

Sankaran Meenakshi

List of Publications by Year in descending order

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99
papers

4,688
citations

71061

41
h-index

110317

64
g-index

99
all docs

99
docs citations

99
times ranked

3852
citing authors

#	ARTICLE	IF	CITATIONS
1	Identification of selective ion-exchange resin for fluoride sorption. <i>Journal of Colloid and Interface Science</i> , 2007, 308, 438-450.	5.0	411
2	Removal of Pb(II) and Cd(II) ions from aqueous solution using polyaniline grafted chitosan. <i>Chemical Engineering Journal</i> , 2015, 263, 168-177.	6.6	286
3	Enhanced fluoride sorption by mechanochemically activated kaolinites. <i>Journal of Hazardous Materials</i> , 2008, 153, 164-172.	6.5	197
4	Synergistic Effect of Chitosan and Titanium Dioxide on the Removal of Toxic Dyes by the Photodegradation Technique. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 55-63.	1.8	139
5	Applications of chitin and chitosan based biomaterials for the adsorptive removal of textile dyes from water – A comprehensive review. <i>Carbohydrate Polymers</i> , 2021, 273, 118604.	5.1	111
6	Removal of chlorpyrifos, an insecticide using metal free heterogeneous graphitic carbon nitride (g-C ₃ N ₄) incorporated chitosan as catalyst: Photocatalytic and adsorption studies. <i>International Journal of Biological Macromolecules</i> , 2019, 132, 289-299.	3.6	100
7	Synthesis and characterization of metal loaded chitosan-alginate biopolymeric hybrid beads for the efficient removal of phosphate and nitrate ions from aqueous solution. <i>International Journal of Biological Macromolecules</i> , 2019, 130, 407-418.	3.6	93
8	Effective removal of Cr(VI) and methyl orange from the aqueous environment using two-dimensional (2D) Ti ₃ C ₂ T _x MXene nanosheets. <i>Ceramics International</i> , 2021, 47, 3692-3698.	2.3	93
9	An efficient and regenerable quaternary amine modified chitosan beads for the removal of nitrate and phosphate anions. <i>Journal of Environmental Chemical Engineering</i> , 2013, 1, 906-915.	3.3	92
10	A novel quaternized chitosan-melamine-glutaraldehyde resin for the removal of nitrate and phosphate anions. <i>International Journal of Biological Macromolecules</i> , 2014, 64, 224-232.	3.6	91
11	Fabrication of sulfur-doped biochar derived from tapioca peel waste with superior adsorption performance for the removal of Malachite green and Rhodamine B dyes. <i>Surfaces and Interfaces</i> , 2021, 23, 100920.	1.5	85
12	Removal of phosphate and nitrate ions from aqueous solution using La ³⁺ incorporated chitosan biopolymeric matrix membrane. <i>International Journal of Biological Macromolecules</i> , 2019, 124, 492-504.	3.6	84
13	Zr(IV) loaded cross-linked chitosan beads with enhanced surface area for the removal of nitrate and phosphate. <i>International Journal of Biological Macromolecules</i> , 2014, 69, 336-343.	3.6	83
14	Lanthanum (III) encapsulated chitosan-montmorillonite composite for the adsorptive removal of phosphate ions from aqueous solution. <i>International Journal of Biological Macromolecules</i> , 2018, 112, 284-293.	3.6	83
15	Preparation and characterization of La(III) encapsulated silica gel/chitosan composite and its metal uptake studies. <i>Journal of Hazardous Materials</i> , 2012, 203-204, 29-37.	6.5	81
16	Effective removal of nitrate and phosphate anions from aqueous solutions using functionalised chitosan beads. <i>Desalination and Water Treatment</i> , 2014, 52, 2583-2593.	1.0	79
17	One pot synthesis of chitosan grafted quaternized resin for the removal of nitrate and phosphate from aqueous solution. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1517-1527.	3.6	77
18	Synthesis and characterization of Zn-Al LDHs/activated carbon composite and its adsorption properties for phosphate and nitrate ions in aqueous medium. <i>Journal of Molecular Liquids</i> , 2019, 296, 111766.	2.3	77

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19	Effective removal of organic pollutants by adsorption onto chitosan supported graphene oxide-hydroxyapatite composite: A novel reusable adsorbent. <i>Journal of Molecular Liquids</i> , 2020, 318, 114200.	2.3	76
20	Two-dimensional (2D) Ti ₃ C ₂ T _x MXene nanosheets with superior adsorption behavior for phosphate and nitrate ions from the aqueous environment. <i>Ceramics International</i> , 2021, 47, 732-739.	2.3	71
21	Chemical modification of chitin with polypyrrole for the uptake of Pb(II) and Cd(II) ions. <i>International Journal of Biological Macromolecules</i> , 2015, 78, 157-164.	3.6	70
22	Mechanistic performance of polyaniline-substituted hexagonal boron nitride composite as a highly efficient adsorbent for the removal of phosphate, nitrate, and hexavalent chromium ions from an aqueous environment. <i>Applied Surface Science</i> , 2020, 511, 145543.	3.1	69
23	Enriched fluoride sorption using chitosan supported mixed metal oxides beads: Synthesis, characterization and mechanism. <i>Journal of Water Process Engineering</i> , 2014, 2, 96-104.	2.6	67
24	Synthesis and characterization of La(III) supported carboxymethylcellulose-clay composite for toxic dyes removal: Evaluation of adsorption kinetics, isotherms and thermodynamics. <i>International Journal of Biological Macromolecules</i> , 2020, 161, 1117-1126.	3.6	67
25	Adsorptive performance of lanthanum encapsulated biopolymer chitosan-kaolin clay hybrid composite for the recovery of nitrate and phosphate from water. <i>International Journal of Biological Macromolecules</i> , 2020, 154, 188-197.	3.6	65
26	Synthesis, characterization and Cr(VI) uptake study of polyaniline coated chitin. <i>International Journal of Biological Macromolecules</i> , 2015, 72, 235-242.	3.6	56
27	Enhancement of oil recovery using zirconium-chitosan hybrid composite by adsorptive method. <i>Carbohydrate Polymers</i> , 2016, 145, 103-113.	5.1	56
28	Exploitation of zinc oxide impregnated chitosan beads for the photocatalytic decolorization of an azo dye. <i>International Journal of Biological Macromolecules</i> , 2015, 72, 900-910.	3.6	54
29	Zr ⁴⁺ ions embedded chitosan-soya bean husk activated bio-char composite beads for the recovery of nitrate and phosphate ions from aqueous solution. <i>International Journal of Biological Macromolecules</i> , 2019, 130, 573-583.	3.6	53
30	Removal of hexavalent chromium ions from aqueous solution using chitosan/polypyrrole composite. <i>Desalination and Water Treatment</i> , 2015, 56, 1587-1600.	1.0	52
31	Assembly of nano-sized hydroxyapatite onto graphene oxide sheets via in-situ fabrication method and its prospective application for defluoridation studies. <i>Chemical Engineering Journal</i> , 2016, 300, 334-342.	6.6	52
32	Designed fabrication of sulfide-rich bi-metallic-assembled MXene layered sheets with dramatically enhanced photocatalytic performance for Rhodamine B removal. <i>Separation and Purification Technology</i> , 2021, 258, 118003.	3.9	52
33	Synthesis, characterization and Cr(VI) uptake studies of polypyrrole functionalized chitin. <i>Synthetic Metals</i> , 2014, 198, 181-187.	2.1	48
34	Synthesis and characterization of chitosan/Mg-Al layered double hydroxide composite for the removal of oil particles from oil-in-water emulsion. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1586-1595.	3.6	46
35	Facile synthesis of chitosan-La ³⁺ -graphite composite and its influence in photocatalytic degradation of methylene blue. <i>International Journal of Biological Macromolecules</i> , 2019, 133, 253-261.	3.6	46
36	Boosted insights of novel accordion-like (2D/2D) hybrid photocatalyst for the removal of cationic dyes: Mechanistic and degradation pathways. <i>Journal of Environmental Management</i> , 2020, 273, 111125.	3.8	45

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37	Fabrication of hybrid chitosan encapsulated magnetic-kaolin beads for adsorption of phosphate and nitrate ions from aqueous solutions. <i>International Journal of Biological Macromolecules</i> , 2021, 168, 750-759.	3.6	45
38	Removal of Toxic Cr(VI) Ions from Aqueous Solution Using Nano-Hydroxyapatite-Based Chitin and Chitosan Hybrid Composites. <i>Adsorption Science and Technology</i> , 2010, 28, 49-64.	1.5	44
39	Effective adsorption of oil droplets from oil-in-water emulsion using metal ions encapsulated biopolymers: Role of metal ions and their mechanism in oil removal. <i>International Journal of Biological Macromolecules</i> , 2018, 112, 294-305.	3.6	44
40	Perceptive removal of toxic azo dyes from water using magnetic Fe ₃ O ₄ reinforced graphene oxide-carboxymethyl cellulose recyclable composite: Adsorption investigation of parametric studies and their mechanisms. <i>Surfaces and Interfaces</i> , 2020, 21, 100648.	1.5	44
41	Novel one-pot synthesis of dicarboxylic acids mediated alginate-zirconium biopolymeric complex for defluoridation of water. <i>Carbohydrate Polymers</i> , 2015, 120, 60-68.	5.1	43
42	Effective adsorption of hexavalent chromium using biopolymer assisted oxyhydroxide materials from aqueous solution. <i>Reactive and Functional Polymers</i> , 2017, 117, 16-24.	2.0	42
43	Immobilization of MIL-88(Fe) anchored TiO ₂ -chitosan(2D/2D) hybrid nanocomposite for the degradation of organophosphate pesticide: Characterization, mechanism and degradation intermediates. <i>Journal of Hazardous Materials</i> , 2021, 406, 124728.	6.5	41
44	Visible light-driven photoactivity of zinc oxide impregnated chitosan beads for the detoxification of textile dyes. <i>Applied Catalysis A: General</i> , 2015, 503, 124-134.	2.2	40
45	Photo-reduction of Cr(VI) using chitosan supported zinc oxide materials. <i>International Journal of Biological Macromolecules</i> , 2017, 104, 1783-1793.	3.6	39
46	Facile synthesis of Zr ⁴⁺ incorporated chitosan/gelatin composite for the sequestration of Chromium(VI) and fluoride from water. <i>Chemosphere</i> , 2021, 262, 128317.	4.2	38
47	Magnesium ferrite-reinforced polypyrrole hybrids as an effective adsorbent for the removal of toxic ions from aqueous solutions: Preparation, characterization, and adsorption experiments. <i>Journal of Hazardous Materials</i> , 2021, 408, 124892.	6.5	37
48	Enhanced photocatalytic response of ZnO embedded chitosan/ β -cyclodextrin towards the detoxification of Cr(VI) under visible light. <i>International Journal of Biological Macromolecules</i> , 2020, 147, 867-876.	3.6	34
49	A dendrimer-like hyper branched chitosan beads toward fluoride adsorption from water. <i>International Journal of Biological Macromolecules</i> , 2015, 78, 280-286.	3.6	33
50	Preparation and metal uptake studies of modified forms of chitin. <i>International Journal of Biological Macromolecules</i> , 2010, 47, 583-589.	3.6	32
51	Removal of nitrate and phosphate anions from aqueous solutions using strong base anion exchange resin. <i>Desalination and Water Treatment</i> , 2013, 51, 7145-7156.	1.0	32
52	Development of sodium alginate@ZnFe-LDHs functionalized beads: Adsorption properties and mechanistic behaviour of phosphate and nitrate ions from the aqueous environment. <i>Environmental Chemistry and Ecotoxicology</i> , 2021, 3, 42-50.	4.6	32
53	Hydrothermal synthesis of magnetic iron oxide encrusted hydrocalumite-chitosan composite for defluoridation studies. <i>International Journal of Biological Macromolecules</i> , 2019, 132, 600-605.	3.6	31
54	Fabrication of La ³⁺ Impregnated Chitosan/ β -Cyclodextrin Biopolymeric Materials for Effective Utilization of Chromate and Fluoride Adsorption in Single Systems. <i>Journal of Chemical & Engineering Data</i> , 2018, 63, 723-731.	1.0	30

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55	Adsorptive removal of anionic azo dyes from effluent water using Zr(IV) encapsulated carboxymethyl cellulose-montmorillonite composite. <i>Environmental Chemistry and Ecotoxicology</i> , 2020, 2, 73-82.	4.6	29
56	Lanthanum (III) incorporated chitosan-montmorillonite composite as flexible material for adsorptive removal of azo dyes from water. <i>Materials Today: Proceedings</i> , 2020, 27, 318-326.	0.9	28
57	Magnetic carbon-biomass from the seeds of <i>Moringa oleifera</i> @MnFe ₂ O ₄ composite as an effective and recyclable adsorbent for the removal of organic pollutants from water. <i>Journal of Molecular Liquids</i> , 2021, 327, 114829.	2.3	28
58	Facile synthesis of metal incorporated chitin for the recovery of oil from oil-in-water emulsion using adsorptive method. <i>Journal of Cleaner Production</i> , 2016, 139, 1339-1350.	4.6	27
59	Defluoridation of water by Tea - bag model using La ³⁺ modified synthetic resin@chitosan biocomposite. <i>International Journal of Biological Macromolecules</i> , 2016, 91, 1002-1009.	3.6	26
60	Complex interior and surface modified alginate reinforced reduced graphene oxide-hydroxyapatite hybrids: Removal of toxic azo dyes from the aqueous solution. <i>International Journal of Biological Macromolecules</i> , 2021, 175, 361-371.	3.6	26
61	Enhanced and selective fluoride sorption on Ce(III) encapsulated chitosan polymeric matrix. <i>Journal of Applied Polymer Science</i> , 2009, 112, 1114-1121.	1.3	25
62	Synthesis and Characterization of a Few Amino-Functionalized Copolymeric Resins and Their Environmental Applications. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 5677-5684.	1.8	24
63	In-situ fabrication of zirconium entrenched biopolymeric hybrid membrane for the removal of toxic anions from aqueous medium. <i>International Journal of Biological Macromolecules</i> , 2019, 141, 1199-1209.	3.6	24
64	Selective sorption of Fe(III) using modified forms of chitosan beads. <i>Journal of Applied Polymer Science</i> , 2012, 124, 1858-1865.	1.3	23
65	In situ fabrication of magnetic particles decorated biopolymeric composite beads for the selective remediation of phosphate and nitrate from aqueous medium. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103530.	3.3	23
66	Chitosan modified zirconium/zinc oxide as a visible light driven photocatalyst for the efficient reduction of hexavalent chromium. <i>International Journal of Biological Macromolecules</i> , 2020, 159, 324-332.	3.6	22
67	Decolorization and detoxification of Acid blue 158 dye using cuttlefish bone powder as co-adsorbent via photocatalytic method. <i>Journal of Water Process Engineering</i> , 2014, 2, 22-30.	2.6	20
68	Encapsulation of metal ions between the biopolymeric layer beads for tunable action on oil particles adsorption from oily wastewater. <i>Journal of Molecular Liquids</i> , 2018, 255, 429-438.	2.3	20
69	Removal of nitrate and phosphate ions from aqueous solution using zirconium encapsulated chitosan quaternized beads: Preparation, characterization and mechanistic performance. <i>Results in Surfaces and Interfaces</i> , 2021, 3, 100010.	1.0	20
70	Preparation of novel cobalt ferrite coated-porous carbon composite by simple chemical co-precipitation method and their mechanistic performance. <i>Diamond and Related Materials</i> , 2020, 108, 107922.	1.8	20
71	Preparation of Modified Chitin for the Removal of Chromium(VI). <i>Bioremediation Journal</i> , 2010, 14, 208-218.	1.0	19
72	Ce(III) networked chitosan/ β -cyclodextrin beads for the selective removal of toxic dye molecules: Adsorption performance and mechanism. <i>Carbohydrate Polymer Technologies and Applications</i> , 2020, 1, 100018.	1.6	19

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73	Defluoridation of water using dicarboxylic acids mediated chitosan-polyaniline/zirconium biopolymeric complex. <i>International Journal of Biological Macromolecules</i> , 2016, 85, 16-22.	3.6	18
74	Comparative studies on revival of nitrate and phosphate ions using quaternized corn husk and jackfruit peel. <i>Bioresource Technology Reports</i> , 2019, 8, 100331.	1.5	18
75	Removal of phosphate and nitrate via a zinc ferrite@activated carbon hybrid composite under batch experiments: Study of isotherm and kinetic equilibriums. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2020, 14, 100378.	1.7	18
76	Performance of chitosan engraved iron and lanthanum mixed oxyhydroxide for the detoxification of hexavalent chromium. <i>International Journal of Biological Macromolecules</i> , 2019, 130, 491-498.	3.6	17
77	Removal of Acid Blue 158 from Aqueous Media by Adsorption Onto Cross-Linked Chitosan Beads. <i>Journal of Chitin and Chitosan Science</i> , 2013, 1, 50-58.	0.3	17
78	In-situ fabrication of cerium incorporated chitosan- β -cyclodextrin microspheres as an effective adsorbent for toxic anions removal. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2019, 12, 100272.	1.7	15
79	Environment responsive Al ³⁺ networked chitosan-gelatin spherical beads for the effective removal of organic pollutants from aqueous solutions. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 3055-3064.	3.6	15
80	Removal of toxic ions from aqueous solutions by surfactant-assisted biopolymeric hybrid membrane: Synthesis, characterization and toxic ions removal performance. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103717.	3.3	14
81	Mechanistic performance of organic pollutants removal from water using Zn/Al layered double hydroxides imprinted carbon composite. <i>Surfaces and Interfaces</i> , 2020, 20, 100581.	1.5	13
82	Enhanced removal of phosphate and nitrate ions by a novel Zn Fe LDHs-activated carbon composite. <i>Sustainable Materials and Technologies</i> , 2020, 25, e00154.	1.7	13
83	Encapsulation of Zn@Fe layered double hydroxide on activated carbon and its liveness in tuning anionic and rhoda dyes through adsorption mechanism. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2020, 15, e2479.	0.8	13
84	Photocatalytic performance of chitosan tethered magnetic Fe ₂ O ₃ -like (3D/2D) hybrid for the dynamic removal of anionic dyes: Degradation and mechanistic pathways. <i>International Journal of Biological Macromolecules</i> , 2021, 183, 2088-2099.	3.6	12
85	Tunable photocatalytic oxidation response of ZnS tethered chitosan-polyaniline composite for the removal of organic pollutants: A mechanistic perspective. <i>Materials Today: Proceedings</i> , 2021, 47, 2553-2559.	0.9	12
86	Synthesis and characterization of magnetic chitin composite and its application towards the uptake of Pb(II) and Cd(II) ions from aqueous solution. <i>Environmental Progress and Sustainable Energy</i> , 2019, 38, S288.	1.3	11
87	In-situ fabrication of ternary (3D/2D/2D) prism-like structures with dramatically enhancement on degradation of profenofos: A systemic study. <i>Journal of Water Process Engineering</i> , 2021, 39, 101720.	2.6	10
88	Performance evaluation of biopolymeric hybrid membrane and their mechanistic approach for the remediation of phosphate and nitrate ions from water. <i>Cellulose</i> , 2020, 27, 4539-4554.	2.4	9
89	Treatment of emulsified oil using biopolymer assisted materials. <i>Polymer Composites</i> , 2018, 39, E261.	2.3	8
90	Al ³⁺ incorporated chitosan-gelatin hybrid microspheres and their use for toxic ions removal: Assessment of its sustainability metrics. <i>Environmental Chemistry and Ecotoxicology</i> , 2020, 2, 97-106.	4.6	8

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91	Removal of phosphate and nitrate ions from water by amine crosslinked magnetic banana bract activated carbon and its physicochemical performance. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2020, 13, 100294.	1.7	8
92	Effective and selective removal of organic pollutants from aqueous solutions using 1D hydroxyapatite-decorated 2D reduced graphene oxide nanocomposite. <i>Journal of Molecular Liquids</i> , 2021, 331, 115795.	2.3	6
93	Equilibrium and Kinetic Studies on the Removal of Basic Violet 10 from Aqueous Solutions Using Activated Carbons Prepared from Industrial Wastes. <i>Bioremediation Journal</i> , 2012, 16, 86-96.	1.0	5
94	Effective utilization of the functional groups in chitosan by loading Zn(II) for the removal of nitrate and phosphate. <i>Desalination and Water Treatment</i> , 0, , 1-10.	1.0	5
95	Synthesis and characterization of Ce(III) decorated Duolite resin and its removal performance of toxic anions from aqueous solutions. <i>Environmental Chemistry and Ecotoxicology</i> , 2021, 3, 8-16.	4.6	5
96	Surface activated mesoporous Ag-Fe ₃ O ₄ tethered chitosan nanomatrix heterojunction photocatalyst for organic dyes degradation: Performance, recycling, and mechanism. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2022, 17, 100654.	1.7	3
97	Construction of ternary (1D/2D/3D) Fe ₂ O ₃ -supported micro pillared Cu-based MOF on chitosan with improved photocatalytic behavior on removal of paraquat. <i>Environmental Science and Pollution Research</i> , 2023, 30, 24876-24889.	2.7	2
98	Preparation of Amino Functionalized Polymeric Resins for Selective Removal of Copper Ions. <i>International Journal of the Society of Materials Engineering for Resources</i> , 2014, 20, 71-76.	0.1	1
99	Technological Advancement in Photocatalytic Degradation of Dyes Using Metal-Doped Biopolymeric Composites—Present and Future Perspectives. <i>Energy, Environment, and Sustainability</i> , 2021, , 205-255.	0.6	1