Yeoung-Sang Yun

List of Publications by Year
in descending order

235 papers	17,166 citations	17440 63 h-index	16650 123 g-index
238 all docs	238 docs citations	238 times ranked	15463 citing authors

#	Article	IF	Citations
1	Bacterial biosorbents and biosorption. Biotechnology Advances, 2008, 26, 266-291.	11.7	1,466
2	Environmental fate and toxicity of ionic liquids: A review. Water Research, 2010, 44, 352-372.	11.3	1,333
3	Cinnamon zeylanicum bark extract and powder mediated green synthesis of nano-crystalline silver particles and its bactericidal activity. Colloids and Surfaces B: Biointerfaces, 2009, 73, 332-338.	5.0	796
4	Biogenic Synthesis of Metallic Nanoparticles by Plant Extracts. ACS Sustainable Chemistry and Engineering, 2013, 1, 591-602.	6.7	649
5	Spinel ferrite magnetic adsorbents: Alternative future materials for water purification?. Coordination Chemistry Reviews, 2016, 315, 90-111.	18.8	575
6	The past, present, and future trends of biosorption. Biotechnology and Bioprocess Engineering, 2010, 15, 86-102.	2.6	554
7	Mechanism of hexavalent chromium removal by dead fungal biomass of Aspergillus niger. Water Research, 2005, 39, 533-540.	11.3	361
8	Immobilization of silver nanoparticles synthesized using Curcuma longa tuber powder and extract on cotton cloth for bactericidal activity. Bioresource Technology, 2010, 101, 7958-7965.	9.6	343
9	Studies on hexavalent chromium biosorption by chemically-treated biomass of Ecklonia sp.. Chemosphere, 2005, 60, 1356-1364.	8.2	342
10	Biosorption of Trivalent Chromium on the Brown Seaweed Biomass. Environmental Science & Technology, 2001, 35, 4353-4358.	10.0	332
11	Reduction of Hexavalent Chromium with the Brown SeaweedEckloniaBiomass. Environmental Science & Technology, 2004, 38, 4860-4864.	10.0	256
12	Carbon Dioxide Fixation by Algal Cultivation Using Wastewater Nutrients. Journal of Chemical Technology and Biotechnology, 1997, 69, 451-455.	3.2	242
13	XAS and XPS studies on chromium-binding groups of biomaterial during Cr(VI) biosorption. Journal of Colloid and Interface Science, 2008, 317, 54-61.	9.4	228
14	Reliable evidences that the removal mechanism of hexavalent chromium by natural biomaterials is adsorption-coupled reduction. Chemosphere, 2007, 70, 298-305.	8.2	212
15	Phyto-crystallization of palladium through reduction process using Cinnamom zeylanicum bark extract. Journal of Hazardous Materials, 2009, 171, 400-404.	12.4	200
16	Biosorbents for recovery of precious metals. Bioresource Technology, 2014, 160, 203-212.	9.6	197
17	Development of a new Cr(VI)-biosorbent from agricultural biowaste. Bioresource Technology, 2008, 99, 8810-8818.	9.6	185
18	Effective adsorption of Pd(<scp>ii</scp>), Pt(<scp>iv</scp>) and Au(<scp>iii</scp>) by Zr(<scp>iv</scp>)-based metalâ€“organic frameworks from strongly acidic solutions. Journal of Materials Chemistry A, 2017, 5, 13557-13564.	10.3	179

#	Article	IF	Citations
19	Use of dead fungal biomass for the detoxification of hexavalent chromium: screening and kinetics. Process Biochemistry, 2005, 40, 2559-2565.	3.7	176
20	Highly Effective Removal of Nonsteroidal Anti-inflammatory Pharmaceuticals from Water by Zr(IV)-Based Metalâ€“Organic Framework: Adsorption Performance and Mechanisms. ACS Applied Materials & Interfaces, 2018, 10, 28076-28085.	8.0	171
21	Biosorption of C.I. Reactive Black 5 from aqueous solution using acid-treated biomass of brown seaweed Laminaria sp.. Dyes and Pigments, 2008, 76, 726-732.	3.7	170
22	The ecotoxicity of ionic liquids and traditional organic solvents on microalga Selenastrum capricornutum. Ecotoxicology and Environmental Safety, 2008, 71, 166-171.	6.0	170
23	Influence of anions on the toxic effects of ionic liquids to a phytoplankton Selenastrum capricornutum. Green Chemistry, 2008, 10, 67-72.	9.0	162
24	Utilization of fermentation waste (Corynebacterium glutamicum) for biosorption of Reactive Black 5 from aqueous solution. Journal of Hazardous Materials, 2007, 141, 45-52.	12.4	153
25	Toxicity of imidazolium salt with anion bromide to a phytoplankton Selenastrum capricornutum: Effect of alkyl-chain length. Chemosphere, 2007, 69, 1003-1007.	8.2	148
26	Review of the toxic effects of ionic liquids. Science of the Total Environment, 2021, 786, 147309.	8.0	135
27	Corynebacterium glutamicum-mediated crystallization of silver ions through sorption and reduction processes. Chemical Engineering Journal, 2010, 162, 989-996.	12.7	129
28	In vitro release of metformin from iron (III) cross-linked alginateâ€“carboxymethyl cellulose hydrogel beads. International Journal of Biological Macromolecules, 2015, 77, 114-119.	7.5	124
29	Selective recovery of Pd(II) from extremely acidic solution using ion-imprinted chitosan fiber: Adsorption performance and mechanisms. Journal of Hazardous Materials, 2015, 299, 10-17.	12.4	121
30	Selective recovery of Au(III), Pt(IV), and Pd(II) from aqueous solutions by liquidâ€“liquid extraction using ionic liquid Aliquat-336. Journal of Molecular Liquids, 2016, 216, 18-24.	4.9	121
31	Biosorption of methylene blue from aqueous solution using free and polysulfone-immobilized Corynebacterium glutamicum: Batch and column studies. Bioresource Technology, 2008, 99, 2864-2871.	9.6	107
32	Biosorption of cadmium by various types of dried sludge: An equilibrium study and investigation of mechanisms. Journal of Hazardous Materials, 2006, 138, 378-383.	12.4	105
33	Recovery of Pd(II) from hydrochloric solution using polyallylamine hydrochloride-modified Escherichia coli biomass. Journal of Hazardous Materials, 2010, 181, 794-800.	12.4	104
34	Utilization of PEI-modified Corynebacterium glutamicum biomass for the recovery of Pd(II) in hydrochloric solution. Bioresource Technology, 2011, 102, 3888-3893.	9.6	104
35	Kinetic modeling of the light-dependent photosynthetic activity of the green microalgaChlorella vulgaris. Biotechnology and Bioengineering, 2003, 83, 303-311.	3.3	97
36	Kinetics of the reduction of hexavalent chromium with the brown seaweed Ecklonia biomass. Chemosphere, 2007, 66, 939-946.	8.2	97

#	Article	IF	Citations
37	Structure-controlled recovery of palladium(II) from acidic aqueous solution using metal-organic frameworks of MOF-802, UiO-66 and MOF-808. Chemical Engineering Journal, 2019, 362, 280-286.	12.7	93
38	Biosorptive Decolorization of Reactive Orange 16 Using the Waste Biomass of Corynebacterium glutamicum. Industrial & Engineering Chemistry Research, 2004, 43, 7865-7869.	3.7	91
39	Biosorption Process for Treatment of Electroplating Wastewater Containing Cr(VI):Â Laboratory-Scale Feasibility Test. Industrial & Engineering Chemistry Research, 2006, 45, 5059-5065.	3.7	91
40	Aliquat-336-impregnated alginate capsule as a green sorbent for selective recovery of gold from metal mixtures. Chemical Engineering Journal, 2016, 289, 413-422.	12.7	91
41	Mechanisms of the removal of hexavalent chromium by biomaterials or biomaterial-based activated carbons. Journal of Hazardous Materials, 2006, 137, 1254-1257.	12.4	90
42	Platinum recovery from ICP wastewater by a combined method of biosorption and incineration. Bioresource Technology, 2010, 101, 1135-1140.	9.6	88
43	How to study Cr(VI) biosorption: Use of fermentation waste for detoxifying Cr(VI) in aqueous solution. Chemical Engineering Journal, 2008, 136, 173-179.	12.7	87
44	Advanced kinetic model of the Cr(VI) removal by biomaterials at various pHs and temperatures. Bioresource Technology, 2008, 99, 1141-1147.	9.6	86
45	Biosynthesis of Gold Nanoparticles Using Ocimum sanctum Extracts by Solvents with Different Polarity. ACS Sustainable Chemistry and Engineering, 2016, 4, 2651-2659.	6.7	86
46	Counter ions and temperature incorporated tailoring of biogenic gold nanoparticles. Process Biochemistry, 2010, 45, 1450-1458.	3.7	85
47	Removal of heavy metals from aqueous phases using chemically modified waste Lyocell fiber. Journal of Hazardous Materials, 2015, 299, 550-561.	12.4	85
48	Valorisation of post-sorption materials: Opportunities, strategies, and challenges. Advances in Colloid and Interface Science, 2017, 242, 35-58.	14.7	85
49	Combined effects of light intensity and acetate concentration on the growth of unicellular microalga Haematococcus pluvialis. Enzyme and Microbial Technology, 2006, 39, 490-495.	3.2	83
50	Performance, kinetics and equilibrium in biosorption of anionic dye Reactive Black 5 by the waste biomass of Corynebacterium glutamicum as a low-cost biosorbent. Chemical Engineering Journal, 2006, 121, 37-43.	12.7	82
51	Interaction between protonated waste biomass of Corynebacterium glutamicum and anionic dye Reactive Red 4. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 262, 175-180.	4.7	80
52	Glutaraldehyde-crosslinked chitosan beads for sorptive separation of Au(III) and Pd(II): Opening a way to design reduction-coupled selectivity-tunable sorbents for separation of precious metals. Journal of Hazardous Materials, 2013, 248-249, 211-218.	12.4	80
53	Alkyl-chain length effects of imidazolium and pyridinium ionic liquids on photosynthetic response of Pseudokirchneriella subcapitata. Journal of Bioscience and Bioengineering, 2008, 105, 425-428.	2.2	78
54	Attenuation of monochromatic and polychromatic lights in Chlorella vulgaris suspensions. Applied Microbiology and Biotechnology, 2001, 55, 765-770.	3.6	77

#	Article	IF	Citations
55	Carboxymethyl cellulose fiber as a fast binding and biodegradable adsorbent of heavy metals. Journal of the Taiwan Institute of Chemical Engineers, 2015, 57, 104-110.	5.3	76
56	Selective adsorption of Pd(II) over interfering metal ions (Co(II), Ni(II), Pt(IV)) from acidic aqueous phase by metal-organic frameworks. Chemical Engineering Journal, 2018, 345, 337-344.	12.7	76
57	Identification of Metabolites Involved in the Biodegradation of the Ionic Liquid 1-Butyl-3-methylpyridinium Bromide by Activated Sludge Microorganisms. Environmental Science & Technology, 2009, 43, 516-521.	10.0	75
58	Selective biosorption behavior of Escherichia coli biomass toward Pd(II) in Pt(IV)â€“Pd(II) binary solution. Journal of Hazardous Materials, 2015, 283, 657-662.	12.4	74
59	Chemical Modification and Immobilization ofCorynebacterium glutamicumfor Biosorption of Reactive Black 5 from Aqueous Solution. Industrial & Engineering Chemistry Research, 2007, 46, 608-617.	3.7	71
60	Benignly-fabricated crosslinked polyethylenimine/calcium-alginate fibers as high-performance adsorbents for effective recovery of gold. Journal of Cleaner Production, 2020, 252, 119389.	9.3	70
61	Mechanistic understanding and performance enhancement of biosorption of reactive dyestuffs by the waste biomass generated from amino acid fermentation process. Biochemical Engineering Journal, 2007, 36, 2-7.	3.6	69
62	Measurement of microalgal photosynthetic activity depending on light intensity and quality. Biochemical Engineering Journal, 2005, 27, 127-131.	3.6	67
63	Treatment of complex Remazol dye effluent using sawdust- and coal-based activated carbons. Journal of Hazardous Materials, 2009, 167, 790-796.	12.4	67
64	Performance and mechanism in binding of Reactive Orange 16 to various types of sludge. Biochemical Engineering Journal, 2006, 28, 208-214.	3.6	66
65	Lead biosorption by waste biomass of Corynebacterium glutamicum generated from lysine fermentation process. Biotechnology Letters, 2004, 26, 331-336.	2.2	65
66	Surface modification of Corynebacterium glutamicum for enhanced Reactive Red 4 biosorption. Bioresource Technology, 2009, 100, 1463-1466.	9.6	65
67	Chemical modification of Corynebacterium glutamicum to improve methylene blue biosorption. Chemical Engineering Journal, 2008, 145, 1-6.	12.7	63
68	Competition of Reactive red 4, Reactive orange 16 and Basic blue 3 during biosorption of Reactive blue 4 by polysulfone-immobilized Corynebacterium glutamicum. Journal of Hazardous Materials, 2008, 153, 478-486.	12.4	63
69	Highly efficient and acid-resistant metal-organic frameworks of MIL-101(Cr)-NH2 for Pd(II) and Pt(IV) recovery from acidic solutions: Adsorption experiments, spectroscopic analyses, and theoretical computations. Journal of Hazardous Materials, 2020, 387, 121689.	12.4	62
70	Biosynthesis of Au Nanoparticles Using Cumin Seed Powder Extract. Journal of Nanoscience and Nanotechnology, 2011, 11, 1811-1814.	0.9	61
71	Sequential recovery of gold and copper from bioleached wastewater using ion exchange resins. Environmental Pollution, 2020, 266, 115167.	7.5	61
72	Evaluation of Factors Promoting Astaxanthin Production by a Unicellular Green Alga, Haematococcus pluvialis, with Fractional Factorial Design. Biotechnology Progress, 2002, 18, 1170-1175.	2.6	59

#	Article	IF	Citations
73	Modeling of Lithium Interference in Cadmium Biosorption. Environmental Science & Technology, 2003, 37, 3601-3608.	10.0	59
74	Ruthenium recovery from acetic acid waste water through sorption with bacterial biosorbent fibers. Bioresource Technology, 2013, 128, 30-35.	9.6	58
75	Chromium Biosorption by Thermally Treated Biomass of the Brown Seaweed,Eckloniasp.. Industrial & Engineering Chemistry Research, 2004, 43, 8226-8232.	3.7	55
76	Removal of hydrolyzed Reactive Black 5 from aqueous solution using a polyethylenimineâ€“polyvinyl chloride composite fiber. Chemical Engineering Journal, 2015, 280, 18-25.	12.7	55
77	Biosorption of cationic basic dye and cadmium by the novel biosorbent Bacillus catenulatus JB-022 strain. Journal of Bioscience and Bioengineering, 2015, 119, 433-439.	2.2	55
78	A phosphorus-enriched biochar fertilizer from bio-fermentation waste: A potential alternative source for phosphorus fertilizers. Journal of Cleaner Production, 2018, 196, 163-171.	9.3	55
79	Biosorption of Reactive black 5 by Corynebacterium glutamicum biomass immobilized in alginate and polysulfone matrices. Chemosphere, 2007, 68, 1838-1845.	8.2	54
80	A new approach to study the decolorization of complex reactive dye bath effluent by biosorption technique. Bioresource Technology, 2008, 99, 5778-5785.	9.6	54
81	Superâ€Stable, Highly Efficient, and Recyclable Fibrous Metalâ€“Organic Framework Membranes for Precious Metal Recovery from Strong Acidic Solutions. Small, 2019, 15, e1805242.	10.0	54
82	Polysulfone-immobilized Corynebacterium glutamicum: A biosorbent for Reactive black 5 from aqueous solution in an up-flow packed column. Chemical Engineering Journal, 2008, 145, 44-49.	12.7	51
83	Recovery of gold as a type of porous fiber by using biosorption followed by incineration. Bioresource Technology, 2012, 104, 208-214.	9.6	50
84	Development of polyethyleneimine-loaded core-shell chitosan hollow beads and their application for platinum recovery in sequential metal scavenging fill-and-draw process. Journal of Hazardous Materials, 2017, 324, 724-731.	12.4	49
85	Sequential process of sorption and incineration for recovery of gold from cyanide solutions: Comparison of ion exchange resin, activated carbon and biosorbent. Chemical Engineering Journal, 2010, 165, 440-446.	12.7	47
86	Evaluation of orange peel-derived activated carbons for treatment of dye-contaminated wastewater tailings. Environmental Science and Pollution Research, 2020, 27, 1053-1068.	5.3	46
87	Biosorptive removal of Reactive Yellow 2 using waste biomass from lysine fermentation process. Dyes and Pigments, 2008, 76, 502-507.	3.7	45
88	Cationic polymer-immobilized polysulfone-based fibers as high performance sorbents for Pt(IV) recovery from acidic solutions. Journal of Hazardous Materials, 2013, 263, 391-397.	12.4	45
89	A sustainable cationic chitosan/E. coli fiber biosorbent for Pt(IV) removal and recovery in batch and column systems. Separation and Purification Technology, 2015, 143, 32-39.	7.9	45
90	Reusable polyethylenimine-coated polysulfone/bacterial biomass composite fiber biosorbent for recovery of Pd(II) from acidic solutions. Chemical Engineering Journal, 2016, 302, 545-551.	12.7	45

#	Article	IF	Citations
91	Functionalized magnetic biopolymeric graphene oxide with outstanding performance in water purification. NPG Asia Materials, 2019, 11, .	7.9	45
92	Different binding mechanisms in biosorption of reactive dyes according to their reactivity. Water Research, 2008, 42, 4847-4855.	11.3	44
93	The role of biomass in polyethylenimine-coated chitosan/bacterial biomass composite biosorbent fiber for removal of Ru from acetic acid waste solution. Bioresource Technology, 2014, 160, 93-97.	9.6	44
94	Prediction of adsorption properties for ionic and neutral pharmaceuticals and pharmaceutical intermediates on activated charcoal from aqueous solution via LFER model. Chemical Engineering Journal, 2019, 362, 199-206.	12.7	42
95	Ion-imprinted chitosan fiber for recovery of Pd(II): Obtaining high selectivity through selective adsorption and two-step desorption. Environmental Research, 2020, 182, 108995.	7.5	40
96	Surface modified bacterial biosorbent with poly(allylamine hydrochloride): Development using response surface methodology and use for recovery of hexachloroplatinate(IV) from aqueous solution. Water Research, 2010, 44, 5919-5928.	11.3	39
97	Conversion of waste textile cellulose fibers into heavy metal adsorbents. Journal of Industrial and Engineering Chemistry, 2016, 43, 61-68.	5.8	39
98	Ruthenium recovery from acetic acid industrial effluent using chemically stable and high-performance polyethylenimine-coated polysulfone-Escherichia coli biomass composite fibers. Journal of Hazardous Materials, 2016, 313, 29-36.	12.4	39
99	Poly(styrenesulfonic acid)-impregnated alginate capsule for the selective sorption of Pd(II) from a Pt(IV)-Pd(II) binary solution. Journal of Hazardous Materials, 2016, 318, 79-89.	12.4	38
100	Structural effects of ionic liquids on microalgal growth inhibition and microbial degradation. Environmental Science and Pollution Research, 2016, 23, 4294-4300.	5.3	38
101	Treatment of food wastes using slurry-phase decomposition. Bioresource Technology, 2000, 73, 21-27.	9.6	37
102	Comment on the Removal Mechanism of Hexavalent Chromium by Biomaterials or Biomaterial-Based Activated Carbons. Industrial & Engineering Chemistry Research, 2006, 45, 2405-2407.	3.7	37
103	On-line estimation of key process variables based on kernel partial least squares in an industrial cokes wastewater treatment plant. Journal of Hazardous Materials, 2009, 161, 538-544.	12.4	37
104	Modelling for antimicrobial activities of ionic liquids towards Escherichia coli, Staphylococcus aureus and Candida albicans using linear free energy relationship descriptors. Journal of Hazardous Materials, 2016, 311, 168-175.	12.4	37
105	A strategy for promoting astaxanthin accumulation in Haematococcus pluvialis by 1-aminocyclopropane-1-carboxylic acid application. Journal of Biotechnology, 2016, 236, 120-127.	3.8	36
106	Low-cost renewable adsorbent developed from waste textile fabric and its application to heavy metal adsorption. Journal of the Taiwan Institute of Chemical Engineers, 2016, 63, 250-258.	5.3	35
107	Comprehensive approach for predicting toxicological effects of ionic liquids on several biological systems using unified descriptors. Scientific Reports, 2016, 6, 33403.	3.3	35
108	Improving the quality of runoff from green roofs through synergistic biosorption and phytoremediation techniques: A review. Sustainable Cities and Society, 2019, 46, 101381.	10.4	35

#	Article	IF	Citations
109	Adsorption performance and mechanism in binding of Reactive Red 4 by coke waste. Journal of Hazardous Materials, 2006, 138, 370-377.	12.4	33
110	Green fabrication of zirconia nano-chains using novel Curcuma longa tuber extract. Materials Letters, 2013, 98, 242-245.	2.6	33
111	Biosorption of Nickel(II) from aqueous solution by the fungal mat of Trametes versicolor (rainbow) biomass: equilibrium, kinetics, and thermodynamic studies. Biotechnology and Bioprocess Engineering, 2013, 18, 280-288.	2.6	32
112	Use of ion-exchange resins for the adsorption of the cationic part of ionic liquid, 1-ethyl-3-methylimidazolium. Chemical Engineering Journal, 2013, 214, 78-82.	12.7	32
113	Optimum condition for the removal of Cr(VI) or total Cr using dried leaves of Pinus densiflora. Desalination, 2011, 271, 309-314.	8.2	31
114	Effect of pH on the binding mechanisms in biosorption of Reactive Orange 16 by Corynebacterium glutamicum. Journal of Colloid and Interface Science, 2009, 331, 83-89.	9.4	30
115	Recovery of microbially synthesized gold nanoparticles using sodium citrate and detergents. Chemical Engineering Journal, 2013, 214, 253-261.	12.7	30
116	Recovery of gold via adsorption-incineration techniques using banana peel and its derivatives: Selectivity and mechanisms. Waste Management, 2020, 113, 225-235.	7.4	30
117	Determination of the time transferring cells for astaxanthin production considering two-stage process of Haematococcus pluvialis cultivation. Bioresource Technology, 2011, 102, 11249-11253.	9.6	29
118	Characterization of the residual biochemical components of sequentially extracted banana peel biomasses and their environmental remediation applications. Waste Management, 2019, 89, 141-153.	7.4	29
119	Development of gas recycling photobioreactor system for microalgal carbon dioxide fixation. Korean Journal of Chemical Engineering, 1997, 14, 297-300.	2.7	28
120	Column study on Cr(VI)-reduction using the brown seaweed Ecklonia biomass. Journal of Hazardous Materials, 2006, 137, 1377-1384.	12.4	28
121	Enhanced abiotic reduction of Cr(VI) in a soil slurry system by natural biomaterial addition. Journal of Hazardous Materials, 2008, 160, 422-427.	12.4	28
122	Self-coagulating polyelectrolyte complexes for target-tunable adsorption and separation of metal ions. Journal of Hazardous Materials, 2021, 401, 123352.	12.4	28
123	Effect of Ni(II) on the reduction of Cr(VI) by Ecklonia biomass. Bioresource Technology, 2006, 97, 1592-1598.	9.6	27
124	Immobilized citric acid-treated bacterial biosorbents for the removal of cationic pollutants. Chemical Engineering Journal, 2010, 162, 662-668.	12.7	27
125	Development of waste biomass based sorbent for removal of cyanotoxin microcystin-LR from aqueous phases. Bioresource Technology, 2018, 247, 690-696.	9.6	27
126	Enhancement of CO2 tolerance of Chlorella vulgaris by gradual increase of CO2 concentration. Biotechnology Letters, 1996, 10, 713.	0.5	26

#	Article	IF	Citations
127	Effect of imidazoliumâ€based ionic liquids on the photosynthetic activity and growth rate of Selenastrum capricornutum. Environmental Toxicology and Chemistry, 2008, 27, 1583-1589.	4.3	26
128	Recovery of zero-valent gold from cyanide solution by a combined method of biosorption and incineration. Bioresource Technology, 2010, 101, 8587-8592.	9.6	26
129	Synthesis of thiourea-immobilized polystyrene nanoparticles and their sorption behavior with respect to silver ions in aqueous phase. Journal of Hazardous Materials, 2018, 344, 398-407.	12.4	26
130	Adsorptive interaction of cationic pharmaceuticals on activated charcoal: Experimental determination and QSAR modelling. Journal of Hazardous Materials, 2018, 360, 529-535.	12.4	26
131	Adsorptive removal of endocrine-disrupting compounds and a pharmaceutical using activated charcoal from aqueous solution: kinetics, equilibrium, and mechanism studies. Environmental Science and Pollution Research, 2019, 26, 33897-33905.	5.3	26
132	Evaluation of fermentation waste (Corynebacterium glutamicum) as a biosorbent for the treatment of nickel(II)-bearing solutions. Biochemical Engineering Journal, 2008, 41, 228-233.	3.6	25
133	Synthesis, characterization and mechanistic insights of mycogenic iron oxide nanoparticles. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	25
134	In silico prediction of linear free energy relationship descriptors of neutral and ionic compounds. RSC Advances, 2015, 5, 80634-80642.	3.6	25
135	Fabrication of Stable and Regenerable Amine Functionalized Magnetic Nanoparticles as a Potential Material for Pt(IV) Recovery from Acidic Solutions. ACS Applied Materials & Interfaces, 2017, 9, 18650-18659.	8.0	25
136	High-performance and acid-tolerant polyethylenimine-aminated polyvinyl chloride fibers: fabrication and application for recovery of platinum from acidic wastewaters. Journal of Environmental Chemical Engineering, 2019, 7, 102839.	6.7	25
137	Development of prediction models for adsorption properties of chitin and chitosan for micropollutants. Chemical Engineering Journal, 2021, 426, 131341.	12.7	25
138	Reinforcement of carboxyl groups in the surface of Corynebacterium glutamicum biomass for effective removal of basic dyes. Bioresource Technology, 2009, 100, 6301-6306.	9.6	24
139	An Assessment on the Interaction of a Hydrophilic Ionic Liquid with Different Sorbents. Industrial & Engineering Chemistry Research, 2009, 48, 7283-7288.	3.7	24
140	Estimating environmental fate of tricyclic antidepressants in wastewater treatment plant. Science of the Total Environment, 2018, 634, 52-58.	8.0	24
141	Simple, green organic acid-based hydrometallurgy for waste-to-energy storage devices: Recovery of NiMnCoC2O4 as an electrode material for pseudocapacitor from spent LiNiMnCoO2 batteries. Journal of Hazardous Materials, 2022, 424, 127481.	12.4	24
142	Preparation of PEI-coated bacterial biosorbent in water solution: Optimization of manufacturing conditions using response surface methodology. Bioresource Technology, 2011, 102, 1462-1467.	9.6	23
143	Decarboxylated polyethylenimine-modified bacterial biosorbent for Ru biosorption from Ru-bearing acetic acid wastewater. Chemical Engineering Journal, 2013, 230, 303-307.	12.7	22
144	Recovery of metallic palladium from hydrochloric acid solutions by a combined method of adsorption and incineration. Chemical Engineering Journal, 2013, 218, 303-308.	12.7	22

#	Article	IF	Citations
145	Effective Recovery of Pt(IV) from Acidic Solution by a Defective Metalâ€“Organic Frameworks Using Central Composite Design for Synthesis. ACS Sustainable Chemistry and Engineering, 2019, 7, 7510-7518.	6.7	22
146	QSAR modelling for predicting adsorption of neutral, cationic, and anionic pharmaceuticals and other neutral compounds to microalgae Chlorella vulgaris in aquatic environment. Water Research, 2019, 151, 288-295.	11.3	22
147	Polyethyleneimine impregnated alginate capsule as a high capacity sorbent for the recovery of monovalent and trivalent gold. Scientific Reports, 2021, 11, 17836.	3.3	22
148	Comment on â€œChromate ion adsorption by agricultural by-products modified with dimethyloldihydroxylethylene urea and choline chlorideâ€•by Wartelle and Marshall. Water Research, 2006, 40, 1501-1504.	11.3	21
149	Surface modification of the Corynebacterium glutamicum biomass to increase carboxyl binding site for basic dye molecules. Biochemical Engineering Journal, 2009, 46, 1-6.	3.6	21
150	Interpretation of toxicological activity of ionic liquids to acetylcholinesterase inhibition via in silico modelling. Chemosphere, 2016, 159, 178-183.	8.2	21
151	Microalgal photosynthetic activity measurement system for rapid toxicity assessment. Ecotoxicology, 2008, 17, 455-463.	2.4	20
152	Development of Poly(acrylic acid)-Modified Bacterial Biomass As a High-Performance Biosorbent for Removal of Cd(II) from Aqueous Solution. Industrial & Engineering Chemistry Research, 2013, 52, 6446-6452.	3.7	20
153	L-cysteine impregnated alginate capsules as a sorbent for gold recovery. Polymer Degradation and Stability, 2014, 109, 424-429.	5.8	20
154	Preparation of polyaniline-coated polystyrene nanoparticles for the sorption of silver ions. Reactive and Functional Polymers, 2016, 105, 52-59.	4.1	20
155	Adsorptive separation of Pb(II) and Cu(II) from aqueous solutions using as-prepared carboxymethylated waste Lyocell fiber. International Journal of Environmental Science and Technology, 2016, 13, 875-886.	3.5	20
156	Facile fabrication of polyacrylic acid-polyvinyl chloride composite adsorbents for the treatment of cadmium-contaminated wastewater. Journal of Environmental Chemical Engineering, 2018, 6, 2401-2408.	6.7	20
157	Ionic liquid-assisted cellulose coating of chitosan hydrogel beads and their application as drug carriers. Scientific Reports, 2020, 10, 13905.	3.3	19
158	Organic acid-based linear free energy relationship models for green leaching of strategic metals from spent lithium-ion batteries and improvement of leaching performance. Journal of Hazardous Materials, 2022, 423, 127214.	12.4	19
159	Removal of 1-ethyl-3-methylimidazolium cations with bacterial biosorbents from aqueous media. Journal of Hazardous Materials, 2013, 244-245, 130-134.	12.4	18
160	Development of Surface-Modified Polyacrylonitrile Fibers and Their Selective Sorption Behavior of Precious Metals. Applied Sciences (Switzerland), 2016, 6, 378.	2.5	18
161	Preparation, characterization and lead adsorption study of tripolyphosphate-modified waste Lyocell fibers. Journal of Environmental Chemical Engineering, 2017, 5, 412-421.	6.7	18
162	Removal of Basic Blue 3 from aqueous solution by Corynebacterium glutamicum biomass: Biosorption and precipitation mechanisms. Korean Journal of Chemical Engineering, 2008, 25, 1060-1064.	2.7	17

#	Article	IF	Citations
163	Toxicity assessment of common organic solvents using a biosensor based on algal photosynthetic activity measurement. Journal of Applied Phycology, 2009, 21, 683-689.	2.8	17
164	Validation and updating of QSAR models for partitioning coefficients of ionic liquids in octanol-water and development of a new LFER model. Science of the Total Environment, 2018, 633, 920-928.	8.0	17
165	Application of general toxic effects of ionic liquids to predict toxicities of ionic liquids to Spodoptera frugiperda 9, Eisenia fetida, Caenorhabditis elegans, and Danio rerio. Environmental Pollution, 2019, 255, 113185.	7.5	17
166	Removal of anionic arsenate by a PEI-coated bacterial biosorbent prepared from fermentation biowaste. Chemosphere, 2019, 226, 67-74.	8.2	17
167	In-situ microwave-assisted leaching and selective separation of Au(III) from waste printed circuit boards in biphasic aqua regia-ionic liquid systems. Separation and Purification Technology, 2021, 255, 117649.	7.9	17
168	Adsorption modeling of microcrystalline cellulose for pharmaceutical-based micropollutants. Journal of Hazardous Materials, 2022, 426, 128087.	12.4	17
169	Sorptive removal and recovery of nickel(II) from an actual effluent of electroplating industry: Comparison between Escherichia coli biosorbent and Amberlite ion exchange resin. Korean Journal of Chemical Engineering, 2011, 28, 927-932.	2.7	16
170	Removal of Cd(II) by poly(styrenesulfonic acid)-impregnated alginate capsule. Journal of the Taiwan Institute of Chemical Engineers, 2016, 61, 188-195.	5.3	16
171	Recovery of high-purity metallic Pd from Pd(II)-sorbed biosorbents by incineration. Bioresource Technology, 2013, 137, 400-403.	9.6	15
172	Valorization ofEscherichia coliwaste biomass as a biosorbent for removing reactive dyes from aqueous solutions. Desalination and Water Treatment, 2016, 57, 20084-20090.	1.0	15
173	Quantitative analysis of adsorptive interactions of ionic and neutral pharmaceuticals and other chemicals with the surface of Escherichia coli cells in aquatic environment. Environmental Pollution, 2017, 227, 8-14.	7.5	15
174	Predicting adsorption of micropollutants on non-functionalized and functionalized multi-walled carbon nanotubes: Experimental study and LFER modeling. Journal of Hazardous Materials, 2021, 411, 125124.	12.4	15
175	Development of quaternized polyethylenimine-cellulose fibers for fast recovery of Au(CN)2- in alkaline wastewater: Kinetics, isotherm, and thermodynamic study. Journal of Hazardous Materials, 2022, 422, 126940.	12.4	15
176	Binding sites and mechanisms of cadmium to the dried sewage sludge biomass. Chemosphere, 2013, 93, 146-151.	8.2	14
177	Three degradation pathways of 1-octyl-3-methylimidazolium cation by activated sludge from wastewater treatment process. Water Research, 2016, 90, 294-300.	11.3	14
178	Simultaneous scavenging of persistent pharmaceuticals with different charges by activated carbon fiber from aqueous environments. Chemosphere, 2020, 247, 125909.	8.2	14
179	Pd(II)-Imprinted Chitosan Adsorbent for Selective Adsorption of Pd(II): Optimizing the Imprinting Process through Boxâ€“Behnken Experimental Design. ACS Omega, 2021, 6, 13057-13065.	3.5	14
180	Long-term operation of slurry bioreactor for decomposition of food wastes. Bioresource Technology, 2002, 84, 101-104.	9.6	13

#	Article	IF	Citations
181	Single- and Dual-Component Biosorption of Reactive Black 5 and Reactive Orange 16 onto Polysulfone-Immobilized Esterified Corynebacterium glutamicum. Industrial & Engineering Chemistry Research, 2008, 47, 3179-3185.	3.7	13
182	Facile Synthesis of Monodisperse Pt and Pd Nanoparticles Using Antioxidants. Journal of Nanoscience and Nanotechnology, 2015, 15, 412-417.	0.9	13
183	Correlating toxicological effects of ionic liquids on Daphnia magna with in silico calculated linear free energy relationship descriptors. Chemosphere, 2016, 152, 207-213.	8.2	13
184	Facile Processing of Polyelectrolyte Complexes for Immobilization of Heavy Metal Ions in Wastewater. ACS Applied Polymer Materials, 2022, 4, 2346-2354.	4.4	13
185	Polyethyleneimine functionalized alginate composite fiber for fast recovery of gold from acidic aqueous solutions. Environmental Technology and Innovation, 2022, 28, 102605.	6.1	13
186	High-rate slurry-phase decomposition of food wastes: indirect performance estimation from dissolved oxygen. Process Biochemistry, 2005, 40, 1301-1306.	3.7	12
187	Importance of the coating pH in fabrication of polyethylenimine-coated polysulfone- Escherichia coli composite fiber sorbent. Journal of the Taiwan Institute of Chemical Engineers, 2016, 66, 379-385.	5.3	12
188	Development of melamine-impregnated alginate capsule for selective recovery of Pd(II) from a binary metal solution. Journal of Cleaner Production, 2021, 288, 125648.	9.3	12
189	Development of polyethyleneimine-starch fibers stable over the broad pH range for selective adsorption of gold from actual leachate solutions of waste electrical and electronic equipment. Journal of Cleaner Production, 2021, 328, 129545.	9.3	12
190	The Preparation of Modified Industrial Waste Polyacrylonitrile for the Adsorptive Recovery of Pt(IV) from Acidic Solutions. Materials, 2016, 9, 988.	2.9	11
191	Polyethylenimine-coated biomass-chitosan composite fibers for recovery of ruthenium from industrial effluents: Effects of chitosan molecular weight and drying method. Hydrometallurgy, 2018, 182, 114-120.	4.3	11
192	Experimental and QSAR studies on adsorptive interaction of anionic nonsteroidal anti-inflammatory drugs with activated charcoal. Chemosphere, 2018, 212, 620-628.	8.2	11
193	Multistage Operation of Airlift Photobioreactor for Increased Production of Astaxanthin from Haematococcus pluvialis. Journal of Microbiology and Biotechnology, 2011, 21, 1081-1087.	2.1	11
194	Synthesis and environmental applications of graphene oxide/layered double hydroxides and graphene oxide/MXenes: A critical review. Separation and Purification Technology, 2022, 297, 121518.	7.9	11
195	Biosorptionâ€“Incinerationâ€“Leachingâ€“Smelting Sequential Process for Ru Recovery from Ru-Bearing Acetic Acid Waste Solution. Industrial & Engineering Chemistry Research, 2015, 54, 7148-7153.	3.7	10
196	Reclamation of wastewater from a steel-making plant using an airlift submerged biofilm reactor. Journal of Chemical Technology and Biotechnology, 1998, 73, 162-168.	3.2	9
197	Oxygen evolution rate of photosynthetic microalga Haematococcus pluvialis depending on light intensity and quality. Studies in Surface Science and Catalysis, 2006, 159, 157-160.	1.5	9
198	Biosorption of reactive and basic dyes using fermentation waste Corynebacterium glutamicum: the effects of pH and salt concentration and characterization of the binding sites. World Journal of Microbiology and Biotechnology, 2009, 25, 1259-1266.	3.6	9

#	Article	IF	Citations
199	New insight into continuous recirculation-process for treating arsenate using bacterial biosorbent. Bioresource Technology, 2020, 316, 123961.	9.6	9
200	Prediction of organic pollutant removal using Corynebacterium glutamicum fermentation waste. Environmental Research, 2021, 192, 110271.	7.5	9
201	Fabrication of high performance amine-rich magnetic composite fibers for the recovery of precious Pt(<scp>iv</scp>) from acidic solutions. RSC Advances, 2016, 6, 89089-89097.	3.6	8
202	EFFECT OF IMIDAZOLIUM-BASED IONIC LIQUIDS ON THE PHOTOSYNTHETIC ACTIVITY AND GROWTH RATE OF SELENASTRUM CAPRICORNUTUM. Environmental Toxicology and Chemistry, 2007, preprint, 1.	4.3	8
203	In-situ generated palladium seeds lead to single-step bioinspired growth of Au Pd bimetallic nanoparticles with catalytic performance. Materials Chemistry and Physics, 2016, 183, 356-365.	4.0	7
204	Adsorptive characteristics of the polyurethane-immobilized Corynebacterium glutamicum biosorbent for removal of Reactive Yellow 2 from aqueous solution. Korean Journal of Chemical Engineering, 2016, 33, 945-951.	2.7	7
205	Potentiometric titration data on the enhancement of sorption capacity of surface-modified biosorbents: functional groups scanning method. Clean Technologies and Environmental Policy, 2018, 20, 2191-2199.	4.1	7
206	Selection of low-toxic and highly efficient ionic liquids for the separation of palladium and platinum in acidic solution, and prediction of the metal affinity of ionic liquids. Separation and Purification Technology, 2021, 258, 118019.	7.9	7
207	Role of Adsorptive Concentration in Fentonâ€Like Degradation of Organic Pollutants by Biopolymeric FeOOH/Graphene Oxide Composite Catalyst: Proof of Concept. Advanced Sustainable Systems, 2021, 5, 2100060.	5.3	7
208	Oxygen-limited decomposition of food wastes in a slurry bioreactor. Journal of Industrial Microbiology and Biotechnology, 2001, 27, 67-71.	3.0	6
209	Synthesis, characterization and mechanistic insights of mycogenic iron oxide nanoparticles. , 2013, , 337-348.		6
210	Adsorptive removal of cationic tricyclic antidepressants using cation-exchange resin. Environmental Science and Pollution Research, 2020, 27, 24760-24771.	5.3	6
211	Strategies for recovery of copper and gold as single constituents or an alloy: Selective separation and adsorption-coupled incineration of the bulk metal-loaded adsorbents. Resources, Conservation and Recycling, 2022, 181, 106264.	10.8	6
212	Comment on â€œFilling environmental data gaps with QSPR for ionic liquids: Modeling n-octanol/water coefficientâ€• Journal of Hazardous Materials, 2017, 329, 348-350.	12.4	5
213	Carbon Dioxide Fixation by Algal Cultivation Using Wastewater Nutrients. Journal of Chemical Technology and Biotechnology, 1997, 69, 451-455.	3.2	5
214	Title is missing!. Biotechnology Letters, 1997, 19, 831-833.	2.2	4
215	Bacterial Biosorption and Biosorbents. , 2011, , 121-141.		4
216	Thiourea-Immobilized Polymer Beads for Sorption of Cr(VI) Ions in Acidic Aqueous Media. Macromolecular Research, 2019, 27, 515-521.	2.4	4

#	Article	IF	Citations
217	Recycling waste nutrient solution originating from the plant factory with the cultivation of newly isolated Acutodesmus species. Journal of Biotechnology, 2019, 289, 15-25.	3.8	4
218	Development of Alamine-336-Impregnated Alginate Capsule for Selective Recovery of Gold from Multi-Metal Solution. Advanced Materials Research, 2013, 825, 552-555.	0.3	3
219	On the reason why acid treatment of biomass enhances the biosorption capacity of cationic pollutants. Korean Journal of Chemical Engineering, 2014, 31, 68-73.	2.7	3
220	Facile room temperature deposition of gold nanoparticle-ionic liquid hybrid film on silica substrate. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 170, 48-55.	3.9	3
221	Environmental Concerns Regarding Ionic Liquids in Biotechnological Applications. Advances in Biochemical Engineering/Biotechnology, 2018, 168, 241-328.	1.1	3
222	Optimization Studies of Conditions for Biological Synthesis of AuNPs in Various Shapes Using Plant Extract (<I>Ocimum sanctum</I>). Journal of Nanoscience and Nanotechnology, 2015, 15, 326-329.	0.9	2
223	An Aminated Bacterial Biosorbent Capable of Effectively Binding Negatively Charged Pollutants in Aqueous Solution. Adsorption Science and Technology, 2008, 26, 589-598.	3.2	1
224	Development of Powerful Bacterial Biosorbent Fibers for Recovery of Ruthenium and Comprehension of the Role of Bacterial Biomass in the Fiber. Advanced Materials Research, 0, 825, 560-563.	0.3	1
225	Formation of Crystalline Metal Nanoparticles by Marine Isolates and Their Microbial Consortium. Journal of Environmental Engineering, ASCE, 2016, 142, .	1.4	1
226	Metalâ€“Organic Framework Fibrous Membranes: Superâ€stable, Highly Efficient, and Recyclable Fibrous Metalâ€“Organic Framework Membranes for Precious Metal Recovery from Strong Acidic Solutions (Small 10/2019). Small, 2019, 15, 1970055.	10.0	1
227	In silico prediction and analysis of dielectric constant of ionic liquids. Korean Journal of Chemical Engineering, 2022, 39, 1651-1657.	2.7	1
228	Comment on â€œSorption of Cr(VI) from dilute solutions and wastewater by live and pretreated biomass of Aspergillus flavusâ€• by Deepa et al.. Chemosphere, 2006, 63, 1060-1062.	8.2	0
229	Broadening of the optimal pH range for reactive dye biosorption by chemical modification of surface functional groups of Corynebacterium glutamicum biomass. Studies in Surface Science and Catalysis, 2006, , 161-164.	1.5	0
230	Recovery of precious metal from aqueous solution using surface modified biosorbent prepared from the waste biomass of Corynebacterium glutamicum. Journal of Bioscience and Bioengineering, 2009, 108, S82-S83.	2.2	0
231	An assessment of environmental benignity of ionic liquids with different head groups and side chains. Journal of Bioscience and Bioengineering, 2009, 108, S91.	2.2	0
232	Mechanistic aspects of biogenic synthesis of gold nanoparticles. Journal of Bioscience and Bioengineering, 2009, 108, S92.	2.2	0
233	Recovery of zero-valent gold from cyanide solution by biosorption followed by incineration. Journal of Bioscience and Bioengineering, 2009, 108, S93.	2.2	0
234	Recovery of Zero-Valent Ruthenium from Acetic Acid Waste Solution by a Combined Process of Biosorption with Bacterial Biosorbent Fibers and Incineration. Advanced Materials Research, 0, 825, 564-567.	0.3	0

#	ARTICLE	IF	CITATIONS
235	Quantitative Structure-Activity Relationships to Estimate Toxicity of Ionic Liquids (ILs). , 2019, , 1-16.		0