancer drug vandetanib by human and rat hepatic microsomal systems. <i>Environmental Toxicology and Pharmacology</i> , <b>2020</b> , 74, 103310 | 5.8  | 8  |
| 470 | Synergistic Effect of Chitosan and Selenium Nanoparticles on Biodegradation and Antibacterial Properties of Collagenous Scaffolds Designed for Infected Burn Wounds. <i>Nanomaterials</i> , <b>2020</b> , 10,  | 5.4  | 14 |
| 469 | Epigenetic mechanisms leading to genetic flexibility during abiotic stress responses in microalgae: A review. <i>Algal Research</i> , <b>2020</b> , 50, 101999   | 5    | 1  |
| 468 | Homology modeling in the time of collective and artificial intelligence. <i>Computational and Structural Biotechnology Journal</i> , <b>2020</b> , 18, 3494-3506   | 6.8  | 12 |
| 467 | Ariel's window to the origin of life on early earth?. <i>Experimental Astronomy</i> , <b>2020</b> , 1  | 1.3  | 1  |
| 466 | UV-Induced Nanoparticles-Formation, Properties and Their Potential Role in Origin of Life. <i>Nanomaterials</i> , <b>2020</b> , 10,  | 5.4  | 5  |
| 465 | Metal- and Affinity-Specific Dual Labeling of Cysteine-Rich Proteins for Identification of Metal-Binding Sites. <i>Analytical Chemistry</i> , <b>2020</b> , 92, 12950-12958  | 7.8  | 6  |
| 464 | MALDI MSI Reveals the Spatial Distribution of Protein Markers in Tracheobronchial Lymph Nodes and Lung of Pigs after Respiratory Infection. <i>Molecules</i> , <b>2020</b> , 25,   | 4.8  | 1  |
| 463 | Tuning the surface coating of IONs toward efficient sonochemical tethering and sustained liberation of topoisomerase II poisons. <i>International Journal of Nanomedicine</i> , <b>2019</b> , 14, 7609-7624  | 7.3  | 0  |
| 462 | CdS quantum dots-based immunoassay combined with particle imprinted polymer technology and laser ablation ICP-MS as a versatile tool for protein detection. <i>Scientific Reports</i> , <b>2019</b> , 9, 11840   | 4.9  | 14 |
| 461 | Intelligent and active composite films based on furcellaran: Structural characterization, antioxidant and antimicrobial activities. <i>Food Packaging and Shelf Life</i> , <b>2019</b> , 22, 100405  | 8.2  | 16 |
| 460 | Fabrication of Graphene/Molybdenum Disulfide Composites and Their Usage as Actuators for Electrochemical Sensors and Biosensors. <i>Molecules</i> , <b>2019</b> , 24,  | 4.8  | 12 |
| 459 | Molecularly imprinted polymers coupled to mass spectrometric detection for metallothionein sensing. <i>Talanta</i> , <b>2019</b> , 198, 224-229  | 6.2  | 11 |
| 458 | Prostate cancer-specific hallmarks of amino acids metabolism: Towards a paradigm of precision medicine. <i>Biochimica Et Biophysica Acta: Reviews on Cancer</i> , <b>2019</b> , 1871, 248-258  | 11.2 | 14 |
| 457 | Nanoparticle-drug conjugates treating bacterial infections. <i>Journal of Controlled Release</i> , <b>2019</b> , 307, 166-185  | 11.5 | 33 |
| 456 | Graphene oxide as a tool for antibiotic-resistant gene removal: a review. <i>Environmental Science and Pollution Research</i> , <b>2019</b> , 26, 20148-20163  | 5.1  | 18 |

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| 455 | Rotamer Dynamics: Analysis of Rotamers in Molecular Dynamics Simulations of Proteins. <i>Biophysical Journal</i> , <b>2019</b> , 116, 2062-2072  | 2.9 | 7  |
| 454 | Transcriptomic Landscape of Cisplatin-Resistant Neuroblastoma Cells. <i>Cells</i> , <b>2019</b> , 8,   | 7.9 | 6  |
| 453 | Ellipticine-loaded apoferritin nanocarrier retains DNA adduct-based cytochrome P450-facilitated toxicity in neuroblastoma cells. <i>Toxicology</i> , <b>2019</b> , 419, 40-54  | 4.4 | 11 |
| 452 | Electrochemical Evaluation of Selenium (IV) Removal from Its Aqueous Solutions by Unmodified and Modified Graphene Oxide. <i>Molecules</i> , <b>2019</b> , 24,   | 4.8 | 4  |
| 451 | Zinc phosphate-based nanoparticles as a novel antibacterial agent: study on rats after dietary exposure. <i>Journal of Animal Science and Biotechnology</i> , <b>2019</b> , 10, 17   | 6   | 17 |
| 450 | The strong reaction of simple phenolic acids during oxidative stress caused by nickel, cadmium and copper in the microalga <i>Scenedesmus quadricauda</i> . <i>New Biotechnology</i> , <b>2019</b> , 48, 66-75                                 | 6.4 | 14 |
| 449 | Gold nanoparticles as labels for immunochemical analysis using laser ablation inductively coupled plasma mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , <b>2019</b> , 411, 559-564   | 4.4 | 11 |
| 448 | Prevalent anatase crystalline phase increases the cytotoxicity of biphasic titanium dioxide nanoparticles in mammalian cells. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2019</b> , 182, 110391  | 6   | 3  |
| 447 | Nanoparticle-Plant Interactions: Two-Way Traffic. <i>Small</i> , <b>2019</b> , 15, e1901794  | 11  | 48 |
| 446 | Effect of Graphene Oxide Modification on a DNA Biosensor Developed for the Detection of Methylated DNA Associated with Cancer. <i>Proceedings (mdpi)</i> , <b>2019</b> , 15, 13  | 0.3 |    |
| 445 | Application of the Enzymatic Electrochemical Biosensors for Monitoring Non-Competitive Inhibition of Enzyme Activity by Heavy Metals. <i>Sensors</i> , <b>2019</b> , 19,   | 3.8 | 13 |
| 444 | Identification of Human Enzymes Oxidizing the Anti-Thyroid-Cancer Drug Vandetanib and Explanation of the High Efficiency of Cytochrome P450 3A4 in its Oxidation. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,       | 6.3 | 10 |
| 443 | One-step detection of human papilloma viral infection using quantum dot-nucleotide interaction specificity. <i>Talanta</i> , <b>2019</b> , 205, 120111   | 6.2 | 4  |
| 442 | The effect of different fatty acid sources on wound healing in rats assessed by matrix-assisted-laser-desorption-ionization mass-spectroscopy-imaging. <i>Acta Veterinaria Brno</i> , <b>2019</b> , 88, 443-449                                | 0.8 | 1  |
| 441 | Examination of the Spatial Structure of Pigs Melanoma in Tissue Sections Based on Histology and Mass Spectrometry. <i>IFMBE Proceedings</i> , <b>2019</b> , 255-259  | 0.2 |    |
| 440 | Nanocomposite Furcellaran Films-the Influence of Nanofillers on Functional Properties of Furcellaran Films and Effect on Linseed Oil Preservation. <i>Polymers</i> , <b>2019</b> , 11,   | 4.5 | 22 |
| 439 | Current Trends in Detection of Histamine in Food and Beverages. <i>Journal of Agricultural and Food Chemistry</i> , <b>2019</b> , 67, 773-783  | 5.7 | 30 |
| 438 | Folic acid-mediated re-shuttling of ferritin receptor specificity towards a selective delivery of highly cytotoxic nickel(II) coordination compounds. <i>International Journal of Biological Macromolecules</i> , <b>2019</b> , 126, 1099-1111 | 7.9 | 14 |



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|-----|---|------|-----|
| 437 | Antioxidant, gene expression and metabolomics fingerprint analysis of Arabidopsis thaliana treated by foliar spraying of ZnSe quantum dots and their growth inhibition of Agrobacterium tumefaciens. <i>Journal of Hazardous Materials</i> , <b>2019</b> , 365, 932-941 | 12.8 | 11  |
| 436 | Synthesis and structural characterization of antimicrobial binuclear copper(II) coordination compounds bridged by hydroxy- and/or thiodipropionic acid. <i>Journal of Inorganic Biochemistry</i> , <b>2019</b> , 191, 8-20  | 4.2  | 3   |
| 435 | Sarcosine is a prostate epigenetic modifier that elicits aberrant methylation patterns through the SAME-Dnmts axis. <i>Molecular Oncology</i> , <b>2019</b> , 13, 1002-1017   | 7.9  | 9   |
| 434 | Proteomic Signature of Neuroblastoma Cells UKF-NB-4 Reveals Key Role of Lysosomal Sequestration and the Proteasome Complex in Acquiring Chemoresistance to Cisplatin. <i>Journal of Proteome Research</i> , <b>2019</b> , 18, 1255-1263                                 | 5.6  | 4   |
| 433 | Bioavailability of mercury in contaminated soils assessed by the diffusive gradient in thin film technique in relation to uptake by Miscanthus liganteus. <i>Environmental Toxicology and Chemistry</i> , <b>2019</b> , 38, 321-328                                     | 3.8  | 9   |
| 432 | The effects of 5-azacytidine and cadmium on global 5-methylcytosine content and secondary metabolites in the freshwater microalgae Chlamydomonas reinhardtii and Scenedesmus quadricauda. <i>Journal of Phycology</i> , <b>2019</b> , 55, 329-342                       | 3    | 3   |
| 431 | Mass spectrometric imaging of cysteine rich proteins in human skin. <i>International Journal of Biological Macromolecules</i> , <b>2019</b> , 125, 270-277  | 7.9  | 9   |
| 430 | Tyrosine kinase inhibitors vandetanib, lenvatinib and cabozantinib modulate oxidation of an anticancer agent ellipticine catalyzed by cytochromes P450 in vitro. <i>Neuroendocrinology Letters</i> , <b>2019</b> , 39, 515-524  | 0.3  |     |
| 429 | Europium and terbium Schiff base peptide complexes as potential antimicrobial agents against Salmonella typhimurium and Pseudomonas aeruginosa. <i>Chemical Papers</i> , <b>2018</b> , 72, 1437-1449  | 1.9  | 2   |
| 428 | Zinc, zinc nanoparticles and plants. <i>Journal of Hazardous Materials</i> , <b>2018</b> , 349, 101-110   | 12.8 | 119 |
| 427 | Capillary electrophoresis-driven synthesis of water-soluble CdTe quantum dots in nanoliter scale. <i>Nanotechnology</i> , <b>2018</b> , 29, 165602  | 3.4  | 4   |
| 426 | Short-sweep capillary electrophoresis with a selective zinc fluorescence imaging reagent FluoZin-3 for determination of free and metallothionein-2a-bound Zn ions. <i>Analytica Chimica Acta</i> , <b>2018</b> , 1017, 41-47  | 6.6  | 5   |
| 425 | Detection of ROS Generated by UV-C Irradiation of CdS Quantum Dots and their Effect on Damage to Chromosomal and Plasmid DNA. <i>Electroanalysis</i> , <b>2018</b> , 30, 698-704  | 3    | 9   |
| 424 | Separation of Nucleobases Using High-performance Liquid Chromatography Coupled with Voltammetric Scanning. <i>Electroanalysis</i> , <b>2018</b> , 30, 1865-1869   | 3    |     |
| 423 | Development and characterisation of furcellaran-gelatin films containing SeNPs and AgNPs that have antimicrobial activity. <i>Food Hydrocolloids</i> , <b>2018</b> , 83, 9-16   | 10.6 | 47  |
| 422 | Rapid preparation of self-assembled CdTe quantum dots used for sensing of DNA in urine. <i>New Journal of Chemistry</i> , <b>2018</b> , 42, 6005-6012   | 3.6  | 8   |
| 421 | Identification of Sarcosine as a Target Molecule for the Canine Olfactory Detection of Prostate Carcinoma. <i>Scientific Reports</i> , <b>2018</b> , 8, 4958  | 4.9  | 7   |
| 420 | Immobilization of ligninolytic enzymes from white-rot fungi in cross-linked aggregates. <i>Chemosphere</i> , <b>2018</b> , 202, 694-707   | 8.4  | 59  |

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| 4 <sup>19</sup> | Separation, identification and quantification of carotenoids and chlorophylls in dietary supplements containing <i>Chlorella vulgaris</i> and <i>Spirulina platensis</i> using High Performance Thin Layer Chromatography. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , <b>2018</b> , 148, 108-118 | 3.5  | 60 |
| 4 <sup>18</sup> | An insight into the complex roles of metallothioneins in malignant diseases with emphasis on (sub)isoforms/isoforms and epigenetics phenomena. <i>Pharmacology &amp; Therapeutics</i> , <b>2018</b> , 183, 90-117  | 13.9 | 20 |
| 4 <sup>17</sup> | Effect of arsenic (III and V) on oxidative stress parameters in resistant and susceptible <i>Staphylococcus aureus</i> . <i>Environmental Research</i> , <b>2018</b> , 166, 394-401  | 7.9  | 6  |
| 4 <sup>16</sup> | Improving cytocompatibility of CdTe quantum dots by Schiff-base-coordinated lanthanides surface doping. <i>Journal of Nanobiotechnology</i> , <b>2018</b> , 16, 43   | 9.4  | 6  |
| 4 <sup>15</sup> | Upconversion nanoparticle bioconjugates characterized by capillary electrophoresis. <i>Electrophoresis</i> , <b>2018</b> , 39, 2246-2252   | 3.6  | 1  |
| 4 <sup>14</sup> | Prostate-Specific Membrane Antigen-Targeted Site-Directed Antibody-Conjugated Apoferritin Nanovehicle Favorably Influences In Vivo Side Effects of Doxorubicin. <i>Scientific Reports</i> , <b>2018</b> , 8, 8867  | 4.9  | 23 |
| 4 <sup>13</sup> | Comparative gene expression profiling of human metallothionein-3 up-regulation in neuroblastoma cells and its impact on susceptibility to cisplatin. <i>Oncotarget</i> , <b>2018</b> , 9, 4427-4439  | 3.3  | 8  |
| 4 <sup>12</sup> | Differences in Urinary Amino Acid Patterns in Individuals with Different Types of Urological Tumor Urinary Amino Acid Patterns as Markers of Urological Tumors. <i>In Vivo</i> , <b>2018</b> , 32, 425-429   | 2.3  | 4  |
| 4 <sup>11</sup> | Antioxidant status of rats' blood and liver affected by sodium selenite and selenium nanoparticles. <i>PeerJ</i> , <b>2018</b> , 6, e4862  | 3.1  | 8  |
| 4 <sup>10</sup> | Sarcosine influences apoptosis and growth of prostate cells via cell-type specific regulation of distinct sets of genes. <i>Prostate</i> , <b>2018</b> , 78, 104-112   | 4.2  | 6  |
| 4 <sup>09</sup> | Dual-color quantum dots-based simultaneous detection of HPV-HIV co-infection. <i>Sensors and Actuators B: Chemical</i> , <b>2018</b> , 258, 295-303  | 8.5  | 9  |
| 4 <sup>08</sup> | Magnetic solids in electrochemical analysis. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2018</b> , 98, 104-113  | 14.6 | 34 |
| 4 <sup>07</sup> | Review Electrochemical Sensors and Biosensors for Determination of Mercury Ions. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, B824-B834  | 3.9  | 20 |
| 4 <sup>06</sup> | Real-Time Visualization of Cell Membrane Damage Using Gadolinium-Schiff Base Complex-Doped Quantum Dots. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 35859-35868   | 9.5  | 13 |
| 4 <sup>05</sup> | Novel vancomycin-peptide conjugate as potent antibacterial agent against vancomycin-resistant. <i>Infection and Drug Resistance</i> , <b>2018</b> , 11, 1807-1817  | 4.2  | 16 |
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| 17 | Changes of content of glutathione and metallothionein at plant cells and invertebrates treated by platinum group metals. <i>FASEB Journal</i> , <b>2006</b> , 20, A75   | 0.9 | 4   |
| 16 | Determination of isoflavones in soy bits by fast column high-performance liquid chromatography coupled with UV-visible diode-array detection. <i>Journal of Chromatography A</i> , <b>2005</b> , 1084, 71-9   | 4.5 | 56  |
| 15 | Simultaneous femtomole determination of cysteine, reduced and oxidized glutathione, and phytochelatin in maize ( <i>Zea mays</i> L.) kernels using high-performance liquid chromatography with electrochemical detection. <i>Journal of Chromatography A</i> , <b>2005</b> , 1084, 134-44   | 4.5 | 146 |
| 14 | Evaluation of isoflavone aglycon and glycoside distribution in soy plants and soybeans by fast column high-performance liquid chromatography coupled with a diode-array detector. <i>Journal of Agricultural and Food Chemistry</i> , <b>2005</b> , 53, 5848-52   | 5.7 | 67  |
| 13 | Study of Metallothionein Modified Electrode Surface Behavior in the Presence of Heavy Metal Ions-Biosensor. <i>Electroanalysis</i> , <b>2005</b> , 17, 1649-1657  | 3   | 62  |
| 12 | An analysis of avidin, biotin and their interaction at attomole levels by voltammetric and chromatographic techniques. <i>Analytical and Bioanalytical Chemistry</i> , <b>2005</b> , 381, 1167-78   | 4.4 | 45  |
| 11 | Application of computer imaging, stripping voltammetry and mass spectrometry to study the effect of lead (Pb-EDTA) on the growth and viability of early somatic embryos of Norway spruce ( <i>Picea abies</i> /L./ Karst.). <i>Analytical and Bioanalytical Chemistry</i> , <b>2005</b> , 383, 576-86   | 4.4 | 21  |
| 10 | Elimination Voltammetry with Linear Scan as a New Detection Method for DNA Sensors. <i>Sensors</i> , <b>2005</b> , 5, 448-464   | 3.8 | 32  |
| 9  | Phytochelatin Modified Electrode Surface as a Sensitive Heavy- Metal Ion Biosensor. <i>Sensors</i> , <b>2005</b> , 5, 70-84   | 3.8 | 58  |
| 8  | USING OF ELECTROCHEMICAL METHODS FOR STUDYING OF METALLOTHIONEIN CONTENT IN THE HUMAN BLOOD SERUM OF A PATIENT POISONED BY LEAD AND TREATED BY PLATINUM. <i>Biomedical Papers of the Medical Faculty of the University Palacky&amp;#x0301;, Olomouc, Czechoslovakia</i> , <b>2005</b> , 149, 485-488  | 1.7 | 1   |
| 7  | Esterases as a marker for growth of BY-2 tobacco cells and early somatic embryos of the Norway spruce. <i>Plant Cell, Tissue and Organ Culture</i> , <b>2004</b> , 79, 195-201  | 2.7 | 18  |
| 6  | Determination of isoflavones in soybean food and human urine using liquid chromatography with electrochemical detection. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , <b>2004</b> , 806, 101-11  | 3.2 | 71  |

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| 5 | Simultaneous determination of water- and fat-soluble vitamins in pharmaceutical preparations by high-performance liquid chromatography coupled with diode array detection. <i>Analytica Chimica Acta</i> , <b>2004</b> , 520, 57-67            | 6.6 | 110 |
| 4 | Sub-picomole high-performance liquid chromatographic/mass spectrometric determination of glutathione in the maize ( <i>Zea mays</i> L.) kernels exposed to cadmium. <i>Analytica Chimica Acta</i> , <b>2004</b> , 520, 117-124                 | 6.6 | 39  |
| 3 | Liquid chromatographic/mass spectrometric determination of genistin and daidzin in soybean food samples after accelerated solvent extraction with modified content of extraction cell. <i>Analytica Chimica Acta</i> , <b>2004</b> , 517, 1-11 | 6.6 | 58  |
| 2 | Automation of Methods for Determination of Lipid Peroxidation  |     | 9   |
| 1 | Nanoparticles-Based Carriers for Gene Therapy and Drug Delivery471-492   |     | 1   |