

CITATION REPORT

List of articles citing

Application of chitosan, a natural aminopolysaccharide, for dye removal from aqueous solutions by adsorption processes using batch studies: A review of recent literature

DOI: 10.1016/j.progpolymsci.2007.11.001

Progress in Polymer Science, 2008, 33, 399-447.

Source: <https://exaly.com/paper-pdf/43471844/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
1692	Adsorption behaviors of three polymeric adsorbents with amide groups for phenol in aqueous solution. 2008 , 327, 9-14		37
1691	The removal of sulphonated azo-dyes by coagulation with chitosan. 2008 , 330, 219-226		96
1690	Chitosan derivatives obtained by chemical modifications for biomedical and environmental applications. 2008 , 43, 401-14		594
1689	Batch and Dynamic Flow Biosorption Potential of <i>Agaricus bisporus</i> / <i>Thuja orientalis</i> Biomass Mixture for Decolorization of RR45 Dye. 2008 , 47, 9715-9723		13
1688	Biosorption of chitin and chitosan. 2008 , 24, 1088-1099		30
1687	Removal of Methylene Blue from Aqueous Solution by Non-Living Biomass of Marine Algae and Freshwater Macrophyte. 2008 , 26, 853-863		5
1686	Assessment on thermodynamics and kinetics parameters on reduction of methylene blue dye using flyash. 2009 , 12, 219-228		31
1685	Functional Characterization of Chitin and Chitosan. 2009 , 3, 203-230		147
1684	Chitosan and its antimicrobial potential--a critical literature survey. 2009 , 2, 186-201		468
1683	Synthesis of Microporous Cationic Hydrogel of Hydroxypropyl Cellulose (HPC) and its Application on Anionic Dye Removal. 2009 , 37, 392-398		40
1682	A Study of the Thermodynamics and Kinetics of Copper Adsorption Using Chemically Modified Rice Husk. 2009 , 37, 704-711		90
1681	Biosorption: critical review of scientific rationale, environmental importance and significance for pollution treatment. 2009 , 84, 13-28		808
1680	Removal of Basic Blue 3 by sorption onto a weak acid acrylic resin. 2009 , 113, 607-614		15
1679	Adsorption of anionic textile dye Acid Green 9 from aqueous solution onto weak or strong base anion exchangers. 2009 , 113, 615-627		29
1678	Adsorption of crystal violet dye from aqueous solution using mesoporous materials synthesized at room temperature. 2009 , 15, 390-405		125
1677	Application of low-cost adsorbents for dye removal--a review. 2009 , 90, 2313-42		2385
1676	Biosorption of azo dyes from aqueous solution by glutaraldehyde-crosslinked chitosans. 2009 , 172, 1111-21		119

1675	Removal of rhodamine B from aqueous solution by sorption on <i>Turbinaria conoides</i> (Phaeophyta). 2009 , 21, 625-631	42
1674	Decolourisation of model and industrial dyes by mitosporic fungi in different culture conditions. 2009 , 25, 1363-1374	18
1673	Ultrasonic-assisted condensation of chitosan with salicylaldehyde. 2009 , 27, 882-886	3
1672	Chitosan for coagulation/flocculation processes [An eco-friendly approach. 2009 , 45, 1337-1348	579
1671	Chitosan-γ-aminic chloride intermediary as a source to incorporate molecules [Thermodynamic data of copper/biopolymer interactions. 2009 , 483, 21-28	41
1670	Synthesis of a chitin-based biocomposite for water treatment: Optimization for fluoride removal. 2009 , 130, 718-726	40
1669	Ethylenediamine modified starch as biosorbent for acid dyes. 2009 , 172, 1665-70	38
1668	The kinetics of adsorption of tetracycline on chitosan particles. 2009 , 340, 182-91	64
1667	Adsorption of methyl violet onto granular activated carbon: Equilibrium, kinetics and modeling. 2009 , 146, 36-41	143
1666	Degradation and biodegradability improvement of the reactive red 198 azo dye using catalytic ozonation with MgO nanocrystals. 2009 , 152, 1-7	190
1665	Applications of chitin- and chitosan-derivatives for the detoxification of water and wastewater--a short review. 2009 , 152, 26-38	503
1664	Biosorption of a reactive textile dye from aqueous solutions utilizing an agro-waste. 2009 , 249, 757-761	113
1663	Fungal dye decolourization: recent advances and future potential. 2009 , 35, 127-41	441
1662	SDBS@BaSO ₄ : an efficient wastewater-sorbing material. 2009 , 19, 3598	20
1661	Removal of Crystal Violet Dye from Aqueous Solution Using Calcined and Uncalcined Mixed Clay Adsorbents. 2009 , 45, 94-104	20
1660	Enhanced Adsorption of Ammonium Using Hydrogel Composites Based on Chitosan and Halloysite. 2009 , 47, 33-38	58
1659	Starch-based biosorbents for dyes in textile wastewater treatment. 2010 , 12, 129	17
1658	Adsorption of anionic dyes on chitosan grafted poly(alkyl methacrylate)s. 2010 , 158, 393-401	82

1657	Sea shell powder as a new adsorbent to remove Basic Green 4 (Malachite Green) from aqueous solutions: Equilibrium, kinetic and thermodynamic studies. 2010 , 164, 168-177	243
1656	Defined Chitosan-based networks by C-6-Azide-Alkyne Click Reaction. 2010 , 70, 272-281	42
1655	Adsorption characterization of Pb(II) and Cu(II) ions onto chitosan-tripolyphosphate beads: Kinetic, equilibrium and thermodynamic studies. 2010 , 91, 958-69	291
1654	Application of carbon adsorbents prepared from Brazilian-pine fruit shell for the removal of reactive orange 16 from aqueous solution: Kinetic, equilibrium, and thermodynamic studies. 2010 , 91, 1695-706	110
1653	Biosorption of Reactive Black 5 from aqueous solutions by chitosan: column studies. 2010 , 91, 2669-75	41
1652	Biosorption of Acid Yellow 17 from aqueous solution by non-living aerobic granular sludge. 2010 , 174, 215-25	116
1651	Efficient removal of dyes in water using chitosan microsphere supported cobalt (II) tetrasulfophthalocyanine with H ₂ O ₂ . 2010 , 177, 560-6	59
1650	Adsorption of Remazol Black 5 from aqueous solution by the templated crosslinked-chitosans. 2010 , 177, 668-75	48
1649	A novel magnetically separable gamma-Fe ₂ O ₃ /crosslinked chitosan adsorbent: preparation, characterization and adsorption application for removal of hazardous azo dye. 2010 , 179, 251-7	256
1648	The past, present, and future trends of biosorption. 2010 , 15, 86-102	458
1647	Turning calcium carbonate into a cost-effective wastewater-sorbing material by occluding waste dye. 2010 , 17, 97-105	20
1646	Microfibrillated cellulose and new nanocomposite materials: a review. 2010 , 17, 459-494	2084
1645	Assessment on the Removal of Methylene Blue Dye using Tamarind Fruit Shell as Biosorbent. 2010 , 213, 287-299	55
1644	Enhanced adsorption of Methylene Blue from aqueous solution by chitosan-g-poly (acrylic acid)/vermiculite hydrogel composites. 2010 , 22, 486-93	193
1643	Removal of Congo Red from Aqueous Solution by Sorption on Organified Rectorite. 2010 , 38, n/a-n/a	2
1642	Assessment on the Removal of Malachite Green Using Tamarind Fruit Shell as Biosorbent. 2010 , 38, 437-445	95
1641	Enzymatic saccharification of dissolution pretreated waste cellulosic fabrics for bacterial cellulose production by <i>Gluconacetobacter xylinus</i> . 2010 , 85, 1346-1352	43
1640	Direct determinations of energetic parameters at chitosan/Cr(VI) interfaces by means of immersion heat-conduction microcalorimetry. 2010 , 352, 491-7	11

1639	Decolorization of dye wastewaters by biosorbents: a review. 2010 , 91, 1915-29	523
1638	Preparation of dye waste-barium sulfate hybrid adsorbent and application in organic wastewater treatment. 2010 , 175, 179-86	15
1637	Adsorptive removal of methyl orange from aqueous solution with metal-organic frameworks, porous chromium-benzenedicarboxylates. 2010 , 181, 535-535	476
1636	A new type of chitosan hydrogel sorbent generated by anionic surfactant gelation. 2010 , 101, 3853-8	73
1635	Preparation, characterization, adsorption kinetics and thermodynamics of novel magnetic chitosan enwrapping nanosized gamma-Fe ₂ O ₃ and multi-walled carbon nanotubes with enhanced adsorption properties for methyl orange. 2010 , 101, 5063-9	297
1634	Functionalized superhydrophobic biomimetic chitosan-based films. 2010 , 81, 140-144	55
1633	Hollow quaternized chitosan microspheres increase the therapeutic effect of orally administered insulin. 2010 , 6, 205-9	48
1632	New materials for photocatalytic degradation of Indigo Carmine Synthesis, characterization and catalytic experiments of nanometric tin dioxide-based composites. 2010 , 96, 67-71	38
1631	Assessment of synthetic zeolite Na A \times as sorbing barrier for strontium in a radioactive disposal facility. 2010 , 157, 100-112	86
1630	Adsorption of acid dyes on fungal biomass: Equilibrium and kinetics characterization. 2010 , 162, 537-545	46
1629	Kinetics, isotherm and thermodynamic studies of Reactive Black 5 removal by acid acrylic resins. 2010 , 162, 919-926	105
1628	Enhanced solubilization of phenanthrene in Triton X-100 solutions by the addition of small amounts of chitosan. 2010 , 163, 450-453	18
1627	Adsorption of congo red by chitosan hydrogel beads impregnated with carbon nanotubes. 2010 , 101, 1800-6	309
1626	Competitive biosorption of Yellow 2G and Reactive Brilliant Red K-2G onto inactive aerobic granules: simultaneous determination of two dyes by first-order derivative spectrophotometry and isotherm studies. 2010 , 101, 5793-801	52
1625	Modified chitosan pretreatment of polyester fabric for printing by ink jet ink. 2010 , 82, 1124-1135	30
1624	Phosphate removal potential of the adsorbent material prepared from thermal decomposition of alunite ore/Cl mixture in environmental cleanup. 2010 , 260, 107-113	9
1623	Adsorption behavior of Cu ²⁺ from aqueous solutions onto starch-g-poly(acrylic acid)/sodium humate hydrogels. 2010 , 263, 170-175	130
1622	Novel biosorbent (Canola hull): Surface characterization and dye removal ability at different cationic dye concentrations. 2010 , 264, 134-142	68

1621	Biosorption of Basic Orange using dried <i>A. filiculoides</i> . 2010 , 36, 1333-1340	34
1620	Equilibrium and kinetic studies of the cationic dye removal capability of a novel biosorbent <i>Tamarindus indica</i> from textile wastewater. 2010 , 126, 261-268	25
1619	Chitin and chitosan as multipurpose natural polymers for groundwater arsenic removal and AS2O3 delivery in tumor therapy. 2010 , 8, 1518-25	44
1618	Dynamic adsorption of chromium ions onto natural and crosslinked chitosan membranes for wastewater treatment. 2010 , 13, 89-94	10
1617	Removal of Cd(II) from aqueous solution by a composite hydrogel based on attapulgite. 2010 , 31, 745-53	27
1616	Application of Natural Clayey Soil as Adsorbent for the Removal of Copper from Wastewater. 2010 , 136, 1409-1417	20
1615	Adsorption of Rhodamine B onto O-Carboxymethylchitosan-N-Lauryl. 2010 , 45, 1490-1498	10
1614	As(III) Removal from Aqueous Solution Using α -Fe ₂ O ₃ -impregnated Chitosan Beads. 2010 ,	1
1613	A comparison study on Acid Red 119 dye removal using two different types of waterworks sludge. 2010 , 61, 1673-81	12
1612	Chitin/TiO ₂ Composite for Photocatalytic Degradation of Phenol. 2010 , 132, 105-110	4
1611	Application of spectroscopic methods for structural analysis of chitin and chitosan. 2010 , 8, 1567-636	637
1610	Equilibrium and molecular mechanism of anionic dyes adsorption onto copper(II) complex of dithiocarbamate-modified starch. 2010 , 26, 752-8	56
1609	Chitosan-Type Bioadditive-Modified Electronic Industry Waste Sludge for Heavy Metal Stabilization with Assistance of Microwave Heating. 2010 , 49, 2557-2561	12
1608	Relating interactions of dye molecules with chitosan to adsorption kinetic data. 2010 , 26, 9617-26	57
1607	Treatment of Azo Dye-Containing Wastewater Using Integrated Processes. 2010 , 133-155	9
1606	Adsorption of an anionic azo dye by chitosan/kaolin/Fe ₂ O ₃ composites. 2010 , 48, 522-526	194
1605	Novel, bio-based, photoactive arsenic sorbent: TiO ₂ impregnated chitosan bead. 2010 , 44, 5722-9	123
1604	Textile Dye Removal from Single and Ternary Systems Using Date Stones: Kinetic, Isotherm, and Thermodynamic Studies. 2010 , 55, 4638-4649	60

1603	Biodegradation of Azo Dyes. 2010 ,	14
1602	Anionically surface-modified pigment/binder ink jet inks for silk fabric printing. 2010 , 39, 327-341	11
1601	Milli-sized calcium alginate sorbent supporting the dye waste [calcium fluoride hybrid for adsorption of organic contaminants. 2010 , 20, 3098	8
1600	Adsorption Characteristics of Chitosan-g-Poly(acrylic acid)/Attapulgitte Hydrogel Composite for Hg(II) Ions from Aqueous Solution. 2010 , 45, 2086-2094	41
1599	Decolorization of methyl orange with mesoporous materials made from Spent Solar Panel. 2011 ,	
1598	Application of Aqai Stalks As Biosorbents for the Removal of the Dyes Reactive Black 5 and Reactive Orange 16 from Aqueous Solution. 2011 , 56, 1857-1868	37
1597	Adsorption of basic dyes by dried waste sludge: Kinetic, equilibrium and desorption studies. 2011 , 29, 10-19	14
1596	Adsorption of Congo Red from Aqueous Solutions Using Chitosan Hydrogel Beads Formed by Various Anionic Surfactants. 2011 , 46, 986-996	10
1595	Experimental and theoretical studies of the thermal behavior of titanium dioxide-SnO ₂ based composites. 2011 , 115, 2719-26	8
1594	Adsorption efficacy of chitosan nanoparticles from <i>Cunnighamella elegans</i> on RBB dye. 2011 ,	0
1593	Removal of Uranium (VI) from Aqueous Solution by Dry Chitosan Powder. 2011 , 366, 434-437	3
1592	Equilibrium, Kinetics, and Thermodynamics of Dye Removal Using Alginate in Binary Systems. 2011 , 56, 2802-2811	95
1591	Adsorption of a cationic dye, methylene blue, on to chitosan hydrogel beads generated by anionic surfactant gelation. 2011 , 32, 1503-14	72
1590	Removal of Basic Dye Crystal Violet from Aqueous Solution by Cu(II)-Loaded Montmorillonite. 2011 , 46, 656-663	13
1589	Removal of orange 16 reactive dye from aqueous solutions by waste sunflower seed shells. 2011 , 76, 607-624	32
1588	Sorption of Brilliant Red HE-3B Reactive Dye from Aqueous Solution onto Seashells Waste: Equilibrium and Kinetic Studies. 2011 , 46, 1462-1471	6
1587	Amine-Functionalized Titanosilicates Prepared by the Sol-Gel Process as Adsorbents of the Azo-Dye Orange II. 2011 , 50, 239-246	31
1586	Modified Chitosan Hydrogels for the Removal of Acid Dyes at High pH: Modification and Regeneration. 2011 , 50, 6343-6346	21

1585	Cross-linked succinyl chitosan as an adsorbent for the removal of Methylene Blue from aqueous solution. 2011 , 49, 643-51	65
1584	Fast and highly efficient removal of dyes under alkaline conditions using magnetic chitosan-Fe(III) hydrogel. 2011 , 45, 5200-10	247
1583	Hydrogels from Chitosan and a Novel Copolymer Poly(ϵ -N-Vinyl-2-Pyrrolidone-co-Acrolein). 2011 , 02, 1058-1069	3
1582	Adsorption isotherms and thermochemical data of FD&C Red n° 40 binding by Chitosan. 2011 , 28, 295-304	132
1581	Special Adaptive and Functional Polymers and Their Applications. 2011 , 319-383	
1580	Binding of heavy metal contaminants onto chitosans--an evaluation for remediation of metal contaminated soil and water. 2011 , 92, 2675-82	34
1579	Preparation of magnetic modified chitosan and adsorption of Zn ²⁺ from aqueous solutions. 2011 , 88, 574-81	90
1578	Amine-functionalized silica nanoparticle: Preparation, characterization and anionic dye removal ability. 2011 , 279, 61-68	101
1577	Study on a novel polyampholyte nanocomposite superabsorbent hydrogels: Synthesis, characterization and investigation of removal of indigo carmine from aqueous solution. 2011 , 279, 170-182	80
1576	Cationic and anionic dye adsorption by agricultural solid wastes: A comprehensive review. 2011 , 280, 1-13	1020
1575	Adsorption of acid yellow dye on flakes of chitosan prepared from fishery wastes. 2011 , 4, 389-395	80
1574	Integrating photobiological hydrogen production with dye-metal bioremoval from simulated textile wastewater. 2011 , 102, 9957-64	16
1573	Efficient adsorption of Hg ²⁺ ions on chitin/cellulose composite membranes prepared via environmentally friendly pathway. 2011 , 173, 689-697	88
1572	Synthesis and swelling behavior of pH-sensitive semi-interpenetrating polymer network composite hydrogels based on native and modified potatoes starch as potential sorbent for cationic dyes. 2011 , 178, 252-263	99
1571	Kinetics and Mechanism of the Food Dye FD&C Red 40 Adsorption onto Chitosan. 2011 , 56, 3759-3765	66
1570	Physiochemical, circular dichroism-induced helical conformation and optical property of chitosan azo-based amino methanesulfonate complex. 2011 , 124, n/a-n/a	1
1569	Response surface optimization of acid red 119 dye from simulated wastewater using Al based waterworks sludge and polyaluminium chloride as coagulant. 2011 , 92, 1284-91	52
1568	Adsorptive removal of methyl orange and methylene blue from aqueous solution with a metal-organic framework material, iron terephthalate (MOF-235). 2011 , 185, 507-11	788

1567	Competitive biosorption of azo dyes from aqueous solution on the templated crosslinked-chitosan nanoparticles. 2011 , 185, 430-41	68
1566	Adsorption of acid dyes from aqueous solutions by the ethylenediamine-modified magnetic chitosan nanoparticles. 2011 , 185, 1045-52	225
1565	Contributions of functional groups and extracellular polymeric substances on the biosorption of dyes by aerobic granules. 2011 , 102, 805-13	55
1564	Chemical modification of chitosan by tetraethylenepentamine and adsorption study for anionic dye removal. 2011 , 346, 1232-40	70
1563	Influence of the polyethyleneimine grafting on the adsorption capacity of chitosan beads for Reactive Black 5 from aqueous solutions. 2011 , 166, 168-175	54
1562	Alternative Low-cost Adsorbent for Water and Wastewater Decontamination Derived from Eggshell Waste: An Overview. 2011 , 2, 157-167	75
1561	Composite multilayer thin films morphology and their interactions with proteins as a function of polyanion structure. 2011 , 19, 1062-1070	1
1560	Effect of coagulant addition on the sedimentation of a surfactant-containing washing solution used for phenanthrene-contaminated soil. 2011 , 28, 2293-2299	1
1559	Adsorption of Amaranth Dye onto Alumina Reinforced Polystyrene. 2011 , 39, 74-82	79
1558	The effect of pH on the removal of anionic dyes from colored textile wastewater using a biosorbent. 2011 , 120, 2996-3003	25
1557	Preparation of a new composite by reaction of SnBu ₃ Cl with TiCl ₄ in the presence of NH ₄ OH?photocatalytic degradation of indigo carmine. 2011 , 25, 220-225	21
1556	H ₂ O ₂ -induced surface modification: A facile, effective and environmentally friendly pretreatment of chitosan for dyes removal. 2011 , 166, 474-482	43
1555	Treatment of real effluents from dyeing reactor: Experimental and modeling approach by adsorption onto chitosan. 2011 , 168, 577-585	69
1554	Comparison of the gel anion exchangers for removal of Acid Orange 7 from aqueous solution. 2011 , 170, 184-193	46
1553	Binary biosorption of Acid Red 14 and Reactive Red 15 onto acid treated okara: Simultaneous spectrophotometric determination of two dyes using partial least squares regression. 2011 , 171, 967-975	37
1552	Effect of the addition mode of carbon nanotubes for the production of chitosan hydrogel core-shell beads on adsorption of Congo red from aqueous solution. 2011 , 102, 4402-9	58
1551	Adsorption of dyes and heavy metal ions by chitosan composites: A review. 2011 , 83, 1446-1456	1453
1550	Adsorption of food dyes onto chitosan: Optimization process and kinetic. 2011 , 84, 231-238	162

1549	Chitosan fibrous 3D networks prepared by freeze drying. 2011 , 84, 1329-1336	52
1548	Removal of anionic dye eosin Y from aqueous solution using ethylenediamine modified chitosan. 2011 , 84, 1350-1356	83
1547	Selective carboxypropionylation of chitosan: synthesis, characterization, blood compatibility, and degradation. 2011 , 346, 1217-23	23
1546	Chitosan as a potential amendment to remediate metal contaminated soil - a characterisation study. 2011 , 82, 71-80	53
1545	The sorption of cationic dyes onto kaolin: Kinetic, isotherm and thermodynamic studies. 2011 , 266, 274-280	127
1544	Dye removal from colored textile wastewater using chitosan in binary systems. 2011 , 267, 64-72	111
1543	Reactive dye removal from wastewater using a chitosan nanodispersion. 2011 , 271, 225-230	51
1542	Binary system dye removal from colored textile wastewater using activated carbon: Kinetic and isotherm studies. 2011 , 272, 187-195	87
1541	Isotherm and kinetic studies on the adsorption of humic acid onto chitosan-H ₂ SO ₄ beads. 2011 , 272, 293-300	62
1540	As(III) removal from aqueous solution using Fe ₂ O ₃ impregnated chitosan beads with As(III) as imprinted ions. 2011 , 272, 286-292	91
1539	Preparation, characterization and dye adsorption properties of biocompatible composite (alginate/titania nanoparticle). 2011 , 275, 93-101	87
1538	Preparation and characterization of chitosan hydrogel membrane for the permeation of 5-Fluorouracil. 2011 , 31, 1002-1009	13
1537	Adsorption of food dyes acid blue 9 and food yellow 3 onto chitosan: stirring rate effect in kinetics and mechanism. 2011 , 187, 164-70	180
1536	Consequence of chitosan treating on the adsorption of humic acid by granular activated carbon. 2011 , 191, 380-7	58
1535	FT-IR study of montmorillonite-chitosan nanocomposite materials. 2011 , 79, 784-8	188
1534	Preparation and Adsorption Properties of Gelatin Microspheres for Cationic Dye. 2011 , 415-417, 1794-1798	
1533	Adsorption of congo red using ethylenediamine modified wheat straw. 2011 , 30, 195-206	38
1532	Advancement of chitosan-based adsorbents for enhanced and selective adsorption performance in water/wastewater treatment: review. 2011 , 8, 276	8

1531	Utilization of agricultural waste chestnut shell for the removal of Reactive Brilliant Red K-2G from aqueous solution. 2011 , 36, 141-151	2
1530	New polyelectrolyte complex particles as colloidal dispersions based on weak synthetic and/or natural polyelectrolytes. 2011 , 5, 506-515	14
1529	Modification of activated carbon by the alkaline treatment to remove the dyes from wastewater: mechanism, isotherm and kinetic. 2012 , 47, 322-333	52
1528	Adsorption of Fe(II) ions from aqueous phase by chitosan adsorbent: equilibrium, kinetic, and thermodynamic studies. 2012 , 50, 348-359	41
1527	Isotherm, Kinetic, and Thermodynamic of Cationic Dye Removal from Binary System by Feldspar. 2012 , 47, 1660-1672	19
1526	Sorption of Methylene Blue onto Ionic Composite Hydrogels Based on Polyacrylamide and Dextran Sulfate: Kinetics, Isotherms, and Thermodynamics. 2012 , 47, 1322-1333	10
1525	Effect of MWCNTs Doping on the Morphology, Structure and Properties of Chitosan Beads. 2012 , 49, 674-679	6
1524	Soy meal hull activated carbon: preparation, characterization and dye adsorption properties. 2012 , 44, 237-244	20
1523	Technical Aspects of Adsorption Process onto an Innovative Eggshell-Derived Low-Cost Adsorbent. 2012 , 730-732, 648-652	2
1522	Improved colorimetric determination of chitosan concentrations by dye binding. 2012 , 66, 979-82	10
1521	Treatment of vegetable oil mill effluent using crab shell chitosan as adsorbent. 2012 , 9, 713-718	23
1520	A hierarchical adsorption material by incorporating mesoporous carbon into macroporous chitosan membranes. 2012 , 22, 11908	26
1519	Chitosan/anionic surfactant microparticles synthesized by high pressure spraying method for removal of phenolic pollutants. 2012 , 10, 1969-1979	1
1518	The effective peroxidase-like activity of chitosan-functionalized CoFe ₂ O ₄ nanoparticles for chemiluminescence sensing of hydrogen peroxide and glucose. 2012 , 137, 1225-31	91
1517	Characterizations of the Photocatalytically-Oxidized Cross-Linked Chitosan-Glutaraldehyde and its Application as a Sub-Layer in the TiO ₂ /CS-GLA Bilayer Photocatalyst System. 2012 , 20, 817-829	36
1516	Coagulation of Sericin Protein in Silk Degumming Wastewater Using Quaternized Chitosan. 2012 , 20, 858-864	8
1515	Use of Modified Zeolites for the Remediation of Waters and Cultivated Soils from Cu(II). 2012 , 223, 5841-5854	3
1514	Synthesis and characterization of chitosan-silver nanocomposite. 2012 , 2, 299-303	122

1513	Adsorption of hazardous dyes indigo carmine and acid red on nanofiber membranes. 2012 , 2, 900-907	56
1512	Preparation, Characterization and Dye Decolorization Application of Chitosan/Polyurethane Foam Material. 2012 , 51, 754-759	14
1511	Application of Tetraphenyl- and Ethyltriphenylphosphonium Salts for Separation of Reactive Dyes from Aqueous Solution. 2012 , 47, 1310-1315	2
1510	Effect of chitosan addition on phenanthrene solubilization in anionic or cationic surfactant solutions. 2012 , 37, 253-258	2
1509	A simplified method for synthesis of Fe ₃ O ₄ @PAA nanoparticles and its application for the removal of basic dyes. 2012 , 258, 3897-3902	81
1508	Preparation and characterization of polyvinyl alcohol/chitosan blended membrane for alkaline direct methanol fuel cells. 2012 , 419-420, 65-71	89
1507	Oxidation of crosslinked chitosan-epichlorohydrine film and its application with TiO ₂ for phenol removal. 2012 , 90, 87-94	62
1506	Preparation of microcapsules with multi-layers structure stabilized by chitosan and sodium dodecyl sulfate. 2012 , 90, 967-75	24
1505	Preparation, characterization and properties of aminoethyl chitin hydrogels. 2012 , 90, 1614-9	19
1504	Comparative adsorption of Ni(II) and Cd(II) ions on epichlorohydrin crosslinked chitosan/clay composite beads in aqueous solution. 2012 , 197, 379-386	159
1503	Application of Mangifera indica (mango) seeds as a biosorbent for removal of Victazol Orange 3R dye from aqueous solution and study of the biosorption mechanism. 2012 , 209, 577-588	92
1502	Modelling the effect of pre-swelling on adsorption dynamics of dyes by chitosan derivatives. 2012 , 81, 220-230	33
1501	Adsorption of chitosan on chalcopyrite and galena from aqueous suspensions. 2012 , 409, 167-175	44
1500	Modified chitosan hydrogels as drug delivery and tissue engineering systems: present status and applications. 2012 , 2, 439-449	211
1499	Application of acidic treated pumice as an adsorbent for the removal of azo dye from aqueous solutions: kinetic, equilibrium and thermodynamic studies. 2012 , 9, 9	29
1498	ADSORPTION KINETICS AND EQUILIBRIA OF BASIC DYES ONTO ZEOLITE IN SINGLE AND BINARY COMPONENT SYSTEMS. 2012 , 199, 1412-1436	11
1497	Kinetics and Mechanism of Tartrazine Adsorption onto Chitin and Chitosan. 2012 , 51, 6862-6868	100
1496	Chitosan hollow fibers as effective biosorbent toward dye: preparation and modeling. 2012 , 121, 212-20	79

1495	Surfactant-assistant solvo/hydrothermal methods for preparation of nanoscale calcium aminodiphosphonates exhibiting high methylene blue adsorption affinity. 2012 , 47, 2126-2134	7
1494	Adsorption Kinetics and Thermodynamics of Methyl Orange on Ethylenediamine-Modified Chitosan Magnetic Nano-Adsorbent. 2012 , 581-582, 273-276	1
1493	Carboxymethyl Tamarind-g-poly(acrylamide)/Silica: A High Performance Hybrid Nanocomposite for Adsorption of Methylene Blue Dye. 2012 , 51, 15546-15556	109
1492	Preparation and Kinetic Modeling of Cross-Linked Chitosan Microspheres Immobilized Zn(II) for Urea Adsorption. 2012 , 45, 1632-1644	16
1491	Study of congo red adsorption onto chitosan coated magnetic iron oxide in batch mode. 2012 , 37, 46-54	31
1490	Preparation of Fe ₃ O ₄ /chitosan/poly(acrylic acid) composite particles and its application in adsorbing copper ion (II). 2012 , 19, 2081-2091	45
1489	Fungal Waste-Biomasses as Potential Low-Cost Biosorbents for Decolorization of Textile Wastewaters. 2012 , 4, 770-784	12
1488	Flocculation Efficiency of Chitosan for Papermaking Applications. 2012 , 8,	7
1487	Industrial Cellulignin Wastes as Adsorbent for Removal of Methylene Blue Dye from Aqueous Solutions. 2012 , 8,	7
1486	Hydrogen-bonded supramolecular polymers containing dimethylsilane groups: Synthesis, crystal structure, and characterization. 2012 , 50, 3775-3787	9
1485	Preparation and characterization of conductive chitosan/ionic liquid composite membranes. 2012 , 23, 1429-1434	17
1484	Chitosan/carbon nanotube composite beads: Preparation, characterization, and cost evaluation for mercury removal from wastewater of some industrial cities in Egypt. 2012 , 125, E93	56
1483	Application of chitosan-coated quartz sand for Congo red adsorption from aqueous solution. 2012 , 125, 1766-1772	20
1482	Chitosan bio-based organic-inorganic hybrid aerogel microspheres. 2012 , 18, 8264-77	126
1481	Adsorption of Basic Dyes from Aqueous Solutions by Depolymerization Products of Post-Consumer PET Bottles. 2012 , 40, 325-333	23
1480	Ionic Liquid Modified Resin for the Adsorptive Removal of Dibutyl Phthalate: Equilibrium, Kinetic, and Thermodynamic Studies. 2012 , 40, 630-639	14
1479	Use of chitosan and chitosan-derivatives to remove arsenic from aqueous solutions--a mini review. 2012 , 356, 86-92	86
1478	Adsorption characteristics of chitosan modified by chelating agents of a new generation. 2012 , 179, 33-43	47

1477	Rapid and wide pH-independent ammonium-nitrogen removal using a composite hydrogel with three-dimensional networks. 2012 , 179, 90-98	57
1476	BoxBehnken design optimization of Acid Black 1 dye biosorption by different brown macroalgae. 2012 , 179, 158-168	109
1475	Immobilized Cu ^{II} r layered double hydroxide films with visible-light responsive photocatalysis for organic pollutants. 2012 , 184, 261-267	77
1474	An alternative source of adsorbent for the removal of dyes from textile waters: <i>Posidonia oceanica</i> (L.). 2012 , 189-190, 32-40	52
1473	Adsorption of acid orange II dye by raw and chemically modified brown macroalga <i>Stoechospermum marginatum</i> . 2012 , 192, 67-76	156
1472	Dielectric analysis of chitosan/iron composite microspheres suspensions: Access to internal and interface electrokinetic information of microspheres. 2012 , 396, 270-277	2
1471	Anionic RR120 dye adsorption onto raw clay: Surface properties and adsorption mechanism. 2012 , 403, 69-78	81
1470	Adsorption of surfactin produced from <i>Bacillus subtilis</i> using nonwoven PET (polyethylene terephthalate) fibrous membranes functionalized with chitosan. 2012 , 90, 137-43	32
1469	Optimization and kinetic analysis of food dyes biosorption by <i>Spirulina platensis</i> . 2012 , 91, 234-41	46
1468	Removal of anionic dyes from aqueous solutions by adsorption of chitosan-based semi-IPN hydrogel composites. 2012 , 43, 1570-1578	126
1467	Application of succinylated sugarcane bagasse as adsorbent to remove methylene blue and gentian violet from aqueous solutions [Kinetic and equilibrium studies. 2012 , 92, 967-974	125
1466	Kinetic, equilibrium and thermodynamic studies of ternary system dye removal using a biopolymer. 2012 , 35, 295-301	73
1465	Effects of UV irradiation on the wettability of chitosan films containing dansyl derivatives. 2012 , 376, 255-61	32
1464	Biosorption of food dyes onto <i>Spirulina platensis</i> nanoparticles: equilibrium isotherm and thermodynamic analysis. 2012 , 103, 123-30	122
1463	Preparation of surface modified zinc oxide nanoparticle with high capacity dye removal ability. 2012 , 47, 1800-1809	26
1462	Synthesis, amine functionalization and dye removal ability of titania/silica nano-hybrid. 2012 , 156, 153-160	65
1461	Using chitosan as a selective depressant in the differential flotation of Cu ^{II} B sulfides. 2012 , 106-109, 8-15	54
1460	Enhanced Adsorption of Methyl Orange by Vermiculite Modified by Cetyltrimethylammonium Bromide (CTMAB). 2012 , 13, 2179-2187	16

1459	Photocatalytic decolorization of Remazol Black 5 and Remazol Brilliant Orange 3R by mesoporous TiO ₂ . 2012 , 102, 125-33	25
1458	Removal of fluoride from drinking water by a chitin-based biocomposite in fixed-bed columns. 2012 , 140, 99-103	25
1457	Glow discharge plasma in water: a green approach to enhancing ability of chitosan for dye removal. 2012 , 201-202, 162-9	52
1456	Fabrication of novel magnetic chitosan grafted with graphene oxide to enhance adsorption properties for methyl blue. 2012 , 215-216, 272-9	460
1455	The Seashell Wastes as Biosorbent for Reactive Dye Removal from Textile Effluents. 2012 , 40, 198-205	24
1454	Adsorption of reactive yellow 145 onto chitosan coated magnetite nanoparticles. 2012 , 124, 576-584	40
1453	Influence of culture medium on fungal biomass composition and biosorption effectiveness. 2012 , 64, 50-9	11
1452	Fe ₃ O ₄ Nanostructures and C/Fe ₃ O ₄ Composites as Adsorbents for the Removal of a Textile Dye from Aqueous Solution. 2012 , 223, 1331-1341	10
1451	Sol-gel technology for functional finishing of PES fabric by stimuli-responsive microgel. 2012 , 61, 463-476	11
1450	Biosorption and bioaccumulation studies of acid Orange 7 dye by <i>Ceratophyllum demersum</i> . 2013 , 32, 285-293	10
1449	Dye removal from colored-textile wastewater using chitosan-PPI dendrimer hybrid as a biopolymer: Optimization, kinetic, and isotherm studies. 2013 , 127, 2607-2619	69
1448	Preparation and characterization of porous chitosan-tripolyphosphate beads for copper(II) ion adsorption. 2013 , 127, 4573-4580	46
1447	Synthesis of Novel Biocompatible Composite Fe ₃ O ₄ /ZrO ₂ /Chitosan and Its Application for Dye Removal. 2013 , 23, 393-400	32
1446	Preparation and sorption studies of β-cyclodextrin-chitosan-glutaraldehyde terpolymers. 2013 , 393, 271-7	38
1445	Synthesis and characterization of a chitosan ligand for the removal of copper from aqueous media. 2013 , 130, n/a-n/a	2
1444	Selective depression of sphalerite by chitosan in differential PbZn flotation. 2013 , 122, 29-35	19
1443	A novel water treatment magnetic nanomaterial for removal of anionic and cationic dyes under severe condition. 2013 , 233, 258-264	91
1442	State of the art for the biosorption process--a review. 2013 , 170, 1389-416	296

1441	Removal of Carbamazepine, Naproxen, and Trimethoprim from Water by Amberlite XAD-7: A Kinetic Study. 2013 , 41, 1052-1061	20
1440	Application of zeolite-activated carbon macrocomposite for the adsorption of Acid Orange 7: isotherm, kinetic and thermodynamic studies. 2013 , 20, 7243-55	49
1439	Dye adsorption by resins: Effect of ionic strength on hydrophobic and electrostatic interactions. 2013 , 228, 392-397	201
1438	Application of chitosan as an adsorbent to treat rice mill wastewater--mechanism, modelling and optimization. 2013 , 97, 451-7	47
1437	Adsorption of heavy metal ions, dyes and proteins by chitosan composites and derivatives [A review]. 2013 , 12, 500-508	72
1436	Least squares estimation of kinetic parameters in batch adsorption of phenol with confidence interval analysis. 2013 , 30, 1544-1551	11
1435	New Calix[4]arene Appended Amberlite XAD-4 Resin with Versatile Perchlorate Removal Efficiency. 2013 , 58, 2819-2827	16
1434	Studies on the Performance of Ethylamine-Modified Chitosan Carbonized Rice Husk Composite Beads for Adsorption of Metal Ion. 2013 , 17, 97-106	2
1433	Application of chitosan films for the removal of food dyes from aqueous solutions by adsorption. 2013 , 214, 8-16	124
1432	Chitin as biosorbent for phenol removal from aqueous solution: Equilibrium, kinetic and thermodynamic studies. 2013 , 70, 131-139	33
1431	A study of dyes sorption on biobased cryogels. 2013 , 285, 56-64	30
1430	Effective removal of Congo red dye from aqueous solution using modified xanthan gum/silica hybrid nanocomposite as adsorbent. 2013 , 144, 485-91	172
1429	Decolorization of the azo dye Acid Orange 51 by laccase produced in solid culture of a newly isolated <i>Trametes trogii</i> strain. 2013 , 3, 115-125	19
1428	Effect of basicity of anion exchangers and number and positions of sulfonic groups of acid dyes on dyes adsorption on macroporous anion exchangers with styrenic polymer matrix. 2013 , 215-216, 731-739	39
1427	Biosorption of reactive dye from aqueous media using <i>Saccharomyces cerevisiae</i> biomass. Equilibrium and kinetic study. 2013 , 11, 2048-2057	6
1426	Magnetic ferrite nanoparticlealginate composite: Synthesis, characterization and binary system dye removal. 2013 , 44, 322-330	112
1425	Catalytic wet air oxidation of a non-azo dye with Ni/MgAlO catalyst. 2013 , 215-216, 168-173	33
1424	Application of magnetic chitosan composites for the removal of toxic metal and dyes from aqueous solutions. 2013 , 201-202, 68-93	448

1423	Selective adsorption of hemoglobin using polymer-grafted-magnetite nanocellulose composite. 2013 , 93, 518-27	48
1422	Synthesis, characterization and electrorheological properties of biodegradable chitosan/bentonite composites. 2013 , 48, 129-141	16
1421	Statistical optimization, interaction analysis and desorption studies for the azo dyes adsorption onto chitosan films. 2013 , 411, 27-33	70
1420	Perchlorate adsorption from aqueous solution on inorganic-pillared bentonites. 2013 , 223, 31-39	32
1419	Removal of anionic dyes from aqueous solution by modified alginate. 2013 , 51, 2253-2260	4
1418	Kinetic and equilibrium modeling for adsorption of textile dyes in aqueous solutions by carboxymethyl cellulose/poly(acrylamide-co-hydroxyethyl methacrylate) semi-interpenetrating network hydrogel. 2013 , 53, 2439-2453	32
1417	Utilization of Coconut Milk Processing Waste as a Low-Cost Mercury Sorbent. 2013 , 52, 15648-15657	35
1416	Graphene oxide-chitosan composite hydrogels as broad-spectrum adsorbents for water purification. 2013 , 1, 1992-2001	497
1415	Graphite oxide/chitosan composite for reactive dye removal. 2013 , 217, 256-265	191
1414	Reactive Blue 5G Adsorption onto Activated Carbon: Kinetics and Equilibrium. 2013 , 58, 106-114	23
1413	Metallopolymeric structures containing highly flexible siloxane sequence. 2013 , 54, 43-53	17
1412	Chitosan: A Low Cost Material for the Production of Membrane for Use in PEMFC-A Review. 2013 , 35, 152-163	19
1411	Cu(II) and Ni(II) complexes with a tri-, tetra- or hexadentate triethanolamine ligand: Structural characterization and properties. 2013 , 50, 255-263	22
1410	Environmental applications of water-insoluble β -cyclodextrin-pichlorohydrin polymers. <i>Progress in Polymer Science</i> , 2013 , 38, 344-368	29.6 306
1409	Effect and Mechanism of Association of 8-Hydroxy-1,3,6-pyrenetrisulfonic Acid to Chitosan: Physicochemical Properties of the Complex. 2013 , 214, 99-106	6
1408	Preparation of chitosan-ethyl acrylate as a biopolymer adsorbent for basic dyes removal from colored solutions. 2013 , 1, 406-415	54
1407	Acidic dye wastewater treatment onto a marine macroalga, <i>Nizamuddina zanardini</i> (Phylum: Ochrophyta). 2013 , 217, 329-336	47
1406	Evaluation of polystyrene anion exchange resin for removal of reactive dyes from aqueous solutions. 2013 , 91, 1343-1351	32

1405	Adsorption of dyestuff from aqueous solutions through oxalic acid-modified swede rape straw: adsorption process and disposal methodology of depleted bioadsorbents. 2013 , 138, 191-7	84
1404	Unusual dye adsorption behavior of β -carrageenan coated superparamagnetic nanoparticles. 2013 , 229, 276-284	51
1403	Enhanced sorption of methylene blue from aqueous solutions by semi-IPN composite cryogels with anionically modified potato starch entrapped in PAAm matrix. 2013 , 234, 211-222	80
1402	Environmental friendly technology for the removal of pharmaceutical contaminants from wastewaters using modified chitosan adsorbents. 2013 , 222, 248-258	87
1401	Real-time monitoring on the adsorption process of salicylic acid onto chitosan membrane using dielectric spectroscopy: macroscale concentration polarization and dynamics. 2013 , 117, 3337-44	3
1400	Adsorptive removal of dyes from aqueous solution onto carbon nanotubes: a review. 2013 , 193-194, 24-34	902
1399	An Insight Into the Production, Characterization, and Mechanisms of Action of Low-Cost Adsorbents for Removal of Organics From Aqueous Solution. 2013 , 43, 443-549	27
1398	Chitosan-transition metal ions complexes for selective arsenic(V) preconcentration. 2013 , 47, 3497-506	66
1397	Adsorption of Cr (VI) by chitosan with different deacetylation degrees. 2013 , 51, 7690-7699	28
1396	Removal of various cationic dyes from aqueous solutions using a kind of fully biodegradable magnetic composite microsphere. 2013 , 223, 402-411	118
1395	A review on zinc and nickel adsorption on natural and modified zeolite, bentonite and vermiculite: examination of process parameters, kinetics and isotherms. 2013 , 252-253, 428-61	313
1394	Synthesis of novel nanocomposite Fe ₃ O ₄ /ZrO ₂ /chitosan and its application for removal of nitrate and phosphate. 2013 , 284, 942-949	178
1393	Highly Efficient Liquid Membrane Transport of Dyes Using Calix[4]arene-Linked Triphenylene Dimers as Carriers. 2013 , 48, 1565-1571	14
1392	Kinetics and Equilibrium Studies on the Removal of Victoria Blue Using Prosopis juliflora-Modified Carbon/Zn/Alginate Polymer Composite Beads. 2013 , 58, 517-527	31
1391	Synergistically improved adsorption of anionic surfactant and crystal violet on chitosan hydrogel beads. 2013 , 217, 426-434	93
1390	Gemini polymeric nanoarchitecture as a novel adsorbent: synthesis and dye removal from multicomponent system. 2013 , 400, 88-96	27
1389	Preparation of an ecofriendly chitosan/ZnO composite for chromium complex dye adsorption. 2013 , 129, 187-192	9
1388	ADSORPTION OF A LEATHER DYE ON MESOPOROUS STRUVITE OBTAINED FROM SWINE WASTEWATER. 2013 , 200, 1027-1038	19

1387	Investigation of equilibrium, kinetic, thermodynamic and mechanism of Basic Blue 16 adsorption by montmorillonitic clay. 2013 , 19, 757-768	32
1386	Click synthesis and dye extraction properties of novel thiacalix[4]arene derivatives with triazolyl and hydrogen bonding groups. 2013 , 24, 450-452	17
1385	Preparation and sorption studies of glutaraldehyde cross-linked chitosan copolymers. 2013 , 395, 205-11	59
1384	Colouration of cotton by combining natural colourants and bio-polysaccharide. 2013 , 104, 1269-1276	10
1383	Saccharomyces cerevisiae for the biosorption of basic dyes from binary component systems and the high order derivative spectrophotometric method for simultaneous analysis of Brilliant green and Methylene blue. 2013 , 19, 227-233	82
1382	Triphenylene-modified chitosan: novel high efficient sorbent for cationic and anionic dyes. 2013 , 20, 895-906	18
1381	Chitosan macroporous foams obtained in highly concentrated emulsions as templates. 2013 , 410, 33-42	12
1380	Kinetics and Adsorption Behavior of the Methyl Blue at the Graphene Oxide/Reduced Graphene Oxide Nanosheet/Water Interface: A Comparative Study. 2013 , 58, 3477-3488	139
1379	Column Adsorption Studies for the Removal of Cr(VI) Ions by Ethylamine Modified Chitosan Carbonized Rice Husk Composite Beads with Modelling and Optimization. 2013 , 2013, 1-11	30
1378	Abatement of azo dye from wastewater using bimetal-chitosan. 2013 , 2013, 476271	28
1377	Adsorption of Acid Red by Porous Chitosan Film. 2013 , 690-693, 1184-1187	1
1376	Application of chemically modified beach sand as low cost efficient adsorbent for dye removal. 2013 , 215-223	5
1375	Adsorption and desorption studies on the performance of Fe loaded chitosan carbonized rice husk for metal ion removal. 2013 , 51, 7764-7774	3
1374	Cost-effective hybrid adsorbent facilely prepared with dye waste and calcium fluoride for adsorption of organic contaminants. 2013 , 51, 4566-4572	1
1373	Performance of Fe-loaded chitosan carbonized rice husk beads (Fe-CCRB) for continuous adsorption of metal ions from industrial effluents. 2013 , 33, n/a-n/a	
1372	Synthesis of Polyvinyl Alcohol/Maleic Acid Hydrogels by Electron Beam Irradiation for Dye Uptake. 2013 , 50, 6-17	9
1371	Study on synthesis and adsorption characterization of hydroxypropyl chitosan metal complex. 2013 , 51, 3101-3105	1
1370	Decolorization of Dyeing Wastewater Using Polymeric Absorbents - An Overview. 2013 ,	7

1369	Fabrication of Electrospun Polyamide-6/Chitosan Nanofibrous Membrane toward Anionic Dyes Removal. 2014 , 2014, 1-12	39
1368	Drug Carrier Systems Using Chitosan for Non Parenteral Routes. 2014 ,	5
1367	Adsorption Behavior of Basic Dye from Aqueous Solution onto Alkali Extracted Lignin. 2014 , 9,	12
1366	The potential utility of chitosan micro/nanoparticles in the treatment of gastric infection. 2014 , 12, 981-92	39
1365	Novel Calixarene Benzo-15-crown-5 Derivatives: Synthesis and Complexation for Dyes. 2014 , 51, 223-228	1
1364	Preparation and Characterization of Chitosan/Kaolin/Fe ₃ O ₄ Magnetic Microspheres and Their Application for the Removal of Ciprofloxacin. 2014 , 32, 775-790	18
1363	Nitrate Reduction by Redox-Modified Smectites Exchanged with Chitosan. 2014 , 62, 403-414	5
1362	Assessment of food processing and pharmaceutical industrial wastes as potential biosorbents: a review. 2014 , 2014, 146769	24
1361	Biosorption of toxic acidic dye Acid Blue 25, by aquatic plants. 2014 , 52, 6756-6769	7
1360	Removal of Acid Orange 7 Dye from Water Via Plasma-Polymerized Allylamine-Coated Quartz Particles. 2014 , 225, 1	7
1359	Use of Chitosan with Different Deacetylation Degrees for the Adsorption of Food Dyes in a Binary System. 2014 , 42, 767-774	13
1358	Feldspar/titanium dioxide/chitosan as a biophotocatalyst hybrid for the removal of organic dyes from aquatic phases. 2014 , 131, n/a-n/a	10
1357	Optimization of Malachite Green by KOH-Modified Grapefruit Peel Activated Carbon: Application of Response Surface Methodology. 2014 , 529, 611-615	2
1356	Preparation and Properties of Porous poly(vinyl alcohol)/Powdered Activated Carbon Composite. 2014 , 852, 117-120	1
1355	Synthesis and application of modified chitosan beads for iron removal: kinetic and isotherm models. 2014 , 9, 895-904	6
1354	Applicative Study (Part I): The Excellent Conditions to Remove in Batch Direct Textile Dyes (Direct Red, Direct Blue and Direct Yellow) from Aqueous Solutions by Adsorption Processes on Low-Cost Chitosan Films under Different Conditions. 2014 , 04, 454-469	15
1353	Decontamination of colored wastewater using synthetic sorbents. 2014 , 86, 1771-1780	7
1352	Poly(itaconic acid)-grafted chitosan adsorbents with different cross-linking for Pb(II) and Cd(II) uptake. 2014 , 30, 120-31	135

1351	Radiation synthesis and characterization of starch-based hydrogels for removal of acid dye. 2014 , 66, 400-408	16
1350	Experimental studies on irreversibility of electrostatic adsorption of silica nanoparticles at solid-liquid interface. 2014 , 420, 50-6	15
1349	Study of antagonistic effect in the simultaneous removal of two textile dyes onto cellulose extracted from Posidonia oceanica using derivative spectrophotometric method. 2014 , 2, 1-9	9
1348	Chitin and Chitosan Extracted from Shrimp Waste Using Fish Proteases Aided Process: Efficiency of Chitosan in the Treatment of Unhairing Effluents. 2014 , 22, 78-87	36
1347	Mono and binary component biosorption of Cu(II), Ni(II), and Methylene Blue onto raw and pretreated <i>S. cerevisiae</i> : equilibrium and kinetics. 2014 , 52, 4871-4888	18
1346	The role of chitosan as nanofiller of graphite oxide for the removal of toxic mercury ions. 2014 , 113, 467-76	85
1345	Chitosan based grey wastewater treatment--a statistical design approach. 2014 , 99, 593-600	39
1344	Primary/Secondary amino silica nanoparticle: synthesis and dye removal from binary system. 2014 , 52, 7784-7796	6
1343	Radiation synthesis and characterization of styrene/acrylic acid/organophilic montmorillonite hybrid nanocomposite for sorption of dyes from aqueous solutions. 2014 , 35, 2353-2364	13
1342	Adsorption/desorption of a dye by a chitosan derivative: Experiments and phenomenological modeling. 2014 , 248, 327-336	66
1341	Recent advances in the use of graphene-family nanoadsorbents for removal of toxic pollutants from wastewater. 2014 , 204, 35-56	367
1340	Chitosan-glutaraldehyde copolymers and their sorption properties. 2014 , 109, 92-101	117
1339	Removal of permethrin pesticide from water by chitosan/zinc oxide nanoparticles composite as an adsorbent. 2014 , 18, 348-355	153
1338	Silver and zinc oxide nanostructures loaded on activated carbon as new adsorbents for removal of methylene green: a comparative study. 2014 , 33, 956-67	11
1337	Adsorption of food dyes from aqueous solution by glutaraldehyde cross-linked magnetic chitosan nanoparticles. 2014 , 126, 133-141	118
1336	Design and applications of interpenetrating polymer network hydrogels. A review. 2014 , 243, 572-590	590
1335	Adsorption study of an organo-arsenical with chitosan-based sorbents. 2014 , 420, 136-44	58
1334	Preparation of a new chitosan-based material and its application for mercury sorption. 2014 , 446, 224-232	43

1333	Pyridine derivative covalently bonded on chitosan pendant chains for textile dye removal. 2014 , 102, 38-46	16
1332	Adsorption of C.I. Reactive Blue 19 from aqueous solutions by porous particles of the grafted chitosan. 2014 , 235, 151-157	59
1331	Mechanical behavior of transparent nanofibrillar cellulose-chitosan nanocomposite films in dry and wet conditions. 2014 , 32, 279-286	73
1330	Chitosan metal-crosslinked beads applied for n-alkylmonoamines removal from aqueous solutions: a thermodynamic study. 2014 , 73, 197-205	5
1329	BiFeO ₃ /Fe ₃ O ₄ core/shell composite particles for fast and selective removal of methyl orange dye in water. 2014 , 428, 95-100	41
1328	Microporous spongy chitosan monoliths doped with graphene oxide as highly effective adsorbent for methyl orange and copper nitrate (Cu(NO ₃) ₂) ions. 2014 , 416, 243-51	55
1327	Recent advances in chitosan and its derivatives as adsorbents for removal of pollutants from water and wastewater. 2014 , 4, 62-70	50
1326	Fe ₃ O ₄ MNPs and gum xanthan based hydrogels nanocomposites for the efficient capture of malachite green from aqueous solution. 2014 , 255, 471-482	106
1325	Synthesis of urethane polycarboxylate as a novel adsorbent and its binary system dye removal ability from aqueous solution. 2014 , 15, 446-456	4
1324	Diffusional mass transfer model for the adsorption of food dyes on chitosan films. 2014 , 92, 2324-2332	65
1323	Removal of Acid Orange 7 from aqueous solution using magnetic graphene/chitosan: a promising nano-adsorbent. 2014 , 68, 218-24	119
1322	Glass beads coated with chitosan for the food azo dyes adsorption in a fixed bed column. 2014 , 20, 3387-3393	56
1321	Synthesis of magnetic citric-acid-functionalized graphene oxide and its application in the removal of methylene blue from contaminated water. 2014 , 63, 1881-1888	50
1320	pH dependence and thermodynamics of Hg(II) adsorption onto chitosan-poly(vinyl alcohol) hydrogel adsorbent. 2014 , 441, 51-58	55
1319	Adsorption studies of etherdiamine onto modified sugarcane bagasses in aqueous solution. 2014 , 133, 332-42	19
1318	A 2D metal-organic framework based on dizinc coordination units bridged through both flexible and rigid ligands. 2014 , 1060, 94-101	19
1317	Chitosan-based biosorbents: modification and application for biosorption of heavy metals and radionuclides. 2014 , 160, 129-41	381
1316	Biosorption: current perspectives on concept, definition and application. 2014 , 160, 3-14	647

1315	Adsorption of anthraquinone dye onto eco-friendly semi-IPN biocomposite hydrogel: Equilibrium isotherms, kinetic studies and optimization. 2014 , 45, 653-664	72
1314	Spectral study of fluorone dyes adsorption on chitosan-based polyelectrolyte complexes. 2014 , 417, 80-7	18
1313	Mechanical and dye adsorption properties of graphene oxide/chitosan composite fibers prepared by wet spinning. 2014 , 102, 755-61	125
1312	Marine carbohydrates of wastewater treatment. 2014 , 73, 103-43	12
1311	Shrimp shell as an efficient bioadsorbent for Acid Blue 25 dye removal from aqueous solution. 2014 , 45, 2926-2934	45
1310	A Chemically Defined Approach to the Adsorption of Orange G on Chitosan Particles. 2014 , 35, 934-939	0
1309	Sorbent concentration effect on adsorption of methyl orange on chitosan beads in aqueous solutions. 2014 , 30, 837-843	6
1308	Novel effective dye sorbents: synthesis and properties of 1,2,3-triazole-modified thiacalix[4]arene polymers based on click chemistry. 2014 , 23, 899-906	8
1307	Removal of Methyl Violet Dye from Aqueous Solution by sf Platanus Carpinifolia Tree Leaves as Highly Efficient Sorbent: Multivariate Optimization, Isotherm Modeling, and Kinetic Studies. 2014 , 49, 752-762	6
1306	Functionalized mesoporous silica material and anionic dye adsorption: MCM-41 incorporated with amine groups for competitive adsorption of Acid Fuchsine and Acid Orange II. 2014 , 4, 61256-61267	52
1305	BENZENE ADSORPTION ON ACTIVATED CARBON FROM WALNUT SHELL. 2014 , 201, 1294-1313	13
1304	The efficient enrichment of U(VI) by graphene oxide-supported chitosan. 2014 , 4, 61919-61926	46
1303	Recent Advances in Graft Copolymerization and Applications of Chitosan: A Review. 2014 , 2, 2637-2652	435
1302	STUDY OF HG(II) REMOVAL FROM AQUEOUS SOLUTION USING LIGNOCELLULOSIC COCONUT FIBER BIOSORBENTS: EQUILIBRIUM AND KINETIC EVALUATION. 2014 , 201, 1198-1220	22
1301	Swelling, diffusion, network parameters and adsorption properties of IPN hydrogel of chitosan and acrylic copolymer. 2014 , 44, 132-43	50
1300	Alkali treated Foumanat tea waste as an efficient adsorbent for methylene blue adsorption from aqueous solution. 2014 , 6, 64-80	80
1299	Effect of pH adjustment, solid-liquid separation and chitosan adsorption on pollutants removal from pot ale wastewaters. 2014 , 2, 1929-1936	12
1298	Methylene Blue Adsorption from Aqueous Solution by Magnetic Cellulose/Graphene Oxide Composite: Equilibrium, Kinetics, and Thermodynamics. 2014 , 53, 1108-1118	199

1297	Synthesis of highly phosphonic acid functionalized benzene-bridged periodic mesoporous organosilicas for use as efficient dye adsorbents. 2014 , 278, 539-50	21
1296	Application of chitosan and its derivatives as adsorbents for dye removal from water and wastewater: a review. 2014 , 113, 115-30	692
1295	Adsorption Characteristics of Sulfur-Functionalized Silica Microspheres with Respect to the Removal of Hg(II) from Aqueous Solutions. 2014 , 53, 1225-1233	35
1294	Adsorption of a model anionic dye on protonated crosslinked chitosan. 2014 , 52, 7693-7700	7
1293	Competitive adsorption of acid dyes from aqueous solution on diethylenetriamine-modified chitosan beads. 2014 , 131, n/a-n/a	4
1292	Dye removal using polymeric adsorbent from wastewater containing mixture of two dyes. 2014 , 15, 1656-1668	11
1291	Response surface methodology approach for methyl orange dye removal using optimized Acacia mangium wood activated carbon. 2014 , 48, 1085-1105	18
1290	Synthesis of porous adsorbent using microwave assisted combustion method and dye removal. 2014 , 602, 210-220	14
1289	New hydrogels based on modified chitosan as metal biosorbent agents. 2014 , 64, 328-33	28
1288	TEOS as an improved alternative for chitosan beads cross-linking: A comparative adsorption study. 2014 , 131,	10
1287	Utilization of calcined Ni-Al layered double hydroxide (LDH) as an Adsorbent for removal of methyl orange dye from aqueous solution. 2014 , 33, 154-159	40
1286	Removal of Acid Red 299 dye on gold nanoparticles loaded on activated carbon: kinetic and thermodynamic investigation of the removal process. 2014 , 52, 5494-5503	6
1285	Preparation and characterization of antibacterial chitosan/Ag@montmorillonite with improved dynamic mechanic properties. 2014 , 35, 1980-1988	6
1284	Uptake of Reactive Black 5 by pumice and walnut activated carbon: Chemistry and adsorption mechanisms. 2014 , 20, 2939-2947	116
1283	Dendrimer functionalized nanoarchitecture: Synthesis and binary system dye removal. 2014 , 45, 2008-2020	72
1282	The influence of pH on manganese removal by magnetic microparticles in solution. 2014 , 53, 110-22	27
1281	La(III)-loaded bentonite/chitosan beads for defluoridation from aqueous solution. 2014 , 32, 458-466	22
1280	Modified nano-graphite/Fe ₃ O ₄ composite as efficient adsorbent for the removal of methyl violet from aqueous solution. 2014 , 196, 348-356	77

1279	Highly Efficient Removal of Acid Red 18 from Aqueous Solution by Magnetically Retrievable Chitosan/Carbon Nanotube: Batch Study, Isotherms, Kinetics, and Thermodynamics. 2014 , 59, 39-51	93
1278	Synthesis and characterization of crosslinked chitosan immobilized on bentonite and its grafted products with polyaniline. 2014 , 131, n/a-n/a	9
1277	Chitosan-coated <i>Lentinus polychrous</i> L ^v .: Integrated biosorption and biodegradation systems for decolorization of anionic reactive dyes. 2014 , 93, 168-176	25
1276	Superhydrophilic and superoleophobic chitosan-based nanocomposite coatings for oil/water separation. 2014 , 21, 1851-1857	71
1275	Chitosan as a Biomaterial. 2014 , 91-113	44
1274	Chitosan nanocomposite films based on Ag-NP and Au-NP biosynthesis by <i>Bacillus Subtilis</i> as packaging materials. 2014 , 69, 185-91	160
1273	Chitosan/polyaniline nanofibers coating on the quartz crystal microbalance electrode for gas sensing. 2014 , 202, 144-153	70
1272	Development of novel chitosan-chitin composites for adsorption of dyes and metal ions from wastewater. 2014 , 254, 491-502	241
1271	Synthesis of core-shell magnetic adsorbent nanoparticle and selectivity analysis for binary system dye removal. 2014 , 20, 2050-2058	71
1270	Enhanced adsorption of methyl violet and congo red by using semi and full IPN of polymethacrylic acid and chitosan. 2014 , 104, 8-16	46
1269	Molecularly Imprinted Polymers for Water Polishing. 2014 , 218-231	
1268	Macroporous polymeric ion exchangers as adsorbents for the removal of cationic dye basic blue 9 from aqueous solutions. 2014 , 131, n/a-n/a	25
1267	Removal of Hg(II) and CH ₃ Hg(I) Using Rasped Pith Sago Residue Biosorbent. 2014 , 42, 1541-1548	19
1266	Chitosan-sodium lauryl ether sulfate particles and their use for adsorption of Cu(II) ions. 2014 , 131, n/a-n/a	4
1265	Removal of aniline from aqueous solutions by activated carbon coated by chitosan. 2015 , 5, 610-618	9
1264	Novel Carbon-Based Nanoadsorbents for Removal of Synthetic Textile Dyes from Wastewaters. 2015 , 35-82	2
1263	Advanced Composite Adsorbents: Chitosan versus Graphene. 2015 , 463-492	1
1262	Thiacalix[4]arene derivatives containing multiple aromatic groups: High efficient extractants for organic dyes. 2015 , 127, 1383-1388	0

1261	Synthesis and Characterization of Chitosan-Based Polyelectrolyte Complexes Doped with Xanthene Dyes. 2015 , 16, 3997-4003	9
1260	Preparation of modified oligochitosan and evaluation of its scale inhibition and fluorescence properties. 2015 , 132, n/a-n/a	12
1259	Surfactant-coated Tea Waste: Preparation, Characterization and its Application for Methylene Blue Adsorption from Aqueous Solution. 2015 , 05,	6
1258	Removal of Cr (III) from contaminated water using industrial waste of the cassava as natural adsorbents. 2015 , 10, 4241-4251	6
1257	Preparation and Characterization of Amphoteric Cellulose Hydrogels as Adsorbents for the Anionic Dyes in Aqueous Solutions. 2015 , 1, 94-116	24
1256	An Investigation of the Effect of Chitosan on Isothermal Crystallization, Thermal Decomposition, and Melt Index of Biodegradable Poly(L-lactic acid). 2015 , 2015, 1-5	2
1255	Basic Violet Decolourization Using Alginate Immobilized Nanozirconium Tungstovanadate Matrix as Cation Exchanger. 2015 , 2015, 1-10	11
1254	ADSORPTION OF METHYLENE BLUE ON ALGINATE-GRAFTED-POLY (METHYL METHACRYLATE). 2015 , 76,	2
1253	. 2015 ,	34
1252	Co-deposition of catechol/polyethyleneimine on porous membranes for efficient decolorization of dye water. 2015 , 3, 14438-14444	128
1251	Removal of methyl orange from aqueous solution via adsorption on cork as a natural and low-cost adsorbent: equilibrium, kinetic and thermodynamic study of removal process. 2015 , 53, 3711-3723	41
1250	Polymers and Dyes: Developments and Applications. 2015 , 7, 717-746	85
1249	Surface modification of chitin using ultrasound-assisted and supercritical CO2 technologies for cobalt adsorption. 2015 , 295, 29-36	65
1248	Biosorption of Cd(II) on jatropha fruit coat and seed coat. 2015 , 187, 411	21
1247	Electrophoretic Deposition Behavior of Chitosan Biopolymer as a Function of Solvent Type. 2015 , 54, 1193-1200	6
1246	Complexes of Metal-Based Nanoparticles with Chitosan Suppressing the Risk of Staphylococcus aureus and Escherichia coli Infections. 2015 , 217-232	7
1245	Preparation and characterization of novel P(HEA/IA) hydrogels for Cd ²⁺ ion removal from aqueous solution. 2015 , 338, 178-189	14
1244	Safety evaluation of chitosan and chitosan acid salts from Panurilus argus lobster. 2015 , 72, 1343-50	6

1243	Performance improvements in structural characteristics of chitosan-based nanofibrous composite membrane for using in liquid filtration. 2015 , 56, 77-83	11
1242	Two-stage batch sorber design and optimization of biosorption conditions by Taguchi methodology for the removal of acid red 25 onto magnetic biomass. 2015 , 32, 1864-1878	23
1241	Recent modifications of chitosan for adsorption applications: a critical and systematic review. 2015 , 13, 312-37	292
1240	Polypyrrole-coated magnetic nanoparticles as an efficient adsorbent for RB19 synthetic textile dye: Removal and kinetic study. 2015 , 149, 481-6	56
1239	Investigation of Chitosan-PVA Composite Films and Their Adsorption Properties. 2015 , 03, 78-84	25
1238	Valorization of food wastes as sorbent for dye retention from aqueous medium. 2015 , 54, 2570-2580	3
1237	Antimicrobial and Dyeing studies of treated cotton fabrics by prepared Chitosan-PAMAM Dendrimer/Ag Nano-emulsion. 2015 , 16, 2529-2537	15
1236	Synthesis and dyes adsorption properties of calix[4]crown-grafted chitosan chelating polymer. 2015 , 31, 1051-1055	4
1235	Effect of the degree of cross-linking of N-2-sulfoethylchitosan on the sorption selectivity of copper(II) and silver(I). 2015 , 88, 1434-1439	5
1234	Adsorption of Carbon Black Using Chitosan in the Deinking Process. 2015 , 17, 106-110	5
1233	Nanoadsorbents for pollutants removal: A review. 2015 , 203, 159-168	261
1232	Application of cross-linked porous chitosan films for Congo red adsorption from aqueous solution. 2015 , 53, 1970-1976	9
1231	Calix[4]benzocrown-[60]fullerene dyads: synthesis and complexation properties for dyes. 2015 , 82, 93-99	1
1230	Chitosan/sporopollenin microcapsules: preparation, characterisation and application in heavy metal removal. 2015 , 75, 230-8	59
1229	Application of residual brewery yeast for adsorption removal of Reactive Orange 16 from aqueous solution. 2015 , 26, 267-274	16
1228	Purification of household greywater loaded with hair colorants by solar photocatalysis using TiO ₂ -coated textile fibers coupled flocculation with chitosan. 2015 , 5, 15-27	28
1227	Ethyl acrylate grafted chitosan for heavy metal removal from wastewater: Equilibrium, kinetic and thermodynamic studies. 2015 , 51, 127-134	63
1226	Crystal violet dye sorption and transport in/through biobased PVA cryogel membranes. 2015 , 132,	8

1225	Adsorption of Methylene Blue by ultrasonic surface modified chitin. 2015 , 446, 133-40	166
1224	Introduction to Marine Biotechnology. 2015 , 1-10	1
1223	Adsorption property of methyl orange by chitosan coated on quartz sand in batch mode. 2015 , 55, 1598-1608	9
1222	Treatment of a simulated textile wastewater in a sequencing batch reactor (SBR) with addition of a low-cost adsorbent. 2015 , 291, 74-82	71
1221	Activated carbon xerogel-chitosan composite materials for catalytic wet peroxide oxidation under intensified process conditions. 2015 , 3, 1243-1251	22
1220	Silver Adsorption Enhancement from Aqueous and Photographic Waste Solutions by Mercerized Coconut Fiber. 2015 , 50, 937-946	14
1219	Adsorption of Reactive blue 21 onto functionalized cellulose under ultrasonic pretreatment: Kinetic and equilibrium study. 2015 , 50, 229-235	22
1218	Modeling the biosorption of basic dyes from binary mixtures. 2015 , 21, 177-183	9
1217	Application of soybean residue (okara) as a low-cost adsorbent for reactive dye removal from aqueous solution. 2015 , 53, 2266-2277	9
1216	Synthesis of Magnetic Fe ₃ O ₄ -Chitosan Nanoparticles by Ionic Gelation and Their Dye Removal Ability. 2015 , 87, 425-36	16
1215	Adsorption characterization of Pb(II) ions onto iodate doped chitosan composite: equilibrium and kinetic studies. 2015 , 5, 54188-54201	80
1214	One-Step Fabrication of Graphene Oxide Enhanced Magnetic Composite Gel for Highly Efficient Dye Adsorption and Catalysis. 2015 , 3, 1677-1685	212
1213	Classification, processing and application of hydrogels: A review. 2015 , 57, 414-33	690
1212	Facile immobilization of polyaspartate onto silica gels via poly(dopamine) for the removal of methylene blue from aqueous solution. 2015 , 351, 831-839	19
1211	Hybrid chitosan/FeCl ₃ coagulation-membrane processes: Performance evaluation and membrane fouling study in removing natural organic matter. 2015 , 152, 23-31	31
1210	Calix[4]arene-Modified Multi-Walled Carbon Nanotubes: Novel High-Efficient Sorbent for Organic Dyes. 2015 , 23, 1077-1085	2
1209	Fixed bed adsorption of Methylene Blue by ultrasonic surface modified chitin supported on sand. 2015 , 100, 302-310	27
1208	Adsorption of dyes by nanomaterials: Recent developments and adsorption mechanisms. 2015 , 150, 229-242	407

1207	Removal of Indigo Carmine by a Ni Nanoscale Oxides/Schoenoplectus acutus Composite in Batch and Fixed Bed Column Systems. 2015 , 50, 1602-1610	11
1206	Kinetics and mass transfer aspects about the adsorption of tartrazine by a porous chitosan sponge. 2015 , 116, 105-117	15
1205	Fabrication of interpenetrating polymer network chitosan/gelatin porous materials and study on dye adsorption properties. 2015 , 132, 330-7	44
1204	Ultramicro chitosan-assisted in-syringe dispersive micro-solid-phase extraction for flavonols from healthcare tea by ultra-high performance liquid chromatography. 2015 , 1409, 11-8	23
1203	Organically Modified Saponites: SAXS Study of Swelling and Application in Caffeine Removal. 2015 , 7, 10853-62	46
1202	Removal of anionic dyes in aqueous solution by flocculation with cellulose ampholytes. 2015 , 7, 83-93	38
1201	Rapid scavenging of methylene blue dye from a liquid phase by adsorption on alumina nanoparticles. 2015 , 5, 14425-14440	55
1200	Kinetics and thermodynamics of enhanced adsorption of the dye AR 18 using activated carbons prepared from walnut and poplar woods. 2015 , 208, 99-105	96
1199	Sorbent effect on the sorption of Cr(VI) on a Mg ₆ AlFe-layered double hydroxide and its calcined product in aqueous solutions. 2015 , 293, 1961-1969	18
1198	Synthesis, Characterization, and Performance of a Novel Polymeric Cationic Surfactant Based on Low Molecular Weight Chitosan and 3-Chloro-2-Hydroxypropyl Dimethyl Dehydroabietyl Ammonium Chloride (CHPDMDHA). 2015 , 18, 463-470	7
1197	Controlled delivery of valsartan by cross-linked polymeric matrices: Synthesis, in vitro and in vivo evaluation. 2015 , 487, 110-9	58
1196	Kinetic, isotherm and pH dependency investigation and environmental application of cationic dye adsorption on montmorillonite. 2015 , 56, 2447-2456	3
1195	Carbon-based nanomaterials for removal of chemical and biological contaminants from water: A review of mechanisms and applications. 2015 , 91, 122-143	395
1194	Central composite design optimization of Acid Blue 25 dye biosorption using shrimp shell biomass. 2015 , 207, 266-273	61
1193	Removal of Cr(VI) ions using Fe-loaded chitosan carbonized rice husk composite beads (Fe-CCRCB): Experiment and quantum chemical calculations. 2015 , 208, 380-387	7
1192	Ionic dye adsorption by zinc oxide nanoparticles. 2015 , 31, 173-185	10
1191	Multifunctional sandwich-like mesoporous silica/Fe ₃ O ₄ /graphene oxide nanocomposites for removal of methylene blue from water. 2015 , 5, 39964-39972	31
1190	Efficient and rapid adsorption characteristics of templating modified guar gum and silica nanocomposite toward removal of toxic reactive blue and Congo red dyes. 2015 , 191, 291-9	78

1189	Sorption of heavy metal ions onto carboxylate chitosan derivatives--a mini-review. 2015 , 116, 113-20	109
1188	Preparation and application of grafted <i>Holarrhena antidycentrica</i> fiber as cation exchanger for adsorption of dye from aqueous solution. 2015 , 3, 1038-1046	13
1187	Factorial design analysis for optimizing the removal of cesium and strontium ions on synthetic nano-sized zeolite. 2015 , 55, 133-144	36
1186	Effective removal of cationic dyes from aqueous solution using gum ghatti-based biodegradable hydrogel. 2015 , 79, 8-20	77
1185	Removal of methyl violet dye by adsorption onto N-benzyltriazole derivatized dextran. 2015 , 5, 34327-34334	29
1184	Kinetic Studies on the Thermal Dehydration and Degradation of Chitosan and Citralidene Chitosan. 2015 , 23, 1-10	17
1183	Thiacalix[4]arene 1,2,3-triazole-polyethylene glycol polymers: Synthesis and dye adsorption properties. 2015 , 26, 1091-1095	6
1182	Non-Conventional Adsorbents for Dye Removal. 2015 , 359-407	18
1181	Biosorption of Organic Dyes: Research Opportunities and Challenges. 2015 , 295-329	14
1180	Flotation separation of copper-molybdenum sulfides using chitosan as a selective depressant. 2015 , 83, 217-222	44
1179	Fabrication of poly(β -cyclodextrin-co-citric acid)/bentonite clay nanocomposite hydrogel: thermal and absorption properties. 2015 , 5, 82438-82449	36
1178	Interpretations about methylene blue adsorption by surface modified chitin using the statistical physics treatment. 2015 , 21, 557-564	26
1177	Sorption of Methyl Orange from Aqueous Solution on Chitosan Biomass. 2015 , 15, 596-601	28
1176	Cobalt(III) acetylacetonate initiated RAFT polymerization of acrylonitrile and its application in removal of methyl orange after electrospinning. 2015 , 5, 58393-58402	7
1175	Synthesis of modified maghemite nanoparticles and its application for removal of Acridine Orange from aqueous solutions by using Box-Behnken design. 2015 , 396, 318-326	38
1174	Preparation and adsorption behavior of diethylenetriamine/polyacrylonitrile composite nanofibers for a direct dye removal. 2015 , 16, 1925-1934	36
1173	Preparation of lignosulfonate-acrylamide-chitosan ternary graft copolymer and its flocculation performance. 2015 , 81, 1053-8	28
1172	Cationic Dye Removal Ability From Multicomponent System by Magnetic Carbon Nanotubes. 2015 , 44, 1568-1583	5

1171	Optimization of lead removal from aqueous solution using goethite/chitosan nanocomposite by response surface methodology. 2015 , 484, 216-225	28
1170	Synergistic removal of dyes by <i>Myrothecium verrucaria</i> immobilization on a chitosan/Be membrane. 2015 , 5, 68200-68208	5
1169	Controlled formation of surface hydrophilicity enhanced chitosan film by layer-by-layer electro-assembly. 2015 , 56, 518-21	14
1168	Synthesis, Characterization, and Microbial Activity of Nanocomposites of Chitosan-Graft-Poly(4-vinyl pyridine) Copolymer/Organophilic Montmorillonite. 2015 , 54, 1270-1279	15
1167	Influence of adsorption parameters on cesium uptake from aqueous solutions- a brief review. 2015 , 5, 71658-71683	77
1166	Synthesis of carrageenan/multi-walled carbon nanotube hybrid hydrogel nanocomposite for adsorption of crystal violet from aqueous solution. 2015 , 17, 70-76	22
1165	A bibliometric analysis of industrial wastewater research: current trends and future prospects. 2015 , 105, 863-882	41
1164	Cyanoguanidine-crosslinked chitosan to adsorption of food dyes in the aqueous binary system. 2015 , 211, 425-430	29
1163	Preparation and antibacterial activity of chitosan derivative membrane complexation with iodine. 2015 , 5, 79820-79828	13
1162	Bio-inspired adhesive catechol-conjugated chitosan for biomedical applications: A mini review. 2015 , 27, 101-115	250
1161	Equilibrium Isotherms, Thermodynamics, and Kinetic Studies for the Adsorption of Food Azo Dyes onto Chitosan Films. 2015 , 202, 1316-1323	42
1160	Cyclodextrin facilitated electrospun chitosan nanofibers. 2015 , 5, 7131-7137	29
1159	Kinetics and isotherm of cationic dye removal from multicomponent system using the synthesized silica nanoparticle. 2015 , 54, 562-571	14
1158	Design of Permeable Adsorptive Barriers (PABs) for groundwater remediation by COMSOL Multi-physics simulations. 2015 , 55, 3231-3240	5
1157	Effective adsorption of cationic dyes by lignin sulfonate polymer based on simple emulsion polymerization: isotherm and kinetic studies. 2015 , 5, 3757-3766	37
1156	Utilization of diatomite/chitosan/Be (III) composite for the removal of anionic azo dyes from wastewater: Equilibrium, kinetics and thermodynamics. 2015 , 468, 129-139	66
1155	Effect of low-concentration rhamnolipid on adsorption of <i>Pseudomonas aeruginosa</i> ATCC 9027 on hydrophilic and hydrophobic surfaces. 2015 , 285, 383-8	36
1154	Preparation and adsorption property of xylan/poly(acrylic acid) magnetic nanocomposite hydrogel adsorbent. 2015 , 118, 16-23	122

1153	Comparative study of waste derived adsorbents for sequestering methylene blue from aquatic environment. 2015 , 3, 395-404	14
1152	Preparation and characterization of novel phenolic acid (hydroxybenzoic and hydroxycinnamic acid derivatives) grafted chitosan microspheres with enhanced adsorption properties for Fe(II). 2015 , 262, 803-812	45
1151	Ferrihydrite preparation and its application for removal of anionic dyes. 2015 , 9, 411-418	6
1150	Removal of Methylene Blue from Aqueous Solution by Crosslinked Chitosan-g-Poly(Acrylic Acid)/Bentonite Composite. 2015 , 202, 1635-1644	22
1149	Removal of Lissamine rhodamine B and acid orange 10 from aqueous solution using activated carbon/surfactant: Process optimization, kinetics and equilibrium. 2015 , 47, 149-159	23
1148	Magnetic nanocomposite beads: synthesis and uptake of Cu(II) ions from aqueous solutions. 2015 , 93, 289-296	20
1147	Adsorption of Methylene Blue from Aqueous Solution by Crosslinked Chitosan/Bentonite Composite. 2015 , 36, 61-67	75
1146	Preparation and characterization of a novel chitosan/Al ₂ O ₃ /magnetite nanoparticles composite adsorbent for kinetic, thermodynamic and isotherm studies of Methyl Orange adsorption. 2015 , 259, 1-10	344
1145	Extended isotherm and kinetics of binary system dye removal using carbon nanotube from wastewater. 2015 , 54, 2777-2793	10
1144	Encapsulation of Thyme essential oils in chitosan-benzoic acid nanogel with enhanced antimicrobial activity against <i>Aspergillus flavus</i> . 2015 , 60, 502-508	96
1143	New physicochemical interpretations for the adsorption of food dyes on chitosan films using statistical physics treatment. 2015 , 171, 1-7	54
1142	Syntheses and dye-binding abilities of novel calix[4]benzocrowns with π -conjugate azo groups on sidechains. 2015 , 12, 197-203	3
1141	Amine functionalized magnetic carbon nanotube: synthesis and binary system dye removal. 2015 , 56, 107-120	4
1140	Modified chitosan for the collection of reactive blue 4, arsenic and mercury from aqueous media. 2015 , 117, 123-132	21
1139	Adsorption of dyes in aqueous solutions by chitosan/Balloysite nanotubes composite hydrogel beads. 2015 , 201, 190-201	169
1138	Porous chitosan doped with graphene oxide as highly effective adsorbent for methyl orange and amido black 10B. 2015 , 115, 686-93	84
1137	Adsorption of copper(II) ions by a chitosan-oxalate complex biosorbent. 2015 , 72, 136-44	62
1136	Synthesis and adsorption application of succinyl-grafted chitosan for the simultaneous removal of zinc and cationic dye from binary hazardous mixtures. 2015 , 259, 438-448	227

1135	Removal of elemental mercury from gas stream using sulfur-functionalized silica microspheres (S-SMs). 2015 , 17, 39-47	9
1134	Coconut coir dust as a low cost adsorbent for the removal of cationic dye from aqueous solution. 2016 , 20, S67-S76	128
1133	Alkaline treatment of timber sawdust: A straightforward route toward effective low-cost adsorbent for the enhanced removal of basic dyes from aqueous solutions. 2016 , 20, S241-S249	32
1132	Experimental studies on adsorption of malachite green dye by sugarcane bagasse. 2016 , 18, 239	
1131	Efficiency of Chitosan and their Combination with Bentonite as Retention Aids in Papermaking. 2016 , 11,	7
1130	Chemical Modifications of Cassava Peel as Adsorbent Material for Metals Ions from Wastewater. 2016 , 2016, 1-15	26
1129	Removal of Fluoride from Aqueous Solutions Using Chitosan Cryogels. 2016 , 2016, 1-13	5
1128	Molecular Interaction Studies of Chitosan Cross-linked Compounds as Drug Delivery Substrate for Anticancer Agents. 2016 , 5,	
1127	Sorption of Cu(II) Ions on Chitosan-Zeolite X Composites: Impact of Gelling and Drying Conditions. 2016 , 21, E109	21
1126	Protective effect of dietary chitosan on cadmium accumulation in rats. 2016 , 10, 19-25	10
1125	A Review on Chitosan Utilization in Membrane Synthesis. 2016 , 3, 134-158	33
1124	A novel magnetic Preyssler acid grafted chitosan nano adsorbent: synthesis, characterization and adsorption activity. 2016 , 91, 1452-1460	44
1123	Recent Progress on the Design and Applications of Polysaccharide-Based Graft Copolymer Hydrogels as Adsorbents for Wastewater Purification. 2016 , 301, 496-522	79
1122	Proteomic investigation of the secretome of <i>Cellvibrio japonicus</i> during growth on chitin. 2016 , 16, 1904-14	22
1121	A method for dyeing cotton fabric with anthocyanin dyes extracted from mulberry (<i>Morus rubra</i>) fruits. 2016 , 132, 222-231	20
1120	Equilibrium modeling of single and binary adsorption of Food Yellow 4 and Food Blue 2 on modified chitosan using a statistical physics theory: new microscopic interpretations. 2016 , 222, 151-158	23
1119	Cationic cellulose hydrogels cross-linked by poly(ethylene glycol): Preparation, molecular dynamics, and adsorption of anionic dyes. 2016 , 152, 170-180	69
1118	Adsorptive removal of multi-azo dye from aqueous phase using a semi-IPN superabsorbent chitosan-starch hydrogel. 2016 , 112, 274-288	86

1117	A New Derivative of CoreShell Magnetic Chitosan Biopolymer: Synthesis, Characterization and Application for Adsorption of Lead and Copper Ions. 2016 , 44, 710-719	8
1116	Surface and thermal behavior of chitosan/poly(ethylene oxide) blends. 2016 , 640, 78-89	8
1115	Chitosan-based hydrogel for dye removal from aqueous solutions: Optimization of the preparation procedure. 2016 ,	1
1114	Natural Minerals Coated by Biopolymer Chitosan: Synthesis, Physicochemical, and Adsorption Properties. 2016 , 11, 492	16
1113	ChitosanSodium alginate encapsulated Co-doped ZrO ₂ MWCNTs nanocomposites for photocatalytic decolorization of organic dyes. 2016 , 42, 7231-7245	9
1112	Characterization and adsorption performance of chitosan/diatomite membranes for Orange G removal. 2016 , 16, 99-109	5
1111	A review on chitosan-cellulose blends and nanocellulose reinforced chitosan biocomposites: Properties and their applications. 2016 , 150, 216-26	305
1110	Sorption Behavior of Dowex PSR-2 and Dowex PSR-3 Resins of Different Structures for Metal(II) Removal. 2016 , 34, 375-397	8
1109	Column, kinetic and isotherm studies of PAH (phenanthrene) and dye (acid red) on kaolin modified with 1-hexyl, 3-decahexyl imidazolium ionic liquid. 2016 , 4, 2774-2784	21
1108	Hydrophobic modification of bagasse cellulose fibers with cationic latex: Adsorption kinetics and mechanism. 2016 , 302, 33-43	42
1107	Coagulation/flocculation process for dye removal using water treatment residuals: modelling through artificial neural networks. 2016 , 57, 26392-26400	49
1106	A review on chitosan-based flocculants and their applications in water treatment. 2016 , 95, 59-89	371
1105	Synthesis of functionalized biomaterials and its application in the efficient remediation of aquatic environment contaminated with Cr(VI). 2016 , 296, 35-44	16
1104	Dye adsorption and bactericidal properties of TiO ₂ /chitosan coating layer. 2016 , 148, 153-60	115
1103	Comparison of chitosan with different physical forms to remove Reactive Black 5 from aqueous solutions. 2016 , 4, 2259-2267	25
1102	Efficient removal of cationic dyes using a new magnetic nanocomposite based on starch-g-poly(vinylalcohol) and functionalized with sulfate groups. 2016 , 6, 38042-38051	29
1101	Using activated clay for adsorption of sulfone compounds in diesel. 2016 , 124, 378-382	33
1100	Synthesis and characterization of Co ₃ O ₄ nanocube-doped polyaniline nanocomposites with enhanced methyl orange adsorption from aqueous solution. 2016 , 6, 43388-43400	80

1099	Green synthesis of iron oxide nanoparticles. Development of magnetic hybrid materials for efficient As(V) removal. 2016 , 301, 83-91	148
1098	Investigating the removal of methyl tertiary butyl ether (MTBE) from water using raw and modified fly ash waste materials. 2016 , 57, 26307-26312	2
1097	An environment-friendly and multi-functional absorbent from chitosan for organic pollutants and heavy metal ion. 2016 , 148, 272-80	103
1096	Selective adsorption of amaranth dye on Fe ₃ O ₄ /MgO nanoparticles. 2016 , 219, 780-788	79
1095	Enhanced adsorption capacity of polypyrrole/TiO ₂ composite modified by carboxylic acid with hydroxyl group. 2016 , 6, 42572-42580	12
1094	Biodegradable polymer nanocomposites: An overview. 2016 , 56, 287-328	71
1093	Preparation and characterization of chitosan-clay nanocomposites for the removal of Cu(II) from aqueous solution. 2016 , 89, 507-17	76
1092	Low pressure UV-cured CS/EOBTEGDMA/PAN thin film nanofibrous composite nanofiltration membranes for anionic dye separation. 2016 , 4, 15575-15588	49
1091	Use of non-treated shrimp-shells for textile dye removal from wastewater. 2016 , 4, 4100-4106	17
1090	Antioxidant and antibacterial lignin nanoparticles in polyvinyl alcohol/chitosan films for active packaging. 2016 , 94, 800-811	206
1089	Superabsorbent Cellulose/Clay Nanocomposite Hydrogels for Highly Efficient Removal of Dye in Water. 2016 , 4, 7217-7224	208
1088	Adsorption behavior of modified Iron stick yam skin with Polyethyleneimine as a potential biosorbent for the removal of anionic dyes in single and ternary systems at low temperature. 2016 , 222, 285-293	28
1087	Surface response methodology/central composite design screening for the fabrication of a Gx-psy-g-polyacrylicacid adsorbent and sequestration of auramine-O dye from a textile effluent. 2016 , 6, 74300-74313	22
1086	Potential applications of cellulose and chitosan nanoparticles/composites in wastewater treatment: A review. 2016 , 153, 600-618	255
1085	Biosorptive Performance of Bacillus arsenicus MTCC 4380 Biofilm Supported on Sawdust/MnFe ₂ O ₄ Composite for the Removal of As(III) and As(V). 2016 , 1, 103-125	3
1084	Treatment of Reactive Dyes from Water and Wastewater through Chitosan and its Derivatives. 2016 , 347-377	5
1083	Facile One-Pot Synthesis of Mechanically Robust Biopolymer/Silica Nanocomposite Aerogel by Cogelation of Silicic Acid with Chitosan in Aqueous Media. 2016 , 4, 5674-5683	45
1082	PMAA-g-CS/Loess Composite for Removing Lead Ions. 2016 , 680, 543-546	3

1081	Adsorption of hexavalent chromium by graphite-chitosan binary composite. 2016 , 39, 865-874	4
1080	A dynamic chitosan-based self-healing hydrogel with tunable morphology and its application as an isolating agent. 2016 , 6, 81060-81068	19
1079	Biosorption of Fluoride from Aqueous Solution Using Lichen and Its Ca-Pretreated Biomass. 2016 , 1, 143-160	12
1078	Adsorption rate of Reactive Black 5 on chitosan based materials: geometry and swelling effects. 2016 , 22, 973-983	33
1077	Modular Cross-Linked Chitosan Beads with Calcium Doping for Enhanced Adsorptive Uptake of Organophosphate Anions. 2016 , 55, 11706-11715	30
1076	Fungal Applications in Sustainable Environmental Biotechnology. 2016 ,	6
1075	Application of Biosorption and Biodegradation Functions of Fungi in Wastewater and Sludge Treatment. 2016 , 65-90	4
1074	Capability of Ammonium Adsorption by Anaerobic Ammonia Oxidation Granular Sludge. 2016 , 227, 1	11
1073	Synthesis of Hybrid Ion Exchanger for Rhodamine B Dye Removal: Equilibrium, Kinetic and Thermodynamic Studies. 2016 , 55, 10492-10499	47
1072	Low-cost biosorbent: Anadara inaequalis shells for removal of Pb(II) and Cu(II) from aqueous solution. 2016 , 103, 144-152	51
1071	Antibacterial bioadhesive layer-by-layer coatings for orthopedic applications. 2016 , 4, 5385-5393	41
1070	Anionic dyes removal from aqueous solution using TMU-16 and TMU-16-NH ₂ as isoreticular nanoporous metal organic frameworks. 2016 , 66, 164-171	33
1069	Development of chitosan/bentonite hybrid composite to remove hazardous anionic and cationic dyes from colored effluents. 2016 , 4, 3230-3239	68
1068	A review on chitosan-based adsorptive membranes. 2016 , 152, 419-432	205
1067	Development of a bio-based sorbent media for the removal of nickel ions from aqueous solutions. 2016 , 4, 3159-3169	27
1066	Surface modification of hollow magnetic Fe ₃ O ₄ @NH ₂ -MIL-101(Fe) derived from metal-organic frameworks for enhanced selective removal of phosphates from aqueous solution. 2016 , 6, 30651	44
1065	Cross-linked chitosan beads for phosphate removal from aqueous solution. 2016 , 133, n/a-n/a	43
1064	Synthesis, characterization of magnetic chitosan/active charcoal composite and using at the adsorption of methylene blue and reactive blue4. 2016 , 232, 26-38	89

1063	The facile preparation of novel magnetic zirconia composites with the aid of carboxymethyl chitosan and their efficient removal of dye. 2016 , 6, 58020-58027	34
1062	Kinetic, mechanistic and thermodynamic studies of removal of arsenic using <i>Bacillus arsenicus</i> MTCC 4380 immobilized on surface of granular activated carbon/MnFe ₂ O ₄ composite. 2016 , 2-3, 53-72	5
1061	Carboxymethyl chitosan-modified magnetic-cored dendrimer as an amphoteric adsorbent. 2016 , 317, 608-616	83
1060	Adsorption of rare earth metals: A review of recent literature. 2016 , 221, 954-962	213
1059	Effective removal of sulfur dyes from water by biosorption and subsequent immobilized laccase degradation on crosslinked chitosan beads. 2016 , 304, 313-324	84
1058	Adsorption of fluoride over a metal organic framework Uio-66 functionalized with amine groups and optimization with response surface methodology. 2016 , 221, 279-286	94
1057	Comparison between Brazilian agro-wastes and activated carbon as adsorbents to remove Ni(II) from aqueous solutions. 2016 , 73, 2713-21	22
1056	Evaluating the long-term performance of low-cost adsorbents using small-scale adsorption column experiments. 2016 , 101, 429-440	35
1055	Valorization of food wastes (orange seeds) as adsorbent for dye retention from aqueous medium. 2016 , 57, 29070-29081	5
1054	Chitosan microspheres modified with poly(ethylenimine) enhance the adsorption of methyl orange from aqueous solutions. 2016 , 11, 428-436	12
1053	Fe ₃ O ₄ nanoparticles loaded onto wheat straw: an efficient adsorbent for Basic Blue 9 adsorption from aqueous solution. 2016 , 57, 4110-4121	13
1052	Immobilization of heavy metals by modified bentonite coupled coagulation/flocculation process in the presence of a biological flocculant. 2016 , 57, 6072-6080	7
1051	Equilibrium and kinetic studies for the adsorption of Basic Red 29 from aqueous solutions using activated carbon and conducting polymer composite. 2016 , 57, 8406-8419	9
1050	Silane grafted chitosan for the efficient remediation of aquatic environment contaminated with arsenic(V). 2016 , 467, 203-212	19
1049	Characterization and modelling of biosorptive performance of living cells of <i>Bacillus arsenicus</i> MTCC 4380 for the removal of As(III) and As(V). 2016 , 9, 135-154	7
1048	Selective adsorption and separation of organic dyes in aqueous solutions by hydrolyzed PIM-1 microfibers. 2016 , 109, 76-85	39
1047	Color removal from real leather dyeing effluent using tannery waste as an adsorbent. 2016 , 4, 1061-1067	55
1046	Applications of cyclodextrins in medical textiles - review. 2016 , 224, 146-157	97

1045	Process intensification of anaerobically digested palm oil mill effluent (AAD-POME) treatment using combined chitosan coagulation, hydrogen peroxide (H ₂ O ₂) and Fenton [®] oxidation. 2016 , 18, 219-230	32
1044	Cyclodextrin-grafted thiacalix [4]arene netty polymer based on the click chemistry: preparation and efficient adsorption for organic dyes. 2016 , 23, 1	6
1043	Investigation on the adsorption of phosphorus by Fe-loaded ceramic adsorbent. 2016 , 464, 277-84	31
1042	Investigation of Cationic Dye Adsorption from Water onto Acetic Acid Lignin. 2016 , 36, 173-181	27
1041	Synthesis of maghemite nanoparticles and its application for removal of Titan yellow from aqueous solutions using full factorial design. 2016 , 57, 22618-22631	8
1040	Preparation of chitosan/polycaprolactam nanofibrous filter paper and its greatly enhanced chromium(VI) adsorption. 2016 , 494, 65-73	23
1039	Gd _{0.5} Y _{0.5} CrO ₃ Perovskite-Type Oxide Nanopowder: A Novel Adsorbent to Remove Organic Dye from Aqueous Media. 2016 , 40, 53-61	1
1038	Removal of direct dyes from aqueous solution by oxidized starch cross-linked chitosan/silica hybrid membrane. 2016 , 82, 174-81	66
1037	Removal of heavy metal ions using chitosan and modified chitosan: A review. 2016 , 214, 175-191	472
1036	Simultaneous removal of acid green 25 and mercury ions from aqueous solutions using glutamine modified chitosan magnetic composite microspheres. 2016 , 209, 21-9	48
1035	Enhancement of chromium removal efficiency on adsorption and photocatalytic reduction using a bio-catalyst, titania-impregnated chitosan/xylan hybrid film. 2016 , 130, 126-136	40
1034	Batch and Column Adsorption of Reactive Red 198 from Textile Industry Effluent by Microporous Activated Carbon Developed from Walnut Shells. 2016 , 7, 1255-1270	22
1033	Carboxymethyl chitosan functionalization of Bi ₂ S ₃ quantum dots: Towards eco-friendly fluorescent core-shell nanoprobes. 2016 , 146, 455-66	25
1032	The potentiality of cross-linked fungal chitosan to control water contamination through bioactive filtration. 2016 , 88, 59-65	12
1031	Synthesis and characterization of Fe ₃ O ₄ @TSC nanocomposite: highly efficient removal of toxic metal ions from aqueous medium. 2016 , 6, 22679-22689	91
1030	Dendrimers, mesoporous silicas and chitosan-based nanosorbents for the removal of heavy-metal ions: A review. 2016 , 86, 570-86	185
1029	Swelling induced regeneration of TiO ₂ -impregnated chitosan adsorbents under visible light. 2016 , 140, 433-41	11
1028	Multi-walled carbon nanotubes with selected properties for dynamic filtration of pharmaceuticals and personal care products. 2016 , 92, 104-12	67

1027	WITHDRAWN: Spectroscopic and antibacterial speculation of silver nanoparticles modified chitosan/polyvinyl alcohol polymer blend. 2016,	1
1026	Surfactant modification of banana trunk as low-cost adsorbents and their high benzene adsorptive removal performance from aqueous solution. 2016, 6, 24738-24751	12
1025	Green synthesis of magnetic chitosan nanocomposites by a new sol-gel auto-combustion method. 2016, 410, 27-33	124
1024	Competitive adsorption of 2,4-dichlorophenoxyacetic acid herbicide and humic acid onto activated carbon for agricultural water management. 2016, 57, 25653-25666	7
1023	Polyaniline nanofibers as highly effective re-usable adsorbent for removal of reactive black 5 from aqueous solutions. 2016, 466, 442-51	56
1022	Vanadium removal from aqueous solutions by adsorption onto chitosan films. 2016, 57, 16583-16591	29
1021	Study of the kinetics of arsenic removal from wastewater using Bacillus arsenicus biofilms supported on a Neem leaves/MnFe ₂ O ₄ composite. 2016, 88, 195-216	17
1020	Kinetics and thermodynamics of Pb sorption onto bentonite and poly(acrylic acid)/bentonite hybrid sorbent. 2016, 57, 22467-22479	7
1019	Removal of safranin T and brilliant cresyl blue dyes from water by carboxy methyl cellulose incorporated acrylic hydrogels: Isotherms, kinetics and thermodynamic study. 2016, 60, 313-327	23
1018	Silane Based Novel Crosslinked Chitosan/Poly(Vinyl Alcohol) Membrane: Structure, Characteristic and Adsorption Behaviour. 2016, 26, 208-218	5
1017	The half saturation removal approach and mechanism of Lead (II) removal using eco-friendly industrial fish bone meal waste biosorbent. 2016, 18, 541-551	9
1016	The influence of Na species addition on the synthesis and catalytic activity of Na ₂ Mo ₄ O ₁₃ /β-MoO ₃ as CWAO catalyst. 2016, 278, 192-202	3
1015	Chitosan hydrogel beads impregnated with hexadecylamine for improved reactive blue 4 adsorption. 2016, 137, 139-146	59
1014	Ex-Situ Remediation Technologies for Environmental Pollutants: A Critical Perspective. 2016, 236, 117-92	48
1013	Functionalized copper oxide/zinc oxide nanocomposite: synthesis and genetic programming model of dye adsorption. 2016, 57, 18755-18769	16
1012	Ultrasound-assisted treatment of chitin: evaluation of physicochemical characteristics and dye removal potential. 2016, 16, 49-56	14
1011	Adsorption of dispersed red from aqueous solution onto calcined layered double hydroxides: equilibrium, kinetics studies. 2016, 57, 18879-18887	3
1010	Anionic surfactant-modified rice straw for removal of methylene blue from aqueous solution. 2016, 57, 18202-18216	9

- 1009 Cobalt ferrite nanoparticles: Preparation, characterization and anionic dye removal capability. **2016**, 59, 320-329 52
- 1008 Removal of Congo Red from the aqueous phase by chitin and chitosan from waste shrimp. **2016**, 57, 14674-14685
- 1007 Reviews of Environmental Contamination and Toxicology Volume 236. **2016**, 2
- 1006 Efficient removal of chlorophenols from water with a magnetic reduced graphene oxide composite. **2016**, 59, 350-359 12
- 1005 Highly efficient chromium(VI) adsorption with nanofibrous filter paper prepared through electrospinning chitosan/polymethylmethacrylate composite. **2016**, 137, 119-126 64
- 1004 Comments on the paper: a critical review of the applicability of Avrami fractional kinetic equation in adsorption-based water treatment studies. **2016**, 57, 19566-19571 19
- 1003 Functional chitosan-stabilized nanoscale zero-valent iron used to remove acid fuchsin with the assistance of ultrasound. **2016**, 136, 1085-90 29
- 1002 Highly efficient simultaneous ultrasonic assisted adsorption of brilliant green and eosin B onto ZnS nanoparticles loaded activated carbon: Artificial neural network modeling and central composite design optimization. **2016**, 153, 257-67 143
- 1001 Kinetic and isotherm study of Sudan black B removal. **2016**, 32, 1891-1901
- 1000 Application of granular activated carbon/MnFeO₂ composite immobilized on *C. glutamicum* MTCC 2745 to remove As(III) and As(V): Kinetic, mechanistic and thermodynamic studies. **2016**, 153, 298-314 20
- 999 Removal of hazardous azo dye Metanil Yellow from aqueous solution by cross-linked magnetic biosorbent; equilibrium and kinetic studies. **2016**, 57, 13347-13356 16
- 998 Novel organic dye sorbent: synthesis and adsorption properties of multi-walled carbon nanotubes modified with gallic amide units. **2016**, 57, 12264-12273 2
- 997 pH-tunable surface charge of chitosan/graphene oxide composite adsorbent for efficient removal of multiple pollutants from water. **2016**, 284, 1397-1405 98
- 996 Batch and fixed bed column studies on removal of Orange G acid dye by a weak base functionalized polymer. **2016**, 57, 14708-14727 15
- 995 Surface modification of electrospun PAN nanofibers by amine compounds for adsorption of anionic dyes. **2016**, 57, 10333-10348 43
- 994 Adsorption of rose Bengal dye from aqueous solution by amberlite Ira-938 resin: kinetics, isotherms, and thermodynamic studies. **2016**, 57, 13527-13533 148
- 993 Microwave assisted synthesis of ZnO nanoparticles for lighting and dye removal application. **2016**, 480, 36-41 27
- 992 Removal of cationic dyes by poly(AA-co-AMPS)/montmorillonite nanocomposite hydrogel. **2016**, 57, 6372-6383 8

991	Utilization of inactivated aerobic granular sludge as a potential adsorbent for the removal of sunset yellow FCF. 2016 , 57, 7334-7344	6
990	Biosorption performances of raw and chemically modified biomasses from <i>Perenniporia subacida</i> for heterocycle dye Neutral Red. 2016 , 57, 8454-8469	4
989	Response surface optimization of electro-oxidation process for the treatment of C.I. Reactive Yellow 186 dye: reaction pathways. 2017 , 7, 637-652	22
988	Removal of Congo red dye by gemini surfactant C12-4-C12 Γ 2Br-modified chitosan hydrogel beads. 2017 , 38, 46-57	11
987	Removal of nickel ions by adsorption on nano-bentonite: Equilibrium, kinetics, and thermodynamics. 2017 , 38, 757-767	18
986	Biosorption of As(III) and As(V) on the surface of TW/MnFe ₂ O ₄ composite from wastewater: kinetics, mechanistic and thermodynamics. 2017 , 7, 2689-2715	18
985	Chitosan/polyamide nanofibers prepared by Forcespinning Γ technology: A new adsorbent to remove anionic dyes from aqueous solutions. 2017 , 144, 120-129	111
984	Synthesis, characterization and using at the copper adsorption of chitosan/polyvinyl alcohol magnetic composite. 2017 , 230, 152-162	36
983	A Kinetic Uptake Study of Roxarsone Using Cross-Linked Chitosan Beads. 2017 , 56, 1704-1712	17
982	Synthesis, characterization and exploitation of nano-TiO ₂ /feldspar-embedded chitosan beads towards UV-assisted adsorptive abatement of aqueous arsenic (As). 2017 , 316, 370-382	45
981	Cu(II) adsorption from copper mine water by chitosan films and the matrix effects. 2017 , 24, 5908-5917	42
980	Adsorption of methyl orange from aqueous solution using chitosan/diatomite composite. 2017 , 75, 1633-1642	28
979	Chitin nanowhisiker (ChNW)-functionalized electrospun PVDF membrane for enhanced removal of Indigo carmine. 2017 , 165, 115-122	56
978	Adsorption of aluminum and lead from wastewater by chitosan-tannic acid modified biopolymers: Isotherms, kinetics, thermodynamics and process mechanism. 2017 , 99, 465-476	93
977	Removing Reactive Red 120 and 196 using chitosan/zeolite composite from aqueous solutions: Kinetics, isotherms, and process optimization. 2017 , 51, 185-195	64
976	Synthesis and characterization of chitosan membranes functionalized with amino acids and copper for adsorption of endoglucanase. 2017 , 315, 250-257	20
975	Efficient removal of coomassie brilliant blue R-250 dye using starch/poly(alginic acid-cl-acrylamide) nanohydrogel. 2017 , 109, 301-310	152
974	Synthesis of amine-modified zeolitic imidazolate framework-8, ultrasound-assisted dye removal and modeling. 2017 , 39, 550-564	81

973	Adsorption of carbon black using carboxymethyl chitosan in deinking process. 2017 ,	1
972	Broadband Photocatalytic Activity of Mesoporous Cd(II)-Doped TiO ₂ . 2017 , 2, 3648-3656	5
971	Adsorption affinity and selectivity of 3-ureidopropyltriethoxysilane grafted oil palm empty fruit bunches towards mercury ions. 2017 , 24, 15167-15181	8
970	Facile preparation of MoS ₂ based polymer composites via mussel inspired chemistry and their high efficiency for removal of organic dyes. 2017 , 419, 35-44	190
969	Hexavalent chromium removal by chitosan modified-bioreduced nontronite. 2017 , 210, 25-41	25
968	Removal of As(III) and As(V) from wastewater using <i>Corynebacterium glutamicum</i> MTCC 2745 immobilized on Sawdust/MnFe ₂ O ₄ composite: kinetic, mechanistic and thermodynamic modelling. 2017 , 3, 297-320	1
967	Characterization of modified Chitosan thin film. 2017 , 4, 442-451	5
966	One-Step Synthesis of Cationic Hydrogel for Efficient Dye Adsorption and Its Second Use for Emulsified Oil Separation. 2017 , 5, 5598-5607	87
965	In situ reduced and assembled three-dimensional graphene aerogel for efficient dye removal. 2017 , 714, 522-529	80
964	RSM-CCD optimized adsorbent for the sequestration of carcinogenic rhodamine-B: Kinetics and equilibrium studies. 2017 , 196, 270-283	29
963	Comparative adsorption of Pb(II), Cu(II) and Cd(II) on chitosan saturated montmorillonite: Kinetic, thermodynamic and equilibrium studies. 2017 , 143, 320-326	109
962	Preparation and characterization of nano-TiO ₂ /chitosan/poly(N-isopropylacrylamide) composite hydrogel and its application for removal of ionic dyes. 2017 , 176, 193-199	52
961	Synthesis of metal-organic framework hybrid nanocomposites based on GO and CNT with high adsorption capacity for dye removal. 2017 , 326, 1145-1158	317
960	An Efficient Removal of Disperse Dye from Wastewater Using Zeolite Synthesized from Cenospheres. 2017 , 21, 04017017	10
959	Fabrication of hollow and nonhollow SiO ₂ nanofibers for removal of cationic dyes from aqueous solutions. 2017 , 36, 1390-1404	9
958	The effect of pH on the bonding of Cu and chitosan-montmorillonite composite. 2017 , 103, 751-757	9
957	Mechanistic Insight into the Coagulation Efficiency of Polysaccharide-based Coagulants. 2017 , 13-35	4
956	Degradation of hazardous organic dyes in water by nanomaterials. 2017 , 15, 623-642	147

955	Ultrasonic treatment of water contaminated with various pollutants onto copper nanowires loaded on activated carbon using response surface methodology and artificial intelligent. 2017 , 31, e3878	
954	Alkali Treatment to Improve Physical, Mechanical and Chemical Properties of Lignocellulosic Natural Fibers for Use in Various Applications. 2017 , 47-63	12
953	Tough chitosan hydrogel based on purified regeneration and alkaline solvent as biomaterials for tissue engineering applications. 2017 , 104, 224-231	30
952	Powdered grape seeds (PGS) as an alternative biosorbent to remove pharmaceutical dyes from aqueous solutions. 2017 , 76, 1177-1187	8
951	Synthesis and magnetic properties of nanostructured metallic Co, Mn and Ni oxide materials obtained from solid-state metal-macromolecular complex precursors. 2017 , 7, 27729-27736	16
950	Sol-gel derived xanthan gum/silica nanocomposite-a highly efficient cationic dyes adsorbent in aqueous system. 2017 , 103, 596-604	34
949	Sorption of Congo red and reactive blue on biomass and activated carbon derived from biomass modified by ionic liquid. 2017 , 8, 83-91	21
948	Comparative studies of chitosan and its nanoparticles for the adsorption efficiency of various dyes. 2017 , 104, 1449-1458	60
947	Self-organized graphene oxide and TiO ₂ nanoparticles incorporated alginate/carboxymethyl cellulose nanocomposites with efficient photocatalytic activity under direct sunlight. 2017 , 346, 113-125	28
946	Recent Progress in the Utilization of Chitin/Chitosan for Chemicals and Materials. 2017 , 151-187	1
945	Preparation, Characterization and Methylene Blue Dye Adsorption Ability of Acid Activated-Natural Zeolite. 2017 , 172, 012039	3
944	Preparation and characterization of underwater superoleophobic chitosan/poly(vinyl alcohol) coatings for self-cleaning and oil/water separation. 2017 , 412, 10-18	30
943	Metal Ions Removal Using Nano Oxide Pyrolox TM Material. 2017 , 12, 95	24
942	Environmental applications of chitosan and cellulosic biopolymers: A comprehensive outlook. 2017 , 242, 295-303	182
941	A comparative study of the amaranth azo dye adsorption/desorption from aqueous solutions by layered double hydroxides. 2017 , 143, 142-150	50
940	Adsorption of Co(II) from aqueous solutions onto rice husk modified by ultrasound assisted and supercritical technologies. 2017 , 109, 55-62	27
939	A reusable surface-quaternized nanocellulose-based hybrid cryogel loaded with N-doped TiO ₂ for self-integrated adsorption/photo-degradation of methyl orange dye. 2017 , 7, 17279-17288	21
938	Removal of Anionic Dye from Aqueous Media by Adsorption onto SBA-15/Polyamidoamine Dendrimer Hybrid: Adsorption Equilibrium and Kinetics. 2017 , 62, 1365-1376	42

937	Synthesis and characterization of magnetic chitosan microspheres as low-density and low-biotoxicity adsorbents for lake restoration. 2017 , 171, 571-579	15
936	Exploring bioaugmentation strategies for azo dye CI Reactive Violet 5 decolourization using bacterial mixture: dye response surface methodology. 2017 , 31, 80-89	24
935	Equilibrium, kinetic and thermodynamic studies of Reactive Red 120 dye adsorption by chitosan beads from aqueous solution. 2017 , 2, 85-93	28
934	Sequestration of dyes from artificially prepared textile effluent using RSM-CCD optimized hybrid backbone based adsorbent-kinetic and equilibrium studies. 2017 , 190, 176-187	39
933	Folic acid modified cross-linked cationic polymer: Synthesis, characterization and application of the removal of Congo red dye from aqueous medium. 2017 , 227, 87-97	18
932	High removal efficacy of Hg(II) and MeHg(II) ions from aqueous solution by organoalkoxysilane-grafted lignocellulosic waste biomass. 2017 , 171, 19-30	27
931	Isotherm, kinetic and thermodynamic studies on the adsorption behaviour of textile dyes onto chitosan. 2017 , 106, 1-10	85
930	Studies of cadmium(II), lead(II), nickel(II), cobalt(II) and chromium(VI) sorption on extracellular polymeric substances produced by <i>Rhodococcus opacus</i> and <i>Rhodococcus rhodochrous</i> . 2017 , 225, 113-120	79
929	Biopolymer Flocculants and Oat Hull Biomass To Aid the Removal of Orthophosphate in Wastewater Treatment. 2017 , 56, 37-46	16
928	Polymer-grafted magnetic microspheres for enhanced removal of methylene blue from aqueous solutions. 2017 , 7, 47029-47037	20
927	Biobased Nanographene Oxide Creates Stronger Chitosan Hydrogels with Improved Adsorption Capacity for Trace Pharmaceuticals. 2017 , 5, 11525-11535	36
926	Ultrasound-assisted oxidative-adsorptive desulfurization using highly acidic graphene oxide as a catalyst-adsorbent. 2017 , 210, 639-645	44
925	Development of a graphene oxide/chitosan nanocomposite for the removal of picric acid from aqueous solutions: Study of sorption parameters. 2017 , 160, 671-681	28
924	Macroalgae of <i>Iridaea cordata</i> as an efficient biosorbent to remove hazardous cationic dyes from aqueous solutions. 2017 , 76, 3379-3391	9
923	Characterization and adsorption of disperse dyes from wastewater onto cenospheres activated carbon composites. 2017 , 76, 1	9
922	Factors affecting the antibacterial activity of chitosan-silver nanocomposite. 2017 , 11, 731-737	14
921	Removal of Pollutants Using Electrospun Nanofiber Membranes. 2017 , 301-324	5
920	Halloysite-based hybrid bionanocomposite hydrogels as potential drug delivery systems. 2017 , 148, 48-55	51

919	Chitosan hydrogels embedding hyper-crosslinked polymer particles as reusable broad-spectrum adsorbents for dye removal. 2017 , 177, 347-354	68
918	Chitosan/polyethylene glycol impregnated activated carbons: Synthesis, characterization and adsorption performance. 2017 , 11, 575-585	12
917	Applications of Chitosan Derivatives in Wastewater Treatment. 2017 , 471-517	7
916	Charge-functionalized and mechanically durable composite cryogels from Q-NFC and CS for highly selective removal of anionic dyes. 2017 , 174, 841-848	25
915	Biosorption of cadmium ions from aqueous solution by modified <i>Auricularia Auricular</i> matrix waste. 2017 , 241, 1023-1031	37
914	Chitosan templated synthesis of mesoporous silica and its application in the treatment of aqueous solutions contaminated with cadmium(II) and lead(II). 2017 , 328, 434-444	57
913	Investigating coagulation behavior of chitosan with different Al species dual-coagulants in dye wastewater treatment. 2017 , 78, 423-430	23
912	Chitosan Composites: Preparation and Applications in Removing Water Pollutants. 2017 , 577-672	1
911	Biopolymer mediated nanoparticles synthesized from <i>Adenia hondala</i> for enhanced tamoxifen drug delivery in breast cancer cell line. 2017 , 8, 035011	2
910	Adsorption mechanism of chromium(III) using biosorbents of <i>Jatropha curcas</i> L. 2017 , 24, 21778-21790	14
909	Adsorption of Congo red dye onto antimicrobial terephthaloyl thiourea cross-linked chitosan hydrogels. 2017 , 76, 2719-2732	36
908	Cross-linked chitosan/marble powder composites for the adsorption of Dimozol Blue. 2017 , 76, 2776-2784	2
907	Application of response surface methodology for optimization of Remazol Brilliant Blue R removal onto a novel polymeric adsorbent. 2017 , 80, 406-414	25
906	Preparation and Characterization of Magnetic Cobalt Ferrites/SBA-15 Nanocomposite Adsorbents and the Removal of Methylene Blue. 2017 , 12, 1750060	2
905	Chitosan -Based Composite Materials: Fabrication and Characterization. 2017 , 103-136	1
904	Chitosan Coating on Textile Fibers for Functional Properties. 2017 , 165-197	
903	Extraction and characterization of chitin and chitosan: applications of chitosan nanoparticles in the adsorption of copper in an aqueous environment. 2017 , 17, 383-397	7
902	High-surface-area and nitrogen-rich mesoporous carbon material from fishery waste for effective adsorption of methylene blue. 2017 , 321, 428-434	58

901	WITHDRAWN: Adsorption kinetics of methylene blue using alkali and microwave modified apricot stones. 2017 ,	1
900	Removal of refractory organics from saline concentrate produced by electro dialysis in petroleum industry using bone char. 2017 , 23, 983-997	8
899	Application of polyurethane foam chitosan-coated as a low-cost adsorbent in the effluent treatment. 2017 , 20, 201-206	21
898	Features of Chitosan interaction with copper(II) and cobalt(II) tetrasulfophthalocyanines. 2017 , 87, 2327-2331	4
897	Role of polymer network and gelation kinetics on the mechanical properties and adsorption capacity of chitosan hydrogels for dye removal. 2017 , 55, 1843-1849	16
896	Kinetic desorption models for the release of nanosilver from an experimental nanosilver coating on polystyrene food packaging. 2017 , 44, 149-158	17
895	Predicting the propagation of concentration and saturation fronts in fixed-bed filters. 2017 , 123, 556-568	5
894	Electrochemical sensor based on reduced graphene oxide/carbon black/chitosan composite for the simultaneous determination of dopamine and paracetamol concentrations in urine samples. 2017 , 799, 436-443	90
893	Microwave-assisted preparation of mesoporous-activated carbon from coconut (Cocos nucifera) leaf by H3PO4 activation for methylene blue adsorption. 2017 , 204, 1143-1156	55
892	Adsorption Isotherms in Liquid Phase: Experimental, Modeling, and Interpretations. 2017 , 19-51	50
891	Nitrogen-doped graphene hydrogels as potential adsorbents and photocatalysts for environmental remediation. 2017 , 327, 751-763	56
890	Efficient and selective removal of cefixime from aqueous solution by a modified bionanocomposite. 2017 , 5, 3337-3347	17
889	The application of graphene-based materials for the removal of heavy metals and radionuclides from water and wastewater. 2017 , 47, 1042-1105	122
888	Adsorption Processes for Water Treatment and Purification. 2017 ,	83
887	HPLC-UV platform for trace analysis of three isomeric mononitrophenols in water with chitin based solid phase extraction. 2017 , 9, 4143-4150	9
886	Adsorptive removal of bisphenol A (BPA) from aqueous solution: A review. 2017 , 168, 885-902	249
885	New polymeric/inorganic hybrid sorbents based on red mud and nanosized magnetite for large scale applications in As(V) removal. 2017 , 311, 117-125	27
884	Application of chemometric methods in modeling of competitive multidye biosorption from ternary system. 2017 , 14, 285-296	1

883	A facile, efficient, and sustainable chitosan/CaHAp catalyst and one-pot synthesis of novel 2,6-diamino-pyran-3,5-dicarbonitriles. 2017 , 21, 247-255	28
882	Removal of Cd (II) from water using the waste of jatropha fruit (<i>Jatropha curcas</i> L.). 2017 , 7, 3207-3222	15
881	Development of polyethyleneimine-loaded core-shell chitosan hollow beads and their application for platinum recovery in sequential metal scavenging fill-and-draw process. 2017 , 324, 724-731	34
880	Effective and selective removal of aromatic amines from water by Cu ²⁺ -treated chitosan/alumina nanocomposite. 2017 , 35, 218-240	8
879	Preparation and characterization of controlled-release fertilizers coated with marine polysaccharide derivatives. 2017 , 35, 1086-1093	16
878	Development of chitosan/Spirulina bio-blend films and its biosorption potential for dyes. 2017 , 134,	24
877	Conducting Polymer Hydrogels and Their Applications. 2017 , 193-221	2
876	Visible light photocatalytic activity of chitosan/poly(vinyl alcohol)/TiO ₂ nanocomposite for dye removal: taguchi-based optimization. 2017 , 36, 66-72	7
875	Dye adsorption from single and binary systems using NiO-MnO ₂ nanocomposite and artificial neural network modeling. 2017 , 36, 111-119	10
874	Efficient removal of methyl violet from aqueous solution by a low-cost adsorbent. \square . camphora fallen leaves powder. 2017 , 38, 1135-1141	3
873	Phosphate uptake studies of cross-linked chitosan bead materials. 2017 , 485, 201-212	45
872	Evaluation of decoloration potential of <i>Xanthium Strumarium</i> seed hull for adsorption of Direct red 81 in aqueous solution. 2017 , 19, 1933-1951	8
871	Enhanced, rapid, and selective adsorption behaviors of a porous chitosan-based adsorbent. 2017 , 81, 284-293	2
870	A novel hydrogel based on agricultural waste for removal of hazardous dyes from aqueous solution and reuse process in a secondary adsorption. 2017 , 74, 337-358	19
869	Facile Preparation of Chitosan Films for High Performance Removal of Reactive Blue 19 Dye from Aqueous Solution. 2017 , 25, 146-155	14
868	An efficient removal of crystal violet dye from waste water by adsorption onto TLAC/Chitosan composite: A novel low cost adsorbent. 2017 , 96, 324-333	172
867	Cross-linkable chitosan-based hydrogel microbeads with pH-responsive adsorption properties for organic dyes prepared using size-tunable microchannel emulsification technique. 2017 , 514, 69-78	33
866	Development of chitosan based hybrid hydrogels for dyes removal from aqueous binary system. 2017 , 225, 265-270	74

865	Removal of anionic and cationic dyes from aqueous solution with activated organo-bentonite/sodium alginate encapsulated beads. 2017 , 135, 9-15	136
864	Removal of various pollutants from water and wastewater by modified chitosan adsorbents. 2017 , 47, 2331-2386	177
863	Efficient removal of nickel(II) salts from aqueous solution using carboxymethylchitosan-coated silica particles as adsorbent. 2017 , 173, 372-382	11
862	Comparative efficacy of locally isolated fungal strains for Pb(II) removal and recovery from water. 2017 , 11, 133	3
861	Metal removal from aqueous media by polymer-assisted ultrafiltration with chitosan. 2017 , 10, S3826-S3839	62
860	Alkylphenol and alkylphenol polyethoxylates in water and wastewater: A review of options for their elimination. 2017 , 10, S3749-S3773	100
859	Adsorption of methyl orange onto protonated cross-linked chitosan. 2017 , 10, 24-32	137
858	Biosorption of anionic textile dyes from aqueous solution by yeast slurry from brewery. 2017 , 60,	18
857	Applications of Chitosan in Wastewater Treatment. 2017 ,	29
856	Electrospun chitosan fibers. 2017 , 371-398	6
855	Chitin Adsorbents for Toxic Metals: A Review. 2017 , 18,	90
854	Microwave Irradiation Assisted Preparation of Chitosan Composite Microsphere for Dye Adsorption. 2017 , 2017, 1-8	6
853	Flotation Behavior of Complex Sulfide Ores in the Presence of Biodegradable Polymeric Depressants. 2017 , 2017, 1-9	8
852	The Adsorption of Pb, Zn, Cu, Ni, and Cd by Modified Ligand in a Single Component Aqueous Solution: Equilibrium, Kinetic, Thermodynamic, and Desorption Studies. 2017 , 2017, 6150209	39
851	Adsorption of Reactive Dyes Red 195, Blue 222, and Yellow 145 in Solution with Polyaniline-Chitosan Membrane Using Batch Reactor. 2017 , 751, 713-718	5
850	Efficient Removal of Cationic and Anionic Dyes from Aqueous Solution Using Cellulose-g-p(AA-co-AM) Bio-Adsorbent. 2017 , 12,	10
849	Fluorescent component and complexation mechanism of extracellular polymeric substances during dye wastewater biotreatment by anaerobic granular sludge. 2018 , 5, 171445	2
848	Dye removal from single and binary systems using gel-like bioadsorbent based on functional-modified cellulose. 2018 , 25, 2559-2575	25

847	Adsorptive removal of anionic dyes by chitosan-based magnetic microspheres with pH-responsive properties. 2018 , 256, 424-432	27
846	Adsorption removal of tartrazine by chitosan/polyaniline composite: Kinetics and equilibrium studies. 2018 , 114, 1345-1353	56
845	Solution, Solid-State Two Step Synthesis and Optical Properties of ZnO and SnO ₂ Nanoparticles and Their Nanocomposites with SiO ₂ . 2018 , 29, 251-266	7
844	Animal manure-derived biochars produced via fast pyrolysis for the removal of divalent copper from aqueous media. 2018 , 213, 109-118	54
843	Removal of anionic and cationic dyes with bioadsorbent oxidized chitosans. 2018 , 194, 375-383	64
842	Fabrication of novel metal ion imprinted xanthan gum-layered double hydroxide nanocomposite for adsorption of rare earth elements. 2018 , 194, 274-284	56
841	Casein based biogenic-synthesized zinc oxide nanoparticles simultaneously decontaminate heavy metals, dyes, and pathogenic microbes: a rational strategy for wastewater treatment. 2018 , 93, 2962-2976	32
840	Kinetic and equilibrium of U(VI) adsorption onto magnetic amidoxime-functionalized chitosan beads. 2018 , 188, 655-661	103
839	Role of extracellular polymeric substances in biosorption of Pb ²⁺ by a high metal ion tolerant fungal strain <i>Aspergillus niger</i> PTN31. 2018 , 6, 2733-2742	19
838	Construction of novel cellulose/chitosan composite hydrogels and films and their applications. 2018 , 25, 1987-1996	23
837	Ionic crosslinked magnetic chitosan/κ-carrageenan bioadsorbents for removal of anionic eriochrome black-T. 2018 , 113, 361-375	44
836	Comprehensive remediation study of disperse dyes in wastewater using cenospheres nanosyntactic foam. 2018 , 182, 206-216	21
835	Supersorption Capacity of Anionic Dye by Newer Chitosan Hydrogel Capsules via Green Surfactant Exchange Method. 2018 , 6, 3604-3614	38
834	Evaluation of membrane preparation method on the performance of alkaline polymer electrolyte: Comparison between poly(vinyl alcohol)/chitosan blended membrane and poly(vinyl alcohol)/chitosan electrospun nanofiber composite membranes. 2018 , 266, 332-340	29
833	Poly(2-acrylamido-2-methylpropane sulfonic acid) grafted magnetic chitosan microspheres: Preparation, characterization and dye adsorption. 2018 , 112, 648-655	38
832	Kinetics and mechanistic description of adsorptive uptake of crystal violet dye by lignified elephant grass complexed isolate. 2018 , 6, 2105-2118	36
831	Biosorption of cationic dyes by <i>Parthenochestnut</i> husk (<i>Bertholletia excelsa</i>). 2018 , 77, 1612-1621	37
830	Tailored silica nanospheres: an efficient adsorbent for environmental chromium remediation. 2018 , 106, 427-435	2

829	Remediation of water and wastewater by using engineered nanomaterials: A review. 2018 , 53, 537-554	36
828	Preparation, Characterization and Dye Adsorption/Reuse of Chitosan-Vanadate Films. 2018 , 26, 2917-2924	48
827	Simultaneous treatment of dye wastewater and surfactant wastewater by foam separation: Experimental and mesoscopic simulation study. 2018 , 53, 1604-1610	10
826	MIL-Ti metal-organic frameworks (MOFs) nanomaterials as superior adsorbents: Synthesis and ultrasound-aided dye adsorption from multicomponent wastewater systems. 2018 , 347, 123-140	215
825	Functionalization of Electrospun Poly(vinyl alcohol) (PVA) Nanofiber Membranes for Selective Chemical Capture. 2018 , 1, 722-729	15
824	Environmentally friendly cleaner water-soluble fluorescent carbon dots coated with chitosan: synthesis and its application for sensitivity determination of Cr(VI) ions. 2018 , 15, 23-33	3
823	The influence of filler type on the separation properties of mixed-matrix membranes. 2018 , 72, 1095-1105	5
822	Silica in situ enhanced PVA/chitosan biodegradable films for food packages. 2018 , 184, 214-220	122
821	Simultaneous Adsorption of Cationic and Anionic Dyes by Chitosan/Cellulose Beads for Wastewaters Treatment. 2018 , 12, 59-65	17
820	Facile synthesis of MoO/CaSO composites as highly efficient adsorbents for congo red and rhodamine B.. 2018 , 8, 1621-1631	11
819	Recovery of Au(III) from an aqueous solution by aminopropyltriethoxysilane-functionalized lignocellulosic based adsorbents. 2018 , 123, 106-114	30
818	Biopolymer-Aerogele und -Schäume: Chemie, Eigenschaften und Anwendungen. 2018 , 130, 7704-7733	18
817	Homogeneous synthesis and characterization of chitosan ethers prepared in aqueous alkali/urea solutions. 2018 , 185, 138-144	34
816	Biopolymer Aerogels and Foams: Chemistry, Properties, and Applications. 2018 , 57, 7580-7608	292
815	Azo dyes adsorption in fixed bed column packed with different deacetylation degrees chitosan coated glass beads. 2018 , 6, 3233-3241	17
814	Removal of non-steroidal anti-inflammatory drugs (NSAIDs) and carbamazepine from wastewater using water-soluble protein extracted from <i>Moringa stenopetala</i> seeds. 2018 , 6, 3095-3103	17
813	Enhancement of Adsorption Performance for Organic Molecules by Combined Effect of Intermolecular Interaction and Morphology in Porous rGO-Incorporated Hydrogels. 2018 , 10, 17335-17344	16
812	The application of new environmentally friendly compounds on postharvest characteristics of cut carnation (<i>Dianthus caryophyllus</i> L.). 2018 , 41, 515-522	9

811	A strategy for high radioprotective activity via the assembly of the Ppr1 protein with a ROS-sensitive polymeric carrier. 2018 , 6, 3297-3304	8
810	Synthesis and efficacy of PPy/CS/GO nanocomposites for adsorption of ponceau 4R dye. 2018 , 146, 291-303	45
809	Agricultural solid waste for sorption of metal ions, part II: competitive assessment in multielemental solution and lake water. 2018 , 25, 35906-35914	12
808	Carboxylate-functionalized sugarcane bagasse as an effective and renewable adsorbent to remove methylene blue. 2017 , 2017, 300-309	4
807	Study on the effect of graphene and glycerol plasticizer on the properties of chitosan-graphene nanocomposites via in situ green chemical reduction of graphene oxide. 2018 , 114, 599-613	34
806	Adsorption of Cd(II) by rhizosphere and non-rhizosphere soil originating from mulberry field under laboratory condition. 2018 , 20, 378-383	17
805	Fabrication of multi-functional porous microspheres in a modular fashion for the detection, adsorption, and removal of pollutants in wastewater. 2018 , 522, 1-9	9
804	Efficient dye adsorption by highly porous nanofiber aerogels. 2018 , 547, 117-125	37
803	Layered Double Hydroxide/Chitosan Nanocomposite Beads as Sorbents for Selenium Oxoanions. 2018 , 57, 4978-4987	33
802	Study of heavy metals biosorption on native and alkali-treated apricot shells and its application in wastewater treatment. 2018 , 259, 340-349	51
801	Multilayer Adsorption of Purple NR5 Industrial Dye by Aristeus antennatus Shell in Aqueous Solution. 2018 , 762, 109-114	3
800	Facile one pot green synthesis of Chitosan-Iron oxide (CS-Fe ₂ O ₃) nanocomposite: Removal of Pb(II) and Cd(II) from synthetic and industrial wastewater. 2018 , 186, 342-352	69
799	A novel nano-sized calcium hydroxide catalyst prepared from clam shells for the photodegradation of methyl red dye. 2018 , 6, 3640-3647	16
798	Use of chitosan complex with aminophosphonic groups and cobalt for the removal of Sr ²⁺ ions. 2018 , 53, 1058-1064	10
797	Adsorption of anionic dye by anionic surfactant modified chitosan beads: Influence of hydrophobic tail and ionic head-group. 2018 , 39, 106-115	9
796	Highly efficient removal of acid red-17 and bromophenol blue dyes from industrial wastewater using graphene oxide functionalized magnetic chitosan composite. 2018 , 39, 3317-3328	50
795	Study of a fixed-bed column in the adsorption of an azo dye from an aqueous medium using a chitosan-glutaraldehyde biosorbent. 2018 , 36, 215-232	43
794	Ion cum molecularly dual imprinted polymer for simultaneous removal of cadmium and salicylic acid. 2018 , 31, e2630	16

793	Saccharomyces cerevisiae immobilized onto cross-linked chitosan beads: application of a novel material for the removal of dye toxicity. 2018 , 39, 1851-1867	11
792	Preparation and properties of chitosan-metal complex: Some factors influencing the adsorption capacity for dyes in aqueous solution. 2018 , 66, 301-309	39
791	Physicochemical and thermodynamic study of malachite green adsorption on raw and modified corn straw. 2018 , 96, 779-787	4
790	Smart Polymers: Physicochemical Characteristics and Applications in Bio-Separation Strategies. 2018 , 47, 199-213	9
789	Chitins and chitosans for the removal of total ammonia of aquaculture effluents. 2018 , 483, 203-212	35
788	Biosorption of silver from aqueous solutions using wine industry wastes. 2018 , 205, 325-337	9
787	Polyvinyl alcohol/chitosan hydrogels with enhanced antioxidant and antibacterial properties induced by lignin nanoparticles. 2018 , 181, 275-284	156
786	Bio- and Nanosorbents from Natural Resources. 2018 ,	
785	A systematic approach of chitosan nanoparticle preparation via emulsion crosslinking as potential adsorbent in wastewater treatment. 2018 , 180, 46-54	35
784	New biochar from pecan nutshells as an alternative adsorbent for removing reactive red 141 from aqueous solutions. 2018 , 171, 57-65	118
783	Application of tobacco hairy roots for the removal of malachite green from aqueous solutions: Experimental design, kinetic, equilibrium, and thermodynamic studies. 2018 , 205, 122-133	15
782	Polymer-enhanced ultrafiltration for heavy metal removal: Influence of chitosan and carboxymethyl cellulose on filtration performances. 2018 , 171, 927-933	89
781	Chitosan-edible oil based materials as upgraded adsorbents for textile dyes. 2018 , 180, 182-191	30
780	Design of durable and efficient poly(arylene ether nitrile)/bioinspired polydopamine coated graphene oxide nanofibrous composite membrane for anionic dyes separation. 2018 , 333, 132-145	192
779	Efficient removal of anionic dye (Congo red) by dialdehyde microfibrillated cellulose/chitosan composite film with significantly improved stability in dye solution. 2018 , 107, 283-289	68
778	A Comparative Analysis of Pollutants Adsorption and Photocatalysis on Composite Materials Synthesized from Fly Ash. 2018 , 586-608	
777	A novel approach to 1,2,3-triazole grafted chitosans via modified Wolff-B condensation. 2018 , 98, 492-498	2
776	Towards a better understanding of the synergistic effect in the electro-peroxone process using a three electrode system. 2018 , 337, 733-740	14

775	Design of antihistaminic transdermal films based on alginate-chitosan polyelectrolyte complexes: characterization and permeation studies. 2018 , 44, 432-443	14
774	Preventing Obstructions of Nanosized Drug Delivery Systems by the Extracellular Matrix. 2018 , 7, 1700739	16
773	Comparative study of acid yellow 119 adsorption onto activated carbon prepared from lemon wood and ZnO nanoparticles loaded on activated carbon. 2018 , 32, e4080	15
772	A comprehensive investigation of dye-chitosan blended films for green chemistry applications. 2018 , 135, 45945	15
771	Adsorption of metal ions by microwave assisted grafting of cross-linked chitosan beads. Equilibrium, isotherm, thermodynamic and desorption studies. 2018 , 32, e4131	15
770	A review on environmental applications of chitosan biopolymeric hydrogel based composites. 2018 , 55, 747-763	18
769	New chitosan-imine derivatives: from green chemistry to removal of heavy metals from water. 2018 , 34-43	4
768	Enhanced adsorption behaviors of Co on robust chitosan hydrogel microspheres derived from an alkali solution system: kinetics and isotherm analysis.. 2018 , 8, 36858-36868	7
767	Preparation of Carbon-Chitosan-Polyvinyl Chloride (CC-PVC) Material and its Application to Electrochemical Degradation of Methylene Blue in Sodium Chloride Solution. 2018 , 288, 012127	
766	Design Approach to MIMO Diagnostic Observer and its Application to Fault Detection. 2018 ,	5
765	A renoprotective role of chitosan against lithium-induced renal toxicity in rats. 2018 , 42,	2
764	Moringa Oleifera Dosage Clustering for Remediation Process of Batik Effluents Using Chemometric Technique. 2018 , 7, 85	3
763	Alginate-Based Hydrogel Beads as a Biocompatible and Efficient Adsorbent for Dye Removal from Aqueous Solutions. 2018 , 3, 15140-15148	55
762	The characteristics of heat-driven ammonium adsorption in aerobic granular sludge. 2018 , 78, 1466-1475	1
761	Syntheses of Chitosan Macropore and Application as Procion Red Dyes Adsorbent. 2018 , 1028, 012034	
760	Biogenic synthesized Pd-nanoparticle incorporated antifouling polymeric membrane for removal of crystal violet dye. 2018 , 6, 6139-6146	15
759	Adsorptive removal of methylene blue by chemically treated cellulosic waste banana (Musa sapientum) peels. 2018 , 12, 809-819	47
758	The Chemistry of Chitin and Chitosan Justifying their Nanomedical Utilities. 2018 , 07,	6

757	Rhizofiltration system consists of chitosan and natural <i>Arundo donax</i> L. for removal of basic red dye. 2018 , 120, 1508-1514	15
756	Graphene Oxide-Chitosan Composite Material for Treatment of a Model Dye Effluent. 2018 , 3, 13045-13054	57
755	CO-Activated Adsorption: A New Approach to Dye Removal by Chitosan Hydrogel. 2018 , 3, 14103-14110	20
754	Preparation and characterization of modified sepiolite for the removal of Acid green 20 from aqueous solutions: isotherm, kinetic and process optimization. 2018 , 8, 1	14
753	From Nature to Energy Storage: A Novel Sustainable 3D Cross-Linked Chitosan-PEGGE-Based Gel Polymer Electrolyte with Excellent Lithium-Ion Transport Properties for Lithium Batteries. 2018 , 10, 38526-38537	49
752	The Effect of Temperatures on the Synergistic Effect between a Magnetic Field and Functionalized Graphene Oxide-Carbon Nanotube Composite for Pb ²⁺ and Phenol Adsorption. 2018 , 2018, 1-13	8
751	Development of Antimicrobial Hybrid Materials from Polylactic Acid and Nano-silver Coated Chitosan. 2018 , 34, 683-692	10
750	Reactive RED 195 dye removal using chitosan coacervated particles as bio-sorbent: Analysis of kinetics, equilibrium and adsorption mechanisms. 2018 , 6, 6749-6760	37
749	Safranin-O removal from aqueous solutions using lignin nanoparticle-g-polyacrylic acid adsorbent: Synthesis, properties, and application. 2018 , 36, 1422-1440	34
748	Biochar from byproduct to high value added material A new adsorbent for toxic metal ions removal from aqueous solutions. 2018 , 271, 481-489	15
747	Visible-Light-Induced Photocatalytic Degradation of Textile Dyes over Plasmonic Silver-Modified TiO ₂ . 2018 , 389-418	7
746	Coupling chitosan and TEMPO-oxidized nanofibrillated cellulose by electrostatic attraction and chemical reaction. 2018 , 202, 84-90	15
745	Adsorption removal of anionic dyes from aqueous solutions by chitosan nanoparticles deposited on the fibrous carrier. 2018 , 212, 1155-1162	42
744	The green and stable dissolving system based on KOH/urea for homogeneous chemical modification of chitosan. 2018 , 120, 1103-1110	18
743	Chitosan and gum arabic nanoparticles for heavy metal adsorption. 2018 , 28, 231-238	12
742	One-step fabrication of chitosan-Fe(OH) beads for efficient adsorption of anionic dyes. 2018 , 117, 30-41	59
741	Pb(II) biosorption using DAP/EDTA-modified biopolymer (Chitosan). 2018 , 205, 1555-1567	14
740	A robust UV-visible light-driven SBA-15-PS/phthalhydrazide nanohybrid material with enhanced photocatalytic activity in the photodegradation of methyl orange. 2018 , 32, e4391	11

739	Tunable chitosan hydrogels for adsorption: Property control by biobased modifiers. 2018 , 196, 135-145	26
738	pH responsive adsorption/desorption studies of organic dyes from their aqueous solutions by katira gum-cl-poly(acrylic acid-co-N-vinyl imidazole) hydrogel. 2018 , 553, 472-486	40
737	Density functional study of adsorption and desorption dynamics of hydrogen in zirconium doped aluminium clusters. 2018 , 43, 21724-21731	8
736	Kinetics, Isotherm, and Thermodynamic Studies of Methylene Blue Adsorption on Polyaniline and Polypyrrole Macro-Nanoparticles Synthesized by C-Dot-Initiated Polymerization. 2018 , 3, 7196-7203	44
735	A Study on Copolymer Systems of Styrene with Diethanolamine Side Group and Methyl Methacrylate. 2018 , 2018, 1-12	2
734	Adsorption-Oriented Processes Using Conventional and Non-conventional Adsorbents for Wastewater Treatment. 2018 , 23-71	49
733	A Review on Treatment of Pharmaceuticals and Personal Care Products (PPCPs) in Water and Wastewater. 2018 , 1-12	
732	Anionic and cationic drug sorption on interpolyelectrolyte complexes. 2018 , 170, 210-218	13
731	A review of integrated photocatalyst adsorbents for wastewater treatment. 2018 , 6, 7411-7425	115
730	Bio-composites for the sorption of copper from aqueous solution: A comparative study. 2018 , 7, 265-276	10
729	Preparation of micro-nanofibrous chitosan sponges with ternary solvents for dye adsorption. 2018 , 198, 69-75	29
728	Chitosan-sodium alginate multilayer membrane developed by Fe@WO nanoparticles: Photocatalytic removal of hexavalent chromium. 2018 , 198, 164-174	25
727	Chitosan-macroalgae biocomposites as potential adsorbents of water-soluble hydrocarbons: Organic matter and ionic strength effects. 2018 , 197, 633-642	11
726	Review of fungal chitosan: past, present and perspectives in Brazil. 2018 , 28, 275-283	21
725	Hemp-Based Materials for Metal Removal. 2018 , 1-34	6
724	Dye Removal Using Microbial Biosorbents. 2018 , 253-280	10
723	Hemicellulose-Based Hydrogels and Their Potential Application. 2018 , 87-127	5
722	Methylene Blue dye sorption by hybrid materials from technical lignins. 2018 , 6, 4997-5007	50

721	Extraction of high thermally stable and nanofibrous chitin from Cicada (Cicadoidea). 2018 , 48, 480-489	9
720	Facile preparation of 3D regenerated cellulose/graphene oxide composite aerogel with high-efficiency adsorption towards methylene blue. 2018 , 532, 58-67	137
719	Synthesis and application of magnetic iron oxide nanoparticles on the removal of Reactive Black 5: Reaction mechanism, temperature and pH effects. 2018 , 224, 235-242	25
718	Biosorption of Metals and Metalloids. 2018 , 35-86	6
717	Influence of dextran hydrogel characteristics on adsorption capacity for anionic dyes. 2018 , 199, 75-83	21
716	Preparation optimization of chitosan/graphene oxide aerogels: Tailoring of dye adsorption ability and mechanical properties. 2018 ,	1
715	Regeneration performance of clay-based adsorbents for the removal of industrial dyes: a review.. 2018 , 8, 24571-24587	124
714	Ytterbium tungstate nanoparticles as a novel sorbent for basic dyes from aqueous solutions. 2018 , 44, 6945-6962	6
713	New Food Packaging Systems. 2018 , 63-85	3
712	Biosorption of rhodamine B dye from dyeing stones effluents using the green microalgae <i>Chlorella pyrenoidosa</i> . 2018 , 198, 1302-1310	73
711	Novel route for amine grafting to chitosan electrospun nanofibers membrane for the removal of copper and lead ions from aqueous medium. 2018 , 199, 406-414	26
710	Chitosan nanoparticles extracted from shrimp shells, application for removal of Fe(II) and Mn(II) from aqueous phases. 2018 , 53, 2870-2881	46
709	Electrospun chitosan/poly(ethylene oxide) nanofibers applied for the removal of glycerol impurities from biodiesel production by biosorption. 2018 , 268, 365-370	10
708	Chitosan nanoparticles via high-pressure homogenization-assisted miniemulsion crosslinking for mixed-matrix membrane adsorbents. 2018 , 201, 172-181	14
707	State of the Art in the Targeted Modification of Chitosan. 2018 , 60, 131-161	10
706	Rational design of magnetic infinite coordination polymer core-shell nanoparticles as recyclable adsorbents for selective removal of anionic dyes from colored wastewater. 2018 , 462, 453-465	33
705	One-step preparation of Fe ₂ O ₃ /reduced graphene oxide aerogel as heterogeneous Fenton-like catalyst for enhanced photo-degradation of organic dyes. 2018 , 3, 9062-9070	7
704	Versatile applications of freshwater and marine water microalgae in dairy wastewater treatment, lipid extraction and tetracycline biosorption. 2018 , 268, 523-530	84

703	Synthesis of polymetallic nanoparticles from spent lithium-ion batteries and application in the removal of reactive blue 4 dye. 2018 , 202, 264-272	18
702	Magnetite/chitosan composite particles as adsorbents for Reactive Blue 19 dye. 2018 , 6, 149-156	2
701	Effects of a dielectric barrier discharge (DBD) treatment on chitosan/polyethylene oxide nanofibers and their cellular interactions. 2018 , 201, 402-415	19
700	Chitosan adsorbent reinforced with citric acid modified β -cyclodextrin for highly efficient removal of dyes from reactive dyeing effluents. 2018 , 108, 212-218	37
699	Synthesis of polymetallic nanoparticles from printed circuit board waste and application in textile dye remediation. 2018 , 6, 5580-5586	6
698	A Highly Tunable Approach to Enhance CO Capture with Liquid Alkali/amines. 2018 , 52, 10874-10882	11
697	Statistical physics modeling of synthetic dyes adsorption onto Spirulina platensis nanoparticles. 2018 , 25, 28973-28984	7
696	Sorption of Phthalocyanine Dyes by Chitosan-Sulfate Particles Immobilized on a Fiber Substrate. 2018 , 54, 574-581	4
695	Introductory Chapter: Biosorption. 2018 ,	10
694	Recent advances on biosorption by aerobic granular sludge. 2018 , 357, 253-270	51
693	A novel carboxyl-rich chitosan-based polymer and its application for clay flocculation and cationic dye removal. 2018 , 640-641, 107-115	53
692	Fungal-Derived Chitosan-Based Nanocomposites: A Sustainable Approach for Heavy Metal Biosorption and Environmental Management. 2018 , 325-349	
691	A biopolymer-based composite hydrogel for rhodamine 6G dye removal: its synthesis, adsorption isotherms and kinetics. 2018 , 27, 527-535	19
690	Removal of copper ions from aqueous solutions by adsorption onto wheat straw cellulose-based polymeric composites. 2018 , 135, 46680	16
689	Assessment on the decolourization of textile dye (Reactive Yellow) using Pseudomonas sp. immobilized on fly ash: Response surface methodology optimization and toxicity evaluation. 2018 , 223, 185-195	41
688	Conventional and non-conventional adsorbents for wastewater treatment. 2019 , 17, 195-213	336
687	Adsorption of cationic dye textile wastewater using Clinoptilolite: isotherm and kinetic study. 2019 , 110, 74-80	15
686	Synthesis of magnetic metal-organic framework nanocomposite (ZIF-8@SiO ₂ @MnFe ₂ O ₄) as a novel adsorbent for selective dye removal from multicomponent systems. 2019 , 273, 177-188	92

685	Surface modification by vanadium pentoxide turns oxide nanocrystals into powerful adsorbents of methylene blue. 2019 , 533, 369-374	7
684	Alginate-whey an effective and green adsorbent for crystal violet removal: Kinetic, thermodynamic and mechanism studies. 2019 , 139, 944-954	38
683	Fixed-Bed Adsorption of Allura Red Dye on Chitosan/Polyurethane Foam. 2019 , 42, 2434-2442	6
682	Voltammetric Detection of Lead Using Chitosan-tripolyphosphate Crosslinked Electrode. 2019 , 35, 1255-1261	4
681	Removal of Crystal Violet from Natural Water and Effluents Through Biosorption on Bacterial Biomass Isolated from Rhizospheric Soil. 2019 , 230, 1	8
680	Pro- and Anti-oxidant Properties of Redox-Active Catechol-Chitosan Films. 2019 , 7, 541	3
679	Biopolymer electrospun nanofibres for the adsorption of pharmaceuticals from water systems. 2019 , 7, 103330	19
678	Self-assembly of sponge-like kaolin/chitosan/reduced graphene oxide composite hydrogels for adsorption of Cr(VI) and AYR. 2019 , 26, 28898-28908	17
677	Sonocatalytic and photocatalytic efficiency of transition metal-doped ZnO nanoparticles in the removal of organic dyes from aquatic environments. 2019 , 36, 1360-1370	17
676	Hydrogels: soft matters in photomedicine. 2019 , 18, 2613-2656	20
675	Adsorption of Acid Blue 113 using Nanocarbon Spheres and its Kinetic and Isotherm Studies. 2019 , 31, 1653-1660	
674	Applications of chitosan in food, pharmaceuticals, medicine, cosmetics, agriculture, textiles, pulp and paper, biotechnology, and environmental chemistry. 2019 , 17, 1667-1692	180
673	Synthesis and application of Ce-doped TiO nanoparticles loaded on activated carbon for ultrasound-assisted adsorption of Basic Red 46 dye. 2019 , 58, 104702	38
672	Dye removal by biosorption using cross-linked chitosan-based hydrogels. 2019 , 17, 1645-1666	47
671	Investigation of Eosin B Removal from Aqueous Solution Employing Combined Graphene Oxide Adsorption and Zinc Oxide Coagulation Processes. 2019 , 20, 1411-1417	3
670	Application of hybrid ultrasonic cavitation/adsorption and coagulation for treatment of palm oil mill effluent. 2019 ,	2
669	Adsorption of toxic crystal violet dye using coffee husks: Equilibrium, kinetics and thermodynamics study. 2019 , 5, e00116	50
668	Human Immunoglobulin G Adsorption in Epoxy Chitosan/Alginate Adsorbents: Evaluation of Isotherms by Artificial Neural Networks. 2019 , 14,	2

667	Application of nanomaterials for removal of environmental pollution. 2019 , 365-402	
666	Utilization of a novel activated carbon adsorbent from press mud of sugarcane industry for the optimized removal of methyl orange dye in aqueous solution. 2019 , 9, 1	11
665	Removal of thallium from environmental samples using a raw and chemically modified biosorbent derived from domestic wastes. 2019 , 26, 32285-32297	3
664	Development of adsorption-biodegradation hybrid process for removal of methylene blue from wastewater. 2019 , 7, 103439	15
663	Adsorption Removal of Cr(VI) with Activated Carbon Prepared by Co-pyrolysis of Rice Straw and Sewage Sludge with ZnCl ₂ Activation. 2019 , 230, 1	10
662	Introduction to Green Polymeric Membranes. 2019 , 95-116	1
661	. 2019 ,	1
660	Deep eutectic solvent as an efficient modifier of low-cost adsorbent for the removal of pharmaceuticals and dye. 2019 , 179, 108837	14
659	Adsorption of mercury ions from synthetic aqueous solution using polydopamine decorated SWCNTs. 2019 , 32, 100965	28
658	Chitosan-Graphene Oxide Hydrogels with Embedded Magnetic Iron Oxide Nanoparticles for Dye Removal. 2019 , 2, 7379-7392	55
657	Alginate-coated perlite beads for the efficient removal of methylene blue, malachite green, and methyl violet from aqueous solutions: kinetic, thermodynamic, and equilibrium studies. 2019 , 10,	31
656	Gas and Solution Uptake Properties of Graphene Oxide-Based Composite Materials: Organic vs. Inorganic Cross-Linkers. 2019 , 3, 80	5
655	Preparation and characterization of alginate-kelp biochar composite hydrogel bead for dye removal. 2019 , 26, 33030-33042	13
654	Synthesis and characterization of biopolymers functionalized with APTES (3-aminopropyltriethoxysilane) for the adsorption of sunset yellow dye. 2019 , 7, 103410	34
653	Effect of beading parameters on cross-linked chitosan adsorptive properties. 2019 , 144, 104354	17
652	Operational parameters affecting the atrazine removal from water by using cyclodextrin based polymers as efficient adsorbents for cleaner technologies. 2019 , 16, 100454	17
651	Hybrid carbon nanostructured fibers: stepping stone for intelligent textile-based electronics. 2019 , 11, 3046-3101	46
650	Bioremediation of Cd(II), Pb(II) and Cu(II) from industrial effluents by <i>Moringa stenopetala</i> seed husk. 2019 , 54, 337-351	8

649	Impaired Liver Size and Compromised Neurobehavioral Activity are Elicited by Chitosan Nanoparticles in the Zebrafish Embryo Model. 2019 , 9,	21
648	Biodegradation of synthetic dye using partially purified and characterized laccase and its proposed mechanism. 2019 , 16, 7805-7816	20
647	HPO-activated carbons produced from a [^] ai stones and Brazil nut shells: removal of basic blue 26 dye from aqueous solutions by adsorption. 2019 , 26, 28533-28547	16
646	Surface water pollution by pharmaceuticals and an alternative of removal by low-cost adsorbents: A review. 2019 , 222, 766-780	211
645	Preparation and characteristics of antibacterial chitosan films modified with N-halamine for biomedical application. 2019 , 176, 379-386	24
644	Morphology, Modification and Characterisation of Electrospun Polymer Nanofiber Adsorbent Material Used in Metal Ion Removal. 2019 , 27, 1843-1860	26
643	Acetaminophen adsorption using a low-cost adsorbent prepared from modified residues of Moringa oleifera Lam. seed husks. 2019 , 94, 3147-3157	39
642	Interpenetrating polysaccharide networks as oral drug delivery modalities. 2019 , 319-338	
641	The addition of a quaternary group in biopolymeric material increases the adsorptive capacity of Acid Blue 25 textile dye. 2019 , 26, 24235-24246	2
640	Adsorptive removal of acidic dye onto grafted chitosan: A plausible grafting and adsorption mechanism. 2019 , 136, 1209-1218	49
639	Fundamentals and Applications of Chitosan. 2019 , 49-123	42
638	Sustainable Agriculture Reviews 36. 2019 ,	3
637	Cross-Linked Chitosan-Based Hydrogels for Dye Removal. 2019 , 381-425	10
636	Chitosan-Based Hydrogels. 2019 , 147-173	3
635	Chitosan for Direct Bioflocculation Processes. 2019 , 335-380	5
634	A Spectroscopic Study of Solid-Phase Chitosan/Cyclodextrin-Based Electrospun Fibers. 2019 , 7, 48	6
633	Utility of Chitosan for 3D Printing and Bioprinting. 2019 , 271-292	7
632	Historical Landmarks in the Discovery of Chitin. 2019 , 1-47	6

631	A Review of Chitosan Textile Applications. 2019 , 6, 8-14	7
630	Robust amphiprotic konjac glucomannan cross-linked chitosan aerogels for efficient water remediation. 2019 , 26, 6785-6796	13
629	Ionic liquid functionalization of chitosan beads for improving thermal stability and copper ions uptake from aqueous solution. 2019 , 7, 103181	13
628	Sustainable Agriculture Reviews 35. 2019 ,	6
627	Selective photodegradation of atrazine by a novel molecularly imprinted nanophotocatalyst prepared on the basis of chitosan. 2019 , 382, 111892	8
626	Network of Polyaniline Nanotubes for Wastewater Treatment and Oil/Water Separation. 2019 , 1, 1624-1633	23
625	Adsorption of Direct Blue 78 Using Chitosan and Cyclodextrins as Adsorbents. 2019 , 11,	36
624	Microfluidic Fabrication of Nanoparticles Based on Ethyl Acrylate-Functionalized Chitosan for Adsorption of Methylene Blue from Aqueous Solutions. 2019 , 27, 1653-1665	13
623	Biosorption of Heavy Metals and Dyes from Industrial Effluents by Microalgae. 2019 , 599-634	8
622	Polysaccharide-derived hydrogel water filter for the rapid and selective removal of arsenic. 2019 , 5, 1318-1327	7
621	Recent advances for dyes removal using novel adsorbents: A review. 2019 , 252, 352-365	424
620	Preparation of novel magnetic grafted raft agent nanocomposite: Application in carmine dye adsorptive removal from waste water. 2019 , 7, 103109	8
619	Nanohybrid Layered Double Hydroxides Used to Remove Several Dyes from Water. 2019 , 3, 41	9
618	Enhanced removal of Orange G from aqueous solutions by modified chitosan beads: Performance and mechanism. 2019 , 133, 1260-1267	17
617	Microporous Organic Polymer Nanocomposites for Adsorption Applications. 2019 , 25-47	1
616	Alginate-like exopolysaccharide extracted from aerobic granular sludge as biosorbent for methylene blue: Thermodynamic, kinetic and isotherm studies. 2019 , 7, 103081	19
615	Fabrication of magnetic lignosulfonate using ultrasonic-assisted in situ synthesis for efficient removal of Cr(VI) and Rhodamine B from wastewater. 2019 , 375, 174-181	57
614	Self-assembled amphiphilic chitosan: A time-dependent nanostructural evolution and associated drug encapsulation/elution mechanism. 2019 , 215, 246-252	9

613	Enhanced arsenite removal from water by radially porous Fe-chitosan beads: Adsorption and HO catalytic oxidation. 2019 , 373, 97-105	33
612	Eco-friendly construction of dye-fouled loose CS/PAN nanofibrous composite membranes for permeability-selectivity anti-trade-off property. 2019 , 569, 145-155	14
611	Treatment of real wastewater: Kinetic and thermodynamic aspects of cadmium adsorption onto surfactant-modified chitosan beads. 2019 , 131, 1092-1100	17
610	Separation of anthocyanins extracted from red cabbage by adsorption onto chitosan films. 2019 , 131, 905-911	29
609	Flocculation of a High-Turbidity Kaolin Suspension Using Hydrophobic Modified Quaternary Ammonium Salt Polyacrylamide. 2019 , 7, 108	3
608	Study on the adsorption of dyestuffs with different properties by sludge-rice husk biochar: Adsorption capacity, isotherm, kinetic, thermodynamics and mechanism. 2019 , 285, 62-74	97
607	Kinetic and thermodynamic study of methylene blue adsorption onto chitosan: insights about metachromasy occurrence on wastewater remediation. 2019 , 4, 85-102	8
606	Isotherms, kinetics, and thermodynamic studies for adsorption of pigments and oxidation products in oil bleaching from catfish waste. 2019 , 206, 1399-1413	5
605	Preparation of metal-organic frameworks with bimetallic linkers and corresponding properties. 2019 , 43, 7243-7250	5
604	Biodegradable antioxidant chitosan films useful as an anti-aging skin mask. 2019 , 132, 1262-1273	40
603	Graphene based adsorbents for remediation of noxious pollutants from wastewater. 2019 , 127, 160-180	246
602	Ensis Siliqua Shell for Removal of Cu(II), Zn(II) and Ni(II) from Aqueous Solutions: Kinetics and Isotherm Model. 2019 , 9, 50-63	2
601	Cascade sensing of iodide and fluoride by tryptophan derived low molecular weight gelator. 2019 , 30, 100179	9
600	Optically transparent chitosan hydrogels for selective sorption and fluorometric determination of dibenzothiophenes. 2019 , 216, 260-269	8
599	Chitosan-Cross-Linked Graphene Oxide/Carboxymethyl Cellulose Aerogel Globules with High Structure Stability in Liquid and Extremely High Adsorption Ability. 2019 , 7, 8775-8788	84
598	Chemical Modifications of Cyclodextrin and Chitosan for Biological and Environmental Applications: Metals and Organic Pollutants Adsorption and Removal. 2019 , 27, 1352-1366	33
597	Biomolecule functionalized magnetite nanoparticles efficiently adsorb and remove heavy metals from contaminated water. 2019 , 94, 2009-2022	15
596	Sodium dodecyl sulfate-coated-cationized agroforestry residue as adsorbent for benzene-adsorptive sequestration from aqueous solution. 2019 , 26, 11140-11152	2

595	Biosorption of glycerol impurities from biodiesel production onto electrospun chitosan-based nanofibers: equilibrium and thermodynamic evaluations. 2019 , 26, 28436-28443	5
594	Bio-based magnetic metal-organic framework nanocomposite: Ultrasound-assisted synthesis and pollutant (heavy metal and dye) removal from aqueous media. 2019 , 480, 288-299	99
593	Application of EDTA modified FeO/sawdust carbon nanocomposites to ameliorate methylene blue and brilliant green dye laden water. 2019 , 172, 43-54	49
592	Decolorization and biodegradation of reactive Red 198 Azo dye by a new Enterococcus faecalis-Klebsiella variicola bacterial consortium isolated from textile wastewater sludge. 2019 , 35, 38	33
591	Biopolymer Technologies for Environmental Applications. 2019 , 55-83	4
590	Enhanced Formaldehyde Removal from Air Using Fully Biodegradable Chitosan Grafted β -Cyclodextrin Adsorbent with Weak Chemical Interaction. 2019 , 11,	16
589	Dye-Mediated Interactions in Chitosan-Based Polyelectrolyte/Organoclay Hybrids for Enhanced Adsorption of Industrial Dyes. 2019 , 11, 11961-11969	28
588	Biofilm of cross-linked Chitosan-Ethylene Glycol Diglycidyl Ether for removal of Reactive Red 120 and Methyl Orange: Adsorption and mechanism studies. 2019 , 7, 102965	57
587	Sustainability considerations in membrane-based technologies for industrial effluents treatment. 2019 , 368, 474-494	143
586	Sustainability criteria for assessing nanotechnology applicability in industrial wastewater treatment: Current status and future outlook. 2019 , 125, 261-276	77
585	Adsorption of cadmium (II) by using clays modified with ultrasound. 2019 , 18, 155	8
584	Adsorption of Anionic Metallophthalocyanines on Submicron Chitosan-Sulfate Particles in Aqueous Dispersions. 2019 , 89, 2733-2740	
583	Adsorption of an Acid Textile Dye from Aqueous Solutions by a Chitosan-Containing Polyvinyl Alcohol Composite Cryogel. 2019 , 51, 199-203	5
582	High-Strength Physically Multi-Cross-Linked Chitosan Hydrogels and Aerogels for Removing Heavy-Metal Ions. 2019 , 67, 13648-13657	18
581	Efficient Removal of Copper Ion from Wastewater Using a Stable Chitosan Gel Material. 2019 , 24,	18
580	Designing Highly Luminescent Cellulose Nanocrystals with Modulated Morphology for Multifunctional Bioimaging Materials. 2019 , 11, 48192-48201	23
579	Green Flexible Polyurethane Foam as a Potent Support for Fe-Si Adsorbent. 2019 , 11,	6
578	5. Biocidal activity of biodegradable polymers. 2019 , 107-124	

577	New Smart Magnetic Ionic Liquid Nanocomposites Based on Chemically Bonded Imidazole Silica for Water Treatment. 2019 , 4, 21288-21301	5
576	The effect of chitosan into paper properties in papermaking. 2019 ,	1
575	The fabrication of a CoO/graphene oxide (GO)/polyacrylonitrile (PAN) nanofiber membrane for the degradation of Orange II by advanced oxidation technology.. 2019 , 9, 36517-36523	2
574	Development of a new efficient and economical magnetic sorbent silicone surfactant-based activated carbon for the removal of chloro- and nitro-group phenolic compounds from contaminated water samples.. 2019 , 9, 36915-36930	6
573	Comparative study of uranium and thorium metal ion adsorption by gum ghatti grafted poly(acrylamide) copolymer composites.. 2019 , 9, 41326-41335	11
572	Hemp-based adsorbents for sequestration of metals: a review. 2019 , 17, 393-408	33
571	A New MgAlCuFe-LDH Composite to Enhance the Adsorption of Acid Red 66 Dye: Characterization, Kinetics and Isotherm Analysis. 2019 , 44, 5245-5261	9
570	Chitosan/polyaniline hybrid for the removal of cationic and anionic dyes from aqueous solutions. 2019 , 136, 47056	30
569	Starch, Chitin and Chitosan Based Composites and Nanocomposites. 2019 ,	6
568	Applications of Polysaccharide Based Composites. 2019 , 43-55	1
567	Facile Fabrication of High Performance Nanofiltration Membranes by Using Molecular Coordination Complexes as Pore-Forming Agents. 2019 , 7, 2728-2738	8
566	Adsorption and precipitation of anionic dye Reactive Red 120 from aqueous solution by aminopropyl functionalized magnesium phyllosilicate. 2019 , 36, 101-108	10
565	Highly adsorptive chitosan/saponin-bentonite composite film for removal of methyl orange and Cr(VI). 2019 , 26, 5020-5037	19
564	Sorption-active transparent films based on chitosan. 2019 , 208, 108-114	4
563	Ultrasound assisted preparation, characterization and adsorption study of ternary chitosan-ZnO-TiO nanocomposite: Advantage over conventional method. 2019 , 52, 120-130	36
562	Chitosan-functionalized nanofibers: A comprehensive review on challenges and prospects for food applications. 2019 , 123, 210-220	45
561	Treatment of industrial dyes using chitosan-supported nanocomposite adsorbents. 2019 , 509-539	3
560	Significance of bioadsorption process on textile industry wastewater. 2019 , 367-416	34

559	Application of chitosan derivatives as promising adsorbents for treatment of textile wastewater. 2019 , 417-469	14
558	Adsorption of anionic dyes on a cationic amphiphilic dextran hydrogel: equilibrium, kinetic, and thermodynamic studies. 2019 , 297, 45-57	12
557	Synthesis of Poly(AN-co-VP)/Zeolite Composite and Its Application for the Removal of Brilliant Green by Adsorption Process: Kinetics, Isotherms, and Experimental Design. 2019 , 2019, 1-12	12
556	Application of polyaniline-based adsorbents for dye removal from water and wastewater-a review. 2019 , 26, 5333-5356	115
555	Electrophoretic deposition of chitosan-based composite coatings for biomedical applications: A review. 2019 , 103, 69-108	154
554	Overview of wastewater treatment methods with special focus on biopolymer chitin-chitosan. 2019 , 121, 1086-1100	120
553	Modelling dye removal by adsorption onto water treatment residuals using combined response surface methodology-artificial neural network approach. 2019 , 231, 241-248	107
552	Preparation of chitin nanowhiskers and its application for crystal violet dye removal from wastewaters. 2019 , 26, 28548-28557	17
551	Removal of organic pollutants from wastewater using chitosan: a literature review. 2019 , 16, 1741-1754	42
550	Adsorption kinetics of methylene blue using alkali and microwave-modified apricot stones. 2019 , 54, 1722-1738	12
549	One-pot solvothermal synthesis of Carboxylatopillar[5]arene-modified Fe ₃ O ₄ magnetic nanoparticles for ultrafast separation of cationic dyes. 2019 , 162, 512-516	26
548	Adsorption of a textile dye onto piava fibers: kinetic, equilibrium, thermodynamics, and application in simulated effluents. 2019 , 26, 28584-28592	59
547	Synthesis of cobalt-nitrogen-doped mesoporous carbon from chitosan and its performance for pollutant degradation as Fenton-like catalysts. 2019 , 45, 907-918	16
546	Chitosan-Based Membranes for Wastewater Desalination and Heavy Metal Detoxification. 2019 , 799-814	7
545	Stimuli-responsive graphene-incorporated multifunctional chitosan for drug delivery applications: a review. 2019 , 16, 79-99	56
544	Titanium electrode modified by nano-PMDAH as a highly efficient polymer for removal of Reactive Red 13 using solar cells for energy-harvesting applications. 2019 , 16, 851-864	4
543	Adsorptive performance of magnetic nano-biosorbent for binary dyes and investigation of comparative biosorption. 2019 , 1, 1	6
542	Neural networks to fit potential energy curves from asphaltene-asphaltene interaction data. 2019 , 236, 1117-1127	9

541	Preparation of CoFe ₂ O ₄ @vacancy@mSiO ₂ core-shell composites for removal of organic pollutant in aqueous solution. 2019 , 23, 536-545	11
540	Synthesis of a bio-based polyurethane/chitosan composite foam using ricinoleic acid for the adsorption of Food Red 17 dye. 2019 , 121, 373-380	56
539	Bacteria immobilization on neem leaves/MnFe ₂ O ₄ composite surface for removal of As(III) and As(V) from wastewater. 2019 , 12, 3263-3288	16
538	TMPyP functionalised chitosan membrane for efficient sunlight driven water disinfection. 2019 , 30, 100475	15
537	Adsorption of inorganic mercury from aqueous solutions onto dry biomass of <i>Chlorella vulgaris</i> : kinetic and isotherm study. 2019 , 40, 664-672	21
536	Magnetic Fe ₃ O ₄ -chitosan micro- and nanoparticles for wastewater treatment. 2019 , 37, 732-740	14
535	Regeneration of Chitosan-Based Adsorbents for Eliminating Dyes from Aqueous Solutions. 2019 , 48, 1-13	38
534	Adsorption kinetics and isotherms for the removal of rhodamine B dye and Pb ²⁺ ions from aqueous solutions by a hybrid ion-exchanger. 2019 , 12, 316-329	90
533	Parametrization of particle coating process with chitosan in spouted bed. 2020 , 38, 54-62	3
532	Synergistic effect of zeolite/chitosan in the removal of fluoride from aqueous solution. 2020 , 41, 1554-1567	15
531	Effects of calcination temperature on organic functional groups of TiO ₂ and the adsorption performance of the TiO ₂ for methylene blue. 2020 , 55, 672-683	5
530	Hexagonal strontium ferrite: cationic dye adsorption and antibacterial activity. 2020 , 55, 415-430	6
529	Effects of dietary chitosan supplementation on farmed fish; a review. 2020 , 12, 438-452	35
528	Investigation of <i>Moringa oleifera</i> seeds as effective and low-cost adsorbent to remove yellow dye tartrazine in fixed-bed column. 2020 , 55, 13-25	7
527	Chitosan Based Nanocomposites as Efficient Adsorbents for Water Treatment. 2020 , 69-83	9
526	Synthesis and Characterization of MgZn Bimetallic Nanoparticles: Selective Hydrogenation of p-Nitrophenol, Degradation of Reactive Carbon Black 5 and Fuel Additive. 2020 , 30, 438-450	6
525	Polacrylic and polystyrene functionalized resins for direct dye removal from textile effluents. 2020 , 55, 2122-2136	5
524	Synthesis of alumina-based cross-linked chitosan/PMPC biocomposite film: an efficient and user-friendly adsorbent for multipurpose water purification. 2020 , 44, 322-337	10

523	Ultra-high efficient pH induced selective removal of cationic and anionic dyes from complex coexisted solution by novel amphoteric biocomposite microspheres. 2020 , 231, 115922	30
522	Separation of reactive dyes from textile effluent by hydrolyzed polyacrylonitrile hollow fiber ultrafiltration quantifying the transport of multicomponent species through charged membrane pores. 2020 , 234, 116063	19
521	Adsorption of dyes brilliant blue, sunset yellow and tartrazine from aqueous solution on chitosan: Analytical interpretation via multilayer statistical physics model. 2020 , 382, 122952	68
520	A multifunctional bi-phasic graphene oxide/chitosan paper for water treatment. 2020 , 235, 116181	17
519	Nanomaterials Derived from Fungal Sources-Is It the New Hype?. 2020 , 21, 30-55	37
518	Chitosan hydrogel scaffold modified with carbon nanotubes and its application for food dyes removal in single and binary aqueous systems. 2020 , 142, 85-93	18
517	Green Materials for Wastewater Treatment. 2020 ,	4
516	Adsorptive Removal of Toxic Dyes Using Chitosan and Its Composites. 2020 , 223-255	3
515	N-doped FeOOH/RGO hydrogels with a dual-reaction-center for enhanced catalytic removal of organic pollutants. 2020 , 379, 122310	28
514	Adsorption kinetics of methylene blue removal from aqueous solutions using potassium hydroxide (KOH) modified apricot kernel shells. 2020 , 100, 1549-1565	14
513	Clay-polymer nanocomposites: Progress and challenges for use in sustainable water treatment. 2020 , 383, 121125	77
512	Multi-membrane formation in chitosan hydrogel shell by the addition of goethite nanoparticles. 2020 , 229, 115543	4
511	Highly enhanced adsorption of methyl blue on weakly cross-linked ammonium-functionalized hollow polymer particles. 2020 , 505, 144607	15
510	Energy performance evaluation for benchmarking school buildings using dynamic clustering analysis and particle swarm optimization. 2020 , 41, 429-440	
509	Production, disposal, and efficient technique used in the separation of heavy metals from red meat abattoir wastewater. 2020 , 27, 9424-9434	1
508	Facile synthesis of dual-functionalized microporous organic network for efficient removal of cationic dyes from water. 2020 , 296, 110013	17
507	Degradation of reactive dye using heterogeneous photo-Fenton catalysts: ZnFe ₂ O ₄ and GO-ZnFe ₂ O ₄ composite. 2020 , 7, 015519	33
506	Capture of iodide from wastewater by effective adsorptive membrane synthesized from MIL-125-NH and cross-linked chitosan. 2020 , 231, 115742	52

505	Synthesis of porous metal-organic framework composite adsorbents and pollutant removal from multicomponent systems. 2020 , 243, 122572	13
504	Extended Rate Constant Distribution Model for Sorption in Heterogeneous Systems. 1: Application to Kinetics of Metal Ion Sorption on Polyethyleneimine Cryogels. 2020 , 59, 1123-1134	4
503	Adsorption of Nickel, Ni(II), in Aqueous Solution by Modified Zeolite as a Cation-Exchange Adsorbent. 2020 , 65, 185-197	23
502	Synthesis and characterization of highly durable and reusable superabsorbent core-shell particles. 2020 , 60, 306-313	1
501	A review on recent developments in the adsorption of surfactants from wastewater. 2020 , 254, 109797	85
500	Mushroom-derived chitosan-glucan nanopaper filters for the treatment of water. 2020 , 146, 104428	22
499	Synthesis of a novel Fe-Mn binary oxide-modified lava adsorbent and its effect on ammonium removal from aqueous solutions. 2020 , 92, 850-864	
498	Microwave-Assisted Synthesis of Polyethyleneimine Grafted Chitosan Beads for the Adsorption of Acid Red 27. 2020 , 28, 542-552	12
497	Metal-selective sorbents. 2020 , 185-213	1
496	One-step synthesis of chitosan-polyethyleneimine with calcium chloride as effective adsorbent for Acid Red 88 removal. 2020 , 157, 648-658	15
495	Waste shrimp shell-derived hydrochar as an emergent material for methyl orange removal in aqueous solutions. 2020 , 134, 105340	37
494	Ultrasound-assisted bottom-up synthesis of Ni-graphene hybrid composites and their excellent rhodamine B removal properties. 2020 , 255, 109834	6
493	Construction of a hydrophobic magnetic aerogel based on chitosan for oil/water separation applications. 2020 , 165, 1869-1880	16
492	A Review of Recent Advances in Depression Techniques for Flotation Separation of Cu-Mo Sulfides in Porphyry Copper Deposits. 2020 , 10, 1269	20
491	Efficient carbon interlayered magnetic chitosan adsorbent for anionic dye removal: Synthesis, characterization and adsorption study. 2020 , 164, 3621-3631	39
490	Fabrication of high performance biodegradable Holarrhena antidysenterica fiber based adsorption devices. 2020 , 13, 8734-8749	1
489	Water-Insoluble Cyclodextrin-Epichlorohydrin Polymers. 2020 , 345-394	
488	Synthesis, characterization and application of cross-linked chitosan/oxalic acid hydrogels to improve azo dye (Reactive Red 195) adsorption. 2020 , 155, 104699	19

487	Study on the adsorption property for Cu ²⁺ of Chitosan/Ploy (SSS- HEMA-AA) hydrogel. 2020 , 450, 012036	
486	Use of rapid small-scale column tests for simultaneous prediction of phosphorus and nitrogen retention in large-scale filters. 2020 , 37, 101473	3
485	Remediation of Toxic Dye Pollutants by Using Graphene-Based Adsorbents. 2020 , 5, 8062-8073	3
484	Microscopic studies on chitin and chitosan-based interpenetrating polymer networks, gels, blends, composites, and nanocomposites. 2020 , 95-138	3
483	Chitin and chitosan-based polyurethanes. 2020 , 229-245	
482	Chitin, chitosan, marine to market. 2020 , 335-376	0
481	Chitin, chitosan, marine to market. 2020 , 341-381	1
480	Eco-tourism benefit evaluation of Yellow River based on principal component analysis. 2020 , 39, 8907-8915	2
479	Synthesis of magnetic Forsythia suspensa leaf powders for removal of metal ions and dyes from wastewater. 2020 , 8, 104224	6
478	The effects of carbon disulfide driven functionalization on graphene oxide for enhanced Pb(II) adsorption: Investigation of adsorption mechanism. 2020 , 248, 126078	39
477	Willow Lignin Recovered from Hot-Water Extraction for the Production of Hydrogels and Thermoplastic Blends. 2020 , 13, 4702-4721	8
476	Grand Challenges in Emerging Separation Technologies. 2020 , 1,	2
475	Sequestration of Sulfate Anions from Groundwater by Biopolymer-Metal Composite Materials. 2020 , 12,	6
474	Cetyltrimethylammonium bromide functionalized silica nanoparticles (MSN) synthesis using a combined sol-gel and adsorption steps with enhanced adsorption performance of oxytetracycline in aqueous solution. 2020 , 112, 67-77	6
473	Coupling reaction and vacuum distillation to prepare β -CD-based adsorption material for organic dyes. 2020 , 24, 101350	
472	A novel silica supported chitosan/glutaraldehyde as an efficient sorbent in solid phase extraction coupling with HPLC for the determination of Penicillin G from water and wastewater samples. 2020 , 13, 7147-7159	20
471	Efficient ion-enhanced adsorption of congo red on polyacrolein from aqueous solution: Experiments, characterization and mechanism studies. 2020 , 252, 117445	23
470	Removal of Cu(II) by Fixed-Bed Columns Using Alg-Ch and Alg-ChS Hydrogel Beads: Effect of Operating Conditions on the Mass Transfer Zone. 2020 , 12,	3

469	Modified recycled paper-based adsorbent for nickel removal. 2020 , 736, 072001	1
468	Determination of optimal operating parameters for tetracycline removal by adsorption from synthetic and real aqueous solutions. 2020 , 55, 1615-1623	2
467	Chitosan-based materials for water and wastewater treatment. 2020 , 773-809	6
466	Adsorption and desorption of malachite green by using chitosan-deep eutectic solvents beads. 2020 , 164, 3965-3973	22
465	Sorption Study of Water Vapor and a Dye on Chitosan-Based Framework Materials. 2020 , 5, 21836-21843	2
464	Environmental Applications of Chitosan and its Derivatives. 2020 , 1065-1081	4
463	Electrochemical synthesis of novel aluminium oxyhydroxide-decorated MnO ₂ /chitosan nanocomposite with efficient photocatalytic and antibacterial activity. 2020 , 5, 1	4
462	Statistical optimization and modeling for color removal and COD reduction of reactive blue 19 dye by mesoporous chitosan-epichlorohydrin/kaolin clay composite. 2020 , 164, 4218-4230	65
461	Control over the Free Space within Poly(ionic liquid)s for Selective Adsorption of Size-Matching Dyes. 2020 , 2, 4864-4873	0
460	Adsorptive performance of carbon modified chitosan biopolymer for cationic dye removal: kinetic, isotherm, thermodynamic, and mechanism study. 2020 , 1-15	12
459	-Halamine Hydantoin-Containing Chitosan: Synthesis, Characterization, Thermal and Photolytic Stability Studies. 2020 , 25,	2
458	Solventless Crosslinking of Chitosan, Xanthan, and Locust Bean Gum Networks Functionalized with β -Cyclodextrin. 2020 , 6,	5
457	Synthesis and photocatalytic investigation of ZnFe ₂ O ₄ in the degradation of organic dyes under visible light. 2020 , 9, 15001-15015	17
456	Use of low-cost biopolymers and biopolymeric composite systems for heavy metal removal from water. 2020 , 17, 4389-4406	30
455	Methylene blue adsorption by timba [^] va (Enterolobium contortisiliquum)-derived materials. 2020 , 27, 27893-27903	8
454	Hydrated zirconia-loaded resin for adsorptive removal of phosphate from wastewater. 2020 , 600, 124909	6
453	Modification of rice husk silica with bovine serum albumin (BSA) for improvement in adsorption of metanil yellow dye. 2020 , 17, 2599-2612	7
452	Biodegradable functional chitosan membrane for enhancement of artemisinin purification. 2020 , 246, 116590	4

451	Stimuli-responsive supramolecular polymer network based on bi-pillar[5]arene for efficient adsorption of multiple organic dye contaminants. 2020 , 44, 12531-12537	3
450	A review of the application of sea material shells as low cost and effective bio-adsorbent for removal of heavy metals from wastewater. 2020 , 27, 31105-31119	22
449	MOF-based polymeric nanocomposite beads as an efficient adsorbent for wastewater treatment in batch and continuous systems: Modelling and experiment. 2020 , 400, 125862	45
448	Adsorption of antiretroviral (ARVs) and related drugs from environmental wastewaters using nanofibers. 2020 , 8, 104049	14
447	Egg By-Products as a Tool to Remove Direct Blue 78 Dye from Wastewater: Kinetic, Equilibrium Modeling, Thermodynamics and Desorption Properties. 2020 , 13,	12
446	Ammonium ion removal using activated zeolite and chitosan. 2020 , 15, e2448	6
445	The antioxidative and immunity roles of chitosan nanoparticle and vitamin C-supplemented diets against imidacloprid toxicity on <i>Oreochromis niloticus</i> . 2020 , 523, 735219	33
444	Introduction to Bionanotechnology. 2020 ,	3
443	Cellulose/chitosan porous spheres prepared from 1-butyl-3-methylimidazolium acetate/dimethylformamide solutions for Cu adsorption. 2020 , 237, 116135	12
442	Adsorption of Cu (II) and Cd (II) from aqueous solutions by chitosan immobilized in alginate beads. 2020 , 8, 103878	26
441	Synthesis of Chitosan-Silica Nanocomposite for Removal of Methyl Orange from Water: Composite Characterization and Adsorption Performance. 2020 , 745, 012084	0
440	Synthesis and characterization of conducting polypyrrole/bentonite nanocomposites and in-situ oxidative polymerization of pyrrole: adsorption of 4-nitrophenol by polypyrrole/bentonite nanocomposite. 2020 , 207, 1171-1183	4
439	Implant surface modification strategies through antibacterial and bioactive components. 2020 , 647-673	2
438	Efficient capture of Cr(VI) by carbon hollow fibers with window-like structure. 2020 , 27, 16763-16773	4
437	Waste of <i>Mytella Falcata</i> shells for removal of a triarylmethane biocide from water: Kinetic, equilibrium, regeneration and thermodynamic studies. 2020 , 195, 111230	10
436	Chitosan/montmorillonite composites for fast removal of methylene blue from aqueous solutions. 2020 , 254, 123236	21
435	Effective photocatalytic degradation and physical adsorption of methylene blue using cellulose/GO/TiO hydrogels.. 2020 , 10, 23936-23943	34
434	Zwitterion composite chitosan-epichlorohydrin/zeolite for adsorption of methylene blue and reactive red 120 dyes. 2020 , 163, 756-765	80

433	Bifunctional gelatin/dextrin hybrid backbone based fluorescent chemo-sensor for the detection of tannic acid and removal of eosin yellow dye. 2020 , 254, 123304	4
432	Optical, Functional Impact and Antimicrobial of Chitosan/Phosphosilicate/Al ₂ O ₃ Nanosheets. 2020 , 30, 3084-3094	18
431	Recycling performance of graphene oxide-chitosan hybrid hydrogels for removal of cationic and anionic dyes. 2020 , 7, 4	31
430	Preparation of supported chitosan adsorbent with high adsorption capacity for Titan Yellow removal. 2020 , 152, 449-455	8
429	Performance investigation of struvite high-efficiency precipitation from wastewater using silicon-doped magnesium oxide. 2020 , 27, 15463-15474	7
428	Interpenetrating Polymer Network: Biomedical Applications. 2020 ,	2
427	Synthesis of Schiff-base pendant groups on PGMA-MAn for removal of colored pollutants. 2020 , 17, 1649-1658	1
426	Preparation of TiN@TiO ₂ composite nanoparticles for organic dye adsorption and photocatalysis. 2020 , 46, 14529-14535	17
425	Preparation and characterization of Chicory leaf powder and its application as a nano-native plant sorbent for removal of Acid Blue 25 from aqueous media: isotherm, kinetic and thermodynamic study of the adsorption phenomenon. 2020 , 10, 75-86	11
424	Pillared graphene oxide composite as an adsorbent of soluble hydrocarbons in water: pH and organic matter effects. 2020 , 259, 110044	9
423	Chemically modified chitosan-sodium alginate as chemo-sensor adsorbent for the detection of picric acid and removal of bieberich scarlet. 2020 , 147, 582-594	19
422	Cross-linked chitosan and β -cyclodextrin as functional adsorbents in water treatment. 2020 , 161-264	3
421	Facile preparation of polyacrylamide/chitosan/FeO composite hydrogels for effective removal of methylene blue from aqueous solution. 2020 , 234, 115882	53
420	Electrical curing of chitosan's mesoscale organization. 2020 , 148, 104492	9
419	Oil removal from produced water by agriculture waste adsorbents. 2020 , 25, 12	10
418	Synthesis of Silver Nanoparticles Using Chitosan as Stabilizer Agent: Application towards Electrocatalytic Reduction of p-Nitrophenol. 2020 , 5, 1220-1227	8
417	Effect of Liquefied Lignin Content on Synthesis of Bio-based Polyurethane Foam for Oil Adsorption Application. 2020 , 28, 892-905	15
416	Superior Adsorption of Direct Dye from Aqueous Solution by Y(III)-Chitosan-Doped Fly Ash Composite as Low-Cost Adsorbent. 2020 , 28, 1811-1821	6

415	Removal of malachite green by polyacrylamide-g-chitosan @Fe ₂ O ₃ nanocomposite-an application of central composite design. 2020 , 11, 100378	18
414	Development of chitosan/Spirulina sp. blend films as biosorbents for Cr and Pb removal. 2020 , 155, 142-152	12
413	Novel cationic polymer modified magnetic chitosan beads for efficient adsorption of heavy metals and dyes over a wide pH range. 2020 , 156, 289-301	48
412	Carbon Xerogels for Effluent Treatment. 2020 , 65, 2255-2270	4
411	Current scenario and challenges in adsorption for water treatment. 2020 , 8, 103988	126
410	In vivo approach of simply constructed pyrazinamide conjugated chitosan-g-polycaprolactone micelles for methicillin resistance Staphylococcus aureus. 2020 , 158, 636-647	1
409	Enhanced Pb(II) adsorption onto functionalized ordered mesoporous carbon (OMC) from aqueous solutions: the important role of surface property and adsorption mechanism. 2020 , 27, 23616-23630	15
408	Chitosan-Based Materials for the Removal of Nickel Ions from Aqueous Solutions. 2020 , 94, 748-755	3
407	Chitosan/Graphene Oxide Nanocomposite Membranes as Adsorbents with Applications in Water Purification. 2020 , 13,	27
406	Adsorption capacity, isotherm, kinetic, and thermodynamic studies on adsorption behavior of malachite green onto natural red clay. 2021 , 40,	4
405	Removal of 2,4-dichlorophenol from wastewater by an efficient adsorbent of magnetic activated carbon. 2021 , 56, 252-265	7
404	Water compatible functionalized chitosan-based 4-HBA mimic imprinted polymer as a potential sorbent for salicylic acid. 2021 , 56, 694-707	2
403	Removal of reactive red-198 dye using chitosan as an adsorbent: optimization by Central composite design coupled with response surface methodology. 2021 , 40, 225-237	15
402	Fungal chitin-glucan nanopapers with heavy metal adsorption properties for ultrafiltration of organic solvents and water. 2021 , 253, 117273	16
401	High-viscoelastic graft modified chitosan hydrophobic association polymer for enhanced oil recovery. 2021 , 138, 50004	2
400	Construction of natural polymeric imprinted materials and their applications in water treatment: A review. 2021 , 403, 123643	20
399	Development and optimization of pectin/chitosan magnetic sponge for efficient cationic dyes removal using BoxBehnken design. 2021 , 18, 131-140	5
398	Enhanced adsorption/photocatalytic removal of Cu(II) from wastewater by a novel magnetic chitosan@ bismuth tungstate coated by silver (MCTS-Ag/BiWO) composite. 2021 , 263, 128120	9

397	Zr-MOFs loaded on polyurethane foam by polydopamine for enhanced dye adsorption. 2021 , 101, 177-188	41
396	Enhancement of Cr(VI) removal efficiency via adsorption/photocatalysis synergy using electrospun chitosan/g-CN/TiO nanofibers. 2021 , 253, 117200	43
395	Erythritol-based polyester loose nanofiltration membrane with fast water transport for efficient dye/salt separation. 2021 , 406, 126796	67
394	Chitosan functionalized AgNPs for efficient removal of Imidacloprid pesticide through a pressure-free design. 2021 , 168, 116-123	7
393	A graft-modification of chitosan with twin-tail hydrophobic association polymer for enhance oil recovery. 2021 , 763, 138164	4
392	Adsorption, kinetics and thermodynamics studies of methyl orange dye sequestration through chitosan composites films. 2021 , 168, 383-394	47
391	High-performance removal of 2,4-dichlorophenoxyacetic acid herbicide in water using activated carbon derived from Queen palm fruit endocarp (<i>Syagrus romanzoffiana</i>). 2021 , 9, 104911	28
390	Recovery of nutrients from sewage using zeolite-chitosan-biochar adsorbent: Current practices and perspectives. 2021 , 40, 101845	7
389	MXene/sodium alginate gel beads for adsorption of methylene blue. 2021 , 260, 124123	27
388	Removal of methylene blue from aqueous solutions using a solid residue of the apple juice industry: Full factorial design, equilibrium, thermodynamics and kinetics aspects. 2021 , 1224, 129296	23
387	Key parameters optimization of chitosan production from <i>Aspergillus terreus</i> using apple waste extract as sole carbon source. 2021 , 44, 283-295	4
386	Environmental Remediation Through Carbon Based Nano Composites. 2021 ,	3
385	Phycoremediation [An emerging technique for dye abatement: An overview. 2021 , 147, 214-225	14
384	Succinylated Starches for Dye Removal. 2021 , 73, 2000043	7
383	Spin-coated freestanding films for biomedical applications. 2021 , 9, 3778-3799	7
382	. 2021 , 70, 1-12	0
381	Lignin as the most abundant natural polymers as bio- and nanosorbents. 2021 , 111-129	
380	Advances and applications. 2021 , 33, 557-586	0

379	Kitosan- eker pancar- posas -biyokompozit sorban sisteminin anyonik boyarmadde biyosorpsiyon potansiyeli.	
378	Chitosan-Based Magnetic Adsorbents. 2021 , 435-465	
377	Polymers in Wastewater Treatment. 2021 ,	
376	Natural polymer-based hydrogels for adsorption applications. 2021 , 267-306	0
375	Carbon obtained from waste polyethylene terephthalate (PET) containers as potential sorbent of radionuclides from the contaminated aqueous solutions. 2021 , 18, 3527	1
374	Biodegradable chito-beads replacing non-biodegradable microplastics for cosmetics. 2021 , 23, 6953-6965	9
373	Adsorptive removal of methyl orange dye from aqueous solution using populus leaves: Insights from kinetics, thermodynamics and computational studies. 2021 , 3, 172-181	9
372	Inland Water Fungi in the Anthropocene: Current and Future Perspectives. 2021 ,	0
371	Performance of Chitosan and Polyglutamic Acid in Palm Oil Mill Effluent Treatment. 2021 , 147-173	
370	Environmental Mycobiototechnology in Special Reference to Fungal Bioremediation. 2021 , 361-383	1
369	Development of efficient magnetic Fe ₂ O ₃ -activated Bakelite nanocomposite as an adsorbent for removal of Victoria blue dye from water. 1-16	3
368	Synthesis of mesoporous silica nanoparticles derived from rice husk and surface-controlled amine functionalization for efficient adsorption of methylene blue from aqueous solution. 2021 , 4, 100116	15
367	A review on removal of industrial dyes using low cost natural adsorbents. 2021 ,	0
366	Recent Developments in Chitosan-Based Adsorbents for the Removal of Pollutants from Aqueous Environments. 2021 , 26,	48
365	Treatment of textile wastewater using adsorption and adsorbents. 2021 , 235-273	4
364	Removal and Release of the 2,4,5-Trichlorophenoxyacetic Acid Herbicide from Wastewater by Layered Double Hydroxides. 2021 , 31, 2116-2128	2
363	A Review on the Synthesis, Characterization, and Modeling of Polymer Grafting. 2021 , 9, 375	7
362	Chitosan-based membranes preparation and applications: Challenges and opportunities. 2021 , 98, 100017	19

361	A new application of Hydroxyapatite extracted from dromedary bone: Adsorptive removal of Congo red from aqueous solution. 2021 , 18, 590-597	2
360	Preparation and Kinetic Studies of Cross-Linked Chitosan Beads Using Dual Crosslinkers of Tripolyphosphate and Epichlorohydrin for Adsorption of Methyl Orange. 2021 , 2021, 6648457	2
359	Adsorption of Mn ²⁺ ions on chitosan/cellulose composite: experimentally and theoretically approaches. 1-18	3
358	Magnetic multi-walled carbon nanotubes-loaded alginate for treatment of industrial dye manufacturing effluent: adsorption modelling and process optimisation by central composite face-central design. 1-21	24
357	Amphiphilic chitosan/acrylic acid/thiourea based semi-interpenetrating hydrogel: Solvothermal synthesis and evaluation for controlled release of organophosphate pesticide, triazophos. 2021 , 138, 50595	2
356	Performance of MnO ₂ nanoparticles-coated cationic CTAB for detoxification and decolorization of sulfonated remazol red and reactive black 5 dyes from water. 1	2
355	The effect of amino acids extracted from tofu wastewater on chitosan performance for methylene blue removal from water. 2021 , 1087, 012057	2
354	Cyclodextrin-epichlorohydrin polymers synthesis, characterization and applications to wastewater treatment: a review. 2021 , 19, 2383-2403	7
353	FUNCTIONALIZED HALLOYSITE NANOTUBES FOR ENHANCED REMOVAL OF Hg ²⁺ IONS FROM AQUEOUS SOLUTIONS. 2021 , 69, 117-127	1
352	Adsorption of non-steroidal anti-inflammatory drug (NSAID) by agro-industrial by-product with chemical and thermal modification: Adsorption studies and mechanism. 2021 , 161, 113200	12
351	Response surface modeling of Orange-G adsorption onto surface tuned ragi husk. 2021 , 41, 100363	11
350	Increasing Awareness of Materials and the Environment: Hands-On Outreach Activity Presenting Water Purification Materials and Concepts. 2021 , 98, 1296-1301	1
349	Preparation and Characterization of Sodium Alginate-Based Oxidized Multi-Walled Carbon Nanotubes Hydrogel Nanocomposite and its Adsorption Behaviour for Methylene Blue Dye. 2021 , 9, 576913	14
348	Alginate-based adsorbents for removal of metal ions and radionuclides from aqueous solutions: A review. 2021 , 174, 216-228	30
347	Prospect of clay-based flexible adsorbent coatings as cleaner production technique in wastewater treatment, challenges, and issues: A review. 2021 , 120, 178-206	7
346	Adsorption of Co ²⁺ and Sr ²⁺ from aqueous solution by chitosan grafted with EDTA. 2021 , 325, 115197	8
345	Risk assessment and the adsorptive removal of some pesticides from synthetic wastewater: a review. 2021 , 10,	6
344	The Role of Carbon Nanotube Pretreatments in the Adsorption of Benzoic Acid. 2021 , 14,	4

343	Chitosan-Based Nanocomposite Polymeric Membranes for Water Purification-A Review. 2021 , 14,	12
342	Elucidation of selective adsorption study of Congo red using new Cadmium(II) metal-organic frameworks: Adsorption kinetics, isotherm and thermodynamics. 2021 , 296, 121929	6
341	Three-dimensional (3D) polymer-metal-carbon framework for efficient removal of chemical and biological contaminants. 2021 , 11, 7708	16
340	Hydrogel composite of lanthanum and Halorubrum ejinoor sp. cell lysate as an adsorbing material. 2021 , 43, 1443-1453	1
339	Sulfonamide antibiotics in groundwater and their migration in the vadose zone: A case in a drinking water resource. 2021 , 162, 106175	7
338	Poly(acrylamide acrylic acid) grafted on steel slag as an efficient magnetic adsorbent for cationic and anionic dyes. 2021 , 9, 105126	20
337	Hydrogel Based on Tricarboxi-Cellulose and Poly(Vinyl Alcohol) Used as Biosorbent for Cobalt Ions Retention. 2021 , 13,	2
336	Effective removal of proteins using carbon-based nanoadsorbent: relevancy to the application of membrane-driven pre-water treatment. 2021 , 96, 2053-2064	2
335	Efficient encapsulation of toxic dyes from wastewater using several biodegradable natural polymers and their composites. 2021 , 291, 125920	58
334	Novel 1-butyl-3-methylimidazolium bromide impregnated chitosan hydrogel beads nanostructure as an efficient nanobio-adsorbent for cationic dye removal: Kinetic study. 2021 , 195, 110809	116
333	Aloe vera as Promising Material for Water Treatment: A Review. 2021 , 9, 782	5
332	Using a simple method to prepare UiO-66-NH ₂ /chitosan composite membranes for oil/water separation. 2021 , 138, 50765	5
331	Potentiality of newly isolated Aspergillus tubingensis in biosorption of textile dyes: equilibrium and kinetic modeling. 1	2
330	Synergistic effect of the activated carbon addition from leather wastes in chitosan/alginate-based composites. 2021 , 28, 48666-48680	2
329	Recent Advances in the Synthesis, Properties, and Applications of Modified Chitosan Derivatives: Challenges and Opportunities. 2021 , 379, 19	7
328	Properties of Low Molecular Weight Chitosan Obtained by Catalytic Degradation Using Lanthanum(III)/Halloysite Nanotube Catalysts. 1	
327	Current approaches and methodologies to explore the perceptive adsorption mechanism of dyes on low-cost agricultural waste: A review. 2021 , 319, 111040	23
326	Efficient removal of crystal violet by sulphonic-modified multi-walled carbon nano-tube and graphene oxide. 2021 , 6, 1	2

325	Review of chitosan composite as a heavy metal adsorbent: Material preparation and properties. 2021 , 259, 117613	41
324	The influence of crystalline structure of cellulose in chitosan-based biocomposites on removal of Ca(II), Mg(II), Fe(III) ion in aqueous solutions. 2021 , 28, 5745	3
323	Tailoring Chitosan/LTA Zeolite Hybrid Aerogels for Anionic and Cationic Dye Adsorption. 2021 , 22,	3
322	Chitosan/Zeolite Composite Aerogels for a Fast and Effective Removal of Both Anionic and Cationic Dyes from Water. 2021 , 13,	2
321	Investigation of the removal and recovery of nitrate by an amine-enriched composite under different fixed-bed column conditions. 2021 , 150, 365-372	4
320	Synthesis, characterization and investigation of chitosan-functionalized ZnFe ₂ O ₄ for the removal of dichlorvos from aqueous solution. 1-10	1
319	The Role of a Nitro Substituent in C-Phenylcalix[4]resorcinarenes to Enhance the Adsorption of Gold(III) Ions. 2021 , 6, 5366-5373	0
318	Chemical and physical Chitosan modification for designing enzymatic industrial biocatalysts: How to choose the best strategy?. 2021 , 181, 1124-1170	34
317	Capacity and Modeling of Acid Blue 113 Dye Adsorption onto Chitosan Magnetized by Fe ₂ O ₃ Nanoparticles. 1	20
316	Produção, caracterização e aplicação de carvão ativado de casca de manga no tratamento de efluente têxtil. 2021 , 26, 485-494	
315	Graphene-Based Materials Immobilized within Chitosan: Applications as Adsorbents for the Removal of Aquatic Pollutants. 2021 , 14,	10
314	Efficient adsorption removal of anionic dyes by an imidazolium-based mesoporous poly(ionic liquid) including the continuous column adsorption-desorption process. 2021 , 272, 129640	19
313	Ionic gelation synthesis, characterization and adsorption studies of cross-linked chitosan-tripolyphosphate (CS-TPP) nanoparticles for removal of As (V) ions from aqueous solution: kinetic and isotherm studies. 1-11	
312	Physicochemical modification of chitosan adsorbent: a perspective. 1	3
311	Adsorption of crystal violet dye using <i>Platanus orientalis</i> (Chinar tree) leaf powder and its biochar: equilibrium, kinetics and thermodynamics study. 1-21	7
310	Remediation of Emerging Pollutants by Using Advanced Biological Wastewater Treatments. 2021 , 623-643	0
309	Design and synthesis of amine grafted graphene oxide encapsulated chitosan hybrid beads for defluoridation of water. 2021 , 182, 1843-1851	5
308	A composite sponge based on alkylated chitosan and diatom-biosilica for rapid hemostasis. 2021 , 182, 2097-2107	6

307	Facile synthesis of Pd nanoparticles supported on a novel Schiff base modified chitosan-kaolin: Antibacterial and catalytic activities in Sonogashira coupling reaction. 2021 , 945, 121849	6
306	Chitosan-based nanofibers for enzyme immobilization. 2021 , 183, 1959-1970	13
305	Study on Synthesis of Comb-Shaped Chitosan-Graft-Polyethylenimine Dithiocarbamate Material and Its Adsorption to Heavy Metal Ions. 1	0
304	Microwave-assisted synthesis of ceria nanoparticles on carbon nanotubes and their dye-removal assessment. 2021 , 13, 70-82	2
303	Recent advances in the synthesis and applications of magnetic polymer nanocomposites. 2021 , 99, 1-18	9
302	Performance of oxalic acid-chitosan/alumina ceramic biocomposite for the adsorption of a reactive anionic azo dye. 2021 , 28, 67032-67052	2
301	Supramolecular Gels from Carbohydrate Biopolymers for Water Remediation. 2021 , 127-168	1
300	A chitosan-based composite for adsorption of uranyl ions; mechanism, isotherms, kinetics and thermodynamics. 2021 , 183, 1640-1648	7
299	Concentration-driven selective adsorption of Congo red in binary dyes solution using polyacrolein: Experiments, characterization and mechanism studies. 2021 , 335, 116230	0
298	Spectroscopic investigation of carbon nanotube as nano-filler entrapped in chitosan hydrogel beads. 2021 , 1237, 130386	5
297	Direct and indirect effects of SARS-CoV-2 on wastewater treatment.. 2021 , 42, 102193	17
296	Eco-friendly Chitosan Condensation Adduct Resins for Removal of Toxic Silver Ions from Aqueous Medium. 2021 , 100, 410-421	5
295	Towards a Circular Economy: Analysis of the Use of Biowaste as Biosorbent for the Removal of Heavy Metals. 2021 , 14, 5427	5
294	Mollusk shells as adsorbent for removal of endocrine disruptor in different water matrix. 2021 , 9, 105704	1
293	Development of highly porous activated carbon from Jacaranda mimosifolia seed pods for remarkable removal of aqueous-phase ketoprofen. 2021 , 9, 105676	20
292	Natural polymers based triboelectric nanogenerator for harvesting biomechanical energy and monitoring human motion. 1	8
291	Enhancing visible-light-activity of Ti-based MOFs based on extending the conjugated degree of organic ligands and photocatalytic degradation process and mechanism in real industrial textile wastewaters. 2021 , 9, 106428	2
290	Chitosan-dosed adsorptive filter media for removal of formaldehyde from indoor air [Performance and cancer risk assessment. 2021 , 779, 138836	1

289	Application of polysaccharide biopolymers as natural adsorbent in sample preparation. 2021 , 1-28	2
288	Evaluation of adsorption ability of cyclodextrin-calixarene nanosponges towards Pb ion in aqueous solution. 2021 , 267, 118151	7
287	Tetrabutylammonium Impregnated Chitosan for Adsorptive Removal of Harmful Carcinogenic Dyes from Water-Bodies. 2021 , 4, 993	2
286	Egg White Cryogel for Removal of Methylene Blue from Aqueous Solution. 2021 , 8, 328-336	1
285	A decade development in the application of chitosan-based materials for dye adsorption: A short review. 2021 , 191, 1151-1163	12
284	Reduction-responsive sulfur monoterpenes polysulfides in microfiber for adsorption of aqueous heavy metal. 2021 , 43, 102247	
283	Waste polystyrene foam Chitosan composite materials as high-efficient scavenger for the anionic dyes. 2021 , 627, 127155	6
282	Multi-functional magnetic hydrogels based on <i>Millettia speciosa</i> Champ residue cellulose and Chitosan: Highly efficient and reusable adsorbent for Congo red and Cu ²⁺ removal. 2021 , 423, 130198	15
281	Three-dimensional macroscopic aminosilylated nanocellulose aerogels as sustainable bio-adsorbents for the effective removal of heavy metal ions. 2021 , 190, 170-177	7
280	Adsorption of azo dyes by a novel bio-nanocomposite based on whey protein nanofibrils and nano-clay: Equilibrium isotherm and kinetic modeling. 2021 , 602, 490-503	10
279	Asparagine anchored on mesoporous silica for Au (III) capture: Elucidation of adsorption-reduction mechanisms and their implications towards selective Au (III) recovery. 2021 , 567, 150743	2
278	Assessment of 3-amino-1H-1,2,4-triazole modified layered double hydroxide in effective remediation of heavy metal ions from aqueous environment. 2021 , 341, 116935	9
277	Preparation of carboxymethyl chitosan/phytic acid composite hydrogels for rapid dye adsorption in wastewater treatment. 2021 , 628, 127355	5
276	Adsorption and catalytic performance of pipe growth rings from water distribution networks using 5-BSA as the target pollutant. 2021 , 284, 131343	3
275	Applications of chitin and chitosan based biomaterials for the adsorptive removal of textile dyes from water - A comprehensive review. 2021 , 273, 118604	23
274	Green synthesis of chitosan-based iron@silver nanocomposite as adsorbent for wastewater treatment. 2021 , 26, 100158	1
273	Thiol-functionalized montmorillonite prepared by one-step mechanochemical grafting and its adsorption performance for mercury and methylmercury. 2022 , 806, 150510	3
272	Strategies to cope with the emerging waste water contaminants through adsorption regimes. 2022 , 61-106	0

271	Efficacy of parthenium hysterophorus waste biomass compared with activated charcoal for the removal of CI Reactive Red 239 textile dye from wastewater. 2021 , 137, 234-250	6
270	Chitosan A Promising Biomaterial for Dye Elimination. 2021 , 59-83	
269	Terephthalaldehyde as a good crosslinking agent in crosslinked chitosan hydrogel for the selective removal of anionic dyes. 2021 , 45, 4938-4949	4
268	Adsorption kinetics for the removal of harmful EBT dye by polyvinyl palmitate as effective adsorbents. 2021 , 46, 3756-3764	3
267	Optimization of Chitosan Glutaraldehyde-Crosslinked Beads for Reactive Blue 4 Anionic Dye Removal Using a Surface Response Methodology. 2021 , 11,	16
266	Adsorption of reactive blue 49 onto cross-linked chitosan-based composites containing waste mussel shell and waste active sludge char. 2021 , 83, 715-726	1
265	Tailored natural polymers: a useful eco-friendly sustainable tool for the mitigation of emerging pollutants: a review. 2021 , 18, 2491-2510	2
264	Method Development for Ficin Entrapment into Gels Based on Food-Grade Chitosan and Chitosan Succinate. 2021 , 54, 1067-1070	
263	Potential of chitosan/nanocellulose based composite membrane for the removal of heavy metal (chromium ion). 2021 , 46, 10954-10959	8
262	Environmental applications of biopolymer-based (nano)materials. 2021 , 517-572	1
261	Introduction to polysaccharides. 2021 , 3-46	1
260	Natural polysaccharides as potential biosorbents for heavy metal removal. 2021 , 627-665	3
259	Chitosan-based Interpenetrating Polymeric Network Systems for Sustained Drug Release. 183-208	7
258	Encyclopedia of Sustainability Science and Technology. 2018 , 1-23	5
257	Transformation of Seafood Wastes into Chemicals and Materials. 2019 , 461-482	2
256	Adsorption of Methyl Red from Aqueous Solutions by Algerian Bentonite Clay. 2015 , 203-209	2
255	Polysaccharide-Based Macromolecular Materials for Decolorization of Textile Effluents. 2012 , 377-403	1
254	Fabrication Technology of Chitosan-Based IPN: Drug Delivery Application. 2020 , 55-78	2

253	Optimization of dye adsorption capacity and mechanical strength of chitosan aerogels through crosslinking strategy and graphene oxide addition. 2019 , 211, 195-203	70
252	Acrylic polymer emulsion supported bentonite clay coating for the analysis of industrial dye. 2017 , 145, 550-560	34
251	Effective adsorption of methylene blue by biodegradable superabsorbent cassava starch-based hydrogel. 2020 , 158, 258-264	30
250	Biosorption for sustainable recovery of precious metals from wastewater. 2020 , 8, 103996	18
249	Biodegradable carboxymethyl cellulose based material for sustainable packaging application. 2020 , 10, 21960	42
248	Polyaniline and sodium alginate nanocomposite: a pH-responsive adsorbent for the removal of organic dyes from water.. 2020 , 10, 43904-43914	16
247	Synthesis of Methacrylamide/Chitosan Polymeric Cryogels and Swelling/Dye Sorption Properties. 2020 , 62, 481-493	1
246	Magnetic nanocomposite beads: synthesis and uptake of Cu(II) ions from aqueous solutions. 1-8	1
245	Sorptive Removal of Methyl Green from Aqueous Solutions using Activated Bentonite. 2017 , 132, 448-450	8
244	Solvothermal synthesis of chitosan quantum dots using different solvents. 2016 , 9, 333-336	1
243	Kinetics and Equilibrium of Mercury Sorption by Three Different Types of Live Algae. 63,	1
242	Antimicrobial nanomaterials in the food industry.. 2015 , 61, 51-56	5
241	THE USE OF CHITOSAN FOR REMOVING SELECTED POLLUTANTS FROM WATER AND WASTEWATER [SHORT REVIEW]. 2016 , 9, 107-115	15
240	KAYISI ^ EK^RDE^KABUKLARI ^LE SULU ^ ^ZELT^DEN MET^LEN MAV^S^ ADSORPS^YONUNA PART^K^ ^ BOYUTUNUN ETK^S^.	1
239	Acid violet 17 Dye Decolorization by Multi-walled Carbon Nanotubes from Aqueous Solution. 2016 , 1, 110-117	5
238	Equilibrium, Isotherm and Kinetic Adsorption Studies of Direct Blue 71 onto Raw Kaolin. 2018 , 4, 153-158	2
237	Preparation, Bioactivities and Applications in Food Industry of Chitosan-Based Maillard Products: A Review. 2020 , 26,	6
236	Bioadsorbtion of Arsenic by Prepared and Commercial Crab Shell Chitosan. 2008 , 8, 160-165	11

235	Removal of Heavy Metal from Contaminated Water by Biopolymer Crab Shell Chitosan. 2009 , 9, 2762-2769	26
234	Advanced Oxidative Removal of C.I. Food Red 17 Dye from an Aqueous Solution. 2014 , 13, 631-634	0
233	Investigation of 137Cs and plutonium isotope sorption-desorption in bio- and synthetic materials. 2016 , 56,	2
232	Efficient Removal of Reactive Orange 107 Dye from Aqueous Media by Shrimp Shell Derived Chitosan Functionalized Magnetic Nanoparticles. 2018 , 09, 633-653	2
231	Sesame Husk as Adsorbent for Copper(II) Ions Removal from Aqueous Solution. 2017 , 05, 109-152	21
230	Comparative Study of Adsorption of Copper Ion onto Locally Developed and Commercial Chitosan. 2015 , 05, 21-37	6
229	Cr(VI) Removal from Aqueous Solution by Chitosan/Carboxymethyl Cellulose/Silica Hybrid Membrane. 2015 , 03, 234-240	15
228	Removal of FD&C Red No.40 Food Dye from an Aqueous Solution by Vine-Trimming Waste. 2014 , 5, 420-423	4
227	Magnetic cross-linked chitosan for efficient removing anionic and cationic dyes from aqueous solution. 2021 , 193, 337-346	1
226	Preparation and Application of Chitosan-Based Membrane: Focusing on Dye Removal. 2022 , 121-179	0
225	Chitosan Beads Incorporated with Graphene Oxide/Titanium Dioxide Nanoparticles for Removing an Anionic Dye. 2021 , 11, 9439	1
224	Adsorption Behavior of Methylene Blue Dye by Novel CrossLinked -CM-Chitosan Hydrogel in Aqueous Solution: Kinetics, Isotherm and Thermodynamics. 2021 , 13,	9
223	Malachite green dye and its removal from aqueous solution by clay-chitosane modified. 2021 ,	1
222	Wood based biochar supported MnO ₂ nanorods for high energy asymmetric supercapacitor applications. 2021 , 27, 101548	2
221	Analytical Methodologies of Chitosan in Functional Foods. 2012 , 513-544	
220	Estudios Adsorci ^o n de ^o ido Fer ^o lico en Quitos ^o n. 2012 , 2, 4	
219	Introduction. 2013 , 1-22	
218	Chapter 8 Adsorption of Anionic Dye onto TBAC-Modified Halloysite Nanotubes. 2016 , 119-140	

- 217 Study on the Use of Biomass Polymer Sheets in Water/Alcohol Pervaporation as a Sustainable Source of Alcohol Energy. **2017**, 234-254
- 216 Application of Marine Polymers in Membrane Technology. **2017**, 501-522
- 215 ISOTERMAS DE ADSORÇÃO DO CORANTE AZUL BRILHANTE POR HIDRÓGENIO LIOFILIZADOS A BASE DE QUITOSANA.
- 214 Chitosan-Based Natural Biosorbents: Novel Search for Water and Wastewater Desalination and Heavy Metal Detoxification. **2018**, 123-143
- 213 ~~XXXXXXXXXX~~
~~XXXXXXXXXX~~
~~XXXXXXXXXX~~. **2018**, 384-392
- 212 Reactive Blue 203 dye Removal Using Biosorbent: A Study of Isotherms, Kinetics, and Thermodynamics. **2018**, 5, 91-99 0
- 211 Chitosan-Based Interpenetrating Polymer Networks: Drug Delivery Application. **2019**, 269-295 2
- 210 A Review on Treatment of Pharmaceuticals and Personal Care Products (PPCPs) in Water and Wastewater. **2019**, 1433-1444
- 209 ATIKSUDAN FOTOKATALİTİK YANITIMLE BOYA GÖDERİM VE MİNERALİZASYONU. 1
- 208 Adsorption of l-β-glycerophosphocholine on ion-exchange resin: Equilibrium, kinetic, and thermodynamic studies. **2020**, 9, 275-282 0
- 207 Fe/polymer-based photocatalyst synthesized by sono-sorption method applied to wastewater treatment. **2020**, 396, 112545 3
- 206 A Comprehensive Review of Effective Adsorbents Used for the Removal of Dyes from Wastewater. **2020**, 16, 5
- 205 Effect of Environmental and Operational Parameters on Sequential Batch Reactor Systems in Dye Degradation. **2022**, 193-225 4
- 204 Application of kaolinite-based composite as an adsorbent for removal of uranyl ions from aqueous solution: kinetics and equilibrium study. 1 2
- 203 Understanding the physicochemical properties of Zn-Fe LDH nanostructure as sorbent material for removing of anionic and cationic dyes mixture. **2021**, 11, 21365 2
- 202 Chitosan for delivery of biomolecules. **2022**, 433-460
- 201 Cross-linking of chitosan in drug delivery. **2022**, 277-299
- 200 Development of a PANI/Fe(NO) nanomaterial for reactive orange 16 (RO16) dye removal. **2021**, 13, 5309-5327 2

199	Bionanotechnology in Environment. 2020 , 219-234	
198	Optimization of a Method for Ficin Immobilization Using Glutaraldehyde. 2020 , 36, 81-88	0
197	Synthesis of glutaraldehyde-modified silica/chitosan composites for the removal of water-soluble diclofenac sodium. 2022 , 277, 118868	6
196	Competitive adsorption of nickel(II) and cadmium(II) ions by chitosan cross-linked with sodium tripolyphosphate. 1-19	3
195	Biological macromolecule chitosan grafted co-polymeric composite: bio-adsorption probe on cationic dyes. 1	2
194	Photocatalytic Remediation of Organic Pollutants in Water. 2021 , 1-51	1
193	Carbon-Based Nanocomposites: Preparation and Application in Environmental Pollutants Removal. 2021 , 203-229	2
192	Unconventional Adsorbents for Remediation of Metal Pollution in Waters. 2021 , 123-146	
191	Easy removal of nitrate and phosphate anions from water by low cost chitosan and activated charcoal. 2020 ,	
190	Performance of Chitosan as Natural Coagulant in Oil Palm Mill Effluent Treatment.	
189	Materials Based on Chitosan and Polylactide: From Biodegradable Plastics to Tissue Engineering Constructions. 2021 , 63, 219-226	2
188	Recent Approaches in the Preparation of Various Biosorbents. 2022 , 79-101	1
187	Double Network Gelatin/Chitosan Hydrogel Effective Removal of Dyes from Aqueous Solutions. 1	2
186	Potential for hydrothermally separated groundnut shell fibers for removal of methylene blue dye. 2021 , 48, 1559-1559	1
185	Eco-friendly synthesis of alkaline anion exchange membrane for fuel cells application. 1	
184	Magnetic graphene oxide-containing chitosan-sodium alginate hydrogel beads for highly efficient and sustainable removal of cationic dyes. 2021 , 193, 2221-2221	6
183	Novel green adsorbents for removal of aniline from industrial effluents: A review. 2021 , 345, 118167	3
182	Quantum chemical study of the spectral characteristics of fluorescein dyes bound to chitosan. 2021	

181	Transforming agricultural waste into adsorbent: application of <i>Fagopyrum esculentum</i> wheat husks treated with H ₂ SO ₄ to adsorption of the 2,4-D herbicide. 2021 , 9, 106872	0
180	Lead(II) ions adsorption onto amyloid particulates: An in depth study.. 2021 , 610, 347-358	2
179	Introducing a bio sorbent for removal of methylene blue dye based on flexible poly(glycerol sebacate)/chitosan/graphene oxide ecofriendly nanocomposites.. 2021 , 289, 133219	3
178	A comprehensive review on sources, analysis and toxicity of environmental pollutants and its removal methods from water environment.. 2021 , 812, 152456	4
177	Performance improvement of PES membrane decorated by Mil-125(Ti)/chitosan nanocomposite for removal of organic pollutants and heavy metal.. 2021 , 290, 133335	2
176	Graphene oxide-chitosan hydrogel for adsorptive removal of diclofenac from aqueous solution: preparation, characterization, kinetic and thermodynamic modelling.. 2021 , 11, 36289-36304	17
175	Greywater characteristics, impacts, treatment, and reclamation using adsorption processes towards the circular economy.. 2022 , 29, 10966	4
174	Polysaccharides Used in Biosorbents Preparation for Organic Dyes Retaining from Aqueous Media.. 2022 , 14,	1
173	Heavy metal removal efficiency and antibacterial activity of chitosan beads prepared from crustacean waste. 2022 ,	1
172	Nanomaterial-based biosorbents: Adsorbent for efficient removal of selected organic pollutants from industrial wastewater. 2022 , 8, 46-58	7
171	Removal of Ionic Dyes by Nanofiber Membrane Functionalized with Chitosan and Egg White Proteins: Membrane Preparation and Adsorption Efficiency.. 2022 , 12,	8
170	Oyster shell derived hydroxyapatite microspheres as an effective adsorbent for remediation of Coomassie brilliant blue. 2022 , 33, 103425	2
169	Optimization of the decolorization conditions of Rose Bengal by using TF05 and a decolorization mechanism.. 2022 , 168,	
168	Enhancement of landfill leachate treatment using extracellular polymeric substances as bio-flocculants.. 2022 , 1-9	0
167	Highly Enhanced Congo Red Sorption of New Functionalized Porous Eu(III) Organic Framework by the Insertion of Sulfonate Groups.	1
166	Epichlorohydrin and tripolyphosphate-crosslinked chitosan-kaolin composite for Auramine O dye removal from aqueous solutions: Experimental study and DFT calculations.. 2022 , 199, 318-330	3
165	Synthesis and characterization of a new meso-tetrakis (2,4,6-trimethylphenyl) porphyrinato) zinc(II) supported sodium alginate gel beads for improved adsorption of methylene blue dye.. 2022 , 202, 161-176	0
164	Preparation of Papain Complexes with Chitosan Microparticles and Evaluation of Their Stability Using the Enzyme Activity Level. 2022 , 55, 1240	1

163	Adsorption for rhodamine b dye and biological activity of nano-porous chitosan from shrimp shells.. 2022 , 1	0
162	Study on adsorption of Cu ²⁺ , Pb ²⁺ , Cd ²⁺ , and Zn ²⁺ by the KMnO ₄ modified biochar derived from walnut shell. 1	1
161	Rapid Removal of Acid Red 88 by Zeolite/Chitosan Hydrogel in Aqueous Solution.. 2022 , 14,	1
160	Arsenate Removal from Aqueous Media Using Chitosan-Magnetite Hydrogel by Batch and Fixed-Bed Columns.. 2022 , 8,	0
159	Advances in chitosan biopolymer composite materials: from bioengineering, wastewater treatment to agricultural applications.	8
158	Comparison of methylene blue sequestration potentials of unmodified and Fenton [®] modified plantain (<i>Musa paradisiaca</i>) peels biomass. 1	1
157	Application of a biowaste of fish (<i>Labeo rohita</i>) scale for the removal of methyl orange from aqueous solutions: optimization of sorption conditions by response surface method and analysis of adsorption mechanism. 1	0
156	Fe ²⁺ /Fe ³⁺ based MOIFs + dye interaction study: Thermodynamic and kinetic analysis estimated through spectrophotometrically. 2022 , 99, 100423	
155	Understanding the application of gum ghatti based biodegradable hydrogel for wastewater treatment. 2022 , 17, 100668	1
154	Magnetic responsive mesoporous alginate/β-cyclodextrin polymer beads enhance selectivity and adsorption of heavy metal ions.. 2022 ,	1
153	Buoyant titanium dioxide (TiO ₂) as high performance photocatalyst and peroxide activator: A critical review on fabrication, mechanism and application. 2022 , 10, 107549	1
152	Smart and regeneratable Xanthan gum hydrogel adsorbents for selective removal of cationic dyes. 2022 , 10, 107620	1
151	Development Membranes with Chitosan Delivery Systems for Cannabidiol. 2021 ,	
150	Evaluation of the Adsorption and Desorption Dynamics of Beet Juice Red Dye on Alginate Microbeads.. 2021 , 8,	1
149	Effects of soil components, solution chemical properties, and temperature on Cu(II) adsorption by alluvial acid soil: a case study in Southwest China. 2022 , 15,	0
148	Magnetic chitosan microspheres for the removal of methyl violet 2B from aqueous solutions. 1-13	
147	Study on Preparation, Characteristics and Dissolution Behavior of Interpenetrating Network Delivery System containing Fermented <i>Rhodiola Rosea</i> Extracts. 2021 , 36, 260-271	
146	PREPARATION OF CHITOSAN GRAFT COPOLYMERS AND STUDY OF THEIR WATER-SWELLING PROPERTIES. 2021 , 83-90	

- 145 Nanotechnology Enabled Multifunctional Materials for Removal of Toxicants from Wastewater. **2022**, 1 1
- 144 Waste Biomass and Biomaterials Adsorbents for Wastewater Treatment. **2022**, 1-25 0
- 143 Chitosan-based materials: Preparation, modification and application. **2022**, 131825 6
- 142 Modified chitosan-zeolite supported Pd nanoparticles: A reusable catalyst for the synthesis of 5-substituted-1H-tetrazoles from aryl halides.. **2022**, 0
- 141 Chitosan: Derivatives, Properties and Applications. **2022**, 759-770
- 140 Carbon nanotube-based materials for environmental remediation processes. **2022**, 475-513 0
- 139 Polymeric Hydrogels for Dye Adsorption. **2022**, 125-174
- 138 Natural Biodegradable Polymeric Bio-adsorbents for Textile Wastewater. **2022**, 209-225
- 137 Some Well-Known Alginate and Chitosan Modifications Used in Adsorption: A Review. **2022**, 14, 1353 6
- 136 Eco-friendly adsorption of dye pollutants by palygorskite in aqueous effluents: Experimental and computational studies. 0
- 135 A Minireview on the Use of g-C₃N₄/Chitosan Biocomposite for Potential Applications. **2022**, 9, 0
- 134 Preparation and characterization of biochar from cement waste for removal of rhodamine B dye. 0
- 133 Anti-inflammatory drug diclofenac removal by a synthesized MgAl layered double hydroxide. **2022**, 359, 119207 0
- 132 Statistical physics modeling of the removal of Resorcinol from aqueous effluents by activated carbon from avocado seeds. **2022**, 119386 0
- 131 Photodegradation of Pharmaceutical Pollutants: New Photocatalytic Systems Based on 3D Printed Scaffold-Supported Ag/TiO₂ Nanocomposite. **2022**, 12, 580 0
- 130 High-efficient phosphate removal from wastewater by weak magnetic La(OH)₃ modified platanus biochar. **2022**, 0
- 129 Bioactivity of star-shaped polycaprolactone/chitosan composite hydrogels for biomaterials. **2022**, 212, 420-431
- 128 Metal organic frameworks as a versatile platform for the radioactive iodine capture: State of the art developments and future prospects. **2022**, 539, 121026 0

127	One-Step Microwave Method Synthesis of Fe ₂ O ₃ Nanoribbon@ Carbon Composite for Cr (VI) Removal.	
126	Environmental-Friendly Adsorbent Composite Based on Hydroxyapatite/Hydroxypropyl Methyl-Cellulose for Removal of Cationic Dyes from an Aqueous Solution. 2022 , 14, 2147	0
125	Activated carbon (AC)-metal-organic framework (MOF) composite: Synthesis, characterization and dye removal.	0
124	Co-Utilization of Sewage Sludge and Rice Husk in Ceramsite Preparation with Selective Adsorption Capacity to Pb. 2022 , 15, 4310	1
123	Highly Efficient Functionalized Chitosan in the Development of Electrochemical Sensor for Trace Detection of Pb (II). 2022 , 169, 066513	
122	Adsorption of Crystal violet and Methylene blue Dyes using a Cellulose-based adsorbent from Sugercane bagasse: Characterization, kinetic and Isotherm studies. 2022 ,	11
121	One-step microwave method synthesis of Fe ₃ O ₄ nanoribbon@ carbon composite for Cr (VI) removal. 2022 , 121530	0
120	Fluffy ball-like magnetic covalent organic frameworks for adsorption and removal of organothiophosphate pesticides. 2022 , 840, 156529	0
119	Role of chitosan in eco-friendly management of plant diseases for sustainable agriculture. 2022 , 219-244	
118	Chitosan derivatives. 2022 , 155-185	
117	The period of application: From 1970 until now. 2022 , 125-148	
116	References. 2022 , 213-253	
115	Chitin and chitosan: Production, properties, and applications. 2022 , 149-207	1
114	Historical $r^{\wedge} \sum^{\wedge} !$ 2022 , 1-13	
113	Removal of arsenic from contaminated water using radiation-induced grafted chitosan: a critical review. 1-35	
112	Flexible self-supporting electrode for high removal performance of arsenic by capacitive deionization. 2022 , 299, 121732	2
111	Improved adsorption of Congo red from aqueous solution using alkali-treated goethite impregnated chitosan hydrogel capsule. 2022 , 10, 108244	
110	Development of a novel sensor with high sensitivity for electroanalytical determination of bisphenol A based on chitosan-3-mercaptopropyl trimethoxysilane modified glassy carbon electrode. 2022 , 181, 107748	

109	Fabrication of poly(maleic acid)-grafted cross-linked chitosan/montmorillonite nanospheres for ultra-high adsorption of anionic acid yellow-17 and cationic brilliant green dyes in single and binary systems. 2022 , 439, 129589	0
108	Characterization and adsorption of malachite green dye from aqueous solution onto <i>Salix alba</i> L. (Willow tree) leaves powder and its respective biochar. 1-11	1
107	Efficient removal of Rose Bengal and Malachite Green dyes using Green and sustainable Chitosan/CMC/Bentonite-based hydrogel materials.	0
106	Synthesis of Magnetic Chitosan Hydrogel from Crab Shells as an Environmentally Friendly Adsorbent for Water Purification. 2022 , 627-640	0
105	Kinetic modeling of adsorption of vanadium and iron from acid solution through ion exchange resins. 2022 , 32, 2438-2450	0
104	Biodegradable Polymer Matrix Composites Containing Graphene-Related Materials for Antibacterial Applications: A Critical Review. 2022 ,	5
103	Kinetics and Thermodynamic Study of Laponite Application in Caffeine Removal by Adsorption. 2022 , 9,	0
102	Preparation and Characterization of Chitosan/TiO ₂ Composite Membranes as Adsorbent Materials for Water Purification. 2022 , 12, 804	4
101	Effective adsorption of harmful herbicide diuron onto novel activated carbon from <i>Hovenia dulcis</i> . 2022 , 129900	1
100	A comprehensive review of food gels: formation mechanisms, functions, applications, and challenges. 1-23	1
99	Powerful cellulose phosphorylation by fertilizer-grade phosphate enables excellent methylene blue paper sorbent. 2022 , 219, 949-963	0
98	Morphological diversity effect of graphene quantum dot/MIL88A(Fe) composites on dye and pharmaceuticals (tetracycline and doxycycline) removal. 2022 , 10, 108321	0
97	Enhanced arsenite adsorption from water by activated MOF embedded in macroporous chitosan bionanocomposite beads. 2022 , 26, 101091	0
96	Adsorption of the dye Acid Blue 158 premetalized with chromium on chitin/chitosan. 2022 , 298, 120122	0
95	A simple AIE chemosensor based on diphenyl imidazole scaffold for 2,4,6-trinitrophenol detection and dye absorption. 2023 , 285, 121867	0
94	Magnetic metal-organic frameworks as adsorbents for the detection of azo pigments in food matrices. 2023 , 402, 134134	0
93	Interaction Mechanism of Uranium(VI) with Chitosan Hydrogel: Insights from the Perspective of Adsorbent and Adsorbate.	0
92	Adsorptive removal and concentration of rare-earth elements from aquatic media using various materials: A review. 2022 , 229-245	0

91	Chitosan-Based Composite Beads for Removal of Anionic Dyes. 2022 , 47-73	0
90	Synthesis, characterization, adsorption study, quantum mechanics, monte carlo and molecular dynamics of lead based polymeric compound towards mopping of aqueous methyl red dye. 2022 , 4, 100499	0
89	Investigating the sequestration potential of a novel biopolymer-modified ceria/montmorillonite nanocomposite for chromium and coomassie brilliant blue from the aqueous phase: equilibrium and kinetic studies. 2022 , 1, 558-569	1
88	Turning waste into wealth: efficient and rapid capture of gold from electronic waste with a thiourea functionalised magnetic core stirring rod adsorbent and its application for heterogeneous catalysis. 2022 , 24, 7592-7601	1
87	Green and Self-Cleaning Multi-Functional Composite Hydrogel Membrane for Efficient Purification of Emulsified Oil Wastewater Containing Pb ²⁺ Ions.	0
86	Design and principles of adsorbent-based reactors for modular wastewater treatment. 2022 , 129-148	0
85	Chitosan/Fe(III) Complexes via Green Preparation toward Flame Retardant and High-Mechanical-Strength Epoxy Composites.	0
84	Adsorption of Methylene Blue Using Tea Waste Treated with Alkaline-Potassium Hydroxide. 932, 59-69	0
83	Chitosan-based electrospun nanofibers mat for the removal of acidic drugs from influent and effluent. 1-23	0
82	Effect of Single-Walled Carbon Nanotubes on the Adsorption of Basic Red 12 Dye by Trimellitic Anhydride Isothiocyanate-Cross Linked Chitosan Hydrogel.	0
81	Interaction of protoporphyrinix (PPIX) and 5-amino levulinic acid (ALA) in nanoemulsion. 2022 , 6, 118-121	0
80	Chitosan-multilayered graphene oxide hybrid beads for Zn ²⁺ and metoprolol adsorption. 2022 , 25, 205-223	0
79	Adsorption of the First-Line Covid Treatment Analgesic onto Activated Carbon from Residual Pods of Erythrina Speciosa.	1
78	Synergistic Effects on the Mercury Sorption Behaviors Using Hybrid Cellulose Fiber/Chitosan Foam. 2022 , 7,	0
77	Industrially and biomedically important guar gum based nano composites and their methods of synthesis: a review. 1-23	0
76	Continuous Preparation of Chitosan-Based Self-Powered Sensing Fibers Recycled from Wasted Materials for Smart Home Applications.	1
75	Efficiently ion-enhanced adsorption of anion dyes by acrolein crosslinked polyethylenimine/chitosan hydrogel with excellent recycling stability. 2022 ,	2
74	Green multifunctional PVA composite hydrogel-membrane for the efficient purification of emulsified oil wastewater containing Pb ²⁺ ions. 2022 , 159271	1

- 73 Architectural MCM 41 was anchored to the Schiff base Co(II) complex to enhance methylene blue dye degradation and mimic activity. **2022**, 215, 114325 ○
- 72 Application of dairy sludge derived products for removal of pollutants from the industrial effluents: A way to sustainable disposal. **2022**, 267-289 ○
- 71 SYNTHESIS AND PROPERTIES OF CROSS-LINKED HYDROGELS BASED ON CHITOSAN AND POLYACRYLAMIDE. **2022**, 44, 214-221 ○
- 70 Colorimetric Indicators Based on Anthocyanin Polymer Composites: A Review. **2022**, 14, 4129 ○
- 69 Statistically optimized sequential hydrothermal route for FeTiO₃ surface modification: evaluation of hazardous cationic dyes adsorptive removal. 1
- 68 Para-amino Benzoate Ferroxane/Chitosan Nanocomposite as a Promising Adsorbent for Lead Wastewater Treatment. **2022**, 16, ○
- 67 Chitosan-modified magnetic carbon nanomaterials with high efficiency, controlled motility and reusability - for removal of chromium ions from real wastewater. ○
- 66 Design and Fabrication of a Robust Chitosan/Polyvinyl Alcohol-Based Humidity Sensor energized by a Piezoelectric Generator. **2022**, 15, 7609 ○
- 65 Treatment of residual lubricating oil using rice husk-based material as ecological adsorbent. ○
- 64 Slow-gathering areas of rivers, lakes, and reservoirs: Definition, estimation, and restoration. **2022**, ○
- 63 Chitosan beads coated with almond and walnut shells for the adsorption of gatifloxacin antibiotic compound from aqueous solutions. ○
- 62 Interaction mechanism of uranium(VI) with chitosan hydrogel: Insights from the perspective of adsorbent and adsorbate. **2023**, 546, 116194 ○
- 61 Dibenzo-18-crown-6-functionalized organic nanotubes for the synergistic adsorption of dyes and phenols from aqueous solutions. **2022**, 50, 103213 1
- 60 Protonated polyaniline and its derivatives as potential adsorbents for simultaneous reclamation of textile dyes and oil/water separation. **2023**, 293, 126913 ○
- 59 Evaluation of the adsorption of sulfamethoxazole (SMX) within aqueous influents onto customized ordered mesoporous carbon (OMC) adsorbents: Performance and elucidation of key adsorption mechanisms. **2023**, 454, 140082 ○
- 58 Novel Bionanocomposites Based on Cinnamon Nanoemulsion and TiO₂-NPs for Preserving Fresh Chicken Breast Fillets. ○
- 57 Synthesis of functionalized metal-organic framework metal-organic framework (MIL-53)/Chitosan for removing dye and pharmaceuticals. **2022**, 102471 1
- 56 Efficient removal of microplastics from aqueous solution by a novel magnetic biochar: performance, mechanism, and reusability. ○

55	Adsorptive removal of crystal violet from wastewater using sodium alginate-gelatin-montmorillonite ternary composite microbeads. 2022 , 223, 543-554	1
54	Sustainable Waste Recycling from the Fruit Pulp Industry Applied as an Adsorbent of Textile Dye. 2022 , 233,	0
53	Valorization of Agri-Food Waste and By-Products: Shellfish. 2023 ,	0
52	Superior intrinsic flame-retardant phosphorylated chitosan aerogel as fully sustainable thermal insulation bio-based material. 2023 , 207, 110213	0
51	Efficient phosphate adsorption by a composite composed of Mg ₆ Al ₂ (CO ₃)(OH) ₁₆ ·4H ₂ O LDH and Chitosan: kinetic, thermodynamic, desorption, and characterization studies. 2023 , 307, 122717	0
50	Explaining the adsorption mechanism of the herbicide 2,4-D and the drug ketoprofen onto wheat husks <i>Fagopyrum esculentum</i> treated with H ₂ SO ₄ . 2023 , 313, 137355	0
49	Discovery of artemisinin in <i>Artemisia annua</i> , its current production, and relevance to sub-Saharan Africa. 2023 , 153, 21-27	0
48	Reactive Black 5 bioremoval potential of newly isolated halotolerant <i>Kluyveromyces marxianus</i> . 1-16	0
47	Effect of the aqueous-organic solvent mixtures upon super-aggregation of chitosan. 2023 , 30,	1
46	Risedronate-loaded aerogel scaffolds for bone regeneration. 2023 , 30, 51-63	0
45	Mitigation of Non-Steroidal Anti-Inflammatory and Antiretroviral Drugs as Environmental Pollutants by Adsorption Using Nanomaterials as Viable Solution: A Critical Review. 2023 , 13, 772	0
44	Biosorption of methylene blue dye using a novel chitosan pectinase blend.	0
43	Experimental study and modelling of an azo colorant dynamic adsorption onto functional cross-linked chitosan/ ceramic particles in a fixed bed column.	0
42	Chitosan Composites for the Removal of Pollutants in Aqueous Environment. 2023 , 163-179	0
41	Removal of diclofenac from aqueous solution on apricot seeds activated carbon synthesized by pyro carbonic acid microwave. 2023 , 43, 100982	0
40	Facile synthesis of triazine-based microporous organic network for high-efficient adsorption of flumequine and nadifloxacin: A comprehensive study on adsorption mechanisms and practical application potentials. 2023 , 315, 137731	0
39	Feasibility of the adsorption as a process for its large scale adoption across industries for the treatment of wastewater: Research gaps and economic assessment. 2023 , 388, 136014	1
38	Sustainable hydrogels as an emerging material platform for water purification. 2023 , 375-395	0

- 37 Biosurfactants and Their Perspectives for Application in Drug Adsorption. **2023**, 237-255 ○
- 36 Chitosan Nanoparticles as Potential Nano-Sorbent for Removal of Toxic Environmental Pollutants. **2023**, 13, 447 1
- 35 Cellulose-based composite materials for dye wastewater treatment. **2023**, 267-282 ○
- 34 Effect of binder on CO₂, CH₄, and N₂ adsorption behavior, structural properties, and diffusion coefficients on extruded zeolite 13X. **2023**, 324, 138275 ○
- 33 Sustainable utilization of palladium from industrial catalytic waste by a smart magnetic nano stirring robot. **2023**, 315, 123536 ○
- 32 From the problem to the solution: Chitosan valorization cycle. **2023**, 309, 120674 ○
- 31 Zr⁴⁺ and glutaraldehyde cross-linked polyethyleneimine functionalized chitosan composite: Synthesis, characterization, Cr(VI) adsorption performance, mechanism and regeneration. **2023**, 239, 124266 ○
- 30 Paddle-Wheel-Shaped Porous Cu(II) Organic Framework with Two Different Channels as an Absorbent for Methylene Blue. **2023**, 62, 1735-1743 ○
- 29 Adsorption Cationic Dye on Modified Chitosan with Sodium Dodecyl Sulfate. **2023**, 57-63 ○
- 28 Magnetic CoFe₂O₄@HAp-GQDs nanocomposites for removal of Brilliant crystal blue dye using FCCD optimization and adsorption characterization. **2023**, 290, 116290 ○
- 27 Reduced Graphene Oxide-Modified Spinel Cobalt Ferrite Nanocomposite: Synthesis, Characterization, and Its Superior Adsorption Performance for Dyes and Heavy Metals. **2023**, 8, 6376-6390 ○
- 26 Biopolymer-Based Interpenetrating Polymer Networks. **2022**, 1-33 ○
- 25 Microwave-assisted fabrication for synthesis of magnetite chitosan-modified polymer composite hydrogel as rapid removal adsorbent for effective remediation of hazardous contaminants. ○
- 24 Hybrid Beads of Poly(Acrylonitrile-co-Styrene/Pyrrole)@Poly Vinyl Pyrrolidone for Removing Carcinogenic Methylene Blue Dye Water Pollutant. ○
- 23 Synthesis, Characterization, and Application of Dichloride (5,10,15,20-Tetraphenylporphyrinato) Antimony Functionalized Pectin Biopolymer to Methylene Blue Adsorption. **2023**, 15, 1030 ○
- 22 Introducing Semi-Interpenetrating Networks of Chitosan and Ammonium-Quaternary Polymers for the Effective Removal of Waterborne Pathogens from Wastewaters. **2023**, 15, 1091 ○
- 21 Removal of cationic dyes from a synthetic effluent using a calcium surfactant. **2023**, 18, 647-664 ○
- 20 Recent advances in chitosan based bioactive materials for food preservation. **2023**, 140, 108612 ○

- 19 Rare earths stick to rare cyanobacteria: Future potential for bioremediation and recovery of rare earth elements. 11,
- 18 Phycoremediation. **2023**, 451-469
- 17 Waste material recycled adsorbents for abatement of textile dyes. **2023**, 189-229
- 16 Study on the Competitive Adsorption of Pb (II) and Ni (II) in Aqueous Solution Onto B-nZVI and Its Stability After Adsorption. **2023**, 234,
- 15 Development of novel photocatalyst-impregnated adsorbents by using graphitic carbon nitride for organic dye removal in water. **2022**, 78, III_441-III_448
- 14 Adsorption of phosphate in aqueous solution by ash from the fruit peel of Caryocar Coriaceum WITTM: Characteristics and adsorption behavior.
- 13 Biobased materials for wastewater treatment. **2023**, 593-624
- 12 Amazon raw clay as a precursor of a clay-based adsorbent: experimental study and DFT analysis for the adsorption of Basic Yellow 2 dye.
- 11 A Feasibility Study on the Recall of Metallophilic Fungi from Fe(III)-Contaminated Soil and Evaluating Their Mycoremediation Capacity: Experimental and Theoretical Study. **2023**, 9, 382
- 10 Thermochemical conversion of non-edible fruit waste for dye removal from wastewater.
- 9 Selective purification of quercetin using covalently crosslinked chitosan.
- 8 Evaluation of Efficient Pb Removal from Aqueous Solutions using Biochar Beads. **2023**, 42, 35-43
- 7 Composite crosslinked chitosan beads with zeolitic imidazolate framework-67 as peroxymonosulfate activator for increased dye degradation. **2023**, 109909
- 6 Biopolymer based membrane technology for environmental applications. **2023**,
- 5 Utility of Acrylic Acid Grafted Lignocellulosic Waste Sugarcane Bagasse for the Comparative study of Cationic and Anionic Dyes Adsorption Applications. **2023**, 100824
- 4 Composite beads from chitosan and zeolitic imidazolate framework-8 for the adsorption and photocatalytic degradation of reactive red 141. **2023**, 13, 12295-12308
- 3 Review on Biogeochemical Characteristics of Typical Antibiotics in Groundwater in China. **2023**, 15, 6985
- 2 Introduction to biodegradable and biocompatible polymer nanocomposites: synthesis, structure, fundamental properties, biocompatibility, and biodegradability. **2023**, 1-34

- 1 Potential Application of Innovative *Aspergillus terreus*/ Sodium Alginate Composite Beads as Eco-Friendly and Sustainable Adsorbents for Alizarin Red S Dye: Isotherms and Kinetics Models. **2023**, 11, 1135

o