Andrzej Bajguz

List of Publications by Year
in descending order

96	6,114	94433 37	76900 74
papers	citations	h-index	g-index

100	100	100	5274
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effects of brassinosteroids on the plant responses to environmental stresses. Plant Physiology and Biochemistry, 2009, 47, 1-8.	5.8	754
2	Salinity induced physiological and biochemical changes in plants: An omic approach towards salt stress tolerance. Plant Physiology and Biochemistry, 2020, 156, 64-77.	5.8	438
3	The chemical characteristic and distribution of brassinosteroids in plants. Phytochemistry, 2003, 62, 1027-1046.	2.9	377
4	Phytohormones as regulators of heavy metal biosorption and toxicity in green alga Chlorella vulgaris (Chlorophyceae). Plant Physiology and Biochemistry, 2012, 52, 52-65.	5.8	267
5	Uncovering Potential Applications of Cyanobacteria and Algal Metabolites in Biology, Agriculture and Medicine: Current Status and Future Prospects. Frontiers in Microbiology, 2017, 8, 515.	3.5	264
6	Effect of brassinosteroids on nucleic acids and protein content in cultured cells of Chlorella vulgaris. Plant Physiology and Biochemistry, 2000, 38, 209-215.	5.8	197
7	The role of quercetin in plants. Plant Physiology and Biochemistry, 2021, 166, 10-19.	5.8	181
8	Jasmonic acid as modulator of lead toxicity in aquatic plant Wolffia arrhiza (Lemnaceae). Environmental and Experimental Botany, 2009, 66, 507-513.	4.2	178
9	Conjugates of auxin and cytokinin. Phytochemistry, 2009, 70, 957-969.	2.9	167
10	Zinc Oxide Nanoparticles Application Alleviates Arsenic (As) Toxicity in Soybean Plants by Restricting the Uptake of as and Modulating Key Biochemical Attributes, Antioxidant Enzymes, Ascorbate-Glutathione Cycle and Glyoxalase System. Plants, 2020, 9, 825.	3.5	165
11	Metabolism of brassinosteroids in plants. Plant Physiology and Biochemistry, 2007, 45, 95-107.	5.8	157
12	Suppression of Chlorella vulgaris Growth by Cadmium, Lead, and Copper Stress and Its Restoration by Endogenous Brassinolide. Archives of Environmental Contamination and Toxicology, 2011, 60, 406-416.	4.1	146
13	The effect of natural and synthetic auxins on the growth, metabolite content and antioxidant response of green alga Chlorella vulgaris (Trebouxiophyceae). Plant Growth Regulation, 2014, 73, 57-66.	3.4	141
14	An enhancing effect of exogenous brassinolide on the growth and antioxidant activity in Chlorella vulgaris cultures under heavy metals stress. Environmental and Experimental Botany, 2010, 68, 175-179.	4.2	139
15	Salicylic acid in relation to other phytohormones in plant: A study towards physiology and signal transduction under challenging environment. Environmental and Experimental Botany, 2020, 175, 104040.	4.2	119
16	Conjugates of abscisic acid, brassinosteroids, ethylene, gibberellins, and jasmonates. Phytochemistry, 2011, 72, 2097-2112.	2.9	113
17	Brassinosteroids and Response of Plants to Heavy Metals Action. Frontiers in Plant Science, 2016, 7, 629.	3.6	107
18	Brassinosteroid enhanced the level of abscisic acid in Chlorella vulgaris subjected to short-term heat stress. Journal of Plant Physiology, 2009, 166, 882-886.	3.5	103

#	Article	IF	Citations
19	Interactive effect of brassinosteroids and cytokinins on growth, chlorophyll, monosaccharide and protein content in the green alga Chlorella vulgaris (Trebouxiophyceae). Plant Physiology and Biochemistry, 2014, 80, 176-183.	5.8	98
20	Brassinosteroids Regulate Growth in Plants Under Stressful Environments and Crosstalk with Other Potential Phytohormones. Journal of Plant Growth Regulation, 2018, 37, 1007-1024.	5.1	98
21	Synergistic effect of auxins and brassinosteroids on the growth and regulation of metabolite content in the green alga Chlorella vulgaris (Trebouxiophyceae). Plant Physiology and Biochemistry, 2013, 71, 290-297.	5.8	89
22	Regulation of photosynthesis by brassinosteroids in plants. Acta Physiologiae Plantarum, 2018, 40, 1.	2.1	85
23	Blockade of heavy metals accumulation in Chlorella vulgaris cells by 24-epibrassinolide. Plant Physiology and Biochemistry, 2000, 38, 797-801.	5.8	83
24	Comprehensive Overview of the Brassinosteroid Biosynthesis Pathways: Substrates, Products, Inhibitors, and Connections. Frontiers in Plant Science, 2020, 11, 1034.	3.6	72
25	Brassinosteroids and lead as stimulators of phytochelatins synthesis in Chlorella vulgaris. Journal of Plant Physiology, 2002, 159, 321-324.	3.5	66
26	Changes in Growth, Biochemical Components, and Antioxidant Activity in Aquatic Plant Wolffia arrhiza (Lemnaceae) Exposed to Cadmium and Lead. Archives of Environmental Contamination and Toxicology, 2010, 58, 594-604.	4.1	66
27	The effect of lead on the growth, content of primary metabolites, and antioxidant response of green alga Acutodesmus obliquus (Chlorophyceae). Environmental Science and Pollution Research, 2015, 22, 19112-19123.	5.3	62
28	Hydrogen sulfide: A versatile gaseous molecule in plants. Plant Physiology and Biochemistry, 2021, 158, 372-384.	5.8	62
29	The Use of AlgaeChlorella vulgarisImmobilized on Cellexâ€¶ Support for Separation/Preconcentration of Trace Amounts of Platinum and Palladium before GFAAS Determination. Analytical Letters, 2004, 37, 2189-2203.	1.8	59
30	Isolation and characterization of brassinosteroids from algal cultures of Chlorella vulgaris Beijerinck (Trebouxiophyceae). Journal of Plant Physiology, 2009, 166, 1946-1949.	3.5	51
31	Specific Roles of Lipoxygenases in Development and Responses to Stress in Plants. Plants, 2022, 11, 979.	3.5	51
32	Exogenously applied auxins and cytokinins ameliorate lead toxicity by inducing antioxidant defence system in green alga Acutodesmus obliquus. Plant Physiology and Biochemistry, 2018, 132, 535-546.	5.8	49
33	Physiological and Biochemical Role of Brassinosteroids and Their Structure-Activity Relationship in the Green Alga Chlorella vulgaris Beijerinck (Chlorophyceae). Journal of Plant Growth Regulation, 1998, 17, 131-139.	5.1	47
34	Jasmonic acid (JA) and gibberellic acid (GA3) mitigated Cd-toxicity in chickpea plants through restricted cd uptake and oxidative stress management. Scientific Reports, 2021, 11, 19768.	3.3	47
35	Defense interplay of the zinc-oxide nanoparticles and melatonin in alleviating the arsenic stress in soybean (Glycine max L.). Chemosphere, 2022, 288, 132471.	8.2	45
36	Suppression of Wolffia arrhiza growth by brassinazole, an inhibitor of brassinosteroid biosynthesis and its restoration by endogenous 24-epibrassinolide. Phytochemistry, 2005, 66, 1787-1796.	2.9	43

#	Article	IF	Citations
37	Activity of salicylic acid on the growth and biochemism of Chlorella vulgaris Beijerinck. Acta Physiologiae Plantarum, 2002, 24, 45-52.	2.1	40
38	Analysis of Brassinosteroids in Plants. Journal of Plant Growth Regulation, 2017, 36, 1002-1030.	5.1	38
39	Auxins and Cytokinins Regulate Phytohormone Homeostasis and Thiol-Mediated Detoxification in the Green Alga Acutodesmus obliquus Exposed to Lead Stress. Scientific Reports, 2020, 10, 10193.	3.3	38
40	Brassinosteroids â€“ occurence and chemical structures in plants. , 2011, , 1-27.		37
41	Effects of brassinazole, an inhibitor of brassinosteroid biosynthesis, on light- and dark-grown Chlorella vulgaris. Planta, 2004, 218, 869-877.	3.2	36
42	Effect of brassinosteroids on growth and proton extrusion in the alga Chlorella vulgaris Beijerinck (Chlorophyceae). Journal of Plant Growth Regulation, 1996, 15, 153-156.	5.1	35
43	Silicon mediated abiotic stress tolerance in plants using physio-biochemical, omic approach and cross-talk with phytohormones. Plant Physiology and Biochemistry, 2021, 166, 278-289.	5.8	34
44	Growth, Metabolite Profile, Oxidative Status, and Phytohormone Levels in the Green Alga Acutodesmus obliquus Exposed to Exogenous Auxins and Cytokinins. Journal of Plant Growth Regulation, 2018, 37, 1159-1174.	5.1	29
45	Changes in the Growth, Chemical Composition, and Antioxidant Activity in the Aquatic Plant Wolffia arrhiza (L.) Wimm. (Lemnaceae) Exposed to Jasmonic Acid. Journal of Plant Growth Regulation, 2010, 29, 53-62.	5.1	28
46	Functional Diversity of Nectary Structure and Nectar Composition in the Genus Fritillaria (Liliaceae). Frontiers in Plant Science, 2018, 9, 1246.	3.6	26
47	Stimulatory effect of auxins and cytokinins on carotenes, with differential effects on xanthophylls in the green alga Chlorella pyrenoidosa Chick.. Acta Societatis Botanicorum Poloniae, 2014, 66, 41-46.	0.8	26
48	Response and the detoxification strategies of green alga Acutodesmus obliquus (Chlorophyceae) under lead stress. Environmental and Experimental Botany, 2017, 144, 25-36.	4.2	22
49	Studies on the uptake and transformation of gold(<scp>iii</scp>) and gold nanoparticles in a waterâ€“green algae environment using mass spectrometry techniques. Journal of Analytical Atomic Spectrometry, 2019, 34, 1485-1496.	3.0	22
50	Silencing of TaCKX1 Mediates Expression of Other TaCKX Genes to Increase Yield Parameters in Wheat. International Journal of Molecular Sciences, 2020, 21, 4809.	4.1	22
51	Moringa oleifera Extract as a Natural Plant Biostimulant. Journal of Plant Growth Regulation, 2023, 42, 1291-1306.	5.1	22
52	Method development for speciation analysis of nanoparticle and ionic forms of gold in biological samples by high performance liquid chromatography hyphenated to inductively coupled plasma mass spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 142, 1-7.	2.9	21
53	Nitric Oxide: Role in Plants Under Abiotic Stress. , 2014, , 137-159.		20
54	Ecdysteroids in Plants and their Pharmacological Effects in Vertebrates and Humans. Studies in Natural Products Chemistry, 2015, 45, 121-145.	1.8	20

#	Article	IF	Citations
55	Effect of auxin precursors and chemical analogues on the growth and chemical composition in Chlorella pyrenoidosa Chick. Acta Societatis Botanicorum Poloniae, 2014, 63, 279-286.	0.8	20
56	Biochemical activity of di- and polyamines in the green alga Chlorella vulgaris Beijerinck (Chlorophyceae). Acta Societatis Botanicorum Poloniae, 2011, 72, 19-24.	0.8	20
57	Protective role of 20-hydroxyecdysone against lead stress in Chlorella vulgaris cultures. Phytochemistry, 2004, 65, 711-720.	2.9	19
58	24-Epibrassinolide modulates primary metabolites, antioxidants, and phytochelatins in Acutodesmus obliquus exposed to lead stress. Journal of Applied Phycology, 2020, 32, 263-276.	2.8	17
59	Ascorbateâ€“Glutathione Oxidant Scavengers, Metabolome Analysis and Adaptation Mechanisms of Ion Exclusion in Sorghum under Salt Stress. International Journal of Molecular Sciences, 2021, 22, 13249.	4.1	16
60	Effect of ecdysone application on the growth and biochemical changes in Chlorella vulgaris cells. Plant Physiology and Biochemistry, 2001, 39, 707-715.	5.8	15
61	Effects of ecdysteroids on Chlorella vulgaris. Physiologia Plantarum, 2004, 121, 349-357.	5.2	15
62	The effect of 24-epibrassinolide on the green alga Acutodesmus obliquus (Chlorophyceae). Plant Physiology and Biochemistry, 2018, 124, 175-183.	5.8	15
63	Diversity of nectar amino acids in the Fritillaria (Liliaceae) genus: ecological and evolutionary implications. Scientific Reports, 2019, 9, 15209.	3.3	15
64	Occurrence of brassinosteroids and influence of 24-epibrassinolide with brassinazole on their content in the leaves and roots of Hordeum vulgare L. cv. Golden Promise. Planta, 2019, 249, 123-137.	3.2	15
65	Newly-synthesized iron-oxide nanoparticles showed synergetic effect with citric acid for alleviating arsenic phytotoxicity in soybean. Environmental Pollution, 2022, 295, 118693.	7.5	15
66	Hormonal response of Acutodesmus obliquus exposed to combined treatment with 24-epibrassinolide and lead. Journal of Applied Phycology, 2020, 32, 2903-2914.	2.8	14
67	Occurrence and Biosynthesis of Melatonin and Its Exogenous Effect on Plants. Acta Societatis Botanicorum Poloniae, 2020, 89, .	0.8	14
68	Recent Advances in Medicinal Applications of Brassinosteroids, a Group of Plant Hormones. Studies in Natural Products Chemistry, 2013, 40, 33-49.	1.8	12
69	Nectar composition in moth-pollinated Platanthera bifolia and P. chlorantha and its importance for reproductive success. Planta, 2019, 250, 263-279.	3.2	12
70	Intraspecific Variation in Nectar Chemistry and Its Implications for Insect Visitors: The Case of the Medicinal Plant, Polemonium Caeruleum L.. Plants, 2020, 9, 1297.	3.5	12
71	Deceptive strategy in Dactylorhiza orchids: multidirectional evolution of floral chemistry. Annals of Botany, 2019, 123, 1005-1016.	2.9	11
72	Phytocannabinoids Biosynthesis in Angiosperms, Fungi, and Liverworts and Their Versatile Role. Plants, 2021, 10, 1307.	3.5	11

#	Article	IF	Citations
73	Brassinosteroids in Microalgae: Application for Growth Improvement and Protection Against Abiotic Stresses. , 2019, , 45-58.		10
74	TaCKX2.2 Genes Coordinate Expression of Other TaCKX Family Members, Regulate Phytohormone Content and Yield-Related Traits of Wheat. International Journal of Molecular Sciences, 2021, 22, 4142.	4.1	10
75	Brassinolide Enhances the Level of Brassinosteroids, Protein, Pigments, and Monosaccharides in Wolffia arrhiza Treated with Brassinazole. Plants, 2021, 10, 1311.	3.5	10
76	Evaluation of total phenols content, anti-DPPH activity and the content of selected antioxidants in the honeybee drone brood homogenate. Food Chemistry, 2022, 368, 130745.	8.2	10
77	Effect of isomers of hydroxybenzoic acid on the growth and metabolism of Chlorella vulgaris Beijerinck (Chlorophyceae). Acta Societatis Botanicorum Poloniae, 2014, 70, 253-259.	0.8	9
78	Method development for speciation analysis of silver nanoparticles and silver ions in green algae and surface waters at environmentally relevant concentrations using single particle ICP-MS. Journal of Analytical Atomic Spectrometry, 2022, 37, 1208-1222.	3.0	9
79	Gas chromatographic-mass spectrometric investigation of the chemical composition of the aquatic plant Wolffia arrhiza (Lemnaceae). Oceanological and Hydrobiological Studies, 2013, 42, 181-187.	0.7	8
80	The Mineral Profile of Polish Beers by Fast Sequential Multielement HR CS FAAS Analysis and Its Correlation with Total Phenolic Content and Antioxidant Activity by Chemometric Methods. Molecules, 2020, 25, 3402.	3.8	8
81	Unraveling the mechanisms controlling Cd accumulation and Cdâ€tolerance in <scp> Brachiaria decumbens </scp> and <scp> Panicum maximum </scp> under summer and winter weather conditions. Physiologia Plantarum, 2021, 173, 20-44.	5.2	8
82	How Are the Flower Structure and Nectar Composition of the Generalistic Orchid Neottia ovata Adapted to a Wide Range of Pollinators?. International Journal of Molecular Sciences, 2021, 22, 2214.	4.1	8
83	Genotype-Dependent Effect of Silencing of TaCKX1 and TaCKX2 on Phytohormone Crosstalk and Yield-Related Traits in Wheat. International Journal of Molecular Sciences, 2021, 22, 11494.	4.1	8
84	Brassinosteroids Implicated in Growth and Stress Responses. , 2014, , 163-190.		7
85	The Brassinosteroids Family â€“ Structural Diversity of Natural Compounds and Their Precursors. , 2019, , 1-44.		6
86	Effect of Cadmium on the Level of Isoprenoid-Derived Phytohormones in Duckweed Wolffia arrhiza. Journal of Plant Growth Regulation, 2020, 39, 1518-1530.	5.1	5
87	Origin of Brassinosteroids and Their Role in Oxidative Stress in Plants. , 2012, , 169-183.		4
88	Cadmium: A Threatening Agent for Plants. , 2020, , 59-88.		3
89	Fatty Acid Methyl Esters from the Herbal Industry Wastes as a Potential Feedstock for Biodiesel Production. Energies, 2020, 13, 3702.	3.1	3
90	Glucose escalates PSII activity, dynamics between anabolic and catabolic pathways, redox and elemental status to promote the growth of Brassica juncea. South African Journal of Botany, 2021, 137, 68-84.	2.5	3

#	Article	IF	Citations
91	Phytochemical screening of Pulsatilla species and investigation of their biological activities. Acta Societatis Botanicorum Poloniae, 2019, 88, .	0.8	3
92	Nectar Chemistry or Flower Morphologyâ€"What Is More Important for the Reproductive Success of Generalist Orchid Epipactis palustris in Natural and Anthropogenic Populations?. International Journal of Molecular Sciences, 2021, 22, 12164.	4.1	3
93	Editorial: An Update on Brassinosteroids: Homeostasis, Crosstalk, and Adaptation to Environmental Stress. Frontiers in Plant Science, 2021, 12, 673587.	3.6	2
94	Herbal Industry Wastes as Potential Materials for Biofuel Production. Proceedings (mdpi), 2020, 51, 6.	0.2	1
95	The Chemical Characteristic and Distribution of Brassinosteroids in Plants.. ChemInform, 2003, 34, no.	0.0	0
96	Biosynthesis and Molecular Mechanism of Brassinosteroids Action. Plant in Challenging Environments, 2021, , 211-234.	0.4	0