

K Vijayaraghavan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11225110/publications.pdf>

Version: 2024-02-01

97
papers

8,698
citations

38720

50
h-index

42364

92
g-index

97
all docs

97
docs citations

97
times ranked

8256
citing authors

#	ARTICLE	IF	CITATIONS
1	Bacterial biosorbents and biosorption. <i>Biotechnology Advances</i> , 2008, 26, 266-291.	6.0	1,466
2	Biosorption of nickel(II) ions onto <i>Sargassum wightii</i> : Application of two-parameter and three-parameter isotherm models. <i>Journal of Hazardous Materials</i> , 2006, 133, 304-308.	6.5	729
3	Green roofs: A critical review on the role of components, benefits, limitations and trends. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 57, 740-752.	8.2	393
4	Biosorption of copper(II) and cobalt(II) from aqueous solutions by crab shell particles. <i>Bioresource Technology</i> , 2006, 97, 1411-1419.	4.8	289
5	Plant-mediated biosynthesis of metallic nanoparticles: A review of literature, factors affecting synthesis, characterization techniques and applications. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 4866-4883.	3.3	270
6	Is biosorption suitable for decontamination of metal-bearing wastewaters? A critical review on the state-of-the-art of biosorption processes and future directions. <i>Journal of Environmental Management</i> , 2015, 160, 283-296.	3.8	201
7	Batch and column studies on biosorption of acid dyes on fresh water macro alga <i>Azolla filiculoides</i> . <i>Journal of Hazardous Materials</i> , 2005, 125, 121-129.	6.5	185
8	Removal of nickel(II) ions from aqueous solution using crab shell particles in a packed bed up-flow column. <i>Journal of Hazardous Materials</i> , 2004, 113, 223-230.	6.5	179
9	Biosorption of C.I. Reactive Black 5 from aqueous solution using acid-treated biomass of brown seaweed <i>Laminaria</i> sp.. <i>Dyes and Pigments</i> , 2008, 76, 726-732.	2.0	170
10	The ecotoxicity of ionic liquids and traditional organic solvents on microalga <i>Selenastrum capricornutum</i> . <i>Ecotoxicology and Environmental Safety</i> , 2008, 71, 166-171.	2.9	170
11	Biosorption of cobalt(II) and nickel(II) by seaweeds: batch and column studies. <i>Separation and Purification Technology</i> , 2005, 44, 53-59.	3.9	164
12	Starch/polyaniline nanocomposite for enhanced removal of reactive dyes from synthetic effluent. <i>Carbohydrate Polymers</i> , 2012, 90, 1437-1444.	5.1	161
13	A field study to evaluate runoff quality from green roofs. <i>Water Research</i> , 2012, 46, 1337-1345.	5.3	157
14	Batch and column removal of copper from aqueous solution using a brown marine alga <i>Turbinaria ornata</i> . <i>Chemical Engineering Journal</i> , 2005, 106, 177-184.	6.6	153
15	Utilization of fermentation waste (<i>Corynebacterium glutamicum</i>) for biosorption of Reactive Black 5 from aqueous solution. <i>Journal of Hazardous Materials</i> , 2007, 141, 45-52.	6.5	153
16	Bioreduction of trivalent aurum to nano-crystalline gold particles by active and inactive cells and cell-free extract of <i>Aspergillus oryzae</i> var. <i>viridis</i> . <i>Journal of Hazardous Materials</i> , 2010, 177, 539-545.	6.5	150
17	Biosorption of copper, cobalt and nickel by marine green alga <i>Ulva reticulata</i> in a packed column. <i>Chemosphere</i> , 2005, 60, 419-426.	4.2	144
18	Biosorption of Lanthanum, Cerium, Europium, and Ytterbium by a Brown Marine Alga, <i>Turbinaria Conoides</i> . <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 4405-4411.	1.8	122

#	ARTICLE	IF	CITATIONS
19	Potential of <i>Sargassum wightii</i> biomass for copper(II) removal from aqueous solutions: Application of different mathematical models to batch and continuous biosorption data. <i>Journal of Hazardous Materials</i> , 2006, 137, 558-564.	6.5	120
20	Removal of Cr(VI) Ions by Spent Tea and Coffee Dusts: Reduction to Cr(III) and Biosorption. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 2113-2117.	1.8	115
21	Seaweeds for the remediation of wastewaters contaminated with zinc(II) ions. <i>Journal of Hazardous Materials</i> , 2006, 136, 791-799.	6.5	114
22	Biosorption of Acid Blue 15 using fresh water macroalga <i>Azolla filiculoides</i> : Batch and column studies. <i>Dyes and Pigments</i> , 2006, 71, 77-82.	2.0	110
23	Biosynthesis of Au(0) from Au(III) via biosorption and bioreduction using brown marine alga <i>Turbinaria conoides</i> . <i>Chemical Engineering Journal</i> , 2011, 167, 223-227.	6.6	108
24	Biosorption of methylene blue from aqueous solution using free and polysulfone-immobilized <i>Corynebacterium glutamicum</i> : Batch and column studies. <i>Bioresource Technology</i> , 2008, 99, 2864-2871.	4.8	107
25	Single and binary biosorption of cerium and europium onto crab shell particles. <i>Chemical Engineering Journal</i> , 2010, 163, 337-343.	6.6	92
26	Competitive adsorption of Reactive Orange 16 and Reactive Brilliant Blue R on polyaniline/bacterial extracellular polysaccharides composite—A novel eco-friendly polymer. <i>Journal of Hazardous Materials</i> , 2012, 241-242, 110-117.	6.5	87
27	Valorisation of post-sorption materials: Opportunities, strategies, and challenges. <i>Advances in Colloid and Interface Science</i> , 2017, 242, 35-58.	7.0	85
28	Design and development of green roof substrate to improve runoff water quality: Plant growth experiments and adsorption. <i>Water Research</i> , 2014, 63, 94-101.	5.3	84
29	Biosorption characteristics of crab shell particles for the removal of manganese(II) and zinc(II) from aqueous solutions. <i>Desalination</i> , 2011, 266, 195-200.	4.0	81
30	Equilibrium Isotherm Studies for the Multicomponent Adsorption of Lead, Zinc, and Cadmium onto Indonesian Peat. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 2093-2099.	1.8	78
31	Application of <i>Sargassum</i> biomass to remove heavy metal ions from synthetic multi-metal solutions and urban storm water runoff. <i>Journal of Hazardous Materials</i> , 2009, 164, 1019-1023.	6.5	77
32	Recent advancements in biochar preparation, feedstocks, modification, characterization and future applications. <i>Environmental Technology Reviews</i> , 2019, 8, 47-64.	2.1	75
33	Chemical Modification and Immobilization of <i>Corynebacterium glutamicum</i> for Biosorption of Reactive Black 5 from Aqueous Solution. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 608-617.	1.8	71
34	Application of <i>Azolla rongpong</i> on biosorption of acid red 88, acid green 3, acid orange 7 and acid blue 15 from synthetic solutions. <i>Chemical Engineering Journal</i> , 2006, 122, 55-63.	6.6	67
35	Treatment of complex Remazol dye effluent using sawdust- and coal-based activated carbons. <i>Journal of Hazardous Materials</i> , 2009, 167, 790-796.	6.5	67
36	Can green roof act as a sink for contaminants? A methodological study to evaluate runoff quality from green roofs. <i>Environmental Pollution</i> , 2014, 194, 121-129.	3.7	67

#	ARTICLE	IF	CITATIONS
37	Surface modification of <i>Corynebacterium glutamicum</i> for enhanced Reactive Red 4 biosorption. <i>Bioresource Technology</i> , 2009, 100, 1463-1466.	4.8	65
38	Chemical modification of <i>Corynebacterium glutamicum</i> to improve methylene blue biosorption. <i>Chemical Engineering Journal</i> , 2008, 145, 1-6.	6.6	63
39	Competition of Reactive red 4, Reactive orange 16 and Basic blue 3 during biosorption of Reactive blue 4 by polysulfone-immobilized <i>Corynebacterium glutamicum</i> . <i>Journal of Hazardous Materials</i> , 2008, 153, 478-486.	6.5	63
40	Green Recovery of Gold through Biosorption, Biocrystallization, and Pyro-Crystallization. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 7129-7135.	1.8	63
41	Application of seaweeds for the removal of lead from aqueous solution. <i>Biochemical Engineering Journal</i> , 2007, 33, 211-216.	1.8	61
42	Investigation on removal of malachite green using EM based compost as adsorbent. <i>Ecotoxicology and Environmental Safety</i> , 2015, 118, 177-182.	2.9	61
43	Interaction of rare earth elements with a brown marine alga in multi-component solutions. <i>Desalination</i> , 2011, 265, 54-59.	4.0	60
44	Experimental studies on removal of microcystin-LR by peat. <i>Journal of Hazardous Materials</i> , 2010, 184, 417-424.	6.5	58
45	Treatment of nickel containing electroplating effluents with <i>Sargassum wightii</i> biomass. <i>Process Biochemistry</i> , 2006, 41, 853-859.	1.8	57
46	Application of Two-and Three-Parameter Isotherm Models: Biosorption of Acid Red 88 onto <i>Azolla microphylla</i> . <i>Bioremediation Journal</i> , 2006, 10, 37-44.	1.0	55
47	A phosphorus-enriched biochar fertilizer from bio-fermentation waste: A potential alternative source for phosphorus fertilizers. <i>Journal of Cleaner Production</i> , 2018, 196, 163-171.	4.6	55
48	Biosorption of Reactive black 5 by <i>Corynebacterium glutamicum</i> biomass immobilized in alginate and polysulfone matrices. <i>Chemosphere</i> , 2007, 68, 1838-1845.	4.2	54
49	A new approach to study the decolorization of complex reactive dye bath effluent by biosorption technique. <i>Bioresource Technology</i> , 2008, 99, 5778-5785.	4.8	54
50	Polysulfone-immobilized <i>Corynebacterium glutamicum</i> : A biosorbent for Reactive black 5 from aqueous solution in an up-flow packed column. <i>Chemical Engineering Journal</i> , 2008, 145, 44-49.	6.6	51
51	Removal and recovery of copper from aqueous solution by eggshell in a packed column. <i>Minerals Engineering</i> , 2005, 18, 545-547.	1.8	49
52	Application of bacterial extracellular polysaccharides/polyaniline composite for the treatment of Remazol effluent. <i>Carbohydrate Polymers</i> , 2012, 88, 1002-1008.	5.1	49
53	Crab shell-based biosorption technology for the treatment of nickel-bearing electroplating industrial effluents. <i>Journal of Hazardous Materials</i> , 2005, 119, 251-254.	6.5	47
54	Synthesis, characterization and application of cellulose/polyaniline nanocomposite for the treatment of simulated textile effluent. <i>Cellulose</i> , 2013, 20, 1153-1166.	2.4	47

#	ARTICLE	IF	CITATIONS
55	Improving the quality of runoff from green roofs through synergistic biosorption and phytoremediation techniques: A review. <i>Sustainable Cities and Society</i> , 2019, 46, 101381.	5.1	35
56	Pilot-scale evaluation of green roofs with <i>Sargassum</i> biomass as an additive to improve runoff quality. <i>Ecological Engineering</i> , 2015, 75, 70-78.	1.6	34
57	Assessment of samarium biosorption from aqueous solution by brown macroalga <i>Turbinaria conoides</i> . <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 74, 113-120.	2.7	34
58	Continuous Sorption of Copper and Cobalt By Crab Shell Particles in a Packed Column. <i>Environmental Technology (United Kingdom)</i> , 2005, 26, 267-276.	1.2	32
59	An examination of the uptake of lanthanum from aqueous solution by crab shell particles. <i>Chemical Engineering Journal</i> , 2009, 152, 116-121.	6.6	31
60	Application of seaweed as substrate additive in green roofs: Enhancement of water retention and sorption capacity. <i>Landscape and Urban Planning</i> , 2015, 143, 25-32.	3.4	31
61	The importance of mineral ingredients in biochar production, properties and applications. <i>Critical Reviews in Environmental Science and Technology</i> , 2021, 51, 113-139.	6.6	30
62	Mono- and multi-component biosorption of lead(II), cadmium(II), copper(II) and nickel(II) ions onto coco-peat biomass. <i>Separation Science and Technology</i> , 2016, 51, 2725-2733.	1.3	29
63	Entrapment of brown seaweeds (<i>Turbinaria conoides</i> and <i>Sargassum wightii</i>) in polysulfone matrices for the removal of praseodymium ions from aqueous solutions. <i>Journal of Rare Earths</i> , 2015, 33, 1196-1203.	2.5	28
64	Immobilized citric acid-treated bacterial biosorbents for the removal of cationic pollutants. <i>Chemical Engineering Journal</i> , 2010, 162, 662-668.	6.6	27
65	Biosorption of Cr(VI) using a novel microalga <i>Rhizoclonium hookeri</i> : equilibrium, kinetics and thermodynamic studies. <i>Desalination and Water Treatment</i> , 2015, 56, 194-203.	1.0	27
66	Porogen effect on characteristics of banana pith carbon and the sorption of dichlorophenols. <i>Journal of Colloid and Interface Science</i> , 2008, 320, 22-29.	5.0	26
67	Evaluation of fermentation waste (<i>Corynebacterium glutamicum</i>) as a biosorbent for the treatment of nickel(II)-bearing solutions. <i>Biochemical Engineering Journal</i> , 2008, 41, 228-233.	1.8	25
68	Reinforcement of carboxyl groups in the surface of <i>Corynebacterium glutamicum</i> biomass for effective removal of basic dyes. <i>Bioresource Technology</i> , 2009, 100, 6301-6306.	4.8	24
69	An Assessment on the Interaction of a Hydrophilic Ionic Liquid with Different Sorbents. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 7283-7288.	1.8	24
70	Malachite green and crystal violet biosorption onto coco-peat: characterization and removal studies. <i>Desalination and Water Treatment</i> , 2016, 57, 6423-6431.	1.0	24
71	Experimental characterisation and evaluation of perlite as a sorbent for heavy metal ions in single and quaternary solutions. <i>Journal of Water Process Engineering</i> , 2014, 4, 179-184.	2.6	22
72	Optimization of Cu(II), Ni(II), Cd(II) and Pb(II) biosorption by red marine alga <i>Kappaphycus alvarezii</i> . <i>Desalination and Water Treatment</i> , 2015, 55, 1816-1824.	1.0	22

#	ARTICLE	IF	CITATIONS
73	Concomitant uptake of microcystin-LR and -RR by peat under various environmental conditions. <i>Chemical Engineering Journal</i> , 2011, 172, 754-762.	6.6	21
74	Biosorption of As(V) onto the Shells of the Crab (<i>Portunus sanguinolentus</i>): Equilibrium and Kinetic Studies. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 3589-3594.	1.8	20
75	Removal of Cr(VI) using co-immobilized activated carbon and <i>Bacillus subtilis</i> : fixed-bed column study. <i>Clean Technologies and Environmental Policy</i> , 2017, 19, 251-258.	2.1	20
76	Utilization of Effective Microorganisms based water hyacinth compost as biosorbent for the removal of basic dyes. <i>Desalination and Water Treatment</i> , 2016, 57, 24368-24377.	1.0	19
77	Antimonite Removal Using Marine Algal Species. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 9864-9869.	1.8	18
78	Hybrid <i>Sargassum</i> -sand sorbent: A novel adsorbent in packed column to treat metal-bearing wastewaters from inductively coupled plasma-optical emission spectrometry. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2013, 48, 1685-1693.	0.9	18
79	Batch and column removal of total chromium from aqueous solution using <i>Sargassum polycystum</i> . <i>Environmental Progress and Sustainable Energy</i> , 2010, 29, 334-341.	1.3	17
80	Comparative Assessment of Al(III) and Cd(II) Biosorption onto <i>Turbinaria conoides</i> in Single and Binary Systems. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 2923-2931.	1.1	17
81	Sustainable approach of batch and continuous biosorptive systems for praseodymium and thulium ions removal in mono and binary aqueous solutions. <i>Environmental Technology and Innovation</i> , 2021, 23, 101581.	3.0	17
82	Carbaryl Sorption by Porogen-Treated Banana Pith Carbon. <i>Adsorption Science and Technology</i> , 2008, 26, 679-686.	1.5	16
83	Evaluation of Red Marine Alga <i>Kappaphycus alvarezii</i> as Biosorbent for Methylene Blue: Isotherm, Kinetic, and Mechanism Studies. <i>Separation Science and Technology</i> , 2015, 50, 1120-1126.	1.3	15
84	Single- and Dual-Component Biosorption of Reactive Black 5 and Reactive Orange 16 onto Polysulfone-Immobilized Esterified <i>Corynebacterium glutamicum</i> . <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 3179-3185.	1.8	13
85	Removal of Metal Ions from Storm-Water Runoff by Low-Cost Sorbents: Batch and Column Studies. <i>Journal of Environmental Engineering, ASCE</i> , 2010, 136, 1113-1118.	0.7	13
86	Application of <i>Ulva</i> sp. biomass for single and binary biosorption of chromium(III) and manganese(II) ions: Equilibrium modeling. <i>Environmental Progress and Sustainable Energy</i> , 2014, 33, 147-153.	1.3	13
87	An attempt to develop seaweed-based treatment technology for the remediation of complex metal-bearing laboratory wastewaters. <i>Ecological Engineering</i> , 2012, 47, 278-283.	1.6	12
88	A comparative evaluation of sorbents for the treatment of complex metal-bearing laboratory wastewaters. <i>Journal of Environmental Chemical Engineering</i> , 2013, 1, 473-479.	3.3	12
89	Biosynthesis of gold nanoparticles using green roof species <i>Portulaca grandiflora</i> and their cytotoxic effects against C6 glioma human cancer cells. <i>Environmental Progress and Sustainable Energy</i> , 2016, 35, 1732-1740.	1.3	12
90	Biosorption Potential of Coco-Peat in the Removal of Methylene Blue from Aqueous Solutions. <i>Separation Science and Technology</i> , 2015, 50, 1439-1446.	1.3	10

#	ARTICLE	IF	CITATIONS
91	<i>Portulaca grandiflora</i> as green roof vegetation: Plant growth and phytoremediation experiments. International Journal of Phytoremediation, 2017, 19, 537-544.	1.7	10
92	Biosorption of basic dyes onto <i>Azolla filiculoides</i> : equilibrium and kinetic modeling. Asia-Pacific Journal of Chemical Engineering, 2008, 3, 368-373.	0.8	7
93	Interaction of Mercuric Ions with Different Marine Algal Species. Bioremediation Journal, 2012, 16, 225-234.	1.0	7
94	Preparation of growth substrate to improve runoff quality from green roofs: physico-chemical characterization, sorption and plant-support experiments. Urban Water Journal, 2017, 14, 804-810.	1.0	7
95	<i>Dracaena marginata</i> biofilter: design of growth substrate and treatment of stormwater runoff. Environmental Technology (United Kingdom), 2016, 37, 1101-1109.	1.2	5
96	An Aminated Bacterial Biosorbent Capable of Effectively Binding Negatively Charged Pollutants in Aqueous Solution. Adsorption Science and Technology, 2008, 26, 589-598.	1.5	1
97	In situ removal of dissolved and suspended contaminants from a eutrophic pond using hybrid sand-filter. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2014, 49, 1176-1186.	0.9	0