Rajkishore K Patel

List of Publications by Year
in descending order

60 papers	3,363 citations	94433 37 h-index	144013 57 g-index
62 all docs	62 docs citations	62 times ranked	3456 citing authors

#	Article	IF	Citations
1	Mechanistic insight into the adsorption of mercury (II) on the surface of red mud supported nanoscale zero-valent iron composite. Journal of Contaminant Hydrology, 2022, 246, 103959.	3.3	16
2	Novel Fe₃O₄â€Modified Biochar Derived from Citrus Bergamia Peel: A Green Synthesis Approach for Adsorptive Removal of Methylene Blue. ChemistrySelect, 2022, 7, .	1.5	17
3	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.	1.0	1
4	Visible light active Zr- and N-doped TiO₂ coupled g-C₃N₄ heterojunction nanosheets as a photocatalyst for the degradation of bromoxynil and Rh B along with the H₂ evolution process. Nanoscale Advances, 2021, 3, 6468-6481.	4.6	5
5	Phosphorus sorption behaviour of the largest brackish water lagoon, South Asia. Journal of Earth System Science, 2021, 130, 1.	1.3	1
6	Cerium phosphate polypyrrole flower like nanocomposite: A recyclable adsorbent for removal of Cr(VI) by adsorption combined with in-situ chemical reduction. Journal of Industrial and Engineering Chemistry, 2021, 99, 55-67.	5.8	74
7	Investigating the selectivity and interference behavior for detoxification of Cr(VI) using lanthanum phosphate polyaniline nanocomposite via adsorption-reduction mechanism. Chemosphere, 2021, 278, 130507.	8.2	64
8	Efficient removal of Cr(VI) by polyaniline modified biochar from date (Phoenix dactylifera) seed. Groundwater for Sustainable Development, 2021, 15, 100653.	4.6	31
9	Facile synthesis of poly o-toluidine modified lanthanum phosphate nanocomposite as a superior adsorbent for selective fluoride removal: A mechanistic and kinetic study. Chemosphere, 2020, 252, 126551.	8.2	66
10	Adsorption of methylene blue on chemically modified lychee seed biochar: Dynamic, equilibrium, and thermodynamic study. Journal of Molecular Liquids, 2020, 315, 113743.	4.9	193
11	Kendu (Diospyros melanoxylon Roxb) fruit peel activated carbonâ€"an efficient bioadsorbent for methylene blue dye: equilibrium, kinetic, and thermodynamic study. Environmental Science and Pollution Research, 2020, 27, 22579-22592.	5.3	61
12	Synthesis of Polypyrrole-Modified Layered Double Hydroxides for Efficient Removal of Cr(VI). Journal of Chemical & Engineering Data, 2019, 64, 4357-4368.	1.9	93
13	Interactive Fe2O3/porous SiO2 nanospheres for photocatalytic degradation of organic pollutants: Kinetic and mechanistic approach. Chemosphere, 2019, 234, 596-607.	8.2	56
14	Modified Thorium Oxide Polyaniline Coreâ€“Shell Nanocomposite and Its Application for the Efficient Removal of Cr(VI). Journal of Chemical & Engineering Data, 2019, 64, 1294-1304.	1.9	54
15	Synthesis and characterization of magnetic bio-adsorbent developed from Aegle marmelos leaves for removal of As(V) from aqueous solutions. Environmental Science and Pollution Research, 2019, 26, 946-958.	5.3	61
16	Titania coated silica nanocomposite prepared via encapsulation method for the degradation of Safranin-O dye from aqueous solution: Optimization using statistical design. Water Resources and Industry, 2019, 22, 100071.	3.9	47
17	Synthesis of thoriumâ€“ethanolamine nanocomposite by the co-precipitation method and its application for Cr(<scp>vi</scp>) removal. New Journal of Chemistry, 2018, 42, 5556-5569.	2.8	51
18	A novel approach in red mud neutralization using cow dung. Environmental Science and Pollution Research, 2018, 25, 12841-12848.	5.3	6

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19	Application of Boxâ€“Behnken Design in response surface methodologyÂfor adsorptive removal of arsenic from aqueous solutionÂusing CeO2/Fe2O3/graphene nanocomposite. Materials Chemistry and Physics, 2018, 207, 233-242.	4.0	51
20	Synthesis of hydroxyapatite-zirconia nanocomposite through sonochemical route: A potential catalyst for degradation of phenolic compounds. Journal of Environmental Chemical Engineering, 2018, 6, 6504-6515.	6.7	20
21	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. Journal of Molecular Liquids, 2017, 237, 313-321.	4.9	28
22	Fluoride removal in waters using ionic liquid-functionalized alumina as a novel adsorbent. Journal of Cleaner Production, 2017, 151, 303-318.	9.3	67
23	Removal of As(III) from Aqueous Solution Using Fe3O4 Nanoparticles: Process Modeling and Optimization Using Statistical Design. Water, Air, and Soil Pollution, 2017, 228, 1.	2.4	31
24	Solvothermal synthesis of greigite (Fe₃S₄)â€“ Conducting polypyrrole nanocomposite and its application towards arsenic removal. Separation Science and Technology, 2017, 52, 2837-2854.	2.5	12
25	Cigarette soot activated carbon modified with Fe3O4 nanoparticles as an effective adsorbent for As(III) and As(V): Material preparation, characterization and adsorption mechanism study. Journal of Molecular Liquids, 2017, 243, 395-405.	4.9	59
26	Comprehensive Understanding of the Kinetics and Mechanism of Fluoride Removal over a Potent Nanocrystalline Hydroxyapatite Surface. ACS Omega, 2017, 2, 8118-8128.	3.5	75
27	Removal of malachite green dye from aqueous solution using mesoporous silica synthesized from 1-octyl-3-methylimidazolium chloride ionic liquid. AIP Conference Proceedings, 2016, , .	0.4	3
28	Novel visible-light-driven cobalt loaded neutralized red mud (Co/NRM) composite with photocatalytic activity toward methylene blue dye degradation. Journal of Industrial and Engineering Chemistry, 2016, 40, 72-82.	5.8	31
29	Removal of As(V) from aqueous solution by Ce-Fe bimetal mixed oxide. Journal of Environmental Chemical Engineering, 2016, 4, 2892-2899.	6.7	34
30	Equilibrium and kinetic studies of Cd(II) ion adsorption from aqueous solution by activated red mud. Desalination and Water Treatment, 2016, 57, 14251-14265.	1.0	28
31	Neuro fuzzy approach for arsenic(III) and chromium(VI) removal from water. Journal of Water Process Engineering, 2015, 5, 58-75.	5.6	43
32	Removal efficiency of Pb(II) from aqueous solution by 1-alkyl-3-methylimidazolium bromide ionic liquid mediated mesoporous silica. Journal of Environmental Chemical Engineering, 2015, 3, 1356-1364.	6.7	32
33	Modeling of Arsenic (III) Removal by Evolutionary Genetic Programming and Least Square Support Vector Machine Models. Environmental Processes, 2015, 2, 145-172.	3.5	24
34	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
35	Fluoride removal from aqueous solutions using cerium loaded mesoporous zirconium phosphate. New Journal of Chemistry, 2015, 39, 7300-7308.	2.8	27
36	Adsorption of safranin-O dye on CO₂neutralized activated red mud waste: process modelling, analysis and optimization using statistical design. RSC Advances, 2015, 5, 42294-42304.	3.6	61

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37	Enhanced removal of Cr(VI) by cerium oxide polyaniline composite: Optimization and modeling approach using response surface methodology and artificial neural networks. Journal of Environmental Chemical Engineering, 2015, 3, 870-885.	6.7	46
38	Removal of safranin-O dye from aqueous solution using modified red mud: kinetics and equilibrium studies. RSC Advances, 2015, 5, 78491-78501.	3.6	41
39	Evaluation of Phosphate Removal Efficiency from Aqueous Solution by Polypyrrole/BOF Slag Nanocomposite. Separation Science and Technology, 2014, 49, 2668-2680.	2.5	19
40	Adsorption studies of chromium (VI) removal from water by lanthanum diethanolamine hybrid material. Environmental Technology (United Kingdom), 2014, 35, 817-832.	2.2	23
41	Adsorption studies of arsenic(III) removal from water by zirconium polyacrylamide hybrid material (ZrPACM-43). Water Resources and Industry, 2013, 4, 51-67.	3.9	155
42	Removal efficiency of fluoride by novel Mg-Cr-Cl layered double hydroxide by batch process from water. Journal of Environmental Sciences, 2013, 25, 993-1000.	6.1	49
43	Removal of Pb(II) from aqueous solution by acid activated red mud. Journal of Environmental Chemical Engineering, 2013, 1, 1315-1324.	6.7	70
44	Microwave assisted synthesis of polycinnamamide Mg/Al mixed oxide nanocomposite and its application towards the removal of arsenate from aqueous medium. Chemical Engineering Journal, 2013, 230, 48-58.	12.7	17
45	Removal of Cr (VI) from aqueous solution by Eichhornia crassipes root biomass-derived activated carbon. Chemical Engineering Journal, 2012, 185-186, 71-81.	12.7	130
46	Removal of hydrogen sulfide using red mud at ambient conditions. Fuel Processing Technology, 2011, 92, 1587-1592.	7.2	69
47	Fluoride adsorption from aqueous solution by a hybrid thorium phosphate composite. Chemical Engineering Journal, 2011, 166, 978-985.	12.7	43
48	Thermal activation of basic oxygen furnace slag and evaluation of its fluoride removal efficiency. Chemical Engineering Journal, 2011, 169, 68-77.	12.7	87
49	Adsorption of Zn(II) on activated red mud: Neutralized by CO2. Desalination, 2011, 266, 93-97.	8.2	66
50	Arsenate removal from aqueous solution by cellulose-carbonated hydroxyapatite nanocomposites. Journal of Hazardous Materials, 2011, 189, 755-763.	12.4	63
51	Physicochemical characterization and adsorption behavior of Ca/Al chloride hydrotalcite-like compound towards removal of nitrate. Journal of Hazardous Materials, 2011, 190, 659-668.	12.4	62
52	Studies on the removal of arsenic (III) from water by a novel hybrid material. Journal of Hazardous Materials, 2011, 192, 899-908.	12.4	49
53	Physicochemical characterization of hydroxyapatite and its application towards removal of nitrate from water. Journal of Environmental Management, 2010, 91, 1883-1891.	7.8	92
54	Neutralization of red mud using CO2 sequestration cycle. Journal of Hazardous Materials, 2010, 179, 28-34.	12.4	145

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55	Utilization of activated CO2-neutralized red mud for removal of arsenate from aqueous solutions. Journal of Hazardous Materials, 2010, 179, 1007-1013.	12.4	45
56	Synthesis and physicochemical characterization of Zn/Al chloride layered double hydroxide and evaluation of its nitrate removal efficiency. Desalination, 2010, 256, 120-128.	8.2	132
57	Nitrate sorption by thermally activated Mg/Al chloride hydrotalcite-like compound. Journal of Hazardous Materials, 2009, 169, 524-531.	12.4	104
58	Removal of lead (II) from aqueous environment by a fibrous ion exchanger: Polycinnamamide thorium (IV) phosphate. Journal of Hazardous Materials, 2009, 172, 707-715.	12.4	39
59	Polyacrylamide thorium (IV) phosphate as an important lead selective fibrous ion exchanger: Synthesis, characterization and removal study. Journal of Hazardous Materials, 2008, 156, 509-520.	12.4	53
60	Evaluation of removal efficiency of fluoride from aqueous solution using quick lime. Journal of Hazardous Materials, 2007, 143, 303-310.	12.4	231