

Rajkishore K Patel

List of Publications by Year in descending order

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60
papers

3,363
citations

94269

37
h-index

143772

57
g-index

62
all docs

62
docs citations

62
times ranked

3456
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of removal efficiency of fluoride from aqueous solution using quick lime. <i>Journal of Hazardous Materials</i> , 2007, 143, 303-310.	6.5	231
2	Adsorption of methylene blue on chemically modified lychee seed biochar: Dynamic, equilibrium, and thermodynamic study. <i>Journal of Molecular Liquids</i> , 2020, 315, 113743.	2.3	193
3	Adsorption studies of arsenic(III) removal from water by zirconium polyacrylamide hybrid material (ZrPACM-43). <i>Water Resources and Industry</i> , 2013, 4, 51-67.	1.9	155
4	Neutralization of red mud using CO ₂ sequestration cycle. <i>Journal of Hazardous Materials</i> , 2010, 179, 28-34.	6.5	145
5	Synthesis and physicochemical characterization of Zn/Al chloride layered double hydroxide and evaluation of its nitrate removal efficiency. <i>Desalination</i> , 2010, 256, 120-128.	4.0	132
6	Removal of Cr (VI) from aqueous solution by Eichhornia crassipes root biomass-derived activated carbon. <i>Chemical Engineering Journal</i> , 2012, 185-186, 71-81.	6.6	130
7	Nitrate sorption by thermally activated Mg/Al chloride hydroxalcite-like compound. <i>Journal of Hazardous Materials</i> , 2009, 169, 524-531.	6.5	104
8	Synthesis of Polypyrrole-Modified Layered Double Hydroxides for Efficient Removal of Cr(VI). <i>Journal of Chemical & Engineering Data</i> , 2019, 64, 4357-4368.	1.0	93
9	Physicochemical characterization of hydroxyapatite and its application towards removal of nitrate from water. <i>Journal of Environmental Management</i> , 2010, 91, 1883-1891.	3.8	92
10	Thermal activation of basic oxygen furnace slag and evaluation of its fluoride removal efficiency. <i>Chemical Engineering Journal</i> , 2011, 169, 68-77.	6.6	87
11	Comprehensive Understanding of the Kinetics and Mechanism of Fluoride Removal over a Potent Nanocrystalline Hydroxyapatite Surface. <i>ACS Omega</i> , 2017, 2, 8118-8128.	1.6	75
12	Cerium phosphate polypyrrole flower like nanocomposite: A recyclable adsorbent for removal of Cr(VI) by adsorption combined with in-situ chemical reduction. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 99, 55-67.	2.9	74
13	Removal of Pb(II) from aqueous solution by acid activated red mud. <i>Journal of Environmental Chemical Engineering</i> , 2013, 1, 1315-1324.	3.3	70
14	Removal of hydrogen sulfide using red mud at ambient conditions. <i>Fuel Processing Technology</i> , 2011, 92, 1587-1592.	3.7	69
15	Fluoride removal in waters using ionic liquid-functionalized alumina as a novel adsorbent. <i>Journal of Cleaner Production</i> , 2017, 151, 303-318.	4.6	67
16	Adsorption of Zn(II) on activated red mud: Neutralized by CO ₂ . <i>Desalination</i> , 2011, 266, 93-97.	4.0	66
17	Facile synthesis of poly o-toluidine modified lanthanum phosphate nanocomposite as a superior adsorbent for selective fluoride removal: A mechanistic and kinetic study. <i>Chemosphere</i> , 2020, 252, 126551.	4.2	66
18	Investigating the selectivity and interference behavior for detoxification of Cr(VI) using lanthanum phosphate polyaniline nanocomposite via adsorption-reduction mechanism. <i>Chemosphere</i> , 2021, 278, 130507.	4.2	64

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19	Arsenate removal from aqueous solution by cellulose-carbonated hydroxyapatite nanocomposites. <i>Journal of Hazardous Materials</i> , 2011, 189, 755-763.	6.5	63
20	Physicochemical characterization and adsorption behavior of Ca/Al chloride hydrotalcite-like compound towards removal of nitrate. <i>Journal of Hazardous Materials</i> , 2011, 190, 659-668.	6.5	62
21	Adsorption of safranin-O dye on CO ₂ neutralized activated red mud waste: process modelling, analysis and optimization using statistical design. <i>RSC Advances</i> , 2015, 5, 42294-42304.	1.7	61
22	Synthesis and characterization of magnetic bio-adsorbent developed from Aegle marmelos leaves for removal of As(V) from aqueous solutions. <i>Environmental Science and Pollution Research</i> , 2019, 26, 946-958.	2.7	61
23	Kendu (<i>Diospyros melanoxylon</i> Roxb) fruit peel activated carbon as an efficient bioadsorbent for methylene blue dye: equilibrium, kinetic, and thermodynamic study. <i>Environmental Science and Pollution Research</i> , 2020, 27, 22579-22592.	2.7	61
24	Cigarette soot activated carbon modified with Fe ₃ O ₄ nanoparticles as an effective adsorbent for As(III) and As(V): Material preparation, characterization and adsorption mechanism study. <i>Journal of Molecular Liquids</i> , 2017, 243, 395-405.	2.3	59
25	Interactive Fe ₂ O ₃ /porous SiO ₂ nanospheres for photocatalytic degradation of organic pollutants: Kinetic and mechanistic approach. <i>Chemosphere</i> , 2019, 234, 596-607.	4.2	56
26	Modified Thorium Oxide Polyaniline Core-Shell Nanocomposite and Its Application for the Efficient Removal of Cr(VI). <i>Journal of Chemical & Engineering Data</i> , 2019, 64, 1294-1304.	1.0	54
27	Polyacrylamide thorium (IV) phosphate as an important lead selective fibrous ion exchanger: Synthesis, characterization and removal study. <i>Journal of Hazardous Materials</i> , 2008, 156, 509-520.	6.5	53
28	Synthesis of thorium-ethanolamine nanocomposite by the co-precipitation method and its application for Cr(VI) removal. <i>New Journal of Chemistry</i> , 2018, 42, 5556-5569.	1.4	51
29	Application of Box-Behnken Design in response surface methodology for adsorptive removal of arsenic from aqueous solution using CeO ₂ /Fe ₂ O ₃ /graphene nanocomposite. <i>Materials Chemistry and Physics</i> , 2018, 207, 233-242.	2.0	51
30	Studies on the removal of arsenic (III) from water by a novel hybrid material. <i>Journal of Hazardous Materials</i> , 2011, 192, 899-908.	6.5	49
31	Removal efficiency of fluoride by novel Mg-Cr-Cl layered double hydroxide by batch process from water. <i>Journal of Environmental Sciences</i> , 2013, 25, 993-1000.	3.2	49
32	Titania coated silica nanocomposite prepared via encapsulation method for the degradation of Safranin-O dye from aqueous solution: Optimization using statistical design. <i>Water Resources and Industry</i> , 2019, 22, 100071.	1.9	47
33	Enhanced removal of Cr(VI) by cerium oxide polyaniline composite: Optimization and modeling approach using response surface methodology and artificial neural networks. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 870-885.	3.3	46
34	Utilization of activated CO ₂ -neutralized red mud for removal of arsenate from aqueous solutions. <i>Journal of Hazardous Materials</i> , 2010, 179, 1007-1013.	6.5	45
35	Fluoride adsorption from aqueous solution by a hybrid thorium phosphate composite. <i>Chemical Engineering Journal</i> , 2011, 166, 978-985.	6.6	43
36	Neuro fuzzy approach for arsenic(III) and chromium(VI) removal from water. <i>Journal of Water Process Engineering</i> , 2015, 5, 58-75.	2.6	43

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37	Removal of safranin-O dye from aqueous solution using modified red mud: kinetics and equilibrium studies. <i>RSC Advances</i> , 2015, 5, 78491-78501.	1.7	41
38	Removal of lead (II) from aqueous environment by a fibrous ion exchanger: Polycinnamamide thorium (IV) phosphate. <i>Journal of Hazardous Materials</i> , 2009, 172, 707-715.	6.5	39
39	Removal of As(V) from aqueous solution by Ce-Fe bimetal mixed oxide. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 2892-2899.	3.3	34
40	Removal efficiency of Pb(II) from aqueous solution by 1-alkyl-3-methylimidazolium bromide ionic liquid mediated mesoporous silica. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 1356-1364.	3.3	32
41	Novel visible-light-driven cobalt loaded neutralized red mud (Co/NRM) composite with photocatalytic activity toward methylene blue dye degradation. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 40, 72-82.	2.9	31
42	Removal of As(III) from Aqueous Solution Using Fe ₃ O ₄ Nanoparticles: Process Modeling and Optimization Using Statistical Design. <i>Water, Air, and Soil Pollution</i> , 2017, 228, 1.	1.1	31
43	Efficient removal of Cr(VI) by polyaniline modified biochar from date (<i>Phoenix dactylifera</i>) seed. <i>Groundwater for Sustainable Development</i> , 2021, 15, 100653.	2.3	31
44	Equilibrium and kinetic studies of Cd(II) ion adsorption from aqueous solution by activated red mud. <i>Desalination and Water Treatment</i> , 2016, 57, 14251-14265.	1.0	28
45	Synthesis and characterization of an eco-friendly composite of jute fiber and Fe ₂ O ₃ nanoparticles and its application as an adsorbent for removal of As(V) from water. <i>Journal of Molecular Liquids</i> , 2017, 237, 313-321.	2.3	28
46	Fluoride removal from aqueous solutions using cerium loaded mesoporous zirconium phosphate. <i>New Journal of Chemistry</i> , 2015, 39, 7300-7308.	1.4	27
47	Modeling of Arsenic (III) Removal by Evolutionary Genetic Programming and Least Square Support Vector Machine Models. <i>Environmental Processes</i> , 2015, 2, 145-172.	1.7	24
48	Adsorption studies of chromium (VI) removal from water by lanthanum diethanolamine hybrid material. <i>Environmental Technology (United Kingdom)</i> , 2014, 35, 817-832.	1.2	23
49	Synthesis of hydroxyapatite-zirconia nanocomposite through sonochemical route: A potential catalyst for degradation of phenolic compounds. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 6504-6515.	3.3	20
50	Evaluation of Phosphate Removal Efficiency from Aqueous Solution by Polypyrrole/BOF Slag Nanocomposite. <i>Separation Science and Technology</i> , 2014, 49, 2668-2680.	1.3	19
51	Microwave assisted synthesis of polycinnamamide Mg/Al mixed oxide nanocomposite and its application towards the removal of arsenate from aqueous medium. <i>Chemical Engineering Journal</i> , 2013, 230, 48-58.	6.6	17
52	Novel Fe ₃ O ₄ -Modified Biochar Derived from Citrus Bergamia Peel: A Green Synthesis Approach for Adsorptive Removal of Methylene Blue. <i>ChemistrySelect</i> , 2022, 7, .	0.7	17
53	Mechanistic insight into the adsorption of mercury (II) on the surface of red mud supported nanoscale zero-valent iron composite. <i>Journal of Contaminant Hydrology</i> , 2022, 246, 103959.	1.6	16
54	Solvothermal synthesis of greigite (Fe ₃ S ₄)-Conducting polypyrrole nanocomposite and its application towards arsenic removal. <i>Separation Science and Technology</i> , 2017, 52, 2837-2854.	1.3	12

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55	Polyaniline/basic oxygen furnace slag nanocomposite as a viable adsorbent for the sorption of fluoride from aqueous medium: equilibrium, thermodynamic and kinetic study. Desalination and Water Treatment, 2015, 54, 450-463.	1.0	8
56	A novel approach in red mud neutralization using cow dung. Environmental Science and Pollution Research, 2018, 25, 12841-12848.	2.7	6
57	Visible light active Zr- and N-doped TiO ₂ coupled g-C ₃ N ₄ heterojunction nanosheets as a photocatalyst for the degradation of bromoxynil and Rh B along with the H ₂ evolution process. Nanoscale Advances, 2021, 3, 6468-6481.	2.2	5
58	Removal of malachite green dye from aqueous solution using mesoporous silica synthesized from 1-octyl-3-methylimidazolium chloride ionic liquid. AIP Conference Proceedings, 2016, , .	0.3	3
59	Phosphorus sorption behaviour of the largest brackish water lagoon, South Asia. Journal of Earth System Science, 2021, 130, 1.	0.6	1
60	PREPARATION AND CHARACTERIZATION OF MESOPOROUS CERIUM OXIDE FOR TOXIC AS(V) REMOVAL: PERFORMANCE AND MECHANISTIC STUDIE. Journal of Environmental Engineering and Landscape Management, 2022, 30, 321-330.	0.4	1