

Petr Babula

List of Publications by Year in descending order

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77
papers

2,499
citations

201385

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214527

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all docs

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docs citations

79
times ranked

3534
citing authors

#	ARTICLE	IF	CITATIONS
1	Nitrogen modulates strontium uptake and toxicity in <i>Hypericum perforatum</i> plants. <i>Journal of Hazardous Materials</i> , 2022, 425, 127894.	6.5	4
2	Involvement of calcium signaling in different types of cell death in cancer. <i>Neoplasma</i> , 2022, 69, 264-273.	0.7	4
3	Slow sulfide donor GYY4137 potentiates effect of paclitaxel on colorectal carcinoma cells. <i>European Journal of Pharmacology</i> , 2022, 922, 174875.	1.7	8
4	Fatty Acid Supplementation Affects Skin Wound Healing in a Rat Model. <i>Nutrients</i> , 2022, 14, 2245.	1.7	4
5	Iron Complexes of Flavonoids-Antioxidant Capacity and Beyond. <i>International Journal of Molecular Sciences</i> , 2021, 22, 646.	1.8	58
6	Novel Mitochondria-targeted Drugs for Cancer Therapy. <i>Mini-Reviews in Medicinal Chemistry</i> , 2021, 21, 816-832.	1.1	12
7	CBD is not converted to THC in rats: A framework interpretation and discussion. <i>European Neuropsychopharmacology</i> , 2021, 50, 135-136.	0.3	3
8	Ni and TiO ₂ nanoparticles cause adhesion and cytoskeletal changes in human osteoblasts. <i>Environmental Science and Pollution Research</i> , 2021, 28, 6018-6029.	2.7	1
9	Glyphosate does not show higher phytotoxicity than cadmium: Cross talk and metabolic changes in common herb. <i>Journal of Hazardous Materials</i> , 2020, 383, 121250.	6.5	13
10	Calcium signaling affects migration and proliferation differently in individual cancer cells due to nifedipine treatment. <i>Biochemical Pharmacology</i> , 2020, 171, 113695.	2.0	15
11	Effect of Ni ion release on the cells in contact with NiTi alloys. <i>Environmental Science and Pollution Research</i> , 2020, 27, 7934-7942.	2.7	10
12	Nitrogen nutrition modulates oxidative stress and metabolite production in <i>Hypericum perforatum</i> . <i>Protoplasma</i> , 2020, 257, 439-447.	1.0	12
13	Calcium has protective impact on cadmium-induced toxicity in lichens. <i>Plant Physiology and Biochemistry</i> , 2020, 156, 591-599.	2.8	13
14	Role of Sodium/Calcium Exchangers in Tumors. <i>Biomolecules</i> , 2020, 10, 1257.	1.8	26
15	Uptake and phytotoxicity of lead are affected by nitrate nutrition and phenolic metabolism. <i>Environmental and Experimental Botany</i> , 2020, 178, 104158.	2.0	6
16	Zinc Oxide Nanoparticles Damage Tobacco BY-2 Cells by Oxidative Stress Followed by Processes of Autophagy and Programmed Cell Death. <i>Nanomaterials</i> , 2020, 10, 1066.	1.9	25
17	Root response in <i>Pisum sativum</i> under naproxen stress: Morpho-anatomical, cytological, and biochemical traits. <i>Chemosphere</i> , 2020, 258, 127411.	4.2	16
18	Long-term impact of cadmium in protonema cultures of <i>Physcomitrella patens</i> . <i>Ecotoxicology and Environmental Safety</i> , 2020, 193, 110333.	2.9	9

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19	Possible use of a <i>Nicotiana tabacum</i> "Bright Yellow 2"™ cell suspension as a model to assess phytotoxicity of pharmaceuticals (diclofenac). <i>Ecotoxicology and Environmental Safety</i> , 2019, 182, 109369.	2.9	8
20	Diclofenac as an environmental threat: Impact on the photosynthetic processes of <i>Lemna minor</i> chloroplasts. <i>Chemosphere</i> , 2019, 224, 892-899.	4.2	28
21	Sodium/calcium exchanger is involved in apoptosis induced by H ₂ S in tumor cells through decreased levels of intracellular pH. <i>Nitric Oxide - Biology and Chemistry</i> , 2019, 87, 1-9.	1.2	24
22	Dandelion is more tolerant to cadmium than to nickel excess. <i>Chemosphere</i> , 2019, 224, 884-891.	4.2	9
23	Sensitivity of physiological and biochemical endpoints in early ontogenetic stages of crops under diclofenac and paracetamol treatments. <i>Environmental Science and Pollution Research</i> , 2019, 26, 3965-3979.	2.7	21
24	Nitric oxide affects cadmium-induced changes in the lichen <i>Ramalina farinacea</i> . <i>Nitric Oxide - Biology and Chemistry</i> , 2019, 83, 11-18.	1.2	30
25	Metabolic responses of terrestrial macrolichens to nickel. <i>Plant Physiology and Biochemistry</i> , 2018, 127, 32-38.	2.8	10
26	Impact of humic acid on the accumulation of metals by microalgae. <i>Environmental Science and Pollution Research</i> , 2018, 25, 10792-10798.	2.7	17
27	Metal-induced oxidative stress in terrestrial macrolichens. <i>Chemosphere</i> , 2018, 203, 402-409.	4.2	25
28	Haloperidol Affects Plasticity of Differentiated NG-108 Cells Through $\text{I}\text{f}1\text{R}/\text{IP}3\text{R}1$ Complex. <i>Cellular and Molecular Neurobiology</i> , 2018, 38, 181-194.	1.7	11
29	Metabolic changes induced by manganese in chamomile. <i>Plant Physiology and Biochemistry</i> , 2018, 133, 127-133.	2.8	8
30	Metabolic responses of <i>Ulva compressa</i> to single and combined heavy metals. <i>Chemosphere</i> , 2018, 213, 384-394.	4.2	18
31	Endogenous H ₂ S producing enzymes are involved in apoptosis induction in clear cell renal cell carcinoma. <i>BMC Cancer</i> , 2018, 18, 591.	1.1	33
32	Zinc oxide nanoparticles phytotoxicity on halophyte from genus <i>Salicornia</i> . <i>Plant Physiology and Biochemistry</i> , 2018, 130, 30-42.	2.8	28
33	Amino Acid Profiling of Zinc Resistant Prostate Cancer Cell Lines: Associations With Cancer Progression. <i>Prostate</i> , 2017, 77, 604-616.	1.2	19
34	Ascorbic acid protects <i>Coccomyxa subellipsoidea</i> against metal toxicity through modulation of ROS/NO balance and metal uptake. <i>Journal of Hazardous Materials</i> , 2017, 339, 200-207.	6.5	49
35	Long-term impact of cadmium shows little damage in <i>Scenedesmus acutiformis</i> cultures. <i>Algal Research</i> , 2017, 25, 184-190.	2.4	22
36	Comparison of vascular and non-vascular aquatic plant as indicators of cadmium toxicity. <i>Chemosphere</i> , 2017, 180, 86-92.	4.2	45

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37	Melatonin-Induced Changes in Cytosolic Calcium Might be Responsible for Apoptosis Induction in Tumour Cells. <i>Cellular Physiology and Biochemistry</i> , 2017, 44, 763-777.	1.1	39
38	Fluorescence microscopy as a tool for visualization of metal-induced oxidative stress in plants. <i>Acta Physiologiae Plantarum</i> , 2017, 39, 1.	1.0	21
39	Establishment of oral squamous cell carcinoma cell line and magnetic bead-based isolation and characterization of its CD90/CD44 subpopulations. <i>Oncotarget</i> , 2017, 8, 66254-66269.	0.8	11
40	Turkish <i>Scorzonera</i> Species Extracts Attenuate Cytokine Secretion via Inhibition of NF- κ B Activation, Showing Anti-Inflammatory Effect in Vitro. <i>Molecules</i> , 2016, 21, 43.	1.7	21
41	Impact of Anions, Cations, and pH on Manganese Accumulation and Toxicity in the Green Alga <i>Scenedesmus quadricauda</i> . <i>Water, Air, and Soil Pollution</i> , 2016, 227, 1.	1.1	6
42	Metallothioneins in Prion- and Amyloid-Related Diseases. <i>Journal of Alzheimer's Disease</i> , 2016, 51, 637-656.	1.2	18
43	Humic acid protects barley against salinity. <i>Acta Physiologiae Plantarum</i> , 2016, 38, 1.	1.0	26
44	Age affects not only metabolome but also metal toxicity in <i>Scenedesmus quadricauda</i> cultures. <i>Journal of Hazardous Materials</i> , 2016, 306, 58-66.	6.5	34
45	Possible ecological risk of two pharmaceuticals diclofenac and paracetamol demonstrated on a model plant <i>Lemna minor</i> . <i>Journal of Hazardous Materials</i> , 2016, 302, 351-361.	6.5	93
46	Oxidative Stress Resistance in Metastatic Prostate Cancer: Renewal by Self-Eating. <i>PLoS ONE</i> , 2015, 10, e0145016.	1.1	24
47	Preparation of Silica Nanoparticles Loaded with Nootropics and Their <i>In Vivo</i> Permeation through Blood-Brain Barrier. <i>BioMed Research International</i> , 2015, 2015, 1-9.	0.9	39
48	Molecular response of 4T1-induced mouse mammary tumours and healthy tissues to zinc treatment. <i>International Journal of Oncology</i> , 2015, 46, 1810-1818.	1.4	12
49	DNA hypomethylation concomitant with the overproduction of ROS induced by naphthoquinone juglone on tobacco BY-2 suspension cells. <i>Environmental and Experimental Botany</i> , 2015, 113, 28-39.	2.0	21
50	Lanthanum rather than cadmium induces oxidative stress and metabolite changes in <i>Hypericum perforatum</i> . <i>Journal of Hazardous Materials</i> , 2015, 286, 334-342.	6.5	55
51	Nitric oxide donor modulates cadmium-induced physiological and metabolic changes in the green alga <i>Coccomyxa subellipsoidea</i> . <i>Algal Research</i> , 2015, 8, 45-52.	2.4	49
52	Chromium speciation and biochemical changes vary in relation to plant ploidy. <i>Journal of Inorganic Biochemistry</i> , 2015, 145, 70-78.	1.5	9
53	Physiology and methodology of chromium toxicity using alga <i>Scenedesmus quadricauda</i> as model object. <i>Chemosphere</i> , 2015, 120, 23-30.	4.2	61
54	Multimodal Holographic Microscopy: Distinction between Apoptosis and Oncosis. <i>PLoS ONE</i> , 2015, 10, e0121674.	1.1	59

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55	Application of BY-2 cell model in evaluating an effect of newly prepared potential calcium channel blockers. <i>Pakistan Journal of Pharmaceutical Sciences</i> , 2015, 28, 1281-93.	0.2	0
56	The Study of Naphthoquinones and Their Complexes with DNA by Using Raman Spectroscopy and Surface Enhanced Raman Spectroscopy: New Insight into Interactions of DNA with Plant Secondary Metabolites. <i>BioMed Research International</i> , 2014, 2014, 1-12.	0.9	11
57	Variation of antioxidants and secondary metabolites in nitrogen-deficient barley plants. <i>Journal of Plant Physiology</i> , 2014, 171, 260-268.	1.6	43
58	Hexavalent chromium damages chamomile plants by alteration of antioxidants and its uptake is prevented by calcium. <i>Journal of Hazardous Materials</i> , 2014, 273, 110-117.	6.5	64
59	Comparison of oxidative stress in four <i>Tillandsia</i> species exposed to cadmium. <i>Plant Physiology and Biochemistry</i> , 2014, 80, 33-40.	2.8	21
60	Oxidative stress, uptake and bioconversion of 5-fluorouracil in algae. <i>Chemosphere</i> , 2014, 100, 116-123.	4.2	20
61	Manganese-induced oxidative stress in two ontogenetic stages of chamomile and amelioration by nitric oxide. <i>Plant Science</i> , 2014, 215-216, 1-10.	1.7	48
62	Phytotoxic action of naphthoquinone juglone demonstrated on lettuce seedling roots. <i>Plant Physiology and Biochemistry</i> , 2014, 84, 78-86.	2.8	38
63	Toxicity of Naturally-Contaminated Manganese Soil to Selected Crops. <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 7287-7296.	2.4	17
64	Cisplatin-resistant prostate cancer model: Differences in antioxidant system, apoptosis and cell cycle. <i>International Journal of Oncology</i> , 2014, 44, 923-933.	1.4	58
65	Unexpected Behavior of Some Nitric Oxide Modulators under Cadmium Excess in Plant Tissue. <i>PLoS ONE</i> , 2014, 9, e91685.	1.1	63
66	Toxicity of aluminium oxide nanoparticles demonstrated using a BY-2 plant cell suspension culture model. <i>Environmental and Experimental Botany</i> , 2013, 91, 1-11.	2.0	119
67	Microfluidic robotic device coupled with electrochemical sensor field for handling of paramagnetic micro-particles as a tool for determination of plant mRNA. <i>Mikrochimica Acta</i> , 2011, 173, 189-197.	2.5	14
68	A New Approach how to Define the Coefficient of Electroactivity of Adenine and Its Twelve Derivatives Using Flow Injection Analysis with Amperometric Detection. <i>Electroanalysis</i> , 2011, 23, 1556-1567.	1.5	6
69	Naphthoquinones as allelochemical triggers of programmed cell death. <i>Environmental and Experimental Botany</i> , 2009, 65, 330-337.	2.0	63
70	Square-Wave Voltammetry as a Tool for Investigation of Doxorubicin Interactions with DNA Isolated from Neuroblastoma Cells. <i>Electroanalysis</i> , 2009, 21, 487-494.	1.5	26
71	Electrochemical Investigation of Strontium-Metallothionein Interactions Analysis of Serum and Urine of Patients with Osteoporosis. <i>Electroanalysis</i> , 2009, 21, 650-656.	1.5	16
72	The role of sulphur in cadmium(II) ions detoxification demonstrated in in vitro model: <i>Dionaea muscipula</i> Ell.. <i>Environmental Chemistry Letters</i> , 2009, 7, 353-361.	8.3	5

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73	Noteworthy Secondary Metabolites Naphthoquinones – their Occurrence, Pharmacological Properties and Analysis. <i>Current Pharmaceutical Analysis</i> , 2009, 5, 47-68.	0.3	205
74	Uncommon heavy metals, metalloids and their plant toxicity: a review. <i>Environmental Chemistry Letters</i> , 2008, 6, 189-213.	8.3	328
75	Amperometric Sensor for Detection of Chloride Ions. <i>Sensors</i> , 2008, 8, 5619-5636.	2.1	30
76	Electrochemical Determination of Low Molecular Mass Thiols Content in Potatoes (<i>Solanum</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 (Phytophthora infestans). <i>Sensors</i> , 2008, 8, 3165-3182.	2.1	33
77	Flow Injection Analysis Coupled with Carbon Electrodes as the Tool for Analysis of Naphthoquinones with Respect to Their Content and Functions in Biological Samples. <i>Sensors</i> , 2006, 6, 1466-1482.	2.1	29