Izabela Michalak

List of Publications by Year
in descending order

124 papers	4,642 citations	117453 34 h-index	118652 62 g-index
134 all docs	134 docs citations	134 times ranked	5247 citing authors

#	Article	IF	Citations
1	State of the Art for the Biosorption Processâ€"a Review. Applied Biochemistry and Biotechnology, 2013, 170, 1389-1416.	1.4	373
2	Algae as production systems of bioactive compounds. Engineering in Life Sciences, 2015, 15, 160-176.	2.0	356
3	COVID-19: animals, veterinary and zoonotic links. Veterinary Quarterly, 2020, 40, 169-182.	3.0	218
4	Algal extracts: Technology and advances. Engineering in Life Sciences, 2014, 14, 581-591.	2.0	195
5	SARS-CoV-2 jumping the species barrier: Zoonotic lessons from SARS, MERS and recent advances to combat this pandemic virus. Travel Medicine and Infectious Disease, 2020, 37, 101830.	1.5	176
6	Effect of the New Plant Growth Biostimulants Based on Amino Acids on Yield and Grain Quality of Winter Wheat. Molecules, 2018, 23, 470.	1.7	165
7	Current Trends on Seaweeds: Looking at Chemical Composition, Phytopharmacology, and Cosmetic Applications. Molecules, 2019, 24, 4182.	1.7	164
8	A review of fabrication polymer scaffolds for biomedical applications using additive manufacturing techniques. Biocybernetics and Biomedical Engineering, 2020, 40, 624-638.	3.3	147
9	SARS-CoV-2 in animals: potential for unknown reservoir hosts and public health implications. Veterinary Quarterly, 2021, 41, 181-201.	3.0	112
10	Nutritional significance of amino acids, vitamins and minerals as nutraceuticals in poultry production and health â€" a comprehensive review. Veterinary Quarterly, 2021, 41, 1-29.	3.0	104
11	Astaxanthin and other Nutrients from Haematococcus pluvialisâ€"Multifunctional Applications. Marine Drugs, 2020, 18, 459.	2.2	96
12	Methods of extraction, physicochemical properties of alginates and their applications in biomedical field â€" a review. Open Chemistry, 2019, 17, 738-762.	1.0	94
13	A Review on the Adaption of Alginate-Gelatin Hydrogels for 3D Cultures and Bioprinting. Materials, 2021, 14, 858.	1.3	93
14	Hair analysis in health assessment. Clinica Chimica Acta, 2013, 419, 139-171.	0.5	83
15	Plant Growth Biostimulants Based on Different Methods of Seaweed Extraction with Water. BioMed Research International, 2016, 2016, 1-11.	0.9	73
16	Evaluation of Supercritical Extracts of Algae as Biostimulants of Plant Growth in Field Trials. Frontiers in Plant Science, 2016, 7, 1591.	1.7	73
17	Potential role of important nutraceuticals in poultry performance and health - A comprehensive review. Research in Veterinary Science, 2021, 137, 9-29.	0.9	71
18	Inter-relationship between elements in human hair: The effect of gender. Ecotoxicology and Environmental Safety, 2010, 73, 2022-2028.	2.9	67

#	Article	IF	Citations
19	Plant Growth Biostimulants, Dietary Feed Supplements and Cosmetics Formulated with Supercritical CO2 Algal Extracts. Molecules, 2017, 22, 66.	1.7	66
20	Effect of macroalgae enriched with microelements on egg quality parameters and mineral content of eggs, eggshell, blood, feathers and droppings. Journal of Animal Physiology and Animal Nutrition, 2011, 95, 374-387.	1.0	61
21	Potential applications of cyanobacteria: Spirulina platensis filtrates and homogenates in agriculture. World Journal of Microbiology and Biotechnology, 2019, 35, 80.	1.7	61
22	Biochar from A Freshwater Macroalga as A Potential Biosorbent for Wastewater Treatment. Water (Switzerland), 2019, 11, 1390.	1.2	58
23	Supercritical fluid extraction of algae enhances levels of biologically active compounds promoting plant growth. European Journal of Phycology, 2016, 51, 243-252.	0.9	57
24	Using ICP-OES and SEM-EDX in biosorption studies. Mikrochimica Acta, 2011, 172, 65-74.	2.5	52
25	A Comprehensive Review on Chemical Profile and Pharmacological Activities ofOcimum basilicum. Food Reviews International, 2023, 39, 119-147.	4.3	50
26	Interactions of metal cations with anionic groups on the cell wall of the macroalga Vaucheria sp.. Engineering in Life Sciences, 2010, 10, 209-217.	2.0	49
27	Valuable natural products from marine and freshwater macroalgae obtained from supercritical fluid extracts. Journal of Applied Phycology, 2018, 30, 591-603.	1.5	48
28	A comprehensive analysis of biosorption of metal ions by macroalgae using ICP-OES, SEM-EDX and FTIR techniques. PLoS ONE, 2018, 13, e0205590.	1.1	46
29	Seaweed extract by microwave assisted extraction as plant growth biostimulant. Open Chemistry, 2015, 13, .	1.0	45
30	A Review: Valorization of Keratinous Materials. Waste and Biomass Valorization, 2011, 2, 317-321.	1.8	44
31	The New Application of Biosorption Properties of Enteromorpha prolifera. Applied Biochemistry and Biotechnology, 2010, 160, 1540-1556.	1.4	42
32	The effect of dietary habits on mineral composition of human scalp hair. Environmental Toxicology and Pharmacology, 2010, 30, 188-194.	2.0	42
33	Concise review of Cladophora spp.: macroalgae of commercial interest. Journal of Applied Phycology, 2021, 33, 133-166.	1.5	41
34	Edible macroalga Ulva prolifera as microelemental feed supplement for livestock: the fundamental assumptions of the production method. World Journal of Microbiology and Biotechnology, 2009, 25, 997-1005.	1.7	38
35	The Application of Biosorption for Production of Micronutrient Fertilizers Based on Waste Biomass. Applied Biochemistry and Biotechnology, 2014, 174, 1376-1392.	1.4	36
36	Functional Coatings for Orthodontic Archwiresâ€"A Review. Materials, 2020, 13, 3257.	1.3	36

#	Article	IF	Citations
37	Antioxidant effects of seaweeds and their active compounds on animal health and production â€“ a review. Veterinary Quarterly, 2022, 42, 48-67.	3.0	35
38	Determination of exposure to lead of subjects from southwestern Poland by human hair analysis. Environmental Monitoring and Assessment, 2014, 186, 2259-2267.	1.3	32
39	The Cladophora glomerata Enriched by Biosorption Process in Cr(III) Improves Viability, and Reduces Oxidative Stress and Apoptosis in Equine Metabolic Syndrome Derived Adipose Mesenchymal Stromal Stem Cells (ASCs) and Their Extracellular Vesicles (MVâ€™s). Marine Drugs, 2017, 15, 385.	2.2	32
40	The application of macroalga Pithophora varia Wille enriched with microelements by biosorption as biological feed supplement for livestock. Journal of the Science of Food and Agriculture, 2008, 88, 1178-1186.	1.7	30
41	Biosorption of Cr(III) by Microalgae and Macroalgae: Equilibrium of the Process. American Journal of Agricultural and Biological Science, 2007, 2, 284-290.	0.9	29
42	Algal compost â€“ toward sustainable fertilization. Reviews in Inorganic Chemistry, 2013, 33, 161-172.	1.8	27
43	Experimental processing of seaweeds for biofuels. Wiley Interdisciplinary Reviews: Energy and Environment, 2018, 7, e288.	1.9	27
44	Seaweeds, Intact and Processed, as a Valuable Component of Poultry Feeds. Journal of Marine Science and Engineering, 2020, 8, 620.	1.2	27
45	The Effect of Botanical Extracts Obtained through Ultrasound-Assisted Extraction on White Head Cabbage (Brassica Oleracea L. Var. Capitata L.) Seedlings Grown under Controlled Conditions. Sustainability, 2020, 12, 1871.	1.6	27
46	Using SEM-EDX and ICP-OES to Investigate the Elemental Composition of Green MacroalgaVaucheria sessilis. Scientific World Journal, The, 2014, 2014, 1-8.	0.8	26
47	Cladophora glomerata methanolic extract decreases oxidative stress and improves viability and mitochondrial potential in equine adipose derived mesenchymal stem cells (ASCs). Biomedicine and Pharmacotherapy, 2019, 111, 6-18.	2.5	26
48	Exposure to metals from orthodontic appliances by hair mineral analysis. Environmental Toxicology and Pharmacology, 2011, 32, 10-16.	2.0	25
49	Supercritical Algal Extracts: A Source of Biologically Active Compounds from Nature. Journal of Chemistry, 2015, 2015, 1-14.	0.9	25
50	The Effect of Plant-Derived Biostimulants on White Head Cabbage Seedlings Grown under Controlled Conditions. Sustainability, 2019, 11, 5317.	1.6	25
51	Bioconversion of Baltic Seaweeds into Organic Compost. Waste and Biomass Valorization, 2017, 8, 1885-1895.	1.8	24
52	The Influence of Spirulina platensis Filtrates on Caco-2 Proliferative Activity and Expression of Apoptosis-Related microRNAs and mRNA. Marine Drugs, 2017, 15, 65.	2.2	24
53	Infectious laryngotracheitis: Etiology, epidemiology, pathobiology, and advances in diagnosis and control â€“ a comprehensive review. Veterinary Quarterly, 2020, 40, 140-161.	3.0	24
54	Germination of soybean seeds exposed to the static/alternating magnetic field and algal extract. Engineering in Life Sciences, 2019, 19, 986-999.	2.0	22

#	Article	IF	Citations
55	Arthrospira (Spirulina) platensis: An effective biosorbent for nutrients. Process Biochemistry, 2020, 88, 129-137.	1.8	22
56	Advances in biosorption of microelements â€“ the starting point for the production of new agrochemicals. Reviews in Inorganic Chemistry, 2015, 35, 115-133.	1.8	21
57	The Application of Homogenate and Filtrate from Baltic Seaweeds in Seedling Growth Tests. Applied Sciences (Switzerland), 2017, 7, 230.	1.3	20
58	Plant extracts - importance in sustainable agriculture. Italian Journal of Agronomy, 2021, 16, .	0.4	20
59	New feed supplement from macroalgae as the dietary source of microelements for pigs. Open Chemistry, 2015, 13, .	1.0	18
60	Biofortification of milk and cheese with microelements by dietary feed bio-preparations. Journal of Food Science and Technology, 2015, 52, 6484-6492.	1.4	17
61	Biochars obtained from freshwater biomassâ€"green macroalga and hornwort as Cr(III) ions sorbents. Biomass Conversion and Biorefinery, 2021, 11, 301-313.	2.9	17
62	Using XRF and ICP-OES in Biosorption Studies. Molecules, 2018, 23, 2076.	1.7	16
63	The effect of metal-containing nanoparticles on the health, performance and production of livestock animals and poultry. Veterinary Quarterly, 2022, 42, 68-94.	3.0	16
64	Field-Scale Evaluation of Botanical Extracts Effect on the Yield, Chemical Composition and Antioxidant Activity of Celeriac (Apium graveolens L. Var. rapaceum). Molecules, 2020, 25, 4212.	1.7	15
65	Multielemental analysis of macroalgae from the Baltic Sea by ICP-OES to monitor environmental pollution and assess their potential uses. International Journal of Environmental Analytical Chemistry, 2009, 89, 583-596.	1.8	14
66	Study of the physicochemical properties of highbush blueberry and wild bilberry fruit in central Bosnia. Turk Tarim Ve Ormancilik Dergisi/Turkish Journal of Agriculture and Forestry, 2020, 44, 156-168.	0.8	14
67	Innovative Seed Treatment with Algae Homogenate. Waste and Biomass Valorization, 2015, 6, 441-448.	1.8	13
68	The Influence of pH of Extracting Water on the Composition of Seaweed Extracts and Their Beneficial Properties onLepidium sativum. BioMed Research International, 2017, 2017, 1-11.	0.9	13
69	Freshwater green macroalgae as a biosorbent of Cr(III) ions. Open Chemistry, 2018, 16, 689-701.	1.0	13
70	The Effect of Macroalgal Extracts and Near Infrared Radiation on Germination of Soybean Seedlings: Preliminary Research Results. Open Chemistry, 2018, 16, 1066-1076.	1.0	13
71	Exposure to nickel by hair mineral analysis. Environmental Toxicology and Pharmacology, 2012, 34, 727-734.	2.0	12
72	Advanced nutritional and stem cells approaches to prevent equine metabolic syndrome. Research in Veterinary Science, 2018, 118, 115-125.	0.9	12

#	Article	IF	Citations
73	The application of seaweeds in environmental biotechnology. Advances in Botanical Research, 2020, 95, 85-111.	0.5	12
74	Recent Development in Bioactive Peptides from Plant and Animal Products and Their Impact on the Human Health. Food Reviews International, 2023, 39, 511-536.	4.3	12
75	Systematic Investigation of the Effects of Seven Plant Extracts on the Physiological Parameters, Yield, and Nutritional Quality of Radish (Raphanus sativus var. sativus). Frontiers in Plant Science, 2021, 12, 651152.	1.7	12
76	Assessment of the Exposure to Elements from Silver Jewelry by Hair Mineral Analysis. Archives of Environmental Contamination and Toxicology, 2011, 61, 512-520.	2.1	11
77	Relation between mineral composition of human hair and common illnesses. Science Bulletin, 2012, 57, 3460-3465.	1.7	11
78	Characterisation of biological properties of coâ€composted Baltic seaweeds in germination tests. Engineering in Life Sciences, 2017, 17, 153-164.	2.0	11
79	Cladophora glomerata enriched by biosorption with Mn(II) ions alleviates lipopolysaccharideâ€induced osteomyelitisâ€like model in MC3T3â€E1, and 4B12 osteoclastogenesis. Journal of Cellular and Molecular Medicine, 2020, 24, 7282-7300.	1.6	11
80	Valorization of Cladophora glomerata Biomass and Obtained Bioproducts into Biostimulants of Plant Growth and as Sorbents (Biosorbents) of Metal Ions. Molecules, 2021, 26, 6917.	1.7	11
81	Chemical Characterization of Enteromorpha prolifera Extract Obtained by Enzyme-Assisted Extraction and Its Influence on the Metabolic Activity of Caco-2. International Journal of Molecular Sciences, 2017, 18, 479.	1.8	10
82	Biofortification of hensâ€™ eggs with microelements by innovative bioâ€based dietary supplement. Journal of Animal Physiology and Animal Nutrition, 2019, 103, 485-492.	1.0	10
83	Prospects of geothermal water Use in cultivation of Spirulina. Open Chemistry, 2015, 13, .	1.0	9
84	Biomass Enriched with Minerals via Biosorption Process as a Potential Ingredient of Horse Feed. Waste and Biomass Valorization, 2019, 10, 3403-3418.	1.8	9
85	Cladophora glomerata methanolic extract promotes chondrogenic gene expression and cartilage phenotype differentiation in equine adipose-derived mesenchymal stromal stem cells affected by metabolic syndrome. Stem Cell Research and Therapy, 2019, 10, 392.	2.4	9
86	Effect of Botanical Extracts on the Growth and Nutritional Quality of Field-Grown White Head Cabbage (Brassica oleracea var. capitata). Molecules, 2021, 26, 1992.	1.7	9
87	Mapping chemical elements on the surface of orthodontic appliance by SEM-EDX. Medical Science Monitor, 2014, 20, 860-865.	0.5	9
88	Co-Composting of Algae and Effect of the Compost on Germination and Growth of Lepidium sativum. Polish Journal of Environmental Studies, 2016, 25, 1107-1115.	0.6	9
89	The role of nanoparticles in sustainable agriculture. , 2022, , 225-278.		8
90	Tomato green waste biochars as sustainable trivalent chromium sorbents. Environmental Science and Pollution Research, 2021, 28, 24245-24255.	2.7	7

#	Article	IF	Citations
91	Enzyme-assisted extraction of red seaweed Solieria chordalis (C.Agardh) J. Agardh 1842â€"the starting point for the production of biostimulants of plant growth and biosorbents of metal ions. Biomass Conversion and Biorefinery, 2024, 14, 1621-1635.	2.9	7
92	Application of Biosorption in the Production of Innovative Feed Supplements: A Novel Method. Adsorption Science and Technology, 2013, 31, 421-431.	1.5	6
93	Seaweeds As a Component of the Human Diet. , 2018, , 57-71.		6
94	Effect of Marine Macroalga Enteromorpha sp. Enriched with Zn(II) and Cu(II) ions on the Digestibility, Meat Quality and Carcass Characteristics of Growing Pigs. Journal of Marine Science and Engineering, 2020, 8, 347.	1.2	6
95	Biofortification of Hens Eggs with Polyunsaturated Fatty Acids by New Dietary Formulation: Supercritical Microalgal Extract. Animals, 2020, 10, 499.	1.0	6
96	Soybean Germination Response to Algae Extract and a Static Magnetic Field Treatment. Applied Sciences (Switzerland), 2021, 11, 8597.	1.3	6
97	Extracts of seaweeds used as biostimulants on land and sea cropsâ€"an efficacious, phyconomic, circular blue economy: with special reference to Ascophyllum (brown) and Kappaphycus (red) seaweeds. , 2021, , 263-288.		6
98	Influence of the Static Magnetic Field and Algal Extract on the Germination of Soybean Seeds. Open Chemistry, 2019, 17, 516-525.	1.0	5
99	Role of clay in detoxification of aflatoxin B1 in growing Japanese quail with reference to gender. Veterinary Research Communications, 2021, 45, 363-371.	0.6	5
100	The Possibilities of the Application of Feed Additives from Macroalgae in Sustainable Mineral Animal Feeding. American Journal of Applied Sciences, 2009, 6, 1458-1466.	0.1	5
101	Biocides. , 2014, , 461-463.		4
102	Seaweed resources of Poland. Botanica Marina, 2020, 63, 73-84.	0.6	4
103	Investigation on the potential sorbents â€" Aluminosilicate, microalga and grass hay as feed additives. Environmental Technology and Innovation, 2021, 24, 101816.	3.0	4
104	New Role of Sulfuric Acid In Production of Multicomponent Fertilizers From Renewable Sources. American Journal of Agricultural and Biological Science, 2007, 2, 241-247.	0.9	4
105	Introduction: Toward Algae-Based Products. , 2018, , 1-5.		3
106	The Haematococcus pluvialis extract enriched by bioaccumulation process with Mg(II) ions improves insulin resistance in equine adipose-derived stromal cells (EqASCs). Biomedicine and Pharmacotherapy, 2019, 116, 108972.	2.5	3
107	Cladophora glomerata Extract and Static Magnetic Field Influences the Germination of Seeds and Multielemental Composition of Carrot. Ecological Chemistry and Engineering S, 2020, 27, 629-641.	0.3	3
108	Impact of Freshwater Macroalga (Cladophora glomerata) Extract on the Yield and Morphological Responses of Glycine max (L.) Merr.. Agriculture (Switzerland), 2022, 12, 685.	1.4	3

#	Article	IF	Citations
109	Effects of anions on the biosorption of microelement cations by macroalga Enteromorpha prolifera in single- and multi-metal systems. Science Bulletin, 2012, 57, 736-743.	1.7	2
110	The effect of increase in concentration of Na(I) ions on biosorption of Cr(III) ions by Enteromorpha prolifera and Spirulina sp. Open Chemistry, 2013, 11, 313-319.	1.0	2
111	Effluent Biomonitoring. , 2014, , 312-315.		2
112	Algae as a Promising Feed Additive for Horses. , 2019, , 128-142.		2
113	Look Into My Onco-forest - Review of Plant Natural Products with Anticancer Activity. Current Topics in Medicinal Chemistry, 2022, 22, 922-938.	1.0	2
114	Shrinkage of Alginate Hydrogel Bioinks Potentially Used in 3D Bioprinting Technology. Key Engineering Materials, 0, 885, 39-45.	0.4	1
115	Radiological imaging and orthodontic treatment in the case of growing patients after oncological treatment: Case reports. Dental and Medical Problems, 2019, 56, 209-215.	0.7	1
116	Seaweed extracts as plant biostimulants in agriculture. Burleigh Dodds Series in Agricultural Science, 2020, , 77-124.	0.1	1
117	Novel trends in crop bioprotection. , 2022, , 185-224.		1
118	Algal compost â€“ toward sustainable fertilization. Reviews in Inorganic Chemistry, 2014, 34, 281.	1.8	0
119	Enhancing plant pigments using natural biostimulants. , 2021, , 165-196.		0
120	Potential Advanced Drug Delivery Systems Based on Hydrogels in 3D Printing Technology for Cancer Treatment. Materials Forming, Machining and Tribology, 2021, , 323-348.	0.7	0
121	Effect of Fucus extract and biomass enriched with Cu(II) and Zn(II) ions on the growth of garden cress (Lepidium sativum) under laboratory conditions. Italian Journal of Agronomy, 2021, 16, .	0.4	0
122	Domuz Beslenmesinde Biyoaktif Yem KatkÄ± Maddelerinin Ã–nemi ve Ã–zellikle Besinlerin Sindirimi Ãœzerine Etkisi. Kafkas Universitesi Veteriner Fakultesi Dergisi, 2015, , .	0.0	0
123	Comparison of antimicrobial activity of aqueous and organic extracts from Baltic algae PorÃ³wnanie mikrobiologicznych wÅ‚aÅ›ciwoÅ›ci wodnych i organicznych ekstraktÃ³w z alg baÅ‚tyckich. Przemysl Chemiczny, 2015, 1, 218-220.	0.0	0
124	Advances in food fortification with essential minerals. , 2017, , 97-118.		0