ChitosanA versatile semi-synthetic polymer in biomedical applications

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#	Paper	IF	Citations
2097	Optical-scattering method for the determination of the local polymer concentration inside nanoparticles. **2011**, 84, 022401		23
2096	Biomedical Activity of Chitin/Chitosan Based Materials□Influence of Physicochemical Properties Apart from Molecular Weight and Degree of N-Acetylation. **2011**, 3, 1875-1901		168
2095	Surface modification of crosslinked dextran nanoparticles influences transfection efficiency of dextran□polyethylenimine nanocomposites. **2011**, 7, 11360		19
2094	Effect of chitosan malate on viability and cytoskeletal structures morphology of Caco-2 cells. **2011**, 420, 223-30		5
2093	Theranostic applications of nanomaterials in cancer: drug delivery, image-guided therapy, and multifunctional platforms. **2011**, 165, 1628-51		245
2092	Novel injectable biodegradable glycol chitosan-based hydrogels crosslinked by Michael-type addition reaction with oligo(acryloyl carbonate)-b-poly(ethylene glycol)-b-oligo(acryloyl carbonate) copolymers. **2011**, 99, 316-26		54
2091	Water Soluble Polymers as Proton Exchange Membranes for Fuel Cells. **2012**, 4, 913-963		111
2090	Preparation and Preliminary Characterization of Chitosan from Catharsius molossus Discards. **2012**, 548, 77-81		
2089	Preparation and characterization of magnetic alginate-chitosan hydrogel beads loaded matrine. **2012**, 38, 872-82		10
2088	Design and application of chitosan microspheres as oral and nasal vaccine carriers: an updated review. **2012**, 7, 6077-93		61
2087	Preparation and Degradation Properties of Hydroxyethyl Chitosan-g-Poly(D,L-Lactide) Copolymers. **2012**, 457-458, 308-313		
2086	Synthesis and Thermal Properties of Novel Polyamides Containing □-Amino Acid Moieties: Structure-Property Relationship. **2012**, 49, 41-54		5
2085	Characterization of a conjugate between Rose Bengal and chitosan for targeted antibiofilm and tissue stabilization effects as a potential treatment of infected dentin. **2012**, 56, 4876-84		72
2084	Floating furosemide gel beads: in vitro and in vivo evaluation. **2012**, 22, 317-325		4
2083	Fabrication and Mechanical Properties of Chitosan-Montmorillonite Nano-Composite. **2012**, 512-515, 1746-1750		5
2082	Sintering of Chitosan and Chitosan Composites. **2012**,		1
2081	Biocompatibility of chitosan carriers with application in drug delivery. **2012**, 3, 615-41		190

2080	Hydrogels in mucosal delivery. **2012**, 3, 535-55	13
2079	Determination of Phase Behavior of Poly(ethylene oxide) and Chitosan Solution Blends Using Rheometry. **2012**, 45, 7621-7633	25
2078	Chitosan conjugates with biologically active compounds: design strategies, properties, and targeted drug delivery. **2012**, 61, 781-795	30
2077	Depolymerized chitosans functionalized with bPEI as carriers of nucleic acids and tuftsin-tethered conjugate for macrophage targeting. **2012**, 33, 4204-19	30
2076	Removal of Congo red dye from aqueous solution with hydroxyapatite/chitosan composite. **2012**, 211-212, 336-342	197
2075	Galactosylated chitosan nanoparticles for hepatocyte-targeted delivery of oridonin. **2012**, 436, 379-86	37
2074	Preparation, characterization and in vitro release study of a glutathione-dependent polymeric prodrug Cis-3-(9H-purin-6-ylthio)-acrylic acid-graft-carboxymethyl chitosan. **2012**, 436, 240-7	29
2073	Selective cell recruitment and spatially controlled cell attachment on instructive chitosan surfaces functionalized with antibodies. **2012**, 7, 65	17
2072	Fabrication and mechanical properties of chitosan composite membrane containing hydroxyapatite particles. **2012**, 1, 66-71	22
2071	Fragrance and Flavor Microencapsulation Technology. **2012**, 535-537, 440-445	37
2070	In vitro assessment of alkylglyceryl-functionalized chitosan nanoparticles as permeating vectors for the blood-brain barrier. **2012**, 13, 1067-73	32
2069	Natural Polymers with Antioxidant Properties: Poly-/oligosaccharides of Marine Origin. **2012**, 179-201	1
2068	Tuning the properties and functions of 17Β-estradiol-polysaccharide conjugates in thin films: impact of sample history. **2012**, 13, 4098-108	5
2067	Synthesis and self-assembly of biomimetic phosphorylcholine-bound chitosan derivatives. **2012**, 72, 745-751	15
2066	Polymeric nanocarriers for controlled and enhanced delivery of therapeutic agents to the CNS. **2012**, 3, 875-87	24
2065	Cationic polymers and their therapeutic potential. **2012**, 41, 7147-94	490
2064	Polyelectrolyte Multilayer Deposition on Nickel Modified with Self-Assembled Monolayers of Organophosphonic Acids for Biomaterials: Electrochemical and Spectroscopic Evaluation. **2012**, 116, 19252-19261	10
2063	Characterization of physicochemical parameters of nanoparticles formed from modified chitosan. **2012**, 7, 428-433	4

2062	Chitosan functionalized ionic liquid as a recyclable biopolymer-supported catalyst for cycloaddition of CO2. **2012**, 14, 654	276
2061	Antimicrobial macromolecules: synthesis methods and future applications. **2012**, 2, 4031	77
2060	Chitosan-Clay Bio-Nanocomposites. **2012**, 365-391	5
2059	Synthesis and characterization of a novel fish scale-immobilized chitosan adsorbent--preliminary features of dichlorophenol sorption by solution calorimetry. **2012**, 229-230, 346-53	9
2058	Preparation of chitosan/poly(acrylic acid) magnetic composite microspheres and applications in the removal of copper(II) ions from aqueous solutions. **2012**, 229-230, 371-80	220
2057	Bioconjugation of quantum-dots with chitosan and N,N,N-trimethyl chitosan. **2012**, 90, 189-96	49
2056	Lithium perchlorate doped plasticized chitosan and starch blend as biodegradable polymer electrolyte for supercapacitors. **2012**, 78, 398-405	107
2055	A molecularly imprinted sensor based on □cyclodextrin incorporated multiwalled carbon nanotube and gold nanoparticles-polyamide amine dendrimer nanocomposites combining with water-soluble chitosan derivative for the detection of chlortetracycline. **2012**, 26, 620-627	52
2054	Hydrogels Incorporating GdDOTA: Towards Highly Efficient Dual T1/T2 MRI Contrast Agents. **2012**, 124, 9253-9256	4
2053	Bioactivity and mechanical properties of collagen composite membranes reinforced by chitosan and □tricalcium phosphate. **2012**, 100, 1935-42	21
2052	Fabrication of chitosan-poly(ethylene glycol) hybrid hydrogel microparticles via replica molding and its application toward facile conjugation of biomolecules. **2012**, 28, 17061-70	40
2051	Stability of chitosan nanoparticles cross-linked with tripolyphosphate. **2012**, 13, 3747-56	154
2050	Chitosan/halloysite nanotubes bionanocomposites: structure, mechanical properties and biocompatibility. **2012**, 51, 566-75	236
2049	In vitro degradation of three-dimensional chitosan/apatite composite rods prepared via in situ precipitation. **2012**, 51, 868-73	13
2048	Chitosan-based hydrogels to induce neuronal differentiation of rat muscle-derived stem cells. **2012** , 51, 974-9	23
2047	Application of a cross-linked Pd□hitosan catalyst in liquid-phase-hydrogenation using molecular hydrogen. **2012**, 445-446, 231-238	23
2046	Inhibitory effects of trolox-encapsulated chitosan nanoparticles on tert-butylhydroperoxide induced RAW264.7 apoptosis. **2012**, 33, 8517-28	39
2045	Physical-chemical properties of cross-linked chitosan electrospun fiber mats. **2012**, 31, 1062-1069	40

2044	Preparation of high strength chitosan fibers by using ionic liquid as spinning solution. **2012**, 22, 8585	46
2043	Chitosan–nanobioactive glass electrophoretic coatings with bone regenerative and drug delivering potential. **2012**, 22, 24945	68
2042	Altered enzymatic activity of lysozymes bound to variously sulfated chitosans. **2012**, 30, 893-899	10
2041	Microfluidic-Based Synthesis of Hydrogel Particles for Cell Microencapsulation and Cell-Based Drug Delivery. **2012**, 4, 1084-1108	115
2040	In situ precipitation of amorphous calcium phosphate and ciprofloxacin crystals during the formation of chitosan hydrogels and its application for drug delivery purposes. **2012**, 28, 15937-46	33
2039	Synthesis and characterization of bead-like particles based on chitosan and vinyl polymers. **2012**, 19, 1	8
2038	An electrostatically crosslinked chitosan hydrogel as a drug carrier. **2012**, 17, 13704-11	31
2037	Bio-based nanocomposites obtained through covalent linkage between chitosan and cellulose nanocrystals. **2012**, 90, 210-7	110
2036	Pharmaceutical applications of biocompatible polymer blends containing sodium alginate. **2012**, 31, 219-230	52
2035	Hydrogels incorporating GdDOTA: towards highly efficient dual T1/T2 MRI contrast agents. **2012**, 51, 9119-22	117
2034	Kinetics of adsorption of methylene blue and rhodamine 6G on acrylic acid-based superabsorbents. **2012**, 126, 463-472	15
2033	Chitosan bio-based organic-inorganic hybrid aerogel microspheres. **2012**, 18, 8264-77	126
2032	Chitosan-based gastroretentive floating drug delivery technology: an updated review. **2012**, 9, 525-39	24
2031	Nanofibrous Structure of Chitosan for Biomedical Applications. **2012**, 02,	8
2030	Staudinger reduction chemistry of cellulose: synthesis of selectively O-acylated 6-amino-6-deoxy-cellulose. **2012**, 13, 992-1001	42
2029	Chitosan-based synthesis of magnetically-driven nanocomposites with biogenic magnetite core, controlled silver size, and high antimicrobial activity. **2012**, 14, 2550	79
2028	Effects of ionic strength on the size and compactness of chitosan nanoparticles. **2012**, 290, 919-929	94
2027	Synthesis and characterization of chitosan-homocysteine thiolactone as a mucoadhesive polymer. **2012**, 87, 2399-2408	31

2026	Preparation and characterization of IPN composite hydrogels based on polyacrylamide and chitosan and their interaction with ionic dyes. **2012**, 88, 270-281		84
2025	Effects of nanoliposomes based on soya, rapeseed and fish lecithins on chitosan thin films designed for tissue engineering. **2012**, 88, 618-627		37
2024	Green synthesis of hyaluronan fibers with silver nanoparticles. **2012**, 89, 411-22		73
2023	Study on the new bone cement based on calcium sulfate and Mg, CO3 doped hydroxyapatite. **2012**, 38, 4935-4942		27
2022	Effect of drying methods on the reactivity of chitosan towards Maillard reaction. **2012**, 29, 27-34		15
2021	Cross-linked chitosan microspheres for oral delivery of insulin: Taguchi design and in vivo testing. **2012**, 92, 175-9		73
2020	Chitosan-based luminescent/magnetic hybrid nanogels for insulin delivery, cell imaging, and antidiabetic research of dietary supplements. **2012**, 427, 400-9		57
2019	Chitosan-g-PEG nanoparticles ionically crosslinked with poly(glutamic acid) and tripolyphosphate as protein delivery systems. **2012**, 430, 318-27		69
2018	A novel surface modified nitrendipine nanocrystals with enhancement of bioavailability and stability. **2012**, 430, 366-71		40
2017	Direct deposition of chitosan macromolecules on a substrate from solutions in supercritical carbon dioxide: Solubility and conformational analysis. **2012**, 48, 906-918		9
2016	Synthesis and characterization of folic acid modified water-soluble chitosan derivatives for folate-receptor-mediated targeting. **2012**, 22, 3418-24		16
2015	Chitosan-based edible coatings for quality preservation of postharvest whiteleg shrimp (Litopenaeus vannamei). **2012**, 77, C491-6		76
2014	Characterization of electrophoretic chitosan coatings on stainless steel. **2012**, 66, 302-304		105
2013	Robocasting chitosan/nanobioactive glass dual-pore structured scaffolds for bone engineering. **2012**, 73, 119-122		47
2012	A novel biomimetic chitosan-based nanocarrier with suppression of the protein-nanocarrier interactions. **2012**, 77, 38-40		16
2011	ATRP in the design of functional materials for biomedical applications. *Progress in Polymer Science*, **2012**, 37, 18-37	29.6	447
2010	PEGylated chitosan derivatives: Synthesis, characterizations and pharmaceutical applications. *Progress in Polymer Science*, **2012**, 37, 659-685	29.6	171
2009	Design and characterization of a novel amphiphilic chitosan nanocapsule-based thermo-gelling biogel with sustained in vivo release of the hydrophilic anti-epilepsy drug ethosuximide. **2012**, 161, 942-8		74

2008	A novel and efficient epoxy/chitosan cement slurry for use in severe acidic environments of oil wells-Structural characterization and kinetic modeling. **2012**, 213-214, 109-16	24
2007	Hydrothermal synthesis of a nanostructured TiO2-based material in the presence of chitosan. **2012**, 48, 821-826	2
2006	Biotinylated chitosan-based SPIONs with potential in blood-contacting applications. **2012**, 14, 1	24
2005	Adsorption of anionic dyes on a reversibly swelling cationic superabsorbent polymer. **2013**, 127, 2251-2258	23
2004	Delivery of cisplatin from thermosensitive co-cross-linked chitosan hydrogels. **2013**, 49, 2504-2510	25
2003	Fabrication of poly(vinyl acetate)/polysaccharide biocomposite nanofibrous membranes for tissue engineering. **2013**, 21, 1233-1240	17
2002	Polymeric hollow micro and nanospheres for biotechnological applications: A focused review. **2013**, 109, 134-139	15
2001	In vitro evaluation of biomimetic chitosan-calcium phosphate scaffolds with potential application in bone tissue engineering. **2013**, 8, 025002	32
2000	Biocompatible multi-walled carbon nanotube-chitosan-folic acid nanoparticle hybrids as GFP gene delivery materials. **2013**, 111, 224-31	50
1999	Pectin-coated chitosan microgels crosslinked on superhydrophobic surfaces for 5-fluorouracil encapsulation. **2013**, 98, 331-40	42
1998	In vitro evaluation of paclitaxel loaded amorphous chitin nanoparticles for colon cancer drug delivery. **2013**, 104, 245-53	49
1997	Polyethyleneglycol crosslinked N-(2-hydroxyethyl)-polyethylenimine nanoparticles as efficient non-viral vectors for DNA and siRNA delivery in vitro and in vivo. **2013**, 9, 2322-30	6
1996	Antibacterial activity and cell viability of hyaluronan fiber with silver nanoparticles. **2013**, 92, 1177-87	68
1995	Development of carboxymethyl chitosan hydrogel beads in alcohol-aqueous binary solvent for nutrient delivery applications. **2013**, 31, 332-339	73
1994	Polysaccharide-based nucleic acid nanoformulations. **2013**, 65, 1123-47	140
1993	Chitosan nanoparticles: preparation, size evolution and stability. **2013**, 455, 219-28	369
1992	Heterogeneous modification of chitosan via nitroxide-mediated polymerization. **2013**, 4, 322-328	36
1991	Green Synthesis of Chitosan-Stabilized Copper Nanoparticles. **2013**, 2013, n/a-n/a	49

1990	Drug Delivery Systems: Advanced Technologies Potentially Applicable in Personalised Treatment. **2013**,	6
1989	Anti-biofouling 3D porous systems: the blend effect of oxazoline-based oligomers on chitosan scaffolds. **2013**, 29, 273-82	13
1988	Evaluation of cross-linked chitosan microparticles containing metronidazole for periodontitis treatment. **2013**, 33, 1197-202	49
1987	Influence of glucosamine on oligochitosan solubility and antibacterial activity. **2013**, 381, 28-32	9
1986	Biopolymer based nano-delivery systems for enhancing bioavailability of nutraceuticals. **2013**, 31, 1190-1203	42
1985	Polymeric nanogels as vaccine delivery systems. **2013**, 9, 159-73	78
1984	Chemical Modification of Chitosan and Its Biomedical Application. **2013**, 33-51	4
1983	Sequential antibiotic and growth factor releasing chitosan-PAAm semi-IPN hydrogel as a novel wound dressing. **2013**, 24, 807-19	31
1982	Synthesis of partially biobased polymer-bearing reactive epoxy groups in the side chains by radical copolymerization of limonene oxide with methyl acrylate. **2013**, 70, 1113-1123	7
1981	Formation of hyaluronic acid□llagic acid microfiber hybrid hydrogels and their applications. **2013**, 291, 515-525	2
1980	Polystyrene microsphere and 5-fluorouracil release from custom-designed wound dressing films. **2013**, 2, 1	56
1979	Novel biomimetic thermosensitive □tricalcium phosphate/chitosan-based hydrogels for bone tissue engineering. **2013**, 101, 2984-93	66
1978	Synthesis of chitosan 6-OH immobilized cyclodextrin derivates via click chemistry. **2013**, 14, 1058-1065	12
1977	Removal of Pb(II) from aqueous solution using dithiocarbamate modified chitosan beads with Pb(II) as imprinted ions. **2013**, 220, 412-419	102
1976	Adsorption of heavy metal ions, dyes and proteins by chitosan composites and derivatives □A review. **2013**, 12, 500-508	72
1975	Preparation of Microfibrillated Cellulose Composites for Sustained Release of H2O2or O2for Biomedical Applications. **2013**, 1, 1129-1134	37
1974	Formation of nano and microstructures by polysorbate□hitosan association. **2013**, 418, 29-38	14
1973	Access to tetra-N-acetyl-chitopentaose by chemical N-acetylation of glucosamine pentamer. **2013**, 98, 770-7	14

1972	Thiomer: A potential carrier for therapeutic delivery. **2013**, 73, 1156-1166	28
1971	Equilibrium and kinetic aspects of sodium cromoglycate adsorption on chitosan: mass uptake and surface charging considerations. **2013**, 109, 52-8	11
1970	Effects of Ar-H2-N2 microwave plasma on chitosan and its nanoliposomes blend thin films designed for tissue engineering applications. **2013**, 93, 401-11	13
1969	Preparation of ionically cross-linked pectin nanoparticles in the presence of chlorides of divalent and monovalent cations. **2013**, 14, 3523-31	54
1968	25th anniversary article: Engineering hydrogels for biofabrication. **2013**, 25, 5011-28	1194
1967	Blood contact properties of ascorbyl chitosan. **2013**, 24, 1969-87	1
1966	Investigation of the effects of local glutathione and chitosan administration on incisional oral mucosal wound healing in rabbits. **2013**, 112, 499-507	17
1965	Laccase-initiated reaction between phenolic acids and chitosan. **2013**, 73, 1377-1383	50
1964	A comparative study on antibacterial activities of chitosan based products and their combinations with gentamicin against S. epidermidis and E. coli. **2013**, 70, 3407-3423	10
1963	Synthesis, Structure, and Properties of Biopolymers (Natural and Synthetic). **2013**, 11-107	5
1962	Recent advances in application of chitosan in fuel cells. **2013**, 1, 16	61
1961	One-step colloidal synthesis of biocompatible water-soluble ZnS quantum dot/chitosan nanoconjugates. **2013**, 8, 512	56
1960	Antibacterial finishing of cotton fabrics using biologically active natural compounds. **2013**, 14, 1826-1833	10
1959	Bioinspired methodology for preparing magnetic responsive chitosan beads to be integrated in a tubular bioreactor for biomedical applications. **2013**, 8, 045008	13
1958	Development of new poly(?-caprolactone)/chitosan films. **2013**, 62, 1425-1432	2
1957	Modulating the cytocompatibility of tridimensional carbon nanotube-based scaffolds. **2013**, 1, 3064-3072	27
1956	Novel semi-interpenetrating polymer networks based on functionalized chitosan and poly(acrylic acid) with potential applications in soft tissue engineering. **2013**,	0
1955	Synthesis and characterization of hybrid nanostructures produced in the presence of the titanium dioxide and bioactive organic substances by hydrothermal method. **2013**, 198, 131-137	2

1954	Microfluidic self-assembly of polymeric nanoparticles with tunable compactness for controlled drug delivery. **2013**, 54, 4972-4979	60
1953	Fabrication of nano-fibrous poly(L-lactic acid) scaffold reinforced by surface modified chitosan micro-fiber. **2013**, 61, 353-8	21
1952	Maillard reaction products from chitosan-xylan ionic liquid solution. **2013**, 98, 835-41	26
1951	Toward mucoadhesive hydrogel formulations for the management of xerostomia: the physicochemical, biological, and pharmacological considerations. **2013**, 101, 3327-38	6
1950	Facile fabrication and cell imaging applications of aggregation-induced emission dye-based fluorescent organic nanoparticles. **2013**, 4, 4317	110
1949	Cancer cell targeting and imaging with biopolymer-based nanodevices. **2013**, 441, 234-41	9
1948	Characterization of spray dried chitosan□TPP microparticles formed by two- and three-fluid nozzles. **2013**, 240, 31-40	41
1947	Characterization of the interaction between chitosan and inorganic sodium phosphates by means of rheological and optical microscopy studies. **2013**, 91, 597-602	25
1946	An amelogenin-chitosan matrix promotes assembly of an enamel-like layer with a dense interface. **2013**, 9, 7289-97	74
1945	Fabrication and characterization of novel composite nanofiltration membranes based on zwitterionic O-carboxymethyl chitosan. **2013**, 317, 67-76	22
1944	Surface functionalization of polyethylene via covalent immobilization of O-stearoyl-chitosan. **2013**, 279, 424-431	20
1943	Chitosan-based biomaterials for tissue engineering. **2013**, 49, 780-792	1368
1942	Chitosan polymer as support to IgG immobilization for piezoelectric applications. **2013**, 274, 33-38	5
1941	Nanoscale assemblies and their biomedical applications. **2013**, 10, 20120740	87
1940	Polymer/nanosilver composite coatings for antibacterial applications. **2013**, 439, 69-83	182
1939	Smart heparin-based bioconjugates synthesized by a combination of ATRP and click chemistry. **2013**, 4, 2800	19
1938	Chitosan Based Delivery Systems on a Length Scale: Nano to Macro. **2013**, 11, 125-142	34
1937	Functionalized-chitosan/quantum dot nano-hybrids for nanomedicine applications: towards biolabeling and biosorbing phosphate metabolites. **2013**, 1, 1696-1711	104

1936	Recent advances in chitosan-based nanoparticles for oral delivery of macromolecules. **2013**, 65, 865-79	307
1935	Preparation and characterization of glycol chitin as a new thermogelling polymer for biomedical applications. **2013**, 92, 2267-75	47
1934	Recent advances on the development of wound dressings for diabetic foot ulcer treatment--a review. **2013**, 9, 7093-114	442
1933	Preparation and characterization of chitosan-silver nanocomposite films and their antibacterial activity against Staphylococcus aureus. **2013**, 24, 015101	109
1932	Electrochemical biosensor applications of polysaccharides chitin and chitosan. **2013**, 113, 5458-79	341
1931	Adhesive nanostructured multilayer films using a bacterial exopolysaccharide for biomedical applications. **2013**, 1, 2367-2374	63
1930	Versatile fabrication of arbitrarily shaped multi-membrane hydrogels suitable for biomedical applications. **2013**, 1, 485-492	23
1929	Green Chemistry Approaches to Develop Antimicrobial Textiles Based on Sustainable BiopolymersÂ Review. **2013**, 52, 5245-5260	190
1928	Enhanced mechanical property of chitosan via blending with functional poly(Ecaprolactone). **2013**, 51, 659-667	8
1927	Bioinspired antimicrobial and biocompatible bacterial cellulose membranes obtained by surface functionalization with aminoalkyl groups. **2013**, 5, 3290-7	175
1926	A novel direct contact method for the assessment of the antimicrobial activity of dental cements. **2013**, 93, 168-72	4
1925	Preparation and characterization of silk fibroin/chitosan composite sponges for tissue engineering. **2013**, 178, 5-14	96
1924	Advances in chitosan-based drug delivery vehicles. **2013**, 5, 3103-11	176
1923	Chitosan-based nanomaterials: a state-of-the-art review. **2013**, 59, 46-58	581
1922	Development and evaluation of a novel phytosome-loaded chitosan microsphere system for curcumin delivery. **2013**, 448, 168-74	116
1921	Biocompatible nanoparticles and gadolinium complexes for MRI applications. **2013**, 16, 531-539	10
1920	Preparation of a C6 quaternary ammonium chitosan derivative through a chitosan schiff base with click chemistry. **2013**, 129, 3185-3191	14
1919	Synthesis of water-soluble chitosan-coated nanoceria with excellent antioxidant properties. **2013**, 3, 6833	29

1918	Electrophoretic deposition of nanostructured-TiO2/chitosan composite coatings on stainless steel. **2013**, 3, 11247	61
1917	Impact of physical parameters on particle size and reaction yield when using the ionic gelation method to obtain cationic polymeric chitosan-tripolyphosphate nanoparticles. **2013**, 446, 199-204	62
1916	Synthesis and characterization of thiolated carboxymethyl chitosan-graft-cyclodextrin nanoparticles as a drug delivery vehicle for albendazole. **2013**, 24, 1939-49	32
1915	Bioplastics science from a policy vantage point. **2013**, 30, 635-46	71
1914	Polysaccharide-based micelles for drug delivery. **2013**, 5, 329-52	161
1913	Fabrication of poly(l-glutamic acid)/chitosan polyelectrolyte complex porous scaffolds for tissue engineering. **2013**, 1, 1541-1551	51
1912	Activity of chitosan-encapsulated Eucalyptus staigeriana essential oil on Haemonchus contortus. **2013**, 135, 24-9	45
1911	pH-sensitive multilayers based on maleic acid terpolymers with weak and strong acid moieties. **2013**, 436, 113-122	5
1910	Mechanical enhancement of nanofibrous scaffolds through polyelectrolyte complexation. **2013**, 24, 025701	31
1909	The Importance of Controlled/Living Radical Polymerization Techniques in the Design of Tailor Made Nanoparticles for Drug Delivery Systems. **2013**, 315-357	2
1908	Biopolymer capped silver nanoparticles as fluorophore for ultrasensitive and selective determination of malathion. **2013**, 115, 24-31	36
1907	Enhanced fluorescence of chitosan based on size change of micelles and application to directly selective detecting Fe□+ in human serum. **2013**, 42, 539-44	29
1906	Fabrication of sonicated chitosan nanofiber mat with enlarged porosity for use as hemostatic materials. **2013**, 97, 65-73	132
1905	Electrospun chitosan-based nanofiber mats loaded with Garcinia mangostana extracts. **2013**, 452, 333-43	104
1904	Fabrication, characterization and in vitro profile based interaction with eukaryotic and prokaryotic cells of alginate-chitosan-silica biocomposite. **2013**, 441, 555-61	32
1903	Chitosan/Riboflavin-modified demineralized dentin as a potential substrate for bonding. **2013**, 17, 278-89	26
1902	Build-up of an antimicrobial multilayer coating on a textile support based on a methylene blue-poly(cyclodextrin) complex. **2013**, 8, 065006	19
1901	Chitosan macroporous foams obtained in highly concentrated emulsions as templates. **2013**, 410, 33-42	12

1900	A highly efficient adsorbent synthesized by reactive depositions of chitosan layers on fish scale collagen□Hydrodynamic swelling and dichlorophenol derivative sorption evaluated by continuous long-term solution microcalorimetry. **2013**, 1, 480-485	3
1899	Facile and Mild Strategy Toward Biopolymer-Coated Boron Nitride Nanotubes via a Glycine-Assisted Interfacial Process. **2013**, 130911093342002	6
1898	CHAPTER 2:Antimicrobial Activity of Chitosan in Food, Agriculture and Biomedicine. **2013**, 22-53	9
1897	In vitro cytotoxicity assessment of ulvan, a polysaccharide extracted from green algae. **2013**, 27, 1143-8	42
1896	Preparation, characterization, antifungal activity, and mechanism of chitosan/TiO2 hybrid film against bipolaris maydis. **2013**, 128, 2623-2629	16
1895	Physico-chemical, mechanical and electrical performance of bael fruit gum□hitosan IPN films. **2013**, 30, 192-199	29
1894	Fundamental Characteristics of Bioprint on Calcium Alginate Gel. **2013**, 52, 05DB20	6
1893	Preparation and Characterization of Positively Charged Quaternized Chitosan/PEI Composite Nanofiltration Membranes. **2013**, 721, 45-48	
1892	Adsorption of Cr (VI) by Cross-Linked Magnetic Hydroxamated Chitosan. **2013**, 842, 175-179	
1891	Directing Osteoblast Alignment and Elongation on the Micro-Grooved Silica-Based Hybrid Membrane. **2013**, 647, 165-169	2
1890	One-step biofunctionalization of quantum dots with chitosan and N-palmitoyl chitosan for potential biomedical applications. **2013**, 18, 6550-72	33
1889	Broadband Dielectric Relaxation Spectroscopy of Functionalized Biobased Castor Oil Copolymer Thermosets. **2013**, 214, 2891-2902	3
1888	Nonionic polymer cross-linked chitosan hydrogel: preparation and bioevaluation. **2013**, 24, 1564-74	25
1887	Colloids and Colloid Drug Delivery System. **2013**, 531-540	
1886	Polymers from Renewable Resources. **2013**, 1, 83-112	18
1885	Synthesis, characterization, and antimicrobial properties of copper nanoparticles. **2013**, 8, 4467-79	210
1884	Synthesis and characterization of low-toxicity N-caprinoyl-N-trimethyl chitosan as self-assembled micelles carriers for osthole. **2013**, 8, 3543-58	15
1883	Innovative systems and applications. 326-352	

1882	Removal of Cobalt (II) Ions from Aqueous Solution on Zinc(II) Ions Doping Chitosan/Hydroxyapatite Composite. **2013**, 22, 096369351302200	0
1881	Chitooligosaccharide-2,5-anhydro-D-mannonic Acid. **2014**, 2014, M832	4
1880	Drug Carrier Systems Using Chitosan for Non Parenteral Routes. **2014**,	5
1879	Zeta Potential and Turbidimetry Analyzes for the Evaluation of Chitosan/Phytic Acid Complex Formation. **2014**, 3, 71	23
1878	Chitosan Extrusion at High Solids Content: An Orthogonal Experimental Design Study. **2014**, 5, 1-11	
1877	. **2014**,	5
1876	. **2014**,	8
1875	. **2014**,	1
1874	Preparation and application of positively charged quaternized chitosan/PEI composite nanofiltration membranes. **2014**, 52, 5790-5795	12
1873	The potential utility of chitosan micro/nanoparticles in the treatment of gastric infection. **2014**, 12, 981-92	39
1872	Improved pig slurry mechanical separation using chitosan and biochar. **2014**, 127, 115-124	12
1871	Chemical Modifications of Chitosan and Its Applications. **2014**, 53, 1494-1505	51
1870	Release behavior and kinetic evaluation of berberine hydrochloride from ethyl cellulose/chitosan microspheres. **2014**, 8, 373-382	2
1869	The Development of Hot Melt Extruded Biocompatible Controlled Release Drug Delivery Devices. **2014**, 63, 476-485	9
1868	Precision printing of gelatin utilizing electrostatic inkjet. **2014**, 53, 05HC01	9
1867	Biodegradable Chitosan Scaffolds: Effect of Genipin Crosslinking. **2014**, 805, 116-121	4
1866	Polymers in oral insulin delivery. **2014**, 257-310	9
1865	Experimental and model study of the formation of chitosan-tripolyphosphate-siRNA nanoparticles. **2014**, 292, 2869-2880	4

1864	CHAPTER 16:Cationic Polymers as Gene-Activated Matrices for Biomedical Applications. **2014**, 438-462	
1863	CHAPTER 15:Cationic Polymers for Gene Delivery into Mesenchymal Stem Cells as a Novel Approach to Regenerative Medicine. **2014**, 386-437	
1862	Evaluation of Osseointegration Ability of Porous Polyethylene Implant (Medpor) Treated with Chitosan. **2014**, 2014, 1-9	1
1861	Effects of preparation methods on the bone formation potential of apatite-coated chitosan microspheres. **2014**, 25, 2080-93	9
1860	Preparation and Analyzing Character of Chitosan Block in Fluffy Meshwork Shape Formed from Chitosan Fine Hair. **2014**, 910, 53-56	
1859	Preparation, Characterization, and Bioactivity of Chitosan Microspheres Containing Basic Fibroblast Growth Factor. **2014**, 2014, 1-7	4
1858	Preparation and characterisation of laminated hydroxyapatite/chitosan composite hydrogels. **2014**, 43, 71-75	1
1857	Bioprinting Technology: A Current State-of-the-Art Review. **2014**, 136,	253
1856	The Study of Zinc Doped in Chitosan-Hydrxyapatite Composite. **2014**, 926-930, 383-386	
1855	On prilling of hydrophilic microgels in lipid dispersions using mono-N-carboxymethyl chitosan for oral biologicals delivery. **2014**, 103, 3675-3687	4
1854	Modification of the chitosan structure and properties using high-energy chemistry methods. **2014**, 48, 293-302	10
1853	Microparticles based on hydrophobically modified chitosan as drug carriers. **2014**, 131, n/a-n/a	7
1852	CHAPTER 1:Functionalization of Cationic Polymers for Drug Delivery Applications. **2014**, 1-29	10
1851	CHAPTER 11:Cationic Polymer Nanoparticles for Drug and Gene Delivery. **2014**, 268-295	1
1850	Utilization of flax fibers for biomedical applications. **2014**, 102, 477-87	9
1849	Amphiphilic polysaccharide nanocarriers with antioxidant properties. **2014**, 29, 589-606	6
1848	Tunable stability of monodisperse secondary O/W nano-emulsions. **2014**, 6, 9300-7	27
1847	Utilization of carboxymethyl chitosan in cosmetics. **2014**, 36, 12-21	106

1846	Enzymatic control of chitosan gelation for delivery of periodontal ligament cells. **2014**, 14, 1004-14	10
1845	Chitosan-alginate biocomposite containing fucoidan for bone tissue engineering. **2014**, 12, 300-16	165
1844	N-functionalization of chitosan with bis-O-glycosylated derivative of 2,2-bis(methylol)propionic acid. **2014**, 21, 4145-4156	4
1843	Chitosan nanoparticles for dermaseptin peptide delivery toward tumor cells in vitro. **2014**, 25, 323-31	8
1842	Study of Electrospun Chitosan Nanofibrous Coated Webs. **2014**, 27, 129-141	2
1841	ZnAl2O4/Chitosan Films and Evaluation of the Influence of ZnAl2O4 Filler on the Films Morphology, Structure and Thermal Properties. **2014**, 775-776, 692-695	
1840	Traditional Chitin and Chitosan Biomaterials Research. **2014**, 29-50	1
1839	4-(Hexyloxy)aniline-linked chitooligosaccharide-2,5-anhydro-D-mannofuranose. **2014**, 2014, M815	5
1838	Electrospun chitosan/polyvinyl alcohol nanofibre mats for wound healing. **2014**, 11, 215-22	70
1837	Poly(L-glutamic acid)/chitosan polyelectrolyte complex porous microspheres as cell microcarriers for cartilage regeneration. **2014**, 10, 276-88	90
1836	Antibiofilm efficacy of photosensitizer-functionalized bioactive nanoparticles on multispecies biofilm. **2014**, 40, 1604-10	66
1835	Chitosan and chitosan composites reinforced with carbon nanostructures. **2014**, 615, S515-S521	6
1834	Mechanical, thermal and acoustical characterizations of an insulating bio-based composite made from sunflower stalks particles and chitosan. **2014**, 58, 244-250	92
1833	Fabrication and characterization of ZnxCd1□S nanoparticles in chitosan alginate nanocomposite films. **2014**, 40, 4869-4873	5
1832	Preparation of polysaccharide derivates chitosan-graft-poly(e-caprolactone) amphiphilic copolymer micelles for 5-fluorouracil drug delivery. **2014**, 116, 745-50	61
1831	Adaptogenic effects of dihydroquercetin-chitosan composition during modeling of acute hypoxia. **2014**, 156, 306-9	3
1830	The effect of degree of deacetylation on the radiation induced degradation of chitosan. **2014**, 94, 236-239	27
1829	Dual-responsive polymer-coated iron oxide nanoparticles for drug delivery and imaging applications. **2014**, 466, 1-7	58

1828	Determination of picogram quantities of chlortoluron in soil samples by luminol-chitosan chemiluminescence system. **2014**, 21, 7204-10	5
1827	Development of methods for encapsulation of viruses into polymeric nano- and microparticles for aquaculture vaccines. **2014**, 131, n/a-n/a	6
1826	Preparation and evaluation of chitosanHydrophobic silica composite microspheres: Role of hydrophobic silica in modifying their properties. **2014**, 255, 109-119	27
1825	Strategies to improve chitosan hemocompatibility: A review. **2014**, 53, 171-188	156
1824	ChitosanDNA complexes: Effect of molecular parameters on the efficiency of delivery. **2014**, 460, 184-190	27
1823	Chitin and chitosan in selected biomedical applications. *Progress in Polymer Science*, **2014**, 39, 1644-166729.6	645
1822	Preparation, physical-chemical and biological characterization of chitosan nanoparticles loaded with lysozyme. **2014**, 67, 124-31	48
1821	Enhanced cell affinity of chitosan membranes mediated by superficial cross-linking: a straightforward method attainable by standard laboratory procedures. **2014**, 15, 291-301	16
1820	Novel strategies for the buccal delivery of macromolecules. **2014**, 40, 579-90	42
1819	Antibacterial efficacy of photosensitizer functionalized biopolymeric nanoparticles in the presence of tissue inhibitors in root canal. **2014**, 40, 566-70	32
1818	Dry powders for oral inhalation free of lactose carrier particles. **2014**, 75, 32-52	132
1817	Chitosan-sheath and chitin-core nanowhiskers. **2014**, 107, 158-66	69
1816	Evaluation of wool nanoparticles incorporation in chitosan/gelatin composite films. **2014**, 131, n/a-n/a	11
1815	Study on multilayer structures prepared from heparin and semi-synthetic cellulose sulfates as polyanions and their influence on cellular response. **2014**, 116, 93-103	21
1814	Mechanical behavior of transparent nanofibrillar cellulose-chitosan nanocomposite films in dry and wet conditions. **2014**, 32, 279-286	73
1813	In-situ preparation of NaA zeolite/chitosan porous hybrid beads for removal of ammonium from aqueous solution. **2014**, 107, 103-9	32
1812	Preparation of mono-dispersed silver nanoparticles assisted by chitosan-g-poly(e-caprolactone) micelles and their antimicrobial application. **2014**, 301, 273-279	15
1811	Chitosan/agarose hydrogels: cooperative properties and microfluidic preparation. **2014**, 111, 348-55	61

1810	Natural polymer biomaterials: advanced applications. **2014**, 32-70		18
1809	Chitosan mouthwash: toxicity and in vivo validation. **2014**, 111, 385-92		21
1808	Chilli hotness determination based on optical capsaicin biosensor using stacked immobilisation technique. **2014**, 190, 593-600		14
1807	Chitosan-DNA complexes: charge inversion and DNA condensation. **2014**, 114, 1-10		38
1806	Oxidized dextrins as alternative crosslinking agents for polysaccharides: application to hydrogels of agarose-chitosan. **2014**, 10, 798-811		52
1805	A facile construction method for pH and oxidation dual-responsive assembly based on ferrocene-modified chitooligosaccharide. **2014**, 76, 1-7		4
1804	Nitric oxide-releasing chitosan oligosaccharides as antibacterial agents. **2014**, 35, 1716-24		114
1803	Chitosan-g-hematin: enzyme-mimicking polymeric catalyst for adhesive hydrogels. **2014**, 10, 224-33		53
1802	Novel hydrogels of chitosan and poly(vinyl alcohol)-g-glycolic acid copolymer with enhanced rheological properties. **2014**, 103, 267-73		37
1801	Investigation of the local delivery of an intelligent chitosan-based 188Re thermosensitive in situ-forming hydrogel in an orthotopic hepatoma-bearing rat model. **2014**, 299, 31-40		8
1800	Chitosan nanoparticles for ocular delivery of cyclosporine A. **2014**, 31, 49-57		43
1799	Antimicrobial hydrogels: a new weapon in the arsenal against multidrug-resistant infections. **2014**, 78, 46-62		193
1798	In situ-forming injectable hydrogels for regenerative medicine. *Progress in Polymer Science*, **2014**, 39, 1973-1986	29.6	361
1797	Recent developments in the chemistry of thiourea oxides. **2014**, 20, 14164-76		37
1796	Synthesis of a semi-interpenetrating polymer network as a bioactive curcumin film. **2014**, 15, 1476-89		15
1795	Effects of micro and nano β-TCP fillers in freeze-gelled chitosan scaffolds for bone tissue engineering. **2014**, 131,		27
1794	Hydrolysis of chitozan with an enzyme complex from Myceliophthora sp.. **2014**, 50, 381-386		9
1793	Semi-interpenetrating polymer networks prepared from in situ cationic polymerization of bio-based tung oil with biodegradable polycaprolactone. **2014**, 4, 6710		14

1792	Microfluidic preparation of chitosan–poly(acrylic acid) composite microspheres with a porous surface structure. **2014**, 4, 37142-37147	11
1791	Advanced Protein Composite Materials. **2014**, 177-208	4
1790	Nitric oxide-releasing S-nitrosated derivatives of chitin and chitosan for biomedical applications. **2014**, 2, 7449-7458	35
1789	Silk/chitosan biohybrid hydrogels and scaffolds via green technology. **2014**, 4, 53547-53556	30
1788	A functional biphasic biomaterial homing mesenchymal stem cells for in´vivo cartilage regeneration. **2014**, 35, 9608-19	96
1787	Preparation and characterization of chitosan-based nanofibers by ecofriendly electrospinning. **2014** , 132, 23-26	20
1786	Chitosan derivatives cross-linked with iodinated 2,5-dimethoxy-2,5-dihydrofuran for non-invasive imaging. **2014**, 6, 17926-36	17
1785	Precipitation of chitosan from ionic liquid solution by the compressed CO2 anti-solvent method. **2014**, 16, 2102-2106	37
1784	Recyclable antibacterial material: silicon grafted with 3,6-O-sulfated chitosan and specifically bound by lysozyme. **2014**, 2, 569-576	26
1783	Development of hydroxyethylacryl chitosan/alginate hydrogel films for biomedical application. **2014**, 21, 1	17
1782	Emulsion cross-linked chitosan/nanohydroxyapatite microspheres for controlled release of alendronate. **2014**, 25, 2649-58	19
1781	Molecular simulation and experimental studies of the miscibility of chitosan/poly(ethylene oxide) blends. **2014**, 21, 1	6
1780	Thermal gelation of chitosan in an aqueous alkali-urea solution. **2014**, 10, 8245-53	25
1779	A transdermal device from 2-hydroxyethyl methacrylate grafted carboxymethyl guar gum–multi-walled carbon nanotube composites. **2014**, 4, 13546	13
1778	Synthesis, characterization and biocompatibility of chitosan functionalized superparamagnetic nanoparticles for heat activated curing of cancer cells. **2014**, 43, 17343-51	44
1777	Design, synthesis, fabrication and in vitro evalution of mucoadhesive 5-amino-2-mercaptobenzimidazole chitosan as low water soluble drug carriers. **2014**, 88, 986-97	17
1776	Chitosan improves stability of carbon nanotube biocathodes for glucose biofuel cells. **2014**, 50, 14535-8	33
1775	Chitosan nanoparticles generation using CO2 assisted processes. **2014**, 95, 118-128	14

1774	From crab shells to smart systems: chitosan-alkylethoxy carboxylate complexes. **2014**, 30, 10608-16	29
1773	Emerging trends and new developments in regenerative medicine: a scientometric update (2000 - 2014). **2014**, 14, 1295-317	227
1772	The dissolution behaviour of chitosan in acetate-based ionic liquids and their interactions: from experimental evidence to density functional theory analysis. **2014**, 4, 30282-30291	45
1771	Chitosan as an Advanced Healthcare Material. **2014**, 147-182	1
1770	Hierarchical structure and physicochemical properties of plasticized chitosan. **2014**, 15, 1216-24	31
1769	Long-term antibiotic delivery by chitosan-based composite coatings with bone regenerative potential. **2014**, 317, 56-66	62
1768	Non-cytotoxic conductive carboxymethyl-chitosan/aniline pentamer hydrogels. **2014**, 82, 81-88	37
1767	Hydrophobic chitosan sponges modified by aluminum monostearate and dehydrothermal treatment as sustained drug delivery system. **2014**, 42, 715-25	6
1766	Directing chondrogenic differentiation of mesenchymal stem cells with a solid-supported chitosan thermogel for cartilage tissue engineering. **2014**, 9, 035008	39
1765	Mucoadhesive properties and interaction with P-glycoprotein (P-gp) of thiolated-chitosans and -glycol chitosans and corresponding parent polymers: a comparative study. **2014**, 15, 882-93	34
1764	Tailoring of Clay/Poly(ethylene oxide) Hydrogel Properties by Chitosan Incorporation. **2014**, 53, 13690-13698	16
1763	Cyclic RGD-modified chitosan/graphene oxide polymers for drug delivery and cellular imaging. **2014**, 122, 332-340	65
1762	Modulated release from liposomes entrapped in chitosan/gelatin hydrogels. **2014**, 43, 383-91	40
1761	Thermal preparation of chitosan-acrylic acid superabsorbent: optimization, characteristic and water absorbency. **2014**, 113, 296-303	62
1760	Development of a Novel Nanoparticle-based Therapeutic Vaccine for Breast Cancer Immunotherapy. **2014**, 8, 62-67	5
1759	Study of in vitro degradation of brushite cements scaffolds. **2014**, 25, 2297-303	11
1758	The influence of formulation and processing parameters on the thermal properties of a chitosan□epoxy prepolymer system. **2014**, 63, 420-426	24
1757	In vitro assessment of three dimensional dense chitosan-based structures to be used as bioabsorbable implants. **2014**, 40, 413-425	15

1756	Analgesis and wound healing effect of chitosan and carboxymethyl chitosan on scalded rats. **2014**, 13, 837-841	14
1755	Interface behavior of quaternized chitosan on cellulosic substrates. **2014**, 15, 1450-1455	7
1754	Prevention of peritendinous adhesions with electrospun chitosan-grafted polycaprolactone nanofibrous membranes. **2014**, 10, 4971-4982	58
1753	Chitosan as an adhesive. **2014**, 60, 198-212	144
1752	Effect of neutralization and cross-linking on the thermal degradation of chitosan electrospun membranes. **2014**, 117, 123-130	10
1751	Silver-doped hydroxyapatite coatings formed on Ti-6Al-4V substrates and their characterization. **2014**, 36, 215-20	36
1750	Preparation of immobilized glucose oxidase and its application in improving breadmaking quality of commercial wheat flour. **2014**, 161, 1-7	18
1749	T7 bacteriophage induced changes of gold nanoparticle morphology: biopolymer capped gold nanoparticles as versatile probes for sensitive plasmonic biosensors. **2014**, 139, 3563-71	21
1748	Thermosensitive chitosan/glycerophosphate-based hydrogel and its derivatives in pharmaceutical and biomedical applications. **2014**, 11, 249-67	95
1747	Preparation and in vitro evaluation of surface-modified poly (lactide-co-glycolide) microparticles as biodegradable drug carriers for pulmonary peptide and protein delivery. **2014**, 31, 355-62	6
1746	Preparation of electrocatalytically active chitosan biopolymer films by solvent-dependant electrophoretic deposition. **2014**, 44, 927-934	1
1745	Novel biocompatible pH-stimuli responsive superparamagnetic hybrid hollow microspheres as tumor-specific drug delivery system. **2014**, 122, 99-106	22
1744	Enhanced proton conductivity of hybrid membranes by incorporating phosphorylated hollow mesoporous silica submicrospheres. **2014**, 469, 418-427	38
1743	Chitosan-dextran branched copolymers: Synthesis and properties. **2014**, 56, 341-351	4
1742	Vaginal drug delivery: strategies and concerns in polymeric nanoparticle development. **2014**, 11, 1419-34	40
1741	Green and facile synthesis of water-soluble ZnS quantum dots nanohybrids using chitosan derivative ligands. **2014**, 16, 1	12
1740	pH-sensitive chitosan-based hydrogel nanoparticles through miniemulsion polymerization mediated by peroxide containing macromonomer. **2014**, 14, 1076-83	11
1739	Efficient sorption of Cu(2+) by composite chelating sorbents based on potato starch-graft-polyamidoxime embedded in chitosan beads. **2014**, 6, 16577-92	117

1738	Modification ofBombyx morisilk fabrics by tyrosinase-catalyzed grafting of chitosan. **2014**, 14, 211-217	24
1737	Chitin nanocrystal reinforced wet-spun chitosan fibers. **2014**, 131, n/a-n/a	11
1736	A comprehensive study into the impact of a chitosan mouthwash upon oral microorganism's biofilm formation in vitro. **2014**, 101, 1081-6	62
1735	Development of new albumen based biocomposites formulations by injection moulding using chitosan as physicochemical modifier additive. **2014**, 61, 275-281	16
1734	Novel macroporous palladium cation crosslinked chitosan membranes for heterogeneous catalysis application. **2014**, 68, 189-97	30
1733	Structural analysis of chitosan hydrogels containing polymeric nanocapsules. **2014**, 42, 234-42	25
1732	Mediated differentiation of stem cells by engineered semiconducting silicon nanowires. **2014**, 118-143	
1731	Synthesis of Doxorubicin loaded magnetic chitosan nanoparticles for pH responsive targeted drug delivery. **2014**, 62, 243-50	207
1730	Natural Polymer Bioconjugate Systems. **2014**, 133-145	2
1729	Controlling the complexation of polysaccharides into multi-functional colloidal assemblies for nanomedicine. **2014**, 430, 147-56	24
1728	Influence of the acid type in the production of chitosan films reinforced with bacterial nanocellulose. **2014**, 69, 208-13	45
1727	Chitosan-silica hybrid porous membranes. **2014**, 42, 553-61	49
1726	Vaginal chitosan tablets with clotrimazole-design and evaluation of mucoadhesive properties using porcine vaginal mucosa, mucin and gelatine. **2014**, 62, 160-7	36
1725	Polysaccharide nanosystems for future progress in cardiovascular pathologies. **2014**, 4, 579-91	40
1724	Influence of unmodified and □glycerophosphate cross-linked chitosan on anti-Candida activity of clotrimazole in semi-solid delivery systems. **2014**, 15, 17765-77	17
1723	Chitosan. **2014**, 233-254	2
1722	Effect of Degree of Deacetylation of Chitosan on Macrophage Function. **2014**, 95-104	
1721	Advances in techniques and technologies for bone implants. **2015**, 4, 26-36	4

1720	Synthesis and characterization of composites filtration membranes based on chitosan-poly(ethylene glycol). **2015**,	1
1719	Chapter 44Enzyme Immobilization in Biodegradable Polymers for Biomedical Applications. **2015**, 981-1004	
1718	Biomaterials for Functional Applications in the Oral Cavity via Contemporary Multidimensional Science. **2015**, 365-411	
1717	. **2015**,	0
1716	pH-sensitive polyelectrolyte films derived from submicron chitosan/Eudragit® L 100-55 complexes: Physicochemical characterization and in vitro drug release. **2015**, 132, n/a-n/a	9
1715	Effects of glucose-functionalized multiwalled carbon nanotubes on the structural, mechanical, and thermal properties of chitosan nanocomposite films. **2015**, 132, n/a-n/a	14
1714	Bioactive Chitosan Nanoparticles Loaded with Retinyl Palmitate: A Simple Route Using Ionotropic Gelation. **2015**, 216, 1321-1332	7
1713	Improvements of Tensile Properties and Durability of Chitosan Fiber Using Methanol Drying Treatment. **2015**, 353, 147-153	3
1712	DC Discharge Plasma Modification of Chitosan Films: An Effect of Chitosan Chemical Structure. **2015**, 12, 710-718	21
1711	Cytocompatible Fluorescent Quantum Dot/PEG-Chitosan Bioconjugates for Nanomedicine Applications. **2015**, 2015, 4555-4564	4
1710	Biodegradable Polymeric Films and Membranes Processing and Forming for Tissue Engineering. **2015**, 300, 858-877	36
1709	Development and Characterization of Novel Hybrid Hydrogel Fibers. **2015**, 300, 1217-1225	27
1708	Evaluation of Biocompatibility of Chitosan Films from the Mycelium of Aspergillus niger in Connective Tissue of Rattus norvegicus. **2015**, 09,	
1707	Efeito da modificação química na solubilidade e intumescimento de microesferas à base de goma do cajueiro carboximetilada e quitosana. **2015**, 25, 31-39	4
1706	Stability of chitosan-a challenge for pharmaceutical and biomedical applications. **2015**, 13, 1819-46	434
1705	Preparation and Characterization of Chitosan-Coated Poly(l-Lactic Acid) Fibers and Their Braided Rope. **2015**, 3, 380-393	7
1704	Composite Chitosan/Agarose Ferrogels for Potential Applications in Magnetic Hyperthermia. **2015**, 1, 69-80	28
1703	Chitosan in mucoadhesive drug delivery: focus on local vaginal therapy. **2015**, 13, 222-36	39

1702	The potential of chitosan and its derivatives in prevention and treatment of age-related diseases. **2015**, 13, 2158-82	82
1701	Alginate hydrogels coated with chitosan for wound dressing. **2015**, 13, 2890-908	102
1700	Proteomic analysis of polysaccharide-milk protein interactions induced by chitosan. **2015**, 20, 7737-49	10
1699	Hyaluronic Acid-Chitosan Nanoparticles to Deliver Gd-DTPA for MR Cancer Imaging. **2015**, 5, 1379-1396	20
1698	The Effect of β-Glycerophosphate Crosslinking on Chitosan Cytotoxicity and Properties of Hydrogels for Vaginal Application. **2015**, 7, 2223-2244	26
1697	Chitosan/siRNA nanoparticles targeting cyclooxygenase type 2 attenuate unilateral ureteral obstruction-induced kidney injury in mice. **2015**, 5, 110-23	52
1696	Development of dual-sensitive smart polymers by grafting chitosan with poly (N-isopropylacrylamide): an overview. **2015**, 25, 237-246	14
1695	Bone regeneration by nanohydroxyapatite/chitosan/poly(lactide-co-glycolide) scaffolds seeded with human umbilical cord mesenchymal stem cells in the calvarial defects of the nude mice. **2015**, 2015, 261938	9
1694	Comparison and Characterisation of Regenerated Chitosan from 1-Butyl-3-methylimidazolium Chloride and Chitosan from Crab Shells. **2015**, 2015, 874316	12
1693	Hydrogels and Cell Based Therapies in Spinal Cord Injury Regeneration. **2015**, 2015, 948040	103
1692	Genipin Cross-Linked Chitosan-Polyvinylpyrrolidone Hydrogels: Influence of Composition and Postsynthesis Treatment on pH Responsive Behaviour. **2015**, 2015, 1-10	18
1691	. **2015**,	8
1690	Sub-nanoscale free volume and local elastic modulus of chitosan-carbon nanotube biomimetic nanocomposite scaffold-materials. **2015**, 3, 3169-3176	8
1689	Current state on the development of nanoparticles for use against bacterial gastrointestinal pathogens. Focus on chitosan nanoparticles loaded with phenolic compounds. **2015**, 130, 429-39	40
1688	Effects of chitosan coating on biocompatibility of Mg□%Zn□0%Ca3(PO4)2 implant. **2015**, 25, 824-831	19
1687	An Efficient Synthesis of Tri- and Tetrasubstituted Imidazoles from Benzils Using Functionalized Chitosan as Biodegradable Solid Acid Catalyst. **2015**, 54, 6611-6618	30
1686	A new route to polymeric materials derived from chitosan and natural rubber. **2015**, 72, 2311-2330	5
1685	Bacterial cellulose in the field of wound healing and regenerative medicine of skin: recent trends and future prospectives. **2015**, 72, 2399-2419	88

1684	Molecular dynamics simulation study of chitosan and gemcitabine as a drug delivery system. **2015**, 21, 165	41
1683	Carboxyl-modified poly(vinyl alcohol)-crosslinked chitosan hydrogel films for potential wound dressing. **2015**, 125, 189-99	170
1682	Nanohybrid Nanoparticles Based on Chitosan/Functionalized Carbon Nanotubes as Anti-HIV Nanocarrier. **2015**, 10, 1550010	15
1681	Environmental applications of chitosan and its derivatives. **2015**, 233, 1-43	44
1680	Biological effects of chitosan and its derivatives. **2015**, 51, 200-216	150
1679	Antibacterial effect of calcium oxide nano-plates fabricated from shrimp shells. **2015**, 17, 3276-3280	26
1678	Supercritical carbon dioxide design strategies: from drug carriers to soft killers. **2015**, 373,	13
1677	Laser-induced localized formation of silver nanoparticles on chitosan films: study on particles size and density variation. **2015**, 2, 105014	12
1676	Antimicrobial and Dyeing studies of treated cotton fabrics by prepared Chitosan-PAMAM Dendrimer/Ag Nano-emulsion. **2015**, 16, 2529-2537	15
1675	Adsorption of chromium from aqueous solutions using crosslinked chitosan-diethylenetriaminepentaacetic acid. **2015**, 74, 458-66	51
1674	Doxorubicin-loaded mesoporous magnetic nanoparticles to induce apoptosis in breast cancer cells. **2015**, 69, 355-60	25
1673	Fish Gelatin: Characteristics, Functional Properties, Applications and Future Potentials. **2015**, 7, 33-44	77
1672	Bio-nanocomposite films based on cellulose nanocrystals filled polyvinyl alcohol/chitosan polymer blend. **2015**, 132, n/a-n/a	94
1671	An Environmentally Benign Cycle To Regenerate Chitosan and Capture Carbon Dioxide by Ionic Liquids. **2015**, 29, 1923-1930	16
1670	Effects of sodium acetate buffer on chitosan sponge properties and in vivo degradation in a rat intramuscular model. **2015**, 103, 387-96	4
1669	Chitosan as an antimicrobial in food products. **2015**, 153-181	11
1668	Porous membrane based on chitosan□iO2 for coin cell proton battery. **2015**, 41, 5484-5491	15
1667	Real-time monitoring of peptide grafting onto chitosan films using capillary electrophoresis. **2015**, 407, 2543-55	4

1666	Graphene oxide complex as a pH-sensitive antitumor drug. **2015**, 6, 2401-2406		25
1665	Phenotypic expression in human monocyte-derived interleukin-4-induced foreign body giant cells and macrophages in vitro: dependence on material surface properties. **2015**, 103, 1380-90		41
1664	From monomers to polymers from renewable resources: Recent advances. *Progress in Polymer Science*, **2015**, 48, 1-39	29.6	417
1663	Chitosan/bioactive glass nanoparticles scaffolds with shape memory properties. **2015**, 123, 39-45		62
1662	Characteristics of protein-based biopolymer and its application. **2015**, 55, 485-498		88
1661	Lipid nanoparticles for the topical delivery of retinoids and derivatives. **2015**, 10, 253-69		38
1660	Characterization and in vitro evaluation of electrospun chitosan/polycaprolactone blend fibrous mat for skin tissue engineering. **2015**, 26, 5352		56
1659	Microfluidic fabrication of chitosan microfibers with controllable internals from tubular to peapod-like structures. **2015**, 5, 928-936		46
1658	Application of natural and semi-synthetic polymers for the delivery of sensitive drugs. **2015**, 60, 101-131		39
1657	Nanocomposites Based on Chitosan-Graft-Poly(N-Vinyl-2-Pyrrolidone): Synthesis, Characterization, and Biological Activity. **2015**, 64, 578-586		15
1656	Bio-based polymers, supercritical fluids and tissue engineering. **2015**, 50, 826-838		63
1655	Current strategies in multiphasic scaffold design for osteochondral tissue engineering: A review. **2015**, 103, 2460-81		125
1654	Friction behaviour of hydrophilic lubricious coatings for medical device applications. **2015**, 89, 54-61		32
1653	Electrospinning, mechanical properties, and cell behavior study of chitosan/PVA nanofibers. **2015**, 103, 3081-93		129
1652	Oral films: Current status and future perspectives: I - Galenical development and quality attributes. **2015**, 206, 1-19		171
1651	Fabrication of Surface-Modified One-Dimensional Titania Nanostructures in the Presence of Chitosan. **2015**, 30, 611-615		2
1650	Complete glutaraldehyde elimination during chitosan hydrogel drying by SC-CO2 processing. **2015**, 103, 70-76		55
1649	Polysaccharides: Candidates of promising vaccine adjuvants. **2015**, 9, 88-93		81

1630	Evaluation of enzymatically crosslinked injectable glycol chitosan hydrogel. **2015**, 3, 5511-5522	33
1629	Adsorption of Arsenic(V) Oxyanion from Aqueous Solutions by Using Protonated Chitosan Flakes. **2015**, 150615133810006	2
1628	Fabrication of microstructured materials based on chitosan and its derivatives using two-photon polymerization. **2015**, 49, 300-303	5
1627	Stimuli-Responsive Injectable In situ-Forming Hydrogels for Regenerative Medicines. **2015**, 55, 407-452	53
1626	Development, optimization and biological evaluation of chitosan scaffold formulations of new xanthine derivatives for treatment of type-2 diabetes mellitus. **2015**, 77, 122-34	18
1625	Production of chitosan microparticles cross-linked with genipin Identification of factors influencing size and shape properties. **2015**, 104, 82-90	18
1624	Hydrosoluble, UV-crosslinkable and injectable chitosan for patterned cell-laden microgel and rapid transdermal curing hydrogel in vivo. **2015**, 22, 59-69	100
1623	Diffusion and Antibacterial Properties of Nisin-Loaded Chitosan/Poly (L-Lactic Acid) Towards Development of Active Food Packaging Film. **2015**, 8, 1657-1667	51
1622	Michael reaction of chitosan with acrylamides in an aqueous alkali–urea solution. **2015**, 72, 2075-2087	5
1621	Preparation and characterization of hollow magnetic composite nanoparticles for immobilized pectinase. **2015**, 271, 2-7	10
1620	Preparation and in vitro characterization of chitosan nanobubbles as theranostic agents. **2015**, 129, 39-46	47
1619	Preparation of acetylsalicylic acid-acylated chitosan as a novel polymeric drug for drug controlled release. **2015**, 78, 189-94	11
1618	Study on inhibitory activity of chitosan-based materials against biofilm producing Pseudomonas aeruginosa strains. **2015**, 30, 269-78	34
1617	In situ forming chitosan-based hydrogel as a lung sealant for biological lung volume reduction. **2015**, 60, 235-240	9
1616	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
1615	Quantum dot/glycol chitosan fluorescent nanoconjugates. **2015**, 10, 172	22
1614	Photocatalytic degradation of the herbicide terbuthylazine: Preparation, characterization and photoactivity of the immobilized thin layer of TiO2/chitosan. **2015**, 309, 22-29	20
1613	Doxorubicin-loaded magnetic nanocapsules based on N-palmitoyl chitosan and magnetite: Synthesis and characterization. **2015**, 279, 188-197	27

1612	Synthesis, characterization, and thermal decompositions of Schiff base polymers containing chitosan unit. **2015**, 24, 471-480	8
1611	Reviews of Environmental Contamination and Toxicology Volume 233. **2015**,	5
1610	Preparing valuable renewable nanocomposite films based exclusively on oceanic biomass Chitin nanofillers and chitosan. **2015**, 89, 31-39	59
1609	Three-Dimensional Multilayered Devices for Biomedical Applications. **2015**, 363-384	
1608	Enzyme immobilization onto renewable polymeric matrixes: Past, present, and future trends. **2015**, 132, n/a-n/a	64
1607	Chitosan nanoparticles loaded with the antimicrobial peptide temporin B exert a long-term antibacterial activity in vitro against clinical isolates of Staphylococcus epidermidis. **2015**, 6, 372	111
1606	Chitin and chitosan preparation from marine sources. Structure, properties and applications. **2015**, 13, 1133-74	1144
1605	Chitosan nanoparticle based delivery systems for sustainable agriculture. **2015**, 77, 36-51	397
1604	High Strength Chitosan Hydrogels with Biocompatibility via New Avenue Based on Constructing Nanofibrous Architecture. **2015**, 48, 2706-2714	191
1603	Intracellular sorting of differently charged chitosan derivatives and chitosan-based nanoparticles. **2015**, 7, 7942-52	19
1602	Enhancing catalytic performance of laccase via immobilization on chitosan/CeO2 microspheres. **2015**, 78, 1-8	63
1601	Equilibrium, thermodynamic and kinetic studies on removal of chromium, copper, zinc and arsenic from aqueous solutions onto fly ash coated by chitosan. **2015**, 274, 200-212	145
1600	Hexanoyl-Chitosan-PEG Copolymer Coated Iron Oxide Nanoparticles for Hydrophobic Drug Delivery. **2015**, 4, 403-407	37
1599	Study of the Electrophoretic Deposition of Chitosan/Halloysite Nanotubes/Titanium Dioxide Composite Coatings Using Taguchi Experimental Design Approach. **2015**, 654, 230-239	8
1598	Effect of the alkyl chain length of the ionic liquid anion on polymer electrolytes properties. **2015**, 184, 171-178	15
1597	Advances in Spray Drying Technology for Nanoparticle Formation. **2015**, 1-16	1
1596	Hydrothermal Treatment of Wool Fibers with Tetrabutyl Titanate and Chitosan. **2015**, 12, 518-530	4
1595	Chitosan as inter-cellular linker to accelerate multicellular spheroid generation in hydrogel scaffold. **2015**, 77, 366-376	14

1594	Pharmacokinetics and biodegradation performance of a hydroxypropyl chitosan derivative. **2015**, 14, 888-896	20
1593	Chemically Modified Dendritic Starch: A Novel Nanomaterial for siRNA Delivery. **2015**, 26, 1766-74	22
1592	Investigation of microstructured chitosans by coherent anti-Stokes Raman microscopy. **2015**, 257, 217-25	0
1591	Room-Temperature Molten Salts: Protic Ionic Liquids and Deep Eutectic Solvents as Media for Electrochemical Application. **2015**, 217-252	5
1590	Long-acting bioactive composition based on chitosan and taxifolin. **2015**, 6, 479-484	6
1589	Synthesis and characterization of a hydroxyethyl derivative of chitosan and evaluation of its biosafety. **2015**, 14, 703-709	15
1588	Impact of l-leucine on controlled release of ciprofloxacin through micellar catalyzed channels in aqueous medium. **2015**, 212, 142-150	10
1587	Electrokinetic properties of fibres functionalised by chitosan and chitosan nanoparticles. **2015**, 22, 3811-3823	24
1586	Drug Delivery Applications of Chitosan and its Derivatives. **2015**, 637-678	2
1585	Preparation and application of bacteriophage-loaded chitosan microspheres for controlling Lactobacillus plantarum contamination in bioethanol fermentation. **2015**, 5, 69886-69893	8
1584	Dynamic layer-by-layer films linked with Schiff base bond for sustained drug release. **2015**, 5, 83914-83921	14
1583	Polysaccharidic binders for the conception of an insulating agro-composite. **2015**, 78, 152-159	3
1582	Electrochemistry in Ionic Liquids. **2015**,	6
1581	Controlled formation of surface hydrophilicity enhanced chitosan film by layer-by-layer electro-assembly. **2015**, 56, 518-21	14
1580	Enabling non-invasive assessment of an engineered endothelium on ePTFE vascular grafts without increasing oxidative stress. **2015**, 69, 110-20	14
1579	In vitro effects of Eucalyptus staigeriana nanoemulsion on Haemonchus contortus and toxicity in rodents. **2015**, 212, 444-7	25
1578	Staudinger Reactions for Selective Functionalization of Polysaccharides: A Review. **2015**, 16, 2556-71	50
1577	Chitosan. **2015**, 219-246	10

1576	A Review on Bionanocomposites Based on Chitosan and Its Derivatives for Biomedical Applications. **2015**, 173-208	18
1575	On the use of nanotechnology-based strategies for association of complex matrices from plant extracts. **2015**, 25, 426-436	45
1574	Modified Polysaccharides for Drug Delivery. **2015**, 1805-1835	7
1573	Chitosan polyplex nanoparticle vector for miR-145 expression in MCF-7: Optimization by design of experiment. **2015**, 81, 828-37	24
1572	Adsorption behaviour of congo red by cellulose/chitosan hydrogel beads regenerated from ionic liquid. **2015**, 1-11	8
1571	Developing chitosan-based composite nanofibers for supporting metal catalysts. **2015**, 75, 168-177	25
1570	Chitosan coatings to control release and target tissues for therapeutic delivery. **2015**, 6, 855-71	20
1569	Hyaluronic acid and its derivatives in drug delivery and imaging: Recent advances and challenges. **2015**, 97, 400-16	172
1568	Chitosan membranes for tissue engineering: comparison of different crosslinkers. **2015**, 10, 065002	22
1567	Chitosan/gelatin composite sponge is an absorbable surgical hemostatic agent. **2015**, 136, 1026-34	137
1566	Chitosan and its derivatives as self-assembled systems for drug delivery. **2015**, 85-125	2
1565	Investigation of dual-sensitive nanogels based on chitosan and N-isopropylacrylamide and its intelligent drug delivery of 10-hydroxycamptothecine. **2015**, 22, 803-13	10
1564	Physicochemical and biological properties of electrodeposited graphene oxide/chitosan films with drug-eluting capacity. **2015**, 84, 91-102	74
1563	Cyclodextrin facilitated electrospun chitosan nanofibers. **2015**, 5, 7131-7137	29
1562	Antimicrobial and rheological properties of chitosan as affected by extracting conditions and humidity exposure. **2015**, 60, 802-810	23
1561	Relevant insight of surface characterization techniques to study covalent grafting of a biopolymer to titanium implant and its acidic resistance. **2015**, 327, 296-306	11
1560	Novel pH-responsive graft copolymer based on HPMC and poly(acrylamide) synthesised by microwave irradiation: application in controlled release of ornidazole. **2015**, 22, 313-327	13
1559	The role of hybrid chitosan membranes on scarring process following lumbar surgery: post-laminectomy experimental model. **2015**, 37, 23-9	7

1558	Chitosan–phosphotungstic acid complex as membranes for low temperature H2O2 fuel cell. **2015**, 276, 189-194	33
1557	Scalable production of highly concentrated chitosan/TPP nanoparticles in different pHs and evaluation of the in vitro transfection efficiency. **2015**, 94, 65-73	34
1556	Polymeric scaffolds as stem cell carriers in bone repair. **2015**, 9, 1093-119	35
1555	Physico-chemical, thermal, and mechanical approaches for the characterization of solubilized and solid state chitosans. **2015**, 132,	14
1554	Fabrication of chitosan/PDMCHEA blend positively charged membranes with improved mechanical properties and high nanofiltration performances. **2015**, 357, 8-15	43
1553	Chitosan-alginate membranes accelerate wound healing. **2015**, 103, 1013-22	62
1552	Exploiting fungal cell wall components in vaccines. **2015**, 37, 199-207	41
1551	The glucose-lowering potential of exenatide delivered orally via goblet cell-targeting nanoparticles. **2015**, 32, 1017-27	30
1550	Synthesis and characterization of one-dimensional Co-doped titanate nanostructures prepared in the presence of chitosan. **2015**, 62, 106-113	5
1549	S-Nitrosothiol-modified nitric oxide-releasing chitosan oligosaccharides as antibacterial agents. **2015**, 12, 62-69	54
1548	Lyophilized sustained release mucoadhesive chitosan sponges for buccal buspirone hydrochloride delivery: formulation and in vitro evaluation. **2015**, 16, 537-47	35
1547	Chitosan as a suitable nanocarrier material for anti-Alzheimer drug delivery. **2015**, 72, 454-65	87
1546	Liposome-loaded chitosan physical hydrogel: toward a promising delayed-release biosystem. **2015**, 115, 651-7	46
1545	Modification of wool fabric using prepared chitosan-cyanuric chloride hybrid. **2015**, 106, 80-89	21
1544	Design, development and characterization of buccal bioadhesive films of Doxepin for treatment of odontalgia. **2015**, 22, 869-76	17
1543	High intensity ultrasound assisted heating to improve solubility, antioxidant and antibacterial properties of chitosan-fructose Maillard reaction products. **2015**, 60, 253-262	56
1542	Synthesis of protonated chitosan flakes for the removal of vanadium(III, IV and V) oxyanions from aqueous solutions. **2015**, 118, 1-11	56
1541	Preparation, characterization and in vitro digestibility of gellan and chitosan-gellan microgels. **2015**, 117, 54-62	52

1540	Facile functionalization and assembly of live cells with microcontact-printed polymeric biomaterials. **2015**, 11, 80-7	17
1539	Optimization of microwave assisted Maillard reaction to fabricate and evaluate corn fiber gum-chitosan IPN films. **2015**, 44, 260-276	20
1538	Scientometric overview regarding the nanobiomaterials in antimicrobial therapy. **2016**, 511-535	6
1537	. **2016**,	3
1536	A Perspective on 3D Bioprinting Technology: Present and Future. **2016**, 9, 985-990	11
1535	Polystyrene-based wound healing systems. **2016**, 309-334	
1534	Scientometric overview regarding the surface chemistry of nanobiomaterials. **2016**, 463-486	4
1533	Interpenetration of Natural Polymer Aerogels by Supercritical Drying. **2016**, 8,	47
1532	Octanoic Hydrazide-Linked Chitooligosaccharides-2,5-Anhydro-d-Mannofuranose. **2016**, 2016, M904	4
1531	A Novel Microspheres Formulation of Puerarin: Pharmacokinetics Study and In Vivo Pharmacodynamics Evaluations. **2016**, 2016, 4016963	7
1530	Penetration and Silencing Activity of VEGF Dicer Substrate siRNA Vectorized by Chitosan Nanoparticles in Monolayer Culture and a Solid Tumor ModelIn Vitrofor Potential Application in Tumor Therapy. **2016**, 2016, 1-16	3
1529	Preparation of Nanofibers with Renewable Polymers and Their Application in Wound Dressing. **2016**, 2016, 1-17	39
1528	Controlled Release of Interleukin-1 Receptor Antagonist from Hyaluronic Acid-Chitosan Microspheres Attenuates Interleukin-1-Induced Inflammation and Apoptosis in Chondrocytes. **2016** , 2016, 6290957	11
1527	Polysaccharides as Composite Biomaterials. **2016**,	4
1526	Chitosan from shrimp shell (Crangon crangon) and fish scales (Labeorohita): Extraction and characterization. **2016**, 15, 1258-1268	19
1525	Seaweed Polysaccharide-Based Nanoparticles: Preparation and Applications for Drug Delivery. **2016**, 8,	101
1524	Scientometric Overview in ́Nanobiodrugs. **2016**, 405-428	4
1523	Biopolymers as wound healing materials. **2016**, 261-287	18

1522	Preparation and Characterization of Polyvinyl Alcohol-Chitosan Composite Films Reinforced with Cellulose Nanofiber. **2016**, 9,	159
1521	"The Good, the Bad and the Ugly" of Chitosans. **2016**, 14,	184
1520	Novel Spray Dried Glycerol 2-Phosphate Cross-Linked Chitosan Microparticulate Vaginal Delivery System-Development, Characterization and Cytotoxicity Studies. **2016**, 14,	8
1519	Biodegradable Polymer Membranes Applied in Guided Bone/Tissue Regeneration: A Review. **2016**, 8,	136
1518	Graphene-Based Materials Functionalization with Natural Polymeric Biomolecules. **2016**,	8
1517	Plant-based compounds for antimicrobial textiles. **2016**, 155-195	16
1516	Preparation, characterization, and potential application of chitosan, chitosan derivatives, and chitosan metal nanoparticles in pharmaceutical drug delivery. **2016**, 10, 483-507	346
1515	Relevance of charge balance and hyaluronic acid on alginate-chitosan sponge microstructure and its influence on fibroblast growth. **2016**, 104, 2537-43	8
1514	Counterion-Directed, Structurally Tunable Assembly of Hydrogels, Membranes, and Sacs at Aqueous Liquid□liquid Interfaces. **2016**, 3, 1500327	10
1513	Reducing the inflammatory responses of biomaterials by surface modification with glycosaminoglycan multilayers. **2016**, 104, 493-502	32
1512	Biocompatible scaffolds composed of chemically crosslinked chitosan and gelatin for tissue engineering. **2016**, 133,	20
1511	Side-Chain Amino-Acid-Derived Cationic Chiral Polymers by Controlled Radical Polymerization. **2016**, 217, 365-379	34
1510	Ultrastable Liquid-Liquid Interface as Viable Route for Controlled Deposition of Biodegradable Polymer Nanocapsules. **2016**, 12, 3005-13	18
1509	Oil, chitosan, and ethanol production by dimorphic fungus Mucor indicus from different lignocelluloses. **2016**, 91, 1835-1843	23
1508	Cellulose-Based Gels. **2016**, 217, 1322-1334	30
1507	Bacillus sp. DSM 2523 entrapped within chitosan beads used as the whole cell biocatalyst for the production of cyclodextrin glucanotransferase in a fluidized bed bioreactor. **2016**, 68, 989-998	
1506	Collagen-chitosan-laminin hydrogels for the delivery of insulin-producing tissue. **2016**, 10, E397-E408	11
1505	Injectable porous nano-hydroxyapatite/chitosan/tripolyphosphate scaffolds with improved compressive strength for bone regeneration. **2016**, 69, 505-12	50

1504	Evaluation of the donor cell contribution in rhBMP-2 mediated bone formation with chitosan thermogels using fluorescent protein reporter mice. **2016**, 104, 928-41	3
1503	Fabrication of Coaxial Wet-Spun Graphene□Chitosan Biofibers. **2016**, 18, 284-293	32
1502	In vitro evaluation of polymeric formulations designed for use in alveolar osteitis. **2016**, 133, n/a-n/a	1
1501	Polysaccharide-based membranes loaded with erythromycin for application as wound dressings. **2016**, 133, n/a-n/a	14
1500	Entrapment of 5-aminolevulinic acid under edible composite film of konjac glucomannan and chitosan. **2016**, 16, 386-395	1
1499	The lysis and regrowth of toxic cyanobacteria during storage of achitosan□luminium chloride composite coagulated sludge: implications for drinking water sludge treatment. **2016**, 6, 112756-112764	11
1498	Biodegradation Properties of Bioplastic-Based Planting Pots. **2016**, 199-210	
1497	Dissolution and regeneration behavior of chitosan in 3-methyl-1-(ethylacetyl)imidazolium chloride. **2016**, 17, 1741-1748	15
1496	Polymers From Renewable Resources. **2016**, 1-42	1
1495	Applications of Biopolymer-based, Surface-modified Devices in Transplant Medicine and Tissue Engineering. **2016**, 401-424	
1494	Functionalization of poly(□caprolactone) surface with lactose-modified chitosan via alkaline hydrolysis: ToF-SIMS characterization. **2016**, 11, 02A323	11
1493	Microstructured chitosan/poly(□-glutamic acid) polyelectrolyte complex hydrogels by computer-aided wet-spinning for biomedical three-dimensional scaffolds. **2016**, 31, 531-549	43
1492	Recent progress on synthesis, property and application of modified chitosan: An overview. **2016**, 88, 333-44	96
1491	Effect of Different Composition on Particle Size Chitosan-PMAA-PNIPAM Hydrogel. **2016**, 19, 388-393	4
1490	A Green Modified Microsphere of Chitosan Encapsulating Dimethyl Fumarate and Cross-Linked by Vanillin and Its Application for Litchi Preservation. **2016**, 55, 4490-4498	14
1489	Insight of In Vitro Small-Interfering RNA Release From Chitosan Nanoparticles Under Enzymolysis With F□ster Resonance Energy Transfer Analysis. **2016**, 105, 301-7	2
1488	Basic Properties of PMMA Reinforced Using Ceramics Particles of ZrO2-Al2O3-SiO2 Coated with Two Types of Coupling Agents. **2016**, 696, 93-98	13
1487	A review on chitosan-cellulose blends and nanocellulose reinforced chitosan biocomposites: Properties and their applications. **2016**, 150, 216-26	305

1486	Nanomedicine. **2016**,	5
1485	Effect of coatings and surface modification on porous silicon nanoparticles for delivery of the anticancer drug tamoxifen. **2016**, 161, 1-6	22
1484	Investigation of polymer dynamics in chitosan-maghemite nanocomposites: a potential green superparamagnetic material. **2016**, 23, 1	4
1483	Why Chitosan? From properties to perspective of mucosal drug delivery. **2016**, 91, 615-22	103
1482	Comparing homogeneous and heterogeneous routes for ionic crosslinking of chitosan membranes. **2016**, 103, 156-161	15
1481	Biological preparation of chitosan nanoparticles and its in vitro antifungal efficacy against some phytopathogenic fungi. **2016**, 151, 321-325	122
1480	Preparation of copper-chelate quaternized carboxymethyl chitosan/organic rectorite nanocomposites for algae inhibition. **2016**, 151, 130-134	21
1479	Chitosan/Chondroitin Sulfate Membranes Produced by Polyelectrolyte Complexation for Cartilage Engineering. **2016**, 17, 2178-88	49
1478	Design of experiments approach on the preparation of dry inhaler chitosan composite formulations by supercritical CO2-assisted spray-drying. **2016**, 116, 26-35	16
1477	Cellulosic polyelectrolytes: synthetic pathways to regioselectively substituted ammonium and phosphonium derivatives. **2016**, 23, 1687-1704	8
1476	Effects of nozzle type atmospheric dry air plasma on L929 fibroblast cells hybrid poly (Ɛcaprolactone)/chitosan/poly (Ɛcaprolactone) scaffolds interactions. **2016**, 122, 232-9	14
1475	Molecular Dynamics of a Water-Absorbent Nanoscale Material Based on Chitosan. **2016**, 120, 3754-64	8
1474	Chitosan nanoparticles in drug therapy of infectious and inflammatory diseases. **2016**, 13, 1177-94	65
1473	A terahertz spectroscopic study of chitosan-based bionanocomposites containing clay nanoparticles. **2016**, 78, 189-195	4
1472	Gel integration for microfluidic applications. **2016**, 16, 1757-76	66
1471	Oriented Assembly of Zinc Oxide Mesocrystal in Chitosan and Applications for Glucose Biosensors. **2016**, 16, 3359-3365	17
1470	Curcumin bioavailability from oil in water nano-emulsions: In vitro and in vivo study on the dimensional, compositional and interactional dependence. **2016**, 233, 88-100	85
1469	Preparation, characterization and toxicology properties of ⊟and ⊟chitosan Maillard reaction products nanoparticles. **2016**, 89, 287-96	17

1468	Sustainable-solvent-induced polymorphism in chitin films. **2016**, 18, 4303-4311	28
1467	Influence of mechanical properties of alginate-based substrates on the performance of Schwann cells in culture. **2016**, 27, 898-915	51
1466	Targeted silencing of Survivin in cancer cells by siRNA loaded chitosan magnetic nanoparticles. **2016**, 16, 789-97	4
1465	Low-temperature air plasma modification of chitosan-coated PEEK biomaterials. **2016**, 50, 325-334	30
1464	Electrodeposition of chitosan based on coordination with metal ions in situ-generated by electrochemical oxidation. **2016**, 4, 3331-3338	36
1463	Photo-induced green synthesis and antimicrobial efficacy of poly (e-caprolactone)/curcumin/grape leaf extract-silver hybrid nanoparticles. **2016**, 160, 355-63	21
1462	Surface functionalization of biomaterials by radical polymerization. **2016**, 83, 191-235	99
1461	Hydrosoluble 50% N-acetylation-thiolated chitosan complex with cobalt as a pH-responsive renal fibrosis targeting drugs. **2016**, 27, 972-85	5
1460	Product distribution in hydrogenation of styrene oxide over Pd/chitosan catalyst. **2016**, 42, 7581-7595	7
1459	Effect of nanofillers on the physico-mechanical properties of load bearing bone implants. **2016**, 67, 792-806	58
1458	Curcumin loaded in bovine serum albumin□hitosan derived nanoparticles for targeted drug delivery. **2016**, 39, 811-817	12
1457	Chitosan-maghemite-LiClO4 □a new green conducting superpara magnetic nanocomposite. **2016**, 23, 1	1
1456	Physicochemical Aspects of Chitosan Dispersibility in Acidic Aqueous Media: Effects of the Food Acid Counter-Anion. **2016**, 11, 388-399	16
1455	Application of water-soluble chitosan to shrimp for quality retention. **2016**, 74, 571-579	18
1454	Large Scale Production of Continuous Hydrogel Fibers with Anisotropic Swelling Behavior by Dynamic-Crosslinking-Spinning. **2016**, 37, 1795-1801	22
1453	Enhancement of bioactivity and bioavailability of curcumin with chitosan based materials. **2016**, 33, 3316-3329	9
1452	Development of Polyelectrolyte Chitosan-gelatin Hydrogels for Skin Bioprinting. **2016**, 49, 105-112	49
1451	Influence of chitosan on mechanical, thermal, barrier and antimicrobial properties of PLA-biocomposites for food packaging. **2016**, 102, 112-121	88

1450	Chitosan-based membranes with different ionic crosslinking density for pharmaceutical and industrial applications. **2016**, 153, 501-511	59
1449	Multifunctional soft hybrid bio-platforms based on nano-silver and natural compounds. **2016**, 69, 922-32	23
1448	Bio-based Nanomaterials and Their Bionanocomposites. **2016**, 255-330	7
1447	Novel Nanocomposite of Chitosan-protected Platinum Nanoparticles Immobilized on Nickel Hydroxide: Facile Synthesis and Application as Glucose Electrochemical Sensor. **2016**, 128, 1367-1375	13
1446	Advances in nanobiomaterials for topical administrations: new galenic and cosmetic formulations. **2016**, 1-23	2
1445	Artificial extracellular matrix for biomedical applications: biocompatible and biodegradable poly (tetramethylene ether) glycol/poly (□caprolactone diol)-based polyurethanes. **2016**, 27, 1712-1728	38
1444	Laccase-based biocathodes: Comparison of chitosan and Nafion. **2016**, 937, 43-52	7
1443	Chitosan derivatives/reduced graphene oxide/alginate beads for small-molecule drug delivery. **2016**, 69, 1222-8	64
1442	Peptide-Mediated Nanoparticle Drug Delivery System. **2016**, 205-308	
1441	Synthesis and Evaluation of TiO2/Chitosan Based Hydrogel for the Adsorptional Photocatalytic Degradation of Azo and Anthraquinone Dye under UV Light Irradiation. **2016**, 24, 611-618	46
1440	Kinetics and mechanism of degradation of chitosan by combining sonolysis with H2O2/ascorbic acid. **2016**, 6, 76280-76287	20
1439	Magnetic chitosan modified with cysteine-glutaraldehyde as adsorbent for removal of heavy metals from water. **2016**, 4, 3835-3847	44
1438	Recent Developments on Chitosan Applications in Regenerative Medicine. **2016**, 221-243	1
1437	CD147 monoclonal antibody mediated by chitosan nanoparticles loaded with □hederin enhances antineoplastic activity and cellular uptake in liver cancer cells. **2015**, 5, 17904	28
1436	Rheological properties of gallic acid-grafted-chitosans with different substitution degrees. **2016**, 74, 472-479	15
1435	Diabetic wound regeneration using peptide-modified hydrogels to target re-epithelialization. **2016**, 113, E5792-E5801	77
1434	Graphene-Based Polymer Composites for Biomedical Applications. **2016**, 657-690	2
1433	Improvement of corrosion resistance, antimicrobial activity, mechanical and chemical properties of epoxy coating by loading chitosan as a natural renewable resource. **2016**, 101, 288-296	33

1432	Ultra-Stretchable and Force-Sensitive Hydrogels Reinforced with Chitosan Microspheres Embedded in Polymer Networks. **2016**, 28, 8037-8044	220
1431	Temperature and pH dual-responsive poly(vinyl lactam) copolymers functionalized with amine side groups via RAFT polymerization. **2016**, 7, 5011-5022	16
1430	Passive and Interactive Dressing Materials. **2016**, 93-144	4
1429	Tough and Cell-Compatible Chitosan Physical Hydrogels for Mouse Bone Mesenchymal Stem Cells in Vitro. **2016**, 8, 19739-46	59
1428	Stimuli-Sensitive Injectable Hydrogels Based on Polysaccharides and Their Biomedical Applications. **2016**, 37, 1881-1896	89
1427	Potential of Chitosan (Chemically Modified Chitin) for Extraction of Lead-Arsenate Contaminated Soils. **2016**, 47, 1650-1663	1
1426	Needleless electrospinning for scaled-up production of ultrafine chitosan hybrid nanofibers used for air filtration. **2016**, 6, 105988-105995	41
1425	Biodegradable polymer scaffolds. **2016**, 4, 7493-7505	45
1424	Chitosan and Pluronic F-127: Pharmaceutical Applications. **2016**, 1513-1535	5
1423	Antitumor Effects of Orally and Intraperitoneally Administered Chitosan Oligosaccharides (COSs) on S180-Bearing/Residual Mouse. **2016**, 81, H3035-H3042	21
1422	Surface modification of elongated one-dimensional titanium dioxide structures with ferromagnetic nanoparticles. **2016**, 52, 1160-1165	
1421	Co-assembly of chitosan and phospholipids into hybrid hydrogels. **2016**, 88, 905-916	8
1420	When biomolecules meet graphene: from molecular level interactions to material design and applications. **2016**, 8, 19491-19509	159
1419	Biomedical Benefits of Algal Glycoproteins. **2016**, 141-148	
1418	Carbohydrates in Drug Discovery: Insights into Sulfated Marine Polysaccharides. **2016**, 331-342	
1417	Nanoparticle formation of chitosan induced by 4-sulfonatocalixarenes: utilization for alkaloid encapsulation. **2016**, 294, 1807-1814	6
1416	A review on the biosynthesis of metallic nanoparticles (gold and silver) using bio-components of microalgae: Formation mechanism and applications. **2016**, 95, 28-44	178
1415	Adipose-derived stem cells: a review of osteogenesis differentiation. **2016**, 12, 38-47	3

1414	Cross-Linked Chitosan as a Polymer Network Binder for an Antimony Anode in Sodium-Ion Batteries. **2016**, 6, 1502130		74
1413	A functional chitosan membrane with grafted epigallocatechin-3-gallate and lovastatin enhances periodontal tissue regeneration in dogs. **2016**, 151, 790-802		28
1412	Effects of Medical Chitosan on Capsular Formation Following Silicone Implant Insertion in a Rabbit Model. **2016**, 40, 613-24		4
1411	Facile synthesis of water-soluble graphene-based composite: Non-covalently functionalized with chitosan-ionic liquid conjugation. **2016**, 09, 1650045		9
1410	Janus emulsion mediated porous scaffold bio-fabrication. **2016**, 145, 347-352		8
1409	Preparation and sustainable release of modified konjac glucomannan/chitosan nanospheres. **2016**, 91, 609-14		15
1408	Evaluation of polypropylene mesh coated with biological hydrogels for temporary closure of open abdomen. **2016**, 31, 302-14		7
1407	Biotinylated N-palmitoyl chitosan for design of drug loaded self-assembled nanocarriers. **2016**, 81, 284-294		18
1406	Polymeric nanostructured materials for biomedical applications. *Progress in Polymer Science*, **2016**, 60, 86-128	29.6	209
1405	Integrated three-dimensional fiber/hydrogel biphasic scaffolds for periodontal bone tissue engineering. **2016**, 65, 631-640		30
1404	Quantitative characterization of chitosan in the skin by Fourier-transform infrared spectroscopic imaging and ninhydrin assay: application in transdermal sciences. **2016**, 263, 34-42		9
1403	Polymer-Based DNA Delivery Systems for Cancer Immunotherapy. **2016**, 221-244		1
1402	Nanochitosan and the Skin. **2016**, 69-78		2
1401	Preliminary evaluation of local drug delivery of amphotericin B and in vivo degradation of chitosan and polyethylene glycol blended sponges. **2016**, 104, 78-87		15
1400	Improvement of wound tissue repair by chitosan films containing (-)-borneol, a bicyclic monoterpene alcohol, in rats. **2016**, 13, 799-808		8
1399	A novel nonchemical approach to the expansion of halloysite nanotubes and their uses in chitosan composite hydrogels for broad-spectrum dye adsorption capacity. **2016**, 37, 2770-2781		20
1398	Novel Asymmetric Wettable AgNPs/Chitosan Wound Dressing: In Vitro and In Vivo Evaluation. **2016**, 8, 3958-68		256
1397	Wood-Based Biocomposites: Mechanical Processing, Physical and Biological Properties. **2016**, 674, 26-30		2

1396	Multifunctional coatings to simultaneously promote osseointegration and prevent infection of orthopaedic implants. **2016**, 84, 301-314	422
1395	Intraluminal Release of an Antifungal Peptide Enhances the Antifungal and Anti-Biofilm Activities of Multilayer-Coated Catheters in a Rat Model of Venous Catheter Infection. **2016**, 2, 112-121	22
1394	Quaternized Chitosan/Poly(acrylic acid) Polyelectrolyte Complex Hydrogels with Tough, Self-Recovery, and Tunable Mechanical Properties. **2016**, 49, 1049-1059	118
1393	Biodegradable liposome-encapsulated hydrogels for biomedical applications: a marriage of convenience. **2016**, 4, 555-74	96
1392	Industrial applications of crustacean by-products (chitin, chitosan, and chitooligosaccharides): A review. **2016**, 48, 40-50	590
1391	A Review: Tailor-made Hydrogel Structures (Classifications and Synthesis Parameters). **2016**, 55, 54-70	59
1390	Effect of "phase change" complex on postoperative adhesion prevention. **2016**, 202, 216-24	4
1389	Thermosensitive chitosan-based hydrogel as a topical ocular drug delivery system of latanoprost for glaucoma treatment. **2016**, 144, 390-9	71
1388	Novel meloxicam releasing electrospun polymer/ceramic reinforced biodegradable membranes for periodontal regeneration applications. **2016**, 64, 148-156	34
1387	Bionanocomposite from self-assembled building blocks of nacre-like crystalline polymorph of chitosan with clay nanoplatelets. **2016**, 6, 33501-33509	11
1386	Synthesis and characterization of antibacterial carboxymethyl Chitosan/ZnO nanocomposite hydrogels. **2016**, 88, 273-9	106
1385	Multilayered silica-biopolymer nanocapsules with a hydrophobic core and a hydrophilic tunable shell thickness. **2016**, 8, 8798-809	24
1384	Functionalized Celluloses with Regular Substitution Pattern by Glycosynthase-Catalyzed Polymerization. **2016**, 17, 1272-9	17
1383	Surface Modifications of Titanium Implants by Multilayer Bioactive Coatings with Drug Delivery Potential: Antimicrobial, Biological, and Drug Release Studies. **2016**, 68, 1100-1108	18
1382	On prilled Nanotubes-in-Microgel Oral Systems for protein delivery. **2016**, 101, 90-102	19
1381	Optimizing indomethacin-loaded chitosan nanoparticle size, encapsulation, and release using Box-Behnken experimental design. **2016**, 87, 329-40	44
1380	Bio-based epoxy/chitin nanofiber composites cured with amine-type hardeners containing chitosan. **2016**, 144, 89-97	18
1379	Thiolated carboxymethyl dextran as a nanocarrier for colon delivery of hSET1 antisense: In vitro stability and efficiency study. **2016**, 62, 771-8	26

1378	The facile synthesis of chitosan-based silver nano-biocomposites via a solution plasma process and their potential antimicrobial efficacy. **2016**, 605, 49-58	47
1377	Electrochemical behavior of a novel nano-composite coat on Ti alloy in phosphate buffer solution for biomedical applications. **2016**, 6, 20276-20285	37
1376	Enhanced mechanical stability and sensitive swelling performance of chitosan/yeast hybrid hydrogel beads. **2016**, 40, 3350-3362	24
1375	Tunable functional hydrogels formed from a versatile water-soluble chitosan. **2016**, 85, 386-90	24
1374	Chitin and chitosan based polyurethanes: A review of recent advances and prospective biomedical applications. **2016**, 86, 630-45	136
1373	Thermoresponsive polymers with tunable cloud point temperatures grafted from chitosan via nitroxide mediated polymerization. **2016**, 86, 69-82	21
1372	A comparative study on the druggability of Schiff bases and dithiocarbamate derivatives of chitosan. **2016**, 73, 2165-2177	3
1371	Electrospun fibers of chitosan-grafted polycaprolactone/poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) blends. **2016**, 4, 600-612	32
1370	Tailoring the degradation rate and release kinetics from poly(galactitol sebacate) by blending with chitosan, alginate or ethyl cellulose. **2016**, 93, 1591-1602	11
1369	Reinforced Mechanical Properties and Tunable Biodegradability in Nanoporous Cellulose Gels: Poly(L-lactide-co-caprolactone) Nanocomposites. **2016**, 17, 1506-15	26
1368	Enhancing integrated removal of Microcystis aeruginosa and adsorption of microcystins using chitosan-aluminum chloride combined coagulants: Effect of chemical dosing orders and coagulation mechanisms. **2016**, 490, 258-267	26
1367	Effect of low-temperature plasma on chitosan-coated PEEK polymer characteristics. **2016**, 78, 1-13	36
1366	Fabrication of aggregation-induced emission based fluorescent nanoparticles and their biological imaging application: recent progress and perspectives. **2016**, 19, 284-291	40
1365	Nanomechanical characterization and molecular mechanism study of nanoparticle reinforced and cross-linked chitosan biopolymer. **2015**, 55, 42-52	22
1364	New antimicrobial chitosan derivatives for wound dressing applications. **2016**, 141, 28-40	109
1363	Chitosan nanoparticles loaded with 2,5-dihydroxybenzoic acid and protocatechuic acid: Properties and digestion. **2016**, 174, 8-14	11
1362	Facile preparation of biphasic-induced magnetic icariin-loaded composite microcapsules by automated in situ click technology. **2016**, 140, 50-59	11
1361	Poly(butylene succinate)-based polyesters for biomedical applications: A review. **2016**, 75, 431-460	205

1360	Anti-biofilm activity of chitosan gels formulated with silver nanoparticles and their cytotoxic effect on human fibroblasts. **2016**, 60, 317-323	72
1359	MALDI MS analysis, disk diffusion and optical density measurements for the antimicrobial effect of zinc oxide nanorods integrated in graphene oxide nanostructures. **2016**, 4, 183-94	14
1358	Antimicrobial Polymeric Hydrogels. **2016**, 153-170	1
1357	Curcumin delivered through bovine serum albumin/polysaccharides multilayered microcapsules. **2016**, 30, 857-72	19
1356	Development of porous Ti6Al4V/chitosan sponge composite scaffold for orthopedic applications. **2016**, 58, 1177-81	15
1355	Molecular mechanisms in deformation of cross-linked hydrogel nanocomposite. **2016**, 59, 157-167	15
1354	Chitosan Hydrogels for Regenerative Engineering. **2016**, 3-40	2
1353	Recent Advances in Chitosan-Based Nanomedicines for Cancer Chemotherapy. **2016**, 229-259	8
1352	Bioengineered quantum dot/chitosan-tripeptide nanoconjugates for targeting the receptors of cancer cells. **2016**, 82, 780-9	27
1351	Structure, apatite inducing ability, and corrosion behavior of chitosan/halloysite nanotube coatings prepared by electrophoretic deposition on titanium substrate. **2016**, 59, 740-747	52
1350	Fabrication, characterization and cytotoxicity studies of ionically cross-linked docetaxel loaded chitosan nanoparticles. **2016**, 137, 65-74	82
1349	The effect of glycerol on properties of chitosan/poly(vinyl alcohol) films with AlCl3·6H2O aqueous solution as the solvent for chitosan. **2016**, 135, 191-8	29
1348	Chitin and Chitosan Nanocomposites for Tissue Engineering. **2016**, 123-149	7
1347	Chitin and Chitosan for Regenerative Medicine. **2016**,	25
1346	Preparation of PEC's based on chitosan and NaPMA. **2016**, 489, 27-35	12
1345	Gelatin blending and sonication of chitosan nanofiber mats produce synergistic effects on hemostatic functions. **2016**, 82, 89-96	57
1344	Advances in characterisation and biological activities of chitosan and chitosan oligosaccharides. **2016**, 190, 1174-1181	265
1343	An injectable borate bioactive glass cement for bone repair: Preparation, bioactivity and setting mechanism. **2016**, 432, 150-157	26

1342	The fluorescent interactions between amphiphilic chitosan derivatives and water-soluble quantum dots. **2016**, 152, 343-51	11
1341	PVA-based hydrogels for tissue engineering: A review. **2017**, 66, 159-182	192
1340	Electrokinetic behavoir of chitosan adsorbed on o/w nanoemulsion droplets. **2017**, 519, 205-211	10
1339	Quercetin-Loaded Solid Lipid Nanoparticle Dispersion with Improved Physicochemical Properties and Cellular Uptake. **2017**, 18, 875-883	32
1338	Enzymatically biomineralized chitosan scaffolds for tissue-engineering applications. **2017**, 11, 1500-1513	19
1337	Chitosan-based hydrogels: recent design concepts to tailor properties and functions. **2017**, 66, 981-998	68
1336	Rheological and Physicochemical Studies on Emulsions Formulated with Chitosan Previously Dispersed in Aqueous Solutions of Lactic Acid. **2017**, 12, 109-118	16
1335	Food macromolecule based nanodelivery systems for enhancing the bioavailability of polyphenols. **2017**, 25, 3-15	132
1334	Physicochemical properties and biological activities of novel blend films using oxidized pectin/chitosan. **2017**, 97, 348-356	39
1333	A novel hydrogel of poloxamer 407 and chitosan obtained by gamma irradiation exhibits physicochemical properties for wound management. **2017**, 74, 36-46	20
1332	Multiphase microfluidic synthesis of micro- and nanostructures for pharmaceutical applications. **2017**, 169, 78-96	63
1331	Development of Nano-Antimicrobial Biomaterials for Biomedical Applications. **2017**, 479-545	22
1330	Evaluation of the Combined Effect of Chitosan and Lactic Acid Bacteria in Alheira (Fermented Meat Sausage) Paste. **2017**, 41, e12866	5
1329	Self-assembly of pifithrin-□loaded layered double hydroxide/chitosan nanohybrid composites as a drug delivery system for bone repair materials. **2017**, 5, 2245-2253	18
1328	In vitro drug release profiles of pH-sensitive hydroxyethylacryl chitosan/sodium alginate hydrogels using paracetamol as a soluble model drug. **2017**, 99, 71-78	85
1327	Bactericidal Effect of Gold-Chitosan Nanocomposites in Coculture Models of Pathogenic Bacteria and Human Macrophages. **2017**, 9, 17693-17701	41
1326	Structural, morphological, ionic conductivity, and thermal properties of pectin-based polymer electrolytes. **2017**, 643, 266-273	14
1325	Polymers and Composites for Orthopedic Applications. **2017**, 349-403	21

1324	In situ forming chitosan hydrogels: Preliminary evaluation of the in vivo inflammatory response. **2017**, 75, 279-285	11
1323	Bioelectricity generation from brewery wastewater in a microbial fuel cell using chitosan/biodegradable copolymer membrane. **2017**, 14, 1535-1550	14
1322	Tethering antimicrobial peptides onto chitosan: Optimization of azide-alkyne "click" reaction conditions. **2017**, 165, 384-393	32
1321	Core-shell drug carrier from folate conjugated chitosan obtained from prawn shell for targeted doxorubicin delivery. **2017**, 28, 55	30
1320	Effect of storage time on the ionic conductivity of chitosan-solid polymer electrolytes incorporating cyano-based ionic liquids. **2017**, 232, 22-29	35
1319	Biodegradable chitosan-poly(□caprolactone) dialdehyde copolymer networks for soft tissue engineering. **2017**, 138, 47-54	11
1318	Conducting Nanopaper: A Carbon-Free Cathode Platform for Li□O2 Batteries. **2017**, 2, 673-680	27
1317	Dendritic chitosan as a magnetic and biocompatible nanocarrier for the simultaneous delivery of doxorubicin and methotrexate to MCF-7 cell line. **2017**, 41, 3177-3189	60
1316	Effect of animal products and extracts on wound healing promotion in topical applications: a review. **2017**, 28, 703-729	12
1315	Fully Green Cellulose Nanocomposites. **2017**, 301-334	2
1314	A novel human-like collagen hemostatic sponge with uniform morphology, good biodegradability and biocompatibility. **2017**, 31, 1099-1107	25
1313	Synthesis and characterization of chitosan-alginate scaffolds for seeding human umbilical cord derived mesenchymal stem cells. **2016**, 27, 561-575	5
1312	Thermal Properties of Gelatin and Chitosan. **2017**, 281-304	2
1311	Enhanced immune response to inactivated porcine circovirus type 2 (PCV2) vaccine by conjugation of chitosan oligosaccharides. **2017**, 166, 64-72	23
1310	Formulation and characterization of chitosan-based biocomposites with potential use for bone adhesion. **2017**, 66, 697-707	8
1309	Entrapment of protein in chitosan-tripolyphosphate beads and its release in an in vitro digestive model. **2017**, 229, 495-501	29
1308	Chitosan/TiO composite membrane improves proliferation and survival of L929 fibroblast cells: Application in wound dressing and skin regeneration. **2017**, 98, 329-340	106
1307	Cationic glycopolymers through controlled polymerisation of a glucosamine-based monomer mimicking the behaviour of chitosan. **2017**, 8, 1750-1753	2

1306	Structural and mechanical properties of a range of chitosan-based hybrid networks loaded with colloidal silica and polystyrene particles. **2017**, 52, 8338-8347	14
1305	A close collaboration of chitosan with lipid colloidal carriers for drug delivery applications. **2017**, 256, 121-140	35
1304	A luminescent europium ionic liquid to improve the performance of chitosan polymer electrolytes. **2017**, 240, 474-485	7
1303	Exploring the effect of formulation parameters on the particle size of carboxymethyl chitosan nanoparticles prepared via reverse micellar crosslinking. **2017**, 34, 270-279	11
1302	Functionalization of electrospun polymeric wound dressings with antimicrobial peptides. **2017**, 156, 133-148	92
1301	Enhancement of Growth of MOF MIL-68(Al) Thin Films on Porous Alumina Tubes Using Different Linking Agents. **2017**, 2017, 2532-2540	14
1300	Old drug, new wrapping - A possible comeback for chloramphenicol?. **2017**, 526, 538-546	18
1299	Mucoadhesive properties of low molecular weight chitosan- or glycol chitosan- and corresponding thiomer-coated poly(isobutylcyanoacrylate) core-shell nanoparticles. **2017**, 117, 315-323	32
1298	Poloxamer surface modified trimethyl chitosan nanoparticles for the effective delivery of methotrexate in osteosarcoma. **2017**, 90, 872-879	15
1297	Enhanced solubility and antioxidant activity of chlorogenic acid-chitosan conjugates due to the conjugation of chitosan with chlorogenic acid. **2017**, 170, 206-216	92
1296	Polymer Brush-Functionalized Chitosan Hydrogels as Antifouling Implant Coatings. **2017**, 18, 1983-1992	43
1295	Design of interpenetrating chitosan and poly(ethylene glycol) sponges for potential drug delivery applications. **2017**, 170, 166-175	16
1294	DHA and l-carnitine loaded chitosan hydrogels as delivery systems for topical applications. **2017**, 525, 85-92	15
1293	The influence of solvent formulations on thermosensitive hydroxybutyl chitosan hydrogel as a potential delivery matrix for cell therapy. **2017**, 170, 80-88	29
1292	Pt electrocatalyst supported on metal ion-templated hierarchical porous nitrogen-doped carbon from chitosan for methanol electrooxidation. **2017**, 248, 99-107	14
1291	Challenges for Cartilage Regeneration. **2017**, 389-466	4
1290	Biomaterials for Implants and Scaffolds. **2017**,	3
1289	Concurrent filtration and inactivation of bacteria using poly(vinyl alcohol-co-ethylene) nanofibrous membrane facilely modified using chitosan and graphene oxide. **2017**, 4, 385-395	19

1288	Antimicrobial Hydrogels. **2017**, 179-204	1
1287	Playing with ionic liquids to uncover novel polymer electrolytes. **2017**, 300, 46-52	11
1286	Chitosan-coated amyloid fibrils increase adipogenesis of mesenchymal stem cells. **2017**, 79, 363-371	14
1285	Wet-Spun Biofiber for Torsional Artificial Muscles. **2017**, 4, 421-430	11
1284	CRISPR/Cas9-Based Genome Editing for Disease Modeling and Therapy: Challenges and Opportunities for Nonviral Delivery. **2017**, 117, 9874-9906	287
1283	Correlation between the proton conductivity and diffusion coefficient of sulfonic acid functionalized chitosan and Nafion composites via impedance spectroscopy measurements. **2017**, 23, 2221-2227	1
1282	Tough chitosan hydrogel based on purified regeneration and alkaline solvent as biomaterials for tissue engineering applications. **2017**, 104, 224-231	30
1281	Injectable thermosensitive hydrogel containing hyaluronic acid and chitosan as a barrier for prevention of postoperative peritoneal adhesion. **2017**, 173, 721-731	49
1280	Role of Nitric Oxide-Releasing Chitosan Oligosaccharides on Mucus Viscoelasticity. **2017**, 3, 1017-1026	19
1279	A novel biomimetic scaffold with hUCMSCs for lumbar fusion. **2017**, 5, 5996-6007	5
1278	A comparative study on chitosan/gelatin composite films with conjugated or incorporated gallic acid. **2017**, 173, 473-481	77
1277	Thin layer chitosan-coated cellulose filter paper as substrate for immobilization of catalytic cobalt nanoparticles. **2017**, 104, 56-62	69
1276	Fabrication and characterization of hydrothermal cross-linked chitosan porous scaffolds for cartilage tissue engineering applications. **2017**, 80, 532-542	35
1275	Chitosan nanoparticles based nanovaccines for cancer immunotherapy. **2017**, 89, 931-939	16
1274	Fluorinated methacrylamide chitosan sequesters reactive oxygen species to relieve oxidative stress while delivering oxygen. **2017**, 105, 2368-2374	11
1273	Laccase - methacrylyol functionalized magnetic particles: Highly immobilized, reusable, and efficacious for methyl red decolourization. **2017**, 102, 144-152	23
1272	Synthesis and characterization of a biocompatible chitosan-based hydrogel cross-linked via 'click' chemistry for controlled drug release. **2017**, 102, 1-9	60
1271	Chitosan□graphene oxide nanocomposites: Effect of graphene oxide nanosheets and glycerol plasticizer on thermal and mechanical properties. **2017**, 134, 45092	36

1270	Reconstruction of Large-scale Defects with a Novel Hybrid Scaffold Made from Poly(L-lactic acid)/Nanohydroxyapatite/Alendronate-loaded Chitosan Microsphere: in vitro and in vivo Studies. **2017**, 7, 359		24
1269	Regioselective chitosan end-group activation: the triskelion approach. **2017**, 7, 18628-18638		3
1268	Carbon nanotube filled with magnetic iron oxide and modified with polyamidoamine dendrimers for immobilizing lipase toward application in biodiesel production. **2017**, 7, 45643		42
1267	Physicochemical characterization of water-soluble chitosan derivatives with singlet oxygen quenching and antibacterial capabilities. **2017**, 102, 200-207		21
1266	Stereocomplex poly(lactic acid) nanocoated chitosan microparticles for the sustained release of hydrophilic drugs. **2017**, 76, 1129-1135		11
1265	Green microparticles based on a chitosan/lactobionic acid/linoleic acid association. Characterisation and evaluation as a new carrier system for cosmetics. **2017**, 34, 162-170		7
1264	. **2017**,		
1263	Preparation and antimicrobial activity of sulfopropyl chitosan in an ionic liquid aqueous solution. **2017**, 134,		8
1262	Nanosized dispersions based on chitosan and NaPSS. **2017**, 24, 1		5
1261	Sulfonic Acid Functionalized Chitosan as a Sustainable Component for Proton Conductivity Management in PEMs. **2017**, 2, 2503-2511		5
1260	Lifetime prediction of biodegradable polymers. *Progress in Polymer Science*, **2017**, 71, 144-189	29.6	274
1259	International Conference on Advancements of Medicine and Health Care through Technology; 12th - 15th October 2016, Cluj-Napoca, Romania. **2017**,		1
1258	Characterization of methacrylated polysaccharides in combination with amine-based monomers for application in mortar. **2017**, 168, 173-181		10
1257	Development of nanocomposite scaffolds based on TiO doped in grafted chitosan/hydroxyapatite by freeze drying method and evaluation of biocompatibility. **2017**, 101, 51-58		37
1256	Preparation, Characterization and Preliminary Evaluation of Magnetic Nanoparticles based on Biotinylated N-palmitoyl Chitosan. **2017**, 333-336		
1255	A facile one-step method for preparation of FeO/CS/INH nanoparticles as a targeted drug delivery for tuberculosis. **2017**, 77, 1182-1188		19
1254	Sulfonated chitosan and dopamine based coatings for metallic implants in contact with blood. **2017** , 72, 682-691		29
1253	Evaluation of a water-resistant and biocompatible adhesive with potential use in bone fractures. **2017**, 31, 1480-1495		8

1252	Strategies on process engineering of chondrocyte culture for cartilage tissue regeneration. **2017**, 40, 601-610	7
1251	Synthesis, characterization and antifungal efficacy of C-coordinated O-carboxymethyl chitosan Cu(II) complexes. **2017**, 160, 97-105	21
1250	Highly Flexible Multifunctional Biopaper Comprising Chitosan Reinforced by Ultralong Hydroxyapatite Nanowires. **2017**, 23, 3850-3862	40
1249	In vivo study on the biocompatibility of chitosan-hydroxyapatite film depending on degree of deacetylation. **2017**, 105, 1637-1645	11
1248	Synthesis and Assessment of Novel Gelatin–Chitosan Lactate Cohydrogels for Controlled Delivery and Tissue Engineering Applications. **2017**, 56, 1457-1467	5
1247	Wettability and surface morphology of eroded dentin treated with chitosan. **2017**, 75, 68-73	13
1246	Preparation and Characterization of Hypoglycemic Nanoparticles for Oral Insulin Delivery. **2017**, 18, 4281-4291	14
1245	The facile synthesis of a chitosan Cu(II) complex by solution plasma process and evaluation of their antioxidant activities. **2017**, 103, 501-507	12
1244	Synthesis and Characterisation of Novel Chitosan-Hydroxyapatites Composites Doped with Zinc. **2017**, 264, 74-78	
1243	Nitric Oxide Generation from Endogenous Substrates Using Metal-Organic Frameworks: Inclusion within Poly(vinyl alcohol) Membranes To Investigate Reactivity and Therapeutic Potential. **2017**, 9, 35628-35641	33
1242	Anticorrosion properties of epoxy-nanochitosan nanocomposite coating. **2017**, 113, 74-81	37
1241	PLGA-Chitosan nanoparticle-mediated gene delivery for oral cancer treatment: A brief review. **2017**, 884, 012117	2
1240	Click reactions in chitosan chemistry. **2017**, 66, 769-781	26
1239	Characterization of Fe3O4@CS@NMDP magnetic nanoparticles with core–shell structure prepared by chemical cross-linking method. **2017**, 10, 1750056	3
1238	New hybrid organic polymer montmorillonite/chitosan/polyphenylenediamine composites for nonlinear optical studies. **2017**, 150, 323-332	16
1237	Dynamic Structuration of Physical Chitosan Hydrogels. **2017**, 33, 12697-12707	30
1236	Synthesis and characterization of chitosan-coated titanate nanotubes: towards a new safe nanocarrier. **2017**, 46, 15386-15398	19
1235	Design and fabrication of a chitosan hydrogel with gradient structures via a step-by-step cross-linking process. **2017**, 176, 195-202	20

1234	Surface modification of PS microtiter plate with chitosan oligosaccharides by Co irradiation. **2017**, 176, 135-139	3
1233	Protective effect of controlled release of cytokine response modifier A from chitosan microspheres on rat chondrocytes from interleukin-1□induced inflammation and apoptosis. **2017**, 14, 3170-3178	1
1232	Biomedical Significance of Chitin- and Chitosan-Based Nanocomposites. **2017**, 361-384	
1231	Chitosan Applications for the Food Industry. **2017**, 183-232	45
1230	Chitosan promotes ROS-mediated apoptosis and S phase cell cycle arrest in triple-negative breast cancer cells: evidence for intercalative interaction with genomic DNA. **2017**, 7, 43141-43150	26
1229	Thermo-responsive in-situ forming hydrogels as barriers to prevent post-operative peritendinous adhesion. **2017**, 63, 85-95	45
1228	Biocomposites from Renewable Resources: Preparation and Applications of Chitosan□Clay Nanocomposites. **2017**, 275-303	2
1227	Novel characteristics of horseradish peroxidase immobilized onto the polyvinyl alcohol-alginate beads and its methyl orange degradation potential. **2017**, 105, 328-335	67
1226	Preparation and Application of the Composite from Chitosan. **2017**, 371-433	0
1225	Biodegradable Composites: Properties and Uses. **2017**, 215-250	
1224	Preparation and characterization of photocured poly (□caprolactone) diacrylate/poly (ethylene glycol) diacrylate/chitosan for photopolymerization-type 3D printing tissue engineering scaffold application. **2017**, 81, 66-73	50
1223	Metal□Organic Framework Material Inhibits Biofilm Formation of Pseudomonas aeruginosa. **2017**, 27, 1702255	43
1222	Analysis of the performance of polysaccharide membranes in aqueous media as a tool to assist wound-dressing selection. **2017**, 134, 45386	12
1221	Synthesis and characterisation of cross-linked chitosan composites functionalised with silver and gold nanoparticles for antimicrobial applications. **2017**, 18, 528-540	33
1220	Applications of Chitosan Derivatives in Wastewater Treatment. **2017**, 471-517	7
1219	Chitosan encapsulation of essential oil "cocktails" with well-defined binary Zn(II)-Schiff base species targeting antibacterial medicinal nanotechnology. **2017**, 176, 24-37	7
1218	Chitosan: Application in tissue engineering and skin grafting. **2017**, 24, 1	57
1217	Electrophoretic deposition of tetracycline hydrochloride loaded halloysite nanotubes chitosan/bioactive glass composite coatings for orthopedic implants. **2017**, 327, 146-157	40

1216	Recyclable and biodegradable superhydrophobic and superoleophilic chitosan sponge for the effective removal of oily pollutants from water. **2017**, 330, 423-432	82
1215	Adsorption of Pb(II) ions from aqueous environment using eco-friendly chitosan schiff's base@FeO (CSB@FeO) as an adsorbent; kinetics, isotherm and thermodynamic studies. **2017**, 105, 422-430	48
1214	Highly defined 3D printed chitosan scaffolds featuring improved cell growth. **2017**, 12, 045009	54
1213	Chitin and Chitosan-Based (NANO) Composites. **2017**, 671-700	3
1212	Chitosan/phospholipid coated polyethylene terephthalate (PET) polymer surfaces activated by air plasma. **2017**, 532, 155-164	23
1211	Eco -Friendly Nanocomposites of Chitosan with Natural Extracts, Antimicrobial Agents, and Nanometals. **2017**, 35-60	1
1210	A review of chitosan's effect on oral biofilms: Perspectives from the tube to the mouth. **2017**, 59, 205-210	17
1209	In situ immobilization of Cd by organic amendments and their effect on antioxidant enzyme defense mechanism in mung bean (Vigna radiata L.) seedlings. **2017**, 118, 561-570	20
1208	Accelerated healing of full thickness dermal wounds by macroporous waterborne polyurethane-chitosan hydrogel scaffolds. **2017**, 81, 133-143	55
1207	Promising approaches for the treatment and prevention of viral respiratory illnesses. **2017**, 140, 921-932	39
1206	Preparation of 99Mo/99mTc generator based on cross-linked chitosan polymer using low-specific activity (n,□)99Mo. **2017**, 313, 647-653	8
1205	Mesoporous silica and chitosan based pH-sensitive smart nanoparticles for tumor targeted drug delivery. **2017**, 89, 15-27	4
1204	Synthesis and characterization of three novel amphiphilic dextran self-assembled micelles as potential drug delivery system. **2017**, 52, 12593-12607	18
1203	Flexible Polysaccharide Hydrogel with pH-Regulated Recovery of Self-Healing and Mechanical Properties. **2017**, 302, 1700221	38
1202	Synthesis and characterization of 2-hydroxyethylmethacrylate/2-(3-indol-yl)ethylmethacrylamide-based novel hydrogels as drug carrier with in vitro antibacterial properties. **2017**, 134, 45550	10
1201	Poly(□hydroxy acid) based polymers: A review on material and degradation aspects. **2017**, 144, 520-535	45
1200	Gladius and its derivatives as potential biosorbents for marine diesel oil. **2017**, 24, 22932-22939	2
1199	Surface Functionalization of Biomaterials. **2017**, 457-490	7

1198	Recent Progress in Biocomposite of Biodegradable Polymer. **2017**, 61-94	1
1197	Ultrasound-assisted synthesis of block copolymers of chitosan and D,L-lactide: Structure and properties. **2017**, 59, 551-559	3
1196	In Situ Interfacial Conjugation of Chitosan with Cinnamaldehyde during Homogenization Improves the Formation and Stability of Chitosan-Stabilized Emulsions. **2017**, 33, 14608-14617	38
1195	Biomedical Applications of Chitosan. **2017**, 1-12	
1194	Fifty nanometer lines patterned into silica using water developable chitosan bioresist and electron beam lithography. **2017**, 35, 06GE01	3
1193	Significant role of cationic polymers in drug delivery systems. **2018**, 46, 1872-1891	22
1192	Chitosan-based nanocomposites for the repair of bone defects. **2017**, 13, 2231-2240	31
1191	Chitosan supramolecularly cross linked with trimesic acid - Facile synthesis, characterization and evaluation of adsorption potential for chromium(VI). **2017**, 104, 1254-1266	34
1190	Preparation and properties of plasticized chitosan/starch cast films using AlCl3·6H2O aqueous solution as the solvent. **2017**, 74, 1817-1830	1
1189	UV-crosslinkable and thermo-responsive chitosan hybrid hydrogel for NIR-triggered localized on-demand drug delivery. **2017**, 174, 904-914	49
1188	Nanocelluloses obtained by ammonium persulfate (APS) oxidation of bleached kraft pulp (BKP) and bacterial cellulose (BC) and their application in biocomposite films together with chitosan. **2017**, 71, 659-666	7
1187	Effectiveness of chitosan scaffold in skin, bone and cartilage healing. **2017**, 104, 1003-1011	105
1186	Antibacterial blend films of cellulose and chitosan prepared from binary ionic liquid system. **2017**, 18, 852-858	15
1185	The potential of cashew gum functionalization as building blocks for layer-by-layer films. **2017**, 174, 849-857	16
1184	Chitosan for bone and cartilage regenerative engineering. **2017**, 33-72	3
1183	Chitosan for tendon engineering and regeneration. **2017**, 73-87	2
1182	Chitosan for the delivery of antibiotics. **2017**, 147-173	9
1181	Antimicrobial applications of chitosan. **2017**, 245-274	9

1180	Comparison of chito-oligosaccharide production from three different colloidal chitosans using the endochitonsanolytic system of Bacillus thuringiensis. **2017**, 47, 116-122	15
1179	Use of Oligochitosan as an Inhibiting Agent of Apple Juice Enzymatic Browning. **2017**, 41, e13062	3
1178	Hydrogel-thickened nanoemulsions based on essential oils for topical delivery of psoralen: Permeation and stability studies. **2017**, 116, 38-50	38
1177	Bilayer hydrogel actuators with tight interfacial adhesion fully constructed from natural polysaccharides. **2017**, 13, 345-354	105
1176	Smart composite materials based on chitosan microspheres embedded in thermosensitive hydrogel for controlled delivery of drugs. **2017**, 157, 493-502	54
1175	Lead(II)-ion removal by ethylenediaminetetraacetic acid ligand functionalized magnetic chitosan□luminum oxide□ron oxide nanoadsorbents and microadsorbents: Equilibrium, kinetics, and thermodynamics. **2017**, 134,	24
1174	Current Status and New Perspectives on Chitin and Chitosan as Functional Biopolymers. **2017**, 181, 1314-1337	146
1173	On the biological performance of graphene oxide-modified chitosan/polyvinyl pyrrolidone nanocomposite membranes: In vitro and in vivo effects of graphene oxide. **2017**, 70, 121-131	60
1172	Microwave as skin permeation enhancer for transdermal drug delivery of chitosan-5-fluorouracil nanoparticles. **2017**, 157, 906-919	40
1171	Synthesis and characterization of chitosan/poly (vinylpyrrolidone) biocomposite for biomedical application. **2017**, 74, 2185-2201	15
1170	Fabrication and characterization of a self-crosslinking chitosan hydrogel under mild conditions without the use of strong bases. **2017**, 156, 372-379	45
1169	Chitosan nanoparticles for combined drug delivery and magnetic hyperthermia: From preparation to in vitro studies. **2017**, 157, 361-370	91
1168	Covalent and injectable chitosan-chondroitin sulfate hydrogels embedded with chitosan microspheres for drug delivery and tissue engineering. **2017**, 71, 67-74	110
1167	Chitosan Nanoparticle Penetration into Shrimp Muscle and its Effects on the Microbial Quality. **2017**, 10, 186-198	14
1166	Influence of DBD plasma pretreatment on the deposition of chitosan onto UHMWPE fiber surfaces for improvement of adhesion and dyeing properties. **2017**, 396, 1571-1579	50
1165	Polymers against Microorganisms. **2017**,	8
1164	Combined delivery of FGF-2, TGF-□1, and adipose-derived stem cells from an engineered periosteum to a critical-sized mouse femur defect. **2017**, 105, 900-911	27
1163	Mechanochemical synthesis and in vitro studies of chitosan-coated InAs/ZnS mixed nanocrystals. **2017**, 52, 721-735	16

1162	Enhanced antibacterial and wound healing activities of microporous chitosan-Ag/ZnO composite dressing. **2017**, 156, 460-469	246
1161	Reassessment of chitosanase substrate specificities and classification. **2017**, 8, 1698	40
1160	N-acetylcysteine-functionalized coating avoids bacterial adhesion and biofilm formation. **2017**, 7, 17374	33
1159	Chitosan-based scaffolds for growth factor delivery. **2017**, 175-207	3
1158	Antibacterial properties of chitosan. **2017**, 31-44	6
1157	Characterization of chitosan matters. **2017**, 81-114	4
1156	Production of micro- and nanoscale chitosan particles for biomedical applications. **2017**, 185-209	8
1155	Membrane Technology for Human Health. **2017**, 14, 43-59	
1154	Ionically cross-linked chitosan□alloysite composite microparticles for sustained drug release. **2017**, 52, 413-426	5
1153	□-Ray-Radiation-Scissioned Chitosan as a Gene Carrier and Its Improved in vitro Gene Transfection Performance. **2017**, 30, 231-238	4
1152	Emerging Trends in Therapeutic Algorithm of Chronic Wound Healers: Recent Advances in Drug Delivery Systems, Concepts-to-Clinical Application and Future Prospects. **2017**, 34, 387-452	20
1151	. **2017**,	3
1150	NMR, FT-IR and raman characterization of biomaterials. **2017**, 147-173	6
1149	Collagen/chitosan composite scaffolds for bone and cartilage tissue engineering. **2017**, 163-198	4
1148	Cationic PEGylated polycaprolactone nanoparticles carrying post-operation docetaxel for glioma treatment. **2017**, 8, 1446-1456	31
1147	Supercritical CO□Assisted Spray Drying of Strawberry-Like Gold-Coated Magnetite Nanocomposites in Chitosan Powders for Inhalation. **2017**, 10,	16
1146	Preparation and Characterization of Chitosan Obtained from Shells of Shrimp (Litopenaeus vannamei Boone). **2017**, 15,	145
1145	Response of Ustilago maydis against the Stress Caused by Three Polycationic Chitin Derivatives. **2017**, 22,	7

1144	A Chitosan-Based Liposome Formulation Enhances the In Vitro Wound Healing Efficacy of Substance P Neuropeptide. **2017**, 9,	30
1143	pH Sensitive Hydrogels in Drug Delivery: Brief History, Properties, Swelling, and Release Mechanism, Material Selection and Applications. **2017**, 9,	246
1142	Recent Advances in Antimicrobial Hydrogels Containing Metal Ions and Metals/Metal Oxide Nanoparticles. **2017**, 9,	72
1141	Harnessing Nanoparticles for Immunomodulation and Vaccines. **2017**, 5,	77
1140	Influence of Polycation Functional Properties on Polyanion Micro/Nanoparticles for NSAIDs Reinforced Via Polyelectrolyte Complexation: Alginate□Chitosan Case Study. **2017**, 133-160	3
1139	Analysis of the shelf life of chitosan stored in different types of packaging, using colorimetry and dentin microhardness. **2017**, 42, 87-94	3
1138	Aplicaciones biom□dicas de biomateriales polim□dicos. **2017**, 84, 241	4
1137	Advances in the Fabrication of Antimicrobial Hydrogels for Biomedical Applications. **2017**, 10,	49
1136	Perspectives on Biomedical Applications of Ulvan. **2017**, 305-330	10
1135	Synthesis, Characterization, and Evaluation of Antimicrobial Activities of Chitosan and Carboxymethyl Chitosan Schiff-Base/Silver Nanoparticles. **2017**, 2017, 1-11	32
1134	Nanosized Minicells Generated by Lactic Acid Bacteria for Drug Delivery. **2017**, 2017, 1-10	8
1133	Hybrid polysaccharide-based systems for biomedical applications. **2017**, 107-149	2
1132	Polymer nanoparticles containing essential oils: new options for mosquito control. **2017**, 24, 17006-17015	32
1131	Chitosan-Acrylic Polymeric Nanoparticles with Dynamic Covalent Bonds. Synthesis and Stimuli Behavior. **2017**, 65, 1132-1143	4
1130	The use of Eucalyptus staigeriana nanoemulsion for control of sheep haemonchosis. **2017**, 37, 221-226	5
1129	Fabrication of Chitosan Silk-based Tracheal Scaffold Using Freeze-Casting Method. **2017**, 21, 228-39	21
1128	Evaluation of a chitosan-polyethylene glycol paste as a local antibiotic delivery device. **2017**, 8, 130-141	12
1127	Bio-Instructive Scaffolds for Cartilage Regeneration. **2017**, 115-135	

1126	A biofunctionalizable ink platform composed of catechol-modified chitosan and reduced graphene oxide/platinum nanocomposite. **2017**, 8, 1508-1514	7
1125	TOXICITY ANALYSIS OF RGD-CHITOSAN FROM SHRIMP SHELL SCAFFOLD MEMBRANES TOWARD HUMAN DENTAL PULP CELLS. **2017**, 9, 13	1
1124	Synthesis of Chitosan-Polyvinyl Alcohol Copolymers for Smart Drug Delivery Application. **2017**, 25, 241-246	13
1123	Understanding the properties of chitosan aryl substituted thioureas in their role and potential as antibacterial agents. **2018**,	3
1122	Ultrasensitive and Stable Au Dimer-Based Colorimetric Sensors Using the Dynamically Tunable Gap-Dependent Plasmonic Coupling Optical Properties. **2018**, 28, 1707392	38
1121	Bioactive Ti-base biomaterial with sustained anti-bacterial response for endosseous applications. **2018**, 125, 37-46	3
1120	Reinforcing Mucus Barrier Properties with Low Molar Mass Chitosans. **2018**, 19, 872-882	19
1119	Aptamer-Patterned Hydrogel Films for Spatiotemporally Programmable Capture and Release of Multiple Proteins. **2018**, 10, 8546-8554	15
1118	Self-aggregated nanoparticles of N-dodecyl,N?-glycidyl(chitosan) as pH-responsive drug delivery systems for quercetin. **2018**, 135, 45678	14
1117	Chitosan composites with Ag nanoparticles formed in carbonic acid solutions. **2018**, 190, 103-112	8
1116	Chitosan stabilized nasal emulsion delivery system for effective humoral and cellular response against recombinant tetravalent dengue antigen. **2018**, 190, 129-138	12
1115	Preparation of anticancer micro-medicine based on quinoline and chitosan with pH responsive release performance. **2018**, 165, 278-285	18
1114	Fluorescence control of chitin and chitosan fabricated surface functionalization using direct oxidative polymerization.. **2018**, 8, 7005-7013	27
1113	Poloxamer 407-chitosan grafted thermoresponsive hydrogels achieve synchronous and sustained release of antigen and adjuvant from single-shot vaccines. **2018**, 96, 656-665	16
1112	Thermoplastic blends of chitosan: A method for the preparation of high thermally stable blends with polyesters. **2018**, 191, 44-52	23
1111	Modulation of osteogenic and haemostatic activities by tuning cationicity of genipin-crosslinked chitosan hydrogels. **2018**, 166, 29-36	15
1110	Natural deep eutectic solvents as green plasticizers for chitosan thermoplastic production with controlled/desired mechanical and barrier properties. **2018**, 82, 478-489	44
1109	Porous Nanocomposite Comprising Ultralong Hydroxyapatite Nanowires Decorated with Zinc-Containing Nanoparticles and Chitosan: Synthesis and Application in Bone Defect Repair. **2018**, 24, 8809-8821	23

1108	Chitosan/Polyvinylpyrrolidone/MCM-41 Composite Hydrogel Films: Structural, Thermal, Surface, and Antibacterial Properties. **2018**, 70, 1700303	14
1107	Synthesis, characterization and antifungal efficacy of chitosan derivatives with triple quaternary ammonium groups. **2018**, 114, 942-949	37
1106	Use of microreactors and freeze-drying in the manufacturing process of chitosan coated PCL nanoparticles. **2018**, 119, 135-146	5
1105	Highly Elastic and Ultratough Hybrid Ionic-Covalent Hydrogels with Tunable Structures and Mechanics. **2018**, 30, e1707071	199
1104	Ciprofloxacin and Rifampin Dual Antibiotic-Loaded Biopolymer Chitosan Sponge for Bacterial Inhibition. **2018**, 183, 433-444	17
1103	Fabrication of inhaled hybrid silver/ciprofloxacin nanoparticles with synergetic effect against Pseudomonas aeruginosa. **2018**, 128, 27-35	19
1102	Construction of novel cellulose/chitosan composite hydrogels and films and their applications. **2018**, 25, 1987-1996	23
1101	A low-cost and environment friendly chitosan/aluminum hydroxide bead adsorbent for fluoride removal from aqueous solutions. **2018**, 27, 253-261	14
1100	Chitosan-based nanosystems and their exploited antimicrobial activity. **2018**, 117, 8-20	141
1099	Physicochemical Characteristics of Chitosan□TiO2 Biomaterial. 1. Stability and Swelling Properties. **2018**, 57, 1859-1870	38
1098	Effect of chitosan coating on the structural and magnetic properties of MnFe2O4 and Mn0.5Co0.5Fe2O4 nanoparticles. **2018**, 8, 056726	9
1097	Free Radical Graft Copolymerization Strategy To Prepare Catechin-Modified Chitosan Loose Nanofiltration (NF) Membrane for Dye Desalination. **2018**, 6, 4253-4263	59
1096	d-Glucosamine production from chitosan hydrolyzation over a glucose-derived solid acid catalyst.. **2018**, 8, 5608-5613	12
1095	Chitosan/sodium tripolyphosphate nanoparticles as efficient vehicles for antioxidant peptidic fraction from common kilka. **2018**, 111, 730-737	27
1094	Chitosan composite scaffolds for articular cartilage defect repair: a review.. **2018**, 8, 3736-3749	45
1093	Preparation of chitosan sulfate and vesicle formation with a conventional cationic surfactant. **2018**, 183, 240-245	12
1092	Branched dicationically-charged phosphodicholine (PdC) modified chitosan with specific associated water structure and unique interactions with biocomponents. **2018**, 123, 44-53	2
1091	Ulvan-chitosan polyelectrolyte complexes as matrices for enzyme induced biomimetic mineralization. **2018**, 182, 254-264	36

1090	On the Production of Chitosan-Coated Polycaprolactone Nanoparticles in a Confined Impinging Jet Reactor. **2018**, 107, 1157-1166	6
1089	Hydration of hydrogels studied by near-infrared hyperspectral imaging. **2018**, 32, e2972	3
1088	Mucoralean fungi for sustainable production of bioethanol and biologically active molecules. **2018**, 102, 1097-1117	26
1087	Rubbery Chitosan/Carrageenan Hydrogels Constructed through an Electroneutrality System and Their Potential Application as Cartilage Scaffolds. **2018**, 19, 340-352	49
1086	Application of response surface methodology to tailor the surface chemistry of electrospun chitosan-poly(ethylene oxide) fibers. **2018**, 186, 122-131	18
1085	Thermo-sensitive injectable glycol chitosan-based hydrogel for treatment of degenerative disc disease. **2018**, 184, 342-353	34
1084	Tunable pH-Responsive Chitosan-Poly(acrylic acid) Electrospun Fibers. **2018**, 19, 588-595	25
1083	Effect of the adhesion of Ag coatings on the effectiveness and durability of antibacterial properties. **2018**, 53, 4759-4767	9
1082	Fabrication of Multiple-Layered Hydrogel Scaffolds with Elaborate Structure and Good Mechanical Properties via 3D Printing and Ionic Reinforcement. **2018**, 10, 18338-18350	37
1081	Effect of pH and TPP concentration on chemico-physical properties, release kinetics and antifungal activity of Chitosan-TPP-Ungeremine microbeads. **2018**, 195, 631-641	37
1080	Impact of surface adhesion and sample heterogeneity on the multiscale mechanical characterisation of soft biomaterials. **2018**, 8, 6780	22
1079	Electrophoretic Deposited Stable Chitosan@MoS Coating with Rapid In Situ Bacteria-Killing Ability under Dual-Light Irradiation. **2018**, 14, e1704347	125
1078	Effect of urea addition on chitosan dissolution with [Emim]Ac-Urea solution system. **2018**, 195, 288-297	13
1077	Effects of ascorbate and hydroxyl radical degradations on the structural, physicochemical, antioxidant and film forming properties of chitosan. **2018**, 114, 1086-1093	8
1076	Local Delivery of Amikacin and Vancomycin from Chitosan Sponges Prevent Polymicrobial Implant-Associated Biofilm. **2018**, 183, 459-465	20
1075	Effect of freeze-thawing conditions for preparation of chitosan-poly (vinyl alcohol) hydrogels and drug release studies. **2018**, 195, 476-485	53
1074	A strategy for high radioprotective activity via the assembly of the PprI protein with a ROS-sensitive polymeric carrier. **2018**, 6, 3297-3304	8
1073	Synthesis of chitosan derivative graft acrylic acid superabsorbent polymers and its application as water retaining agent. **2018**, 115, 754-761	64

1072	Chitosan supported palladium nanoparticles: The novel catalysts for hydrogen generation from hydrolysis of ammonia borane. **2018**, 103, 89-95	28
1071	Layer-by-layer assembly of efficient flame retardant coatings based on high aspect ratio graphene oxide and chitosan capable of preventing ignition of PU foam. **2018**, 152, 1-9	63
1070	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
1069	Synthesis of C-coordinated O-carboxymethyl chitosan metal complexes and evaluation of their antifungal activity. **2018**, 8, 4845	13
1068	Supramolecular hydrogel formation between chitosan and hydroxypropyl □cyclodextrin via Diels-Alder reaction and its drug delivery. **2018**, 114, 381-391	35
1067	Preparation and characterization of chitosan-based antimicrobial active food packaging film incorporated with apple peel polyphenols. **2018**, 114, 547-555	175
1066	Vesicle formation in aqueous mixture of the cetyltrimetylammonium bromide and an anionic chitosan derivative. **2018**, 39, 1518-1523	
1065	Parameters influencing the size of chitosan-TPP nano- and microparticles. **2018**, 8, 4695	126
1064	A spotlight on thiolated natural polymers and their relevance in mucoadhesive drug delivery system. **2018**, 4, 47-52	6
1063	Tailoring Functional Chitosan-Based Composites for Food Applications. **2018**, 18, 1138-1149	20
1062	Synthesis and characterization of chitosan-grafted-polycaprolactone micelles for modulate intestinal paclitaxel delivery. **2018**, 8, 387-397	29
1061	Chitin production from crustacean biomass: Sustainability assessment of chemical and enzymatic processes. **2018**, 172, 4140-4151	53
1060	Different Porosities of Chitosan Can Influence the Osteogenic Differentiation Potential of Stem Cells. **2018**, 119, 625-633	13
1059	Entrapment of proteins and peptides in chitosan-polyphosphoric acid hydrogel beads: A new approach to achieve both high entrapment efficiency and controlled in vitro release. **2018**, 239, 1200-1209	45
1058	Polyelectrolyte-complex multilayer membrane with gradient porous structure based on natural polymers for wound care. **2018**, 181, 183-190	21
1057	Anthocyanin stabilization by chitosan-chondroitin sulfate polyelectrolyte complexation integrating catechin co-pigmentation. **2018**, 181, 124-131	49
1056	Nanostructured chitosan□gelatin hybrid aerogels produced by supercritical gel drying. **2018**, 58, 1494-1499	14
1055	Computational approaches to cell-nanomaterial interactions: keeping balance between therapeutic efficiency and cytotoxicity. **2018**, 3, 6-27	33

1054	Safety and efficacy of hydroxyapatite scaffold in the prevention of jaw osteonecrosis in vivo. **2018**, 106, 1799-1808	7
1053	Sodium salt of oleoyl carboxymethyl chitosan: A sustainable adsorbent in the oil spill treatment. **2018**, 170, 339-350	34
1052	Polyurethanes from modified castor oil and chitosan: Synthesis, characterization, in vitro degradation, and cytotoxicity. **2018**, 50, 419-434	8
1051	Chitosan-lipid nanoparticles (CS-LNPs): Application to siRNA delivery. **2018**, 510, 45-56	35
1050	Modification of chitosan-Fe3O4 microspheres with isophorone diisocyanate and formation of polyurethane/mchitosan-Fe3O4 antimicrobial polymer. **2018**, 67, 711-719	3
1049	Soft chitosan microbeads scaffold for 3D functional neuronal networks. **2018**, 156, 159-171	40
1048	The efficiency and mechanism of N-octyl-O, N-carboxymethyl chitosan-based micelles to enhance the oral absorption of silybin. **2018**, 536, 231-240	23
1047	A review on chitosan and its nanocomposites in drug delivery. **2018**, 109, 273-286	548
1046	Evaluating the biocompatibility of marine-derived chitosan□collagen polymeric blends for biomedical applications. **2018**, 33, 439-455	6
1045	A novel approach to 1,2,3-triazole grafted chitosans via modified Wolff□ cyclocondensation. **2018**, 98, 492-498	2
1044	Polymeric Biomaterials Based on Polylactide, Chitosan and Hydrogels in Medicine. **2018**, 119-147	
1043	Chitosan-based coatings in the prevention of intravascular catheter-associated infections. **2018**, 32, 725-737	9
1042	Surface modification of chitin and chitosan with poly(3-hexylthiophene) via oxidative polymerization. **2018**, 434, 188-197	27
1041	Recent trends on gellan gum blends with natural and synthetic polymers: A review. **2018**, 109, 1068-1087	131
1040	C-coordinated O-carboxymethyl chitosan metal complexes: Synthesis, characterization and antifungal efficacy. **2018**, 106, 68-77	31
1039	Photopolymerized water-soluble maleilated chitosan/methacrylated poly (vinyl alcohol) hydrogels as potential tissue engineering scaffolds. **2018**, 106, 227-233	21
1038	Physicochemical characterization of chitosan and its effects on early growth, cell cycle and root anatomy of transgenic and non-transgenic maize hybrids. **2018**, 12, 56-66	9
1037	Effects of Paclitaxel-conjugated N-Succinyl-Hydroxyethyl Chitosan Film for Proliferative Cholangitis in Rabbit Biliary Stricture Model. **2018**, 131, 696-703	4

1036	Chitosan-coated liposomes loaded with butyric acid demonstrate anticancer and anti-inflammatory activity in human hepatoma HepG2 cells. **2019**, 41, 1476-1486	20
1035	Lecithin-chitosan-TPGS nanoparticles as nanocarriers of (-)-epicatechin enhanced its anticancer activity in breast cancer cells.. **2018**, 8, 34773-34782	16
1034	Preparation and characterization of chitosan/graphene oxide composite hydrogels for nerve tissue Engineering. **2018**, 5, 15620-15628	16
1033	. **2018**,	5
1032	Composite Film Based on Pulping Industry Waste and Chitosan for Food Packaging. **2018**, 11,	8
1031	Novel nano-sized chitosan amphotericin B formulation with considerable improvement against Leishmania major. **2018**, 13, 3129-3147	15
1030	Selective and Green Sulfoxidation in Water using a New Chitosan Supported Mo(VI) Complex as Heterogeneous Catalyst. **2018**, 3, 12563-12575	7
1029	Green Composites with Excellent Barrier Properties. **2018**, 321-367	3
1028	Current and novel polymeric biomaterials for neural tissue engineering. **2018**, 25, 90	144
1027	Implantable Polymeric Drug Delivery Devices: Classification, Manufacture, Materials, and Clinical Applications. **2018**, 10,	135
1026	In Vitro morphological, optical and microbiological evaluation of nanosilver fluoride in the remineralization of deciduous teeth enamel. **2018**, 7, 509-520	4
1025	Carrier Based Oral Nano Drug Delivery Framework: A Review. **2018**, 3, 75-85	7
1024	Influence of pH and ionic strength on the antibacterial effect of hyaluronic acid/chitosan films assembled layer-by-layer. **2018**, 109, 198-205	20
1023	A biotechnological approach to immunotherapy: Antivenom against Crotalus durissus cascavella snake venom produced from biodegradable nanoparticles. **2018**, 120, 1917-1924	9
1022	Polysaccharide4loe vera Bioactive Hydrogels as Wound Care System. **2018**, 1-18	
1021	Thermal and kinetics of the degradation of chitosan with different deacetylation degrees under oxidizing atmosphere. **2018**, 670, 18-26	9
1020	Recent progress in the structural modification of chitosan for applications in diversified biomedical fields. **2018**, 109, 402-434	93
1019	Advances in Waterborne Polyurethane-Based Biomaterials for Biomedical Applications. **2018**, 1077, 251-283	23

1018	Advances in Protein-Based Materials: From Origin to Novel Biomaterials. **2018**, 1078, 161-210	19
1017	Ionically Crosslinked Chitosan Membranes Used as Drug Carriers for Cancer Therapy Application. **2018**, 11,	23
1016	Modern Approaches to Tissue Engineering of the Spinal Cord: Analytical Review. **2018**, 7, 3-32	
1015	Synthesis and Activity of Escherichia coli on Different Chitosan Nanoparticles. **2018**, 381, 1800106	
1014	Effects of chitosan as growth promoter on diarrhea, nutrient apparent digestibility, fecal microbiota and immune response in weaned piglets. **2018**, 46, 1437-1442	11
1013	Development of Antimicrobial Hybrid Materials from Polylactic Acid and Nano-silver Coated Chitosan. **2018**, 34, 683-692	10
1012	Borrowing From Nature: Biopolymers and Biocomposites as Smart Wound Care Materials. **2018**, 6, 137	88
1011	Development and Evaluation of an Injectable Chitosan/β-Glycerophosphate Paste as a Local Antibiotic Delivery System for Trauma Care. **2018**, 9,	7
1010	Antibacterial hop extracts encapsulated in nanochitosan matrices. **2018**, 120, 1335-1343	20
1009	Lippia origanoides Kunth. essential oil loaded in nanogel based on the chitosan and β-coumaric acid: Encapsulation efficiency and antioxidant activity. **2018**, 125, 85-94	25
1008	Effect of organic/inorganic nanoparticles on performance of polyurethane nanocomposites for potential wound dressing applications. **2018**, 88, 395-405	26
1007	Synthetic Biopolymers. **2018**, 1-44	
1006	Strategy to improve the characterization of chitosan by size exclusion chromatography coupled with multi angle laser light scattering. **2018**, 202, 99-105	13
1005	Chitosan-Based Mucoadhesive Systems for the Inclusion of the Echinochrome Active Substance. **2018**, 54, 478-483	1
1004	Layer-by-layer-assembled chitosan/phosphorylated cellulose nanofibrils as a bio-based and flame protecting nano-exoskeleton on PU foams. **2018**, 202, 479-487	40
1003	Nano spray drying: A novel technique to prepare well-defined surface coatings for medical implants. **2018**, 48, 145-151	11
1002	Establishing Gene Delivery Systems Based on Small-Sized Chitosan Nanoparticles. **2018**, 17, 1253-1260	2
1001	Characterization of Hydroxyapatite/ Silk Fibroin/ Chitosan Scaffold for Cartilage Tissue Engineering. **2018**, 775, 120-126	3

1000	Overview of Electrospinned Chitosan Nanofiber Composites for Wound Dressings. **2018**,	6
999	Investigation of using pectin and chitosan as natural excipients in pellet formulation. **2018**, 120, 1208-1215	13
998	Biocompatible Porous Scaffolds of Chitosan/Poly(EG--PG) Blends with Tailored Pore Size and Nontoxic to Stem Cells: Preparation by Controlled Evaporation from Aqueous Acetic Acid Solution. **2018**, 3, 10286-10295	9
997	Comparative Study On Water Uptake And Ionic Transport Properties Of Pre- And Post Sulfonated Chitosan/PVA polymer Exchange Membrane. **2018**, 458, 012017	3
996	Rheological behavior of biodegradable N-succinyl chitosan-g-poly (acrylic acid) hydrogels and their applications as drug carrier and in vitro theophylline release. **2018**, 117, 454-466	27
995	Dual Ag/ZnO-Decorated Micro-/Nanoporous Sulfonated Polyetheretherketone with Superior Antibacterial Capability and Biocompatibility via Layer-by-Layer Self-Assembly Strategy. **2018**, 18, e1800028	29
994	ChiBio: An Integrated Bio-refinery for Processing Chitin-Rich Bio-waste to Specialty Chemicals. **2018** , 555-578	11
993	Green Fabrication of Amphiphilic Quaternized β-Chitin Derivatives with Excellent Biocompatibility and Antibacterial Activities for Wound Healing. **2018**, 30, e1801100	169
992	Synthesis and characterization of novel copper oxide-chitosan nanocomposites for non-enzymatic glucose sensing. **2018**, 272, 296-307	54
991	Microbial Polyamino Acids: An Overview for Commercial Attention. **2018**, 381-412	0
990	Role of CdSe quantum dots in the structure and antibacterial activity of chitosan/poly e-caprolactone thin films. **2018**, 5, 138-144	9
989	Effects of chitosan addition on growth performance, diarrhoea, anti-oxidative function and serum immune parameters of weaned piglets. **2018**, 48, 142	8
988	Chitosan-Based Hydrogels: Preparation, Properties, and Applications. **2018**, 1-29	1
987	Growth factor release and enhanced encapsulated periodontal stem cells viability by freeze-dried platelet concentrate loaded thermo-sensitive hydrogel for periodontal regeneration. **2018**, 30, 355-364	7
986	Stimuli-responsive biopolymer nanocarriers for drug delivery applications. **2018**, 405-432	7
985	Protein-Based Hydrogels. **2018**, 1-40	
984	Anionic and cationic drug sorption on interpolyelectrolyte complexes. **2018**, 170, 210-218	13
983	Properties evaluation of polyelectrolyte complex based on iota carrageenan and chitosan in acidic and basic media. **2018**, 229, 142-147	7

982	Phytosome complexed with chitosan for gingerol delivery in the treatment of respiratory infection: In vitro and in vivo evaluation. **2018**, 122, 214-229	37
981	Introduction to Plastics Engineering. **2018**, 1-16	45
980	Grand Challenges in Marine Biotechnology. **2018**,	4
979	Polysaccharides as vaccine adjuvants. **2018**, 36, 5226-5234	93
978	Design of hybrid molecular brushes with reversible surface adaptability on exposure to specific solvents. **2018**, 13, 041006	3
977	Enhanced Enzymatic Hydrolysis of Chitosan by Surfactant Addition. **2018**, 62, 286-291	5
976	Fabrication of Coaxial Wet-Spun Biofibres Containing Graphene Core. **2018**, 79-106	
975	Advances in Biomedical Application of Chitosan and Its Functionalized Nano-derivatives. **2018**, 145-163	1
974	Synergistic Effect of Newly Introduced Root Canal Medicaments; Ozonated Olive Oil and Chitosan Nanoparticles, Against Persistent Endodontic Pathogens. **2018**, 9, 1371	25
973	Introduction and Literature Review. **2018**, 1-45	
972	Fungal Nanobionics: Principles and Applications. **2018**,	33
971	Novel Blend for Producing Porous Chitosan-Based Films Suitable for Biomedical Applications. **2018**, 8,	28
970	Preparation, Characterization and Biological Applications of Biosynthesized Silver Nanoparticles with Chitosan-Fucoidan Coating. **2018**, 23,	36
969	Facile Preparation of Metal-Organic Framework (MIL-125)/Chitosan Beads for Adsorption of Pb(II) from Aqueous Solutions. **2018**, 23,	27
968	Chitosan Based Self-Assembled Nanoparticles in Drug Delivery. **2018**, 10,	129
967	Bioactive Sr(II)/Chitosan/Poly(Ɛcaprolactone) Scaffolds for Craniofacial Tissue Regeneration. In Vitro and In Vivo Behavior. **2018**, 10,	7
966	Reversible pH-Sensitive Chitosan-Based Hydrogels. Influence of Dispersion Composition on Rheological Properties and Sustained Drug Delivery. **2018**, 10,	17
965	Effect of Chemical Disinfection on Chitosan Coated PMMA and PETG Surfaces-An In Vitro Study. **2018**, 10,	3

964	Immune Profiling of Polysaccharide Submicron Vesicles. **2018**, 19, 3560-3571	4
963	New Food Packaging Systems. **2018**, 63-85	3
962	Upscaled Preparation of Trimethylsilylated Chitosan Aerogel. **2018**, 57, 10421-10430	16
961	Nanoindentation Investigation on Chitosan Thin Films with Different Types of Nano Fillers. **2018**, 7, 11	5
960	The Multifunctional Role of Chitosan in Horticultural Crops; A Review. **2018**, 23,	87
959	Biocompatibility of Gd-Loaded Chitosan-Hyaluronic Acid Nanogels as Contrast Agents for Magnetic Resonance Cancer Imaging. **2018**, 8,	12
958	Chitosan-grafted-poly(methacrylic acid)/graphene oxide nanocomposite as a pH-responsive de novo cancer chemotherapy nanosystem. **2018**, 118, 1871-1879	57
957	Natural Antimicrobial Agents for Food Biopreservation. **2018**, 409-438	4
956	Natural polymer blends: Thermal and mechanical behavior. **2018**,	1
955	In-vitro subsurface remineralisation of artificial enamel white spot lesions pre-treated with chitosan. **2018**, 34, 1154-1167	22
954	Nanofiber technology in the ex vivo expansion of cord blood-derived hematopoietic stem cells. **2018**, 14, 1707-1718	13
953	Catechin modulates the copigmentation and encapsulation of anthocyanins in polyelectrolyte complexes (PECs) for natural colorant stabilization. **2018**, 264, 342-349	27
952	Enhanced chondrogenic differentiation of human mesenchymal stems cells on citric acid-modified chitosan hydrogel for tracheal cartilage regeneration applications.. **2018**, 8, 16910-16917	13
951	Glutathione responsive chitosan-thiolated dextran conjugated miR-145 nanoparticles targeted with AS1411 aptamer for cancer treatment. **2018**, 201, 131-140	28
950	Integrating 3D-printed PHBV/Calcium sulfate hemihydrate scaffold and chitosan hydrogel for enhanced osteogenic property. **2018**, 202, 106-114	27
949	Development of Hydrogels from Edible Polymers. **2018**, 551-589	1
948	Review of 3D printable hydrogels and constructs. **2018**, 159, 20-38	99
947	Materials Functionalization with Multicomponent Reactions: State of the Art. **2018**, 20, 499-528	57

946	Salicylic acid loaded chitosan microparticles applied to lettuce seedlings: Recycling shrimp fishing industry waste. **2018**, 200, 321-331	12
945	Novel Nanosized Chitosan-Betulinic Acid Against Resistant Leishmania Major and First Clinical Observation of such parasite in Kidney. **2018**, 8, 11759	20
944	Mechanics for the Adhesion and Aggregation of Red Blood Cells on Chitosan. **2018**, 34, 725-732	7
943	Chitosan/NaF Particles Prepared Via Ionotropic Gelation: Evaluation of Particles Size and Morphology. **2018**, 21,	10
942	Rheological characterization of new thermosensitive hydrogels formed by chitosan, glycerophosphate, and phosphorylated □cyclodextrin. **2018**, 201, 471-481	19
941	Radiation Grafting of Biopolymers and Synthetic Polymers. **2018**, 205-250	1
940	A biopolymer-based composite hydrogel for rhodamine 6G dye removal: its synthesis, adsorption isotherms and kinetics. **2018**, 27, 527-535	19
939	Chitosan Hydrogels and Bionanocomposites Formed through the Mineralization and Regulated Charging. **2018**, 18, 1247	12
938	Chitosan's biological activity upon skin-related microorganisms and its potential textile applications. **2018**, 34, 93	5
937	Grafting Onto Biopolymers: Application in Targeted Drug Delivery. **2018**, 335-389	4
936	Natural Biopolymers for Biomedical Applications. **2019**, 162-176	1
935	On-demand removable hydrogels based on photolabile cross-linkings as wound dressing materials. **2019**, 7, 5669-5676	17
934	Chitosan/tannic acid bilayers layer-by-layer deposited cellulose nanofibrous mats for antibacterial application. **2019**, 139, 191-198	39
933	Surfactant-aided dispersion of carbon nanomaterials in aqueous solution. **2019**, 31, 071301	35
932	Loading of cancer drug resveratrol to pH-Sensitive, smart, alginate-chitosan hydrogels and investigation of controlled release kinetics. **2019**, 53, 101199	13
931	Effects of Chitosan Oligosaccharide□Nisin Conjugates Formed by Maillard reaction on the preservation of Collichthys niveatus. **2019**, 43, e14116	5
930	the Material Properties of Chitosan-Halloysite Hydrogel Composites. **2019**, 5,	9
929	Facile preparation of acid/CO2 stimuli-responsive sheddable nanoparticles based on carboxymethylated chitosan. **2019**, 13, 296-304	1

928	Applications of chitosan in food, pharmaceuticals, medicine, cosmetics, agriculture, textiles, pulp and paper, biotechnology, and environmental chemistry. **2019**, 17, 1667-1692	180
927	Chitosan-Based Drug Delivery Systems for Optimization of Photodynamic Therapy: a Review. **2019**, 20, 253	24
926	Impact of acid type for chitosan dissolution on the characteristics and biodegradability of cornstarch/chitosan based films. **2019**, 138, 693-703	26
925	Effect of Chitosan- and Alginate-Based Coatings Enriched with Cinnamon Essential Oil Microcapsules to Improve the Postharvest Quality of Mangoes. **2019**, 12,	43
924	Recent advances in heterogeneous catalysts for the synthesis of imidazole derivatives. **2019**, 49, 2437-2459	37
923	Hyaluronic acid coated electrospun chitosan-based nanofibers prepared by simultaneous stabilizing and coating. **2019**, 138, 403-411	16
922	Thermochemical research of chitosan complexes with sulfonated metallophthalocyanines. **2019**, 137, 1153-1160	3
921	Functionalization of Polyethylene (PE) and Polypropylene (PP) Material Using Chitosan Nanoparticles with Incorporated Resveratrol as Potential Active Packaging. **2019**, 12,	28
920	Processing of natural mineral magnetite for medical applications. **2019**, 125-147	
919	A Review on Versatile Applications of Degradable Polymers. **2019**, 403-422	8
918	3D printing of chitosan/ poly(vinyl alcohol) hydrogel containing synthesized hydroxyapatite scaffolds for hard-tissue engineering. **2019**, 79, 106006	27
917	Corrosion behavior and characterization of HA/Fe3O4/CS composite coatings on AZ91 Mg alloy by electrophoretic deposition. **2019**, 237, 121884	15
916	Chitosan-Based Bioactive Hemostatic Agents with Antibacterial Properties-Synthesis and Characterization. **2019**, 24,	35
915	Could spray-dried microbeads with chitosan glutamate be considered as promising vaginal microbicide carriers? The effect of process variables on the in vitro functional and physicochemical characteristics. **2019**, 568, 118558	5
914	Chitosan in drug delivery applications. **2019**, 101-119	2
913	Fabrication of Stable Nanofiber Matrices for Tissue Engineering via Electrospinning of Bare Laser-Synthesized Au Nanoparticles in Solutions of High Molecular Weight Chitosan. **2019**, 9,	10
912	Progress and Current Trends in the Synthesis of Novel Polymers with Enhanced Mucoadhesive Properties. **2019**, 19, e1900194	31
911	Implantable microneedles with an immune-boosting function for effective intradermal influenza vaccination. **2019**, 97, 230-238	27

910	Conclusion and Future Prospective of Polymeric Nanoparticles for Cancer Therapy. **2019**, 389-408	11
909	Synthesis of Chitosan-g-Poly(ethylene glycol)-g-Polyethyleneimine Copolymer and Its Research as Drug Carrier. **2019**, 27, 772-780	4
908	Functional and Nutraceutical Ingredients From Marine Resources. **2019**, 101-171	
907	Chitosan for gene, DNA vaccines, and drug delivery. **2019**, 515-550	8
906	Chitosan and water-soluble chitosan effects on refrigerated catfish fillet quality. **2019**, 31, 100426	21
905	Additive Manufacturing Approaches for Hydroxyapatite-Reinforced Composites. **2019**, 29, 1903055	70
904	Green Biopolymers and their Nanocomposites. **2019**,	6
903	Microstructure and characteristic properties of gelatin/chitosan scaffold prepared by the freeze-gelation method. **2019**, 6, 115404	4
902	Comparative analysis between four model nanoformulations of amphotericin B-chitosan, amphotericin B-dendrimer, betulinic acid-chitosan and betulinic acid-dendrimer for treatment of : real-time PCR assay plus. **2019**, 14, 7593-7607	22
901	Plasmonic Gold Nanorattle Impregnated Chitosan Nanocarrier for Stimulus Responsive Theranostics.. **2019**, 2, 4812-4825	6
900	Recent advances in functional nanostructured materials for bone-related diseases. **2019**, 7, 509-527	15
899	Investigation on fractal characteristics of salt rock under different tensile conditions. **2019**, 304, 052117	
898	Detection of EGFR gene mutation status from pleural effusions and other body fluid specimens in patients with lung adenocarcinoma. **2019**, 10, 2218-2224	16
897	Fabrication of Ion-Crosslinking Aminochitosan Nanoparticles for Encapsulation and Slow Release of Curcumin. **2019**, 11,	16
896	Applications of Green Polymeric Composite Materials. **2019**, 161-174	1
895	. **2019**,	1
894	Multifunctional Mineral Hydrogels: Potential in Artificially Intelligent Skins and Drug Delivery. **2019**, 4, 19145-19152	5
893	The Effect of PEGDE Concentration and Temperature on Physicochemical and Biological Properties of Chitosan. **2019**, 11,	7

892	Resorbable polymers in bone repair and regeneration. **2019**, 87-125	4
891	Bisphosphonate-Functionalized Scaffolds for Enhanced Bone Regeneration. **2019**, 8, e1901073	30
890	Yield stress and rheology of a self-associating chitosan solution. **2019**, 58, 729-739	2
889	Uniform magnetic chitosan microspheres with radially oriented channels by electrostatic droplets method for efficient removal of Acid Blue. **2019**, 104, 210-218	11
888	The impact of genetic diversity on the accuracy of DNA barcoding to identify species: A study on the genus. **2019**, 9, 10723-10733	3
887	Effect of Melt-Derived Bioactive Glass Particles on the Properties of Chitosan Scaffolds. **2019**, 10,	5
886	Plant-Derived Nanocellulose as Structural and Mechanical Reinforcement of Freeze-Cast Chitosan Scaffolds for Biomedical Applications. **2019**, 20, 3733-3745	24
885	Application of Chitosan in Bone and Dental Engineering. **2019**, 24,	81
884	Anthelmintic effect of Cymbopogon citratus essential oil and its nanoemulsion on sheep gastrointestinal nematodes. **2019**, 28, 522-527	10
883	Effect of the ultrastructure of chitosan nanoparticles in colloidal stability, quorum quenching and antibacterial activities. **2019**, 556, 592-605	5
882	Enzymatic activity and secondary metabolite profile of Trichoderma asperellum in presence of chitosan. **2019**, 72, 437-444	
881	Electrophoretic deposition of Bioactive glass - Chitosan nanocomposite coatings on Ti-6Al-4V for orthopedic applications. **2019**, 226, 115299	23
880	HDPE/Chitosan Composites Modified with PE-g-MA. Thermal, Morphological and Antibacterial Analysis. **2019**, 11,	8
879	In situ fabrication of nickel-based layered double hydroxides catalysts with carboxymethyl chitosan as biomass template for hydrogenation. **2019**, 478, 110561	3
878	Non-thermal plasma assisted surface nano-textured carboxymethyl guar gum/chitosan hydrogels for biomedical applications.. **2019**, 9, 1705-1716	10
877	Marine shell industrial wastes□n abundant source of chitin and its derivatives: constituents, pretreatment, fermentation, and pleiotropic applications-a revisit. **2019**, 16, 3877-3898	34
876	Combined effect of Laponite and polymer molecular weight on the cell-interactive properties of synthetic PEO-based hydrogels. **2019**, 136, 95-106	12
875	In vitro study of BSA gel/polyelectrolite complexes core shell microcapsules encapsulating doxorubicin for antitumoral targeted treatment. **2019**, 68, 60-72	1

874	Using Artificial Skin Devices as Skin Replacements: Insights into Superficial Treatment. **2019**, 15, e1805453	34
873	An Efficient One-Pot Synthesis of 7,7-Dimethyl-2-(2-oxo-2H-chromen-3-yl)-4-aryl-7,8-dihydroquinolin-5(6H)-one Derivatives Using Chitosan□SO3H as Biodegradable Organocatalyst. **2019**, 56, 947-955	7
872	Synthesis of Bio-based Polymer Composites: Fabrication, Fillers, Properties, and Challenges. **2019**, 29-55	13
871	Bioactive chitosan-based scaffolds with improved properties induced by dextran-grafted nano-maghemite and l-arginine amino acid. **2019**, 107, 1244-1252	18
870	Spatial and Temporal Control Over Multilayer Bio-Polymer Film Assembly and Composition. **2019**, 19, e1800372	4
869	Broad Scale and Structure Fabrication of Healthcare Materials for Drug and Emerging Therapies via Electrohydrodynamic Techniques. **2019**, 2, 1800024	25
868	pH-sensitive ZnO/carboxymethyl cellulose/chitosan bio-nanocomposite beads for colon-specific release of 5-fluorouracil. **2019**, 128, 468-479	65
867	Nanosilica-chitosan hybrid materials: Preparation, characterization and application in aqueous drilling fluids. **2019**, 279, 279-288	20
866	Introduction and Historical Overview. **2019**, 3-20	4
865	Chitosan based-asymmetric membranes for wound healing: A review. **2019**, 127, 460-475	121
864	A facile one-step grafting of polyphosphonium onto halloysite nanotubes initiated by Ce(iv). **2019**, 55, 1040-1043	25
863	Reducing-end "clickable" functionalizations of chitosan oligomers for the synthesis of chitosan-based diblock copolymers. **2019**, 219, 387-394	17
862	Injectable Chitosan Scaffolds with Calcium □Glycerophosphate as the Only Neutralizing Agent. **2019**, 7, 297	3
861	Biomedical and Nutraceutical Applications of Chitin and Chitosan. **2019**, 319-349	1
860	Nitric oxide-releasing alginates as mucolytic agents. **2019**, 5, 3409-3418	8
859	Nano composite material of chitosan for wound healing: A review. **2019**,	2
858	Lossy mode resonance-based fiber optic sensor using layer-by-layer SnO2 thin film and SnO2 nanoparticles. **2019**, 492, 374-381	24
857	Chemoselective synthesis of bis(indolyl)methanes using sulfonic acid-functionalized chitosan. **2019**, 73, 3095-3104	3

856	Chlorin e6 decorated doxorubicin encapsulated chitosan nanoparticles for photo-controlled cancer drug delivery. **2019**, 136, 951-961	17
855	Characterisation of chitosan molecular weight distribution by multi-detection asymmetric flow-field flow fractionation (AF4) and SEC. **2019**, 136, 911-919	13
854	Thermogravimetric analysis of caffeic and rosmarinic acid containing chitosan complexes. **2019**, 222, 115003	9
853	Synthesis of chitosan-mimicking cationic glycopolymers by Cu(0)-LRP for efficient capture and killing of bacteria. **2019**, 10, 4059-4066	7
852	Fundamentals and Applications of Chitosan. **2019**, 49-123	42
851	Sustainable Agriculture Reviews 36. **2019**,	3
850	Chitosan-Based Hydrogels. **2019**, 147-173	3
849	Thiolated-Chitosan: A Novel Mucoadhesive Polymer for Better-Targeted Drug Delivery. **2019**, 459-493	3
848	A Spectroscopic Study of Solid-Phase Chitosan/Cyclodextrin-Based Electrospun Fibers. **2019**, 7, 48	6
847	Nutritional and Additive Uses of Chitin and Chitosan in the Food Industry. **2019**, 1-43	10
846	N-Acetyl-D-Glucosamine-Loaded Chitosan Filaments Biodegradable and Biocompatible for Use as Absorbable Surgical Suture Materials. **2019**, 12,	11
845	Application of Chitosan-Based Formulations in Controlled Drug Delivery. **2019**, 241-314	1
844	Recent advances in polymer-based drug delivery systems for local anesthetics. **2019**, 96, 55-67	31
843	Green Engineered Chitosan Nanoparticles and Its Biomedical Applications□An Overview. **2019**, 329-341	7
842	Electrospun biodegradable chitosan based-poly(urethane urea) scaffolds for soft tissue engineering. **2019**, 103, 109819	21
841	Polyethyleneimine and quaternized ammonium polyethyleneimine: the versatile materials for combating bacteria and biofilms. **2019**, 30, 1243-1259	13
840	Injectable biomaterials for delivery of interleukin-1 receptor antagonist: Toward improving its therapeutic effect. **2019**, 93, 123-134	8
839	Solubility of chitosan in aqueous acetic acid and pressurized carbon dioxide-water: Experimental equilibrium and solubilization kinetics. **2019**, 151, 63-74	15

838	Antimicrobial hydrogels with controllable mechanical properties for biomedical application. **2019**, 34, 1911-1921	4
837	New fluorous gelators for perfluorodecalin. **2019**, 222-223, 24-30	3
836	Chemically Modified Chitosan Bio-Sorbents for the Competitive Complexation of Heavy Metals Ions: A Potential Model for the Treatment of Wastewaters and Industrial Spills. **2019**, 27, 1542-1556	21
835	Strong luminescence and sharp heavy metal ion sensitivity of water-soluble hybrid polysaccharide nanoparticles with Eu3+ and Tb3+ inclusions. **2019**, 9, 1833-1844	10
834	Cinnamaldehyde loaded chitosan/tripolyphosphate nanoassemblies: Fabrication, characterization, and in vitro evaluation of antioxidant activity. **2019**, 43, e13972	11
833	The influence of grafted heparin on chitosan/poly (ethylene glycol) blend membrane and its application for creatinine and urea transport. **2019**, 509, 012121	1
832	Polyhydroxybutyrate/Chitosan 3D Scaffolds Promote In Vitro and In Vivo Chondrogenesis. **2019**, 189, 556-575	10
831	Degradability of chitosan micro/nanoparticles for pulmonary drug delivery. **2019**, 5, e01684	84
830	UV-Responsive Multilayers with Multiple Functions for Biofilm Destruction and Tissue Regeneration. **2019**, 11, 17283-17293	9
829	Synthetic biology for the development of bio-based binders for greener construction materials. **2019**, 9, 474-485	1
828	Preparation and Characterization of Furosemide-Silver Complex Loaded Chitosan Nanoparticles. **2019**, 7, 206	8
827	Aluminosilicate-based composites functionalized with cationic materials: possibilities for drug-delivery applications. **2019**, 285-327	3
826	Characterization of trimethyl chitosan/polyethylene glycol derivatized chitosan blend as an injectable and degradable antimicrobial delivery system. **2019**, 133, 372-381	7
825	Antibacterial free-standing polysaccharide composite films inspired by the sea. **2019**, 133, 933-944	13
824	Thermoresponsive polymer brushes on magnetic chitosan microspheres: Synthesis, characterization and application in oily water of high salinity. **2019**, 286, 110792	7
823	Photo-crosslinking of chitosan/poly(ethylene oxide) electrospun nanofibers. **2019**, 217, 144-151	38
822	Rational Design of a Multifunctional Binder for High-Capacity Silicon-Based Anodes. **2019**, 4, 1171-1180	71
821	Fundamentals of chitosan-based hydrogels: elaboration and characterization techniques. **2019**, 61-81	3

820	Possibilities and perspectives of chitosan scaffolds and composites for tissue engineering. **2019**, 167-203	4
819	New insights into nanohydroxyapatite/chitosan nanocomposites for bone tissue regeneration. **2019**, 331-371	2
818	Antimicrobial Films Based on Nanocomposites of Chitosan/Poly(vinyl alcohol)/Graphene Oxide for Biomedical Applications. **2019**, 9,	43
817	Removal of anionic arsenate by a PEI-coated bacterial biosorbent prepared from fermentation biowaste. **2019**, 226, 67-74	12
816	Functionalization of Polymer Materials for Medical Applications Using Chitosan Nanolayers. **2019**, 333-358	2
815	LIPSS formation of chitosan/hydroxyapatite composites via femtosecond laser processing for bone tissue engineering applications. **2019**,	0
814	EDC-Mediated Grafting of Quaternary Ammonium Salts onto Chitosan for Antibacterial and Thermal Properties Improvement. **2019**, 220, 1800530	7
813	Adsorption of Lead(II) from Aqueous Solution Using Chitosan and Polyvinyl Alcohol Blends. **2019**, 52, 2365-2392	10
812	Fluoranthene Biodegradation by Serratia sp. AC-11 Immobilized into Chitosan Beads. **2019**, 188, 1168-1184	3
811	Influences on mechanical properties of chitosan nanofibrous membranes induced by incorporating graphene oxide nanosheets. **2019**, 6, 075404	8
810	Effects of MeV ions on physicochemical and dielectric properties of chitosan/PEO polymeric blend. **2019**, 447, 68-78	3
809	Composite materials based on hydroxyapatite embedded in biopolymer matrices: ways of synthesis and application. **2019**, 403-440	
808	Removal of Chromium(VI) from Aqueous Solution Using a Novel Green Magnetic Nanoparticle Chitosan Adsorbent. **2019**, 52, 2416-2438	3
807	Modified-release topical hydrogels: a ten-year review. **2019**, 54, 10963-10983	26
806	Fabrication of chitosan/alginate porous sponges as adsorbents for the removal of acid dyes from aqueous solution. **2019**, 54, 9995-10008	14
805	Preparation of glycerol plasticized chitosan films using AlCl3 6H2O as the solvent: optical, crystalline, mechanical and barrier properties. **2019**, 24, 295-303	2
804	Biodegradable antioxidant chitosan films useful as an anti-aging skin mask. **2019**, 132, 1262-1273	40
803	Static and Dynamic Studies on Removal of Chlorophenol from Aqueous Solutions Using Chitosan-Carbon Nanocomposites. **2019**, 9, 32-49	2

802	Chitosan-bioglass complexes promote subsurface remineralisation of incipient human carious enamel lesions. **2019**, 84, 67-75	18
801	Tailored functionalization of poly(L-lactic acid) substrates at the nanoscale to enhance cell response. **2019**, 30, 526-546	5
800	Bio-based Polymers and Nanocomposites. **2019**,	6
799	Recent Developments in Chitosan-Based Nanocomposites. **2019**, 183-215	7
798	Cisplatin delivery systems based on different drug encapsulation techniques. **2019**, 113, 357-364	5
797	Designable Polymeric Microparticles from Droplet Microfluidics for Controlled Drug Release. **2019**, 4, 1800687	41
796	An injection molding method to prepare chitosan-zinc composite material for novel biodegradable flexible implant devices. **2019**, 34, 256-261	6
795	Physiochemical and morphological dependent growth of NIH/3T3 and PC-12 on polyaniline-chloride/chitosan bionanocomposites. **2019**, 99, 1304-1312	18
794	Formulation and Characterization of New Polymeric Systems Based on Chitosan and Xanthine Derivatives with Thiazolidin-4-One Scaffold. **2019**, 12,	4
793	Biosorbents and Composite Cation Exchanger for the Treatment of Heavy Metals. **2019**, 135-159	2
792	A new tool to produce alginate-based aerogels for medical applications, by supercritical gel drying. **2019**, 146, 152-158	33
791	In Vitro Effect of Fungal Chitosan on Tumoral Cells and Microbial Cultures. **2019**, 29, 72	
790	Particle Size Effect of Sn on Structure and Optical Properties of PVA-PEG Blend. **2019**,	0
789	Conversion of Waste Parasitic Insect (Hylobius abietis L.) into Antioxidative, Antimicrobial and Biodegradable Films. **2019**, 7, 215-226	4
788	. **2019**,	12
787	The Dermatotropic Effect of a Silver-containing Sorbent on a Breach of Skin Integrity. **2019**,	
786	Synthesis, Bioapplications, and Toxicity Evaluation of Chitosan-Based Nanoparticles. **2019**, 20,	73
785	Chitosan--oligo/polylactide copolymer non-woven fibrous mats containing protein: from solid-state synthesis to electrospinning.. **2019**, 9, 37652-37659	9

784	Chitosan as a Wound Dressing Starting Material: Antimicrobial Properties and Mode of Action. **2019**, 20,	185
783	Marine Polysaccharides in Pharmaceutical Applications: Fucoidan and Chitosan as Key Players in the Drug Delivery Match Field. **2019**, 17,	51
782	Exploration of Chitinous Scaffold-Based Interfaces for Glucose Sensing Assemblies. **2019**, 11,	10
781	Effect of particle sizes on the kinetics of demineralization of snail shell for chitin synthesis using acetic acid. **2019**, 5, e02828	1
780	Sustainable Nanostructured Materials in Food Packaging. **2019**, 171-213	9
779	Mechanical and Surface Properties of Resilient Denture Liners Modified with Chitosan Salts. **2019**, 12,	2
778	Fabrication of graphene quantum dots/chitosan composite film and its catalytic reduction for 4-nitrophenol. **2019**, 548, 124-132	1
777	. **2019**,	2
776	The Application of Chitin and its Derivatives for the Design of Advanced Medical Devices. **2019**, 291-313	
775	Physicochemical Properties of Chitosan and its Degradation Products. **2019**, 61-80	4
774	Codelivery of Synovium-Derived Mesenchymal Stem Cells and TGF-□by a Hybrid Scaffold for Cartilage Regeneration. **2019**, 5, 805-816	5
773	Synthesis and characterization of chitosan-coated magnetite nanoparticles using a modified wet method for drug delivery applications. **2019**, 68, 73-82	17
772	Photocrosslinkable chitosan hydrogels and their biomedical applications. **2019**, 57, 1862-1871	6
771	Amino acid functionalized pH- and temperature-sensitive biodegradable injectable hydrogels: synthesis, physicochemical characterization and in vivo degradation kinetics. **2019**, 68, 891-900	2
770	Photoelectrochemical platform for sensing propyl gallate in edible oil samples based on CdTe quantum dots and poly(D-glucosamine). **2019**, 23, 725-734	5
769	3-D printing of chitosan-calcium phosphate inks: rheology, interactions and characterization. **2018**, 30, 6	27
768	In vitro evaluation of sustained ciprofloxacin release from □arrageenan-crosslinked chitosan/hydroxyapatite hydrogel nanocomposites. **2019**, 126, 443-453	41
767	Chitosan-based nanotherapeutics for ovarian cancer treatment. **2019**, 27, 839-852	16

766	Polymeric Nanomaterials. **2019**, 557-653	12
765	Chitosan nanocomposites for bone and cartilage regeneration. **2019**, 307-317	5
764	Agarose-chitosan hydrogel-immobilized horseradish peroxidase with sustainable bio-catalytic and dye degradation properties. **2019**, 124, 742-749	87
763	Microwave-assisted synthesis and characterization of chitosan aerogels doped with Au-NPs for skin regeneration. **2019**, 73, 366-376	14
762	Chitosan scaffolds for cartilage regeneration: influence of different ionic crosslinkers on biomaterial properties. **2019**, 68, 936-945	12
761	A review on versatile applications of blends and composites of CNC with natural and synthetic polymers with mathematical modeling. **2019**, 124, 591-626	33
760	Removal of aqueous copper(II) by using crosslinked chitosan films. **2019**, 134, 31-39	19
759	Rheological characterization of chitosan/starch blends by varying polyols and amylopectin content. **2019**, 40, 1405-1412	0
758	Multifunctional Coatings and Nanotopographies: Toward Cell Instructive and Antibacterial Implants. **2019**, 8, e1801103	111
757	Chitosan and polyethylene glycol based membranes with antibacterial properties for tissue regeneration. **2019**, 96, 606-615	23
756	Effect of ultrafiltration membranes modifications by chitosan on humic acid fouling. **2019**, 27, 32-36	8
755	Fabrication and in vitro biocompatibility of sodium tripolyphosphate-crosslinked chitosan–hydroxyapatite scaffolds for bone regeneration. **2019**, 54, 3403-3420	10
754	LED 209 conjugated chitosan as a selective antimicrobial and potential anti-adhesion material. **2019**, 206, 653-663	11
753	Polysaccharide-Aloe vera Bioactive Hydrogels as Wound Care System. **2019**, 1473-1490	1
752	Protein-Based Hydrogels. **2019**, 1561-1600	5
751	Chitosan-Based Hydrogels: Preparation, Properties, and Applications. **2019**, 1665-1693	9
750	Tuning the rheological properties of cellulosic ionogels reinforced with chitosan: The role of the deacetylation degree. **2019**, 207, 775-781	12
749	Electrophoretic deposition of chitosan-based composite coatings for biomedical applications: A review. **2019**, 103, 69-108	154

748	Preparation, swelling behaviors and fertilizer-release properties of sodium humate modified superabsorbent resin. **2019**, 19, 124-130	24
747	Enzyme nanovehicles: Histaminase and catalase delivered in nanoparticulate chitosan. **2019**, 557, 145-153	7
746	Preparation of Inorganic-Organic-Framework Nanoscale Carries as a Potential Platform for Drug Delivery. **2019**, 21, 1800626	4
745	Onion-structure bionic hydrogel capsules based on chitosan for regulating doxorubicin release. **2019**, 209, 152-160	22
744	pH-triggered aggregation behavior of hybrid chitosan assemblies with controlled density distribution of gold nanoparticles. **2019**, 297, 339-350	2
743	Development of sustainable carrier in thermosensitive hydrogel based on chitosan/alginate nanoparticles for in situ delivery system. **2019**, 40, 2187-2196	9
742	Biodegradable polymer matrix nanocomposites for bone tissue engineering. **2019**, 1-37	19
741	Delivery of proteins encapsulated in chitosan-tripolyphosphate nanoparticles to human skin melanoma cells. **2019**, 174, 216-223	10
740	Chitosan□tripolyphosphate bead: the interactions that govern its formation. **2019**, 76, 3879-3903	10
739	Chitosan-based nanoparticles: An overview of biomedical applications and its preparation. **2019**, 49, 66-81	93
738	Construction of chitosan/ZnO nanocomposite film by in situ precipitation. **2019**, 122, 82-87	35
737	Emerging Innovative Wound Dressings. **2019**, 47, 659-675	55
736	Biomedical applications of chitosan electrospun nanofibers as a green polymer - Review. **2019**, 207, 588-600	182
735	Stimuli-responsive graphene-incorporated multifunctional chitosan for drug delivery applications: a review. **2019**, 16, 79-99	56
734	Investigation of the properties of N-[(2-hydroxy-3-trimethylammonium) propyl] chloride chitosan derivatives. **2019**, 124, 994-1001	36
733	Magnetic iron oxide nanoparticles for drug delivery: applications and characteristics. **2019**, 16, 69-78	184
732	Efficient Harvesting of Microalgae via Optimized Chitosan-Mediated Flocculation. **2019**, 3, 1800038	12
731	A new strategy for developing chitosan conversion coating on magnesium substrates for orthopedic implants. **2019**, 466, 854-862	29

730	Hydrogel as an alternative structure for food packaging systems. **2019**, 205, 106-116	93
729	Improving Bioavailability of Polyphenols Using Nanodelivery Systems Based on Food Polymers. **2019**, 59-65	5
728	Synthesis of Novel Magnetic NiFe2O4 Nanocomposite Grafted Chitosan and the Adsorption Mechanism of Cr(VI). **2019**, 29, 290-301	15
727	Synthesis and characterizations of biocompatible polymers and carbon nanotubes-based hybrids for biomedical applications. **2020**, 69, 786-797	3
726	Biodegradable polymeric wires: monofilament and multifilament. **2020**, 24, 166-170	3
725	Composite hydrogels based on gelatin, chitosan and polyvinyl alcohol to biomedical applications: a review. **2020**, 69, 1-20	90
724	Pectin and chitosan microsphere preparation via a water/oil emulsion and solvent evaporation method for drug delivery. **2020**, 69, 467-475	6
723	Enhanced dual network hydrogels consisting of thiolated chitosan and silk fibroin for cartilage tissue engineering. **2020**, 227, 115335	34
722	Biocompatible AIE material from natural resources: Chitosan and its multifunctional applications. **2020**, 227, 115338	42
721	Development of reversibly compressible feather-like lightweight Chitosan/GO composite foams and their mechanical and viscoelastic properties. **2020**, 157, 191-200	7
720	Facile fabrication of mechanically stable non-iridescent structural color coatings. **2020**, 55, 2353-2364	16
719	Virus-like particles for vaccination against cancer. **2020**, 12, e1579	45
718	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
717	Nano Biomedical Potential of Biopolymer Chitosan-Capped Silver Nanoparticles with Special Reference to Antibacterial, Antibiofilm, Anticoagulant and Wound Dressing Material. **2020**, 31, 355-366	17
716	Binding and mucoadhesion of sulfurated derivatives of quaternary ammonium-chitosans and their nanoaggregates: An NMR investigation. **2020**, 177, 112852	9
715	Embedment of liposomes into chitosan physical hydrogel for the delayed release of antibiotics or anaesthetics, and its first ESEM characterization. **2020**, 229, 115532	9
714	In situ facile-forming chitosan hydrogels with tunable physicomechanical and tissue adhesive properties by polymer graft architecture. **2020**, 229, 115538	16
713	Versatile bioactive and antibacterial coating system based on silica, gentamicin, and chitosan: Improving early stage performance of titanium implants. **2020**, 381, 125138	42

712	In Vitro Evaluation of Antifungal Activities by Permeation of Ru(III) Complexes Derived from Chitosan-Schiff Base Ligand. **2020**, 3, 212-220	1
711	Chitosan-reinforced cellulosic bionogels: Viscoelastic and antibacterial properties. **2020**, 229, 115569	14
710	Electrical, optical and mechanical properties of chitosan biocomposites. **2020**, 54, 1497-1510	12
709	Deriving Structure-Performance Relations of Chemically Modified Chitosan Binders for Sustainable High-Voltage LiNi0.5Mn1.5O4 Cathodes. **2020**, 3, 155-164	10
708	Copper Ion Uptake by Chitosan in the Presence of Amyloid-□and Histidine. **2020**, 190, 949-965	8
707	Elaboration of an Imprinted Polymer Film Based on Chitosan Electrodeposition for the Voltammetric Detection of BPA. **2020**, 167, 027507	6
706	Nanodiamond in composite: Biomedical application. **2020**, 108, 906-922	22
705	Development of BSA gel/Pectin/Chitosan polyelectrolyte complex microcapsules for Berberine delivery and evaluation of their inhibitory effect on Cutibacterium acnes. **2020**, 147, 104457	7
704	Chitosan Microbeads Produced by One-Step Scalable Stirred Emulsification: A Promising Process for Cell Therapy Applications. **2020**, 6, 288-297	7
703	Natural biomacromolecule based composite scaffolds from silk fibroin, gelatin and chitosan toward tissue engineering applications. **2020**, 154, 1285-1294	50
702	Chitosan as an environment friendly biomaterial - a review on recent modifications and applications. **2020**, 150, 1072-1083	285
701	Biocompatible and biodegradable chitosan/sodium polyacrylate polyelectrolyte complex hydrogels with smart responsiveness. **2020**, 155, 1245-1251	9
700	Preparation of sulfatide mimicking oleic acid sulfated chitosan as a potential inhibitor for metastasis. **2020**, 147, 792-798	2
699	Recent innovations in artificial skin. **2020**, 8, 776-797	22
698	Preparation of Elastic and Antibacterial Chitosan-Citric Membranes with High Oxygen Barrier Ability by in Situ Cross-Linking. **2020**, 5, 1086-1097	17
697	The effects of prolonged UV irradiation on the physicochemical characteristics of chitosan lamellar films modified with nanoparticulate silver vanadate nanorods. **2020**, 77, 5489-5503	0
696	Activity of chitosan antifungal denture adhesive against common Candida species and Candida albicans adherence on denture base acrylic resin. **2020**, 123, 181.e1-181.e7	16
695	Multivariate analysis of the immune response to different rabies vaccines. **2020**, 220, 109986	6

694	Sustainable and Effective Chitosan Production by Dimorphic Fungus Mucor rouxii via Replacing Yeast Extract with Fungal Extract. **2020**, 191, 666-678	7
693	A brief overview of renewable plastics. **2020**, 7-8, 100031	31
692	Mechanical Stabilization of Deoxyribonucleic Acid Solid Films Based on Hydrated Ionic Liquid. **2020**, 21, 464-471	4
691	. **2020**,	5
690	Electrospun triazole-based chitosan nanofibers as a novel scaffolds for bone tissue repair and regeneration. **2020**, 230, 115707	40
689	Development, characterization and antimicrobial activity of sodium dodecyl sulfate-polysaccharides capsules containing eugenol. **2020**, 230, 115562	3
688	Modulating the properties of polylactic acid for packaging applications using biobased plasticizers and naturally obtained fillers. **2020**, 153, 1165-1175	13
687	Chemically Modified Natural Polymer-Based Theranostic Nanomedicines: Are They the Golden Gate toward a Clinical Approach against Cancer?. **2020**, 6, 134-166	17
686	Collagen scaffold-mediated delivery of NLC/siRNA as wound healing materials. **2020**, 55, 101421	13
685	Biodistribution and biocompatibility of glycyrrhetinic acid and galactose-modified chitosan nanoparticles as a novel targeting vehicle for hepatocellular carcinoma. **2020**, 15, 145-161	10
684	Light-driven assembly of biocompatible fluorescent chitosan hydrogels with self-healing ability. **2020**, 8, 9804-9811	11
683	Quaternary ammonium salts of chitosan. A critical overview on the synthesis and properties generated by quaternization. **2020**, 139, 110016	25
682	Functionalization of halloysite nanotube with chitosan reinforced poly (vinyl alcohol) nanocomposites for potential biomedical applications. **2020**, 165, 1079-1092	18
681	Synthesis and characterization of novel chitosan-dopamine or chitosan-tyrosine conjugates for potential nose-to-brain delivery. **2020**, 589, 119829	18
680	Determination of Optical Band Gap Energies of CS/MWCNT Bio-nanocomposites by Tauc and ASF Methods. **2020**, 269, 116539	15
679	Chitosan Hydrochloride Decreases Growth and Virulence and Boosts Growth, Development and Systemic Acquired Resistance in Two Durum Wheat Genotypes. **2020**, 25,	12
678	Preparation and Characterization of Chitosan obtained from Pacific White Shrimp Shells and its in vitro Antifungal Activity. **2020**, 32, 2515-2519	0
677	Modulating properties of polysaccharides nanocomplexes from enzymatic hydrolysis of chitosan. **2020**, 137, 109642	4

676	Physical characterization and antibacterial activity of PVA/Chitosan matrix doped by selenium nanoparticles prepared via one-pot laser ablation route. **2020**, 9, 9598-9606	45
675	A Lactose-Derived CRISPR/Cas9 Delivery System for Efficient Genome Editing In Vivo to Treat Orthotopic Hepatocellular Carcinoma. **2020**, 7, 2001424	20
674	Assessment of Cytocompatibility and Anti-Inflammatory (Inter)Actions of Genipin-Crosslinked Chitosan Powders. **2020**, 9,	3
673	Determination of chitosan content with ratio coefficient method and HPLC. **2020**, 164, 384-388	4
672	Chitosan-decorated nanoparticles for drug delivery. **2020**, 59, 101896	24
671	Continuous production of uniform chitosan beads as hemostatic dressings by a facile flow injection method. **2020**, 8, 7941-7946	7
670	New Nanofibers Based on Protein By-Products with Bioactive Potential for Tissue Engineering. **2020**, 13,	6
669	Antimicrobial, Aflatoxin B1 Inhibitory and Lipid Oxidation Suppressing Potential of Anethole-Based Chitosan Nanoemulsion as Novel Preservative for Protection of Stored Maize. **2020**, 13, 1462-1477	20
668	Chitin and chitosan: origin, properties, and applications. **2020**, 1-33	8
667	Fundamentals of chitosan for biomedical applications. **2020**, 199-230	5
666	Physicochemical Properties and Cell Viability of Shrimp Chitosan Films as Affected by Film Casting Solvents. I-Potential Use as Wound Dressing. **2020**, 13,	6
665	A step to shell biorefinery:Extraction of astaxanthin-rich oil, protein, chitin, and chitosan from shrimp processing waste. **2020**, 1	6
664	The Application of Mucoadhesive Chitosan Nanoparticles in Nasal Drug Delivery. **2020**, 18,	21
663	A Review on Chitosan's Uses as Biomaterial: Tissue Engineering, Drug Delivery Systems and Cancer Treatment. **2020**, 13,	26
662	Nanosheets and Hydrogels Formed by 2 nm Metal-Organic Cages with Electrostatic Interaction. **2020**, 12, 56310-56318	8
661	Chitosan Nanoparticle Based Mucosal Vaccines Delivered Against Infectious Diseases of Poultry and Pigs. **2020**, 8, 558349	12
660	Nitroxide-Mediated Polymerization: A Versatile Tool for the Engineering of Next Generation Materials. **2020**, 2, 5327-5344	16
659	On an effective approach to improve the properties and the drug release of chitosan-based microparticles. **2020**, 163, 393-401	7

658	Synthesis, structural, dielectric and optical properties of chitosan-MgO nanocomposite. **2020**, 14, 975-983	10
657	Polymer Coating for Industrial Applications. **2020**, 397-413	
656	Preparation and Characterization of Cinnamomum Essential Oil□Chitosan Nanocomposites: Physical, Structural, and Antioxidant Activities. **2020**, 8, 834	10
655	3D Printing and Bioprinting Nerve Conduits for Neural Tissue Engineering. **2020**, 12,	26
654	3D printing of high-strength chitosan hydrogel scaffolds without any organic solvents. **2020**, 8, 5020-5028	28
653	Micro-Structured Patches for Dermal Regeneration Obtained via Electrophoretic Replica Deposition. **2020**, 10, 5010	2
652	. **2020**,	2
651	Electrochemical sensors based on molecularly imprinted chitosan: A review. **2020**, 130, 115982	30
650	Gradient scaffolds for osteochondral tissue engineering and regeneration. **2020**, 8, 8149-8170	36
649	Thrombolytic Agents: Nanocarriers in Controlled Release. **2020**, 16, e2001647	12
648	3D printing of PLA composites scaffolds reinforced with keratin and chitosan: Effect of geometry and structure. **2020**, 141, 110088	20
647	Biodegradable double cross-linked chitosan hydrogels for drug delivery: Impact of chemistry on rheological and pharmacological performance. **2020**, 165, 2205-2218	10
646	Fungi in Fuel Biotechnology. **2020**,	1
645	Renewable Polysaccharides Micro/Nanostructures for Food and Cosmetic Applications. **2020**, 25,	7
644	Determining the degree of acetylation of chitin/chitosan using a SSNMR C method on the basis of cross polarization reciprocity relation. **2020**, 498, 108168	1
643	A Novel and Inexpensive Method Based on Modified Ionic Gelation for pH-responsive Controlled Drug Release of Homogeneously Distributed Chitosan Nanoparticles with a High Encapsulation Efficiency. **2020**, 21, 1917-1926	7
642	The antibacterial structure-activity relationship for common chitosan derivatives. **2020**, 165, 1686-1693	7
641	2-Methyl-□cyclodextrin grafted ammonium chitosan: synergistic effects of cyclodextrin host and polymer backbone in the interaction with amphiphilic prednisolone phosphate salt as revealed by NMR spectroscopy. **2020**, 587, 119698	6

640	and studies of nanoparticles of chitosan- fruit extract as new alternative treatment for hypercholesterolemia via Scavenger Receptor Class B type 1 pathway. **2020**, 28, 1263-1275	3
639	Chitosan as Anticancer Compound and Nanoparticulate Matrix for Cancer Therapeutics. **2020**, 1737-1752	1
638	Chitosan Based Composites and Their Applications in Tissue Engineering. **2020**, 979-1006	1
637	pH-Sensitive Modification of Chitosan as a Gene Carrier among Marine Biomaterials. **2020**, 1249-1282	
636	Interfacial Properties of Chitosan in Interfacial Shear and Capsule Compression. **2020**, 12, 48084-48092	2
635	Environmental Microbiology and Biotechnology. **2020**,	0
634	Microencapsulation of Fluticasone Propionate and Salmeterol Xinafoate in Modified Chitosan Microparticles for Release Optimization. **2020**, 25,	7
633	Effects of Experimental Agents Containing Tannic Acid or Chitosan on the Bacterial Biofilm Formation in Situ. **2020**, 10,	7
632	Poly-Amido-Saccharides (PASs): Functional Synthetic Carbohydrate Polymers Inspired by Nature. **2020**, 53, 2167-2179	7
631	A new emulsification-crosslinking technique for preparation of physically crosslinked chitosan microspheres. **2020**, 35, 289-300	3
630	Activity of Amphotericin B-Loaded Chitosan Nanoparticles against Experimental Cutaneous Leishmaniasis. **2020**, 25,	17
629	l-Ascorbic Acid and Thymoquinone Dual-Loaded Palmitoyl-Chitosan Nanoparticles: Improved Preparation Method, Encapsulation and Release Efficiency. **2020**, 8, 1040	2
628	Chitosan capped CuInS2 and CuInS2/ZnS by wet stirred media milling: in vitro verification of their potential bio-imaging applications. **2020**, 10, 4661-4671	3
627	Menthol, Balance of Menthol/Menthone, and Essential Oil Contents of Mentha Piperita L. under Foliar-Applied Chitosan and Inoculation of Arbuscular Mycorrhizal Fungi. **2020**, 23, 1012-1021	4
626	Antifungal and Surface Properties of Chitosan-Salts Modified PMMA Denture Base Material. **2020**, 25,	5
625	Heparinized chitosan/hydroxyapatite scaffolds stimulate angiogenesis. **2020**, 1,	4
624	Squid pen chitosan nanoparticles: small size and high antibacterial activity. **2020**, 1	4
623	The Role of Chitosan and Graphene Oxide in Bioactive and Antibacterial Properties of Acrylic Bone Cements. **2020**, 10,	6

622	A Bilayer Vaginal Tablet for the Localized Delivery of Disulfiram and 5-Fluorouracil to the Cervix. **2020**, 12,	2
621	Extraction, characterization and bioactivity of chitosan from farms shrimps of Basra province by chemical method. **2020**, 1660, 012023	1
620	Chitosan-Based Delivery Systems Loaded with Glibenclamide and Lipoic Acid: Formulation, Characterization, and Kinetic Release Studies. **2020**, 10, 7532	0
619	The Potential Application of Nanoparticles on Grains during Storage: Part 2 An Overview of Inhibition against Fungi and Mycotoxin Biosynthesis. **2020**,	
618	Alginate and alginate composites for biomedical applications. **2021**, 16, 280-306	66
617	Probing the Molecular Interactions of Chitosan Films in Acidic Solutions with Different Salt Ions. **2020**, 10, 1052	2
616	Hemostatic Enhancement via Chitosan Is Independent of Classical Clotting Pathways-A Quantitative Study. **2020**, 12,	2
615	Drug-loaded chitosan film prepared via facile solution casting and air-drying of plain water-based chitosan solution for ocular drug delivery. **2020**, 5, 577-583	30
614	Influence of chitosan on the mechanical and biological properties of HDPE for biomedical applications. **2020**, 91, 106610	3
613	Intramembranous Ossification Imitation Scaffold with the Function of Macrophage Polarization for Promoting Critical Bone Defect Repair.. **2020**, 3, 3569-3581	2
612	pH-responsive PEG-chitosan/iron oxide hybrid nanoassemblies for low-power assisted PDT/PTT combination therapy. **2020**, 15, 1097-1112	6
611	Novel approaches to cancer therapy with ibuprofen-loaded and/or octadecylamine-modified PLGA nanoparticles by assessment of their effects on apoptosis. **2020**, 46, 1133-1149	10
610	Preparation and application properties of sustainable gelatin/chitosan soil conditioner microspheres. **2020**, 159, 685-695	8
609	Covalently and ionically, dually crosslinked chitosan nanoparticles block quorum sensing and affect bacterial cell growth on a cell-density dependent manner. **2020**, 578, 171-183	2
608	Synthesis of an efficient hydroxyapatite chitosan montmorillonite thin film for the adsorption of anionic and cationic dyes: adsorption isotherm, kinetic and thermodynamic study. **2020**, 2, 1	12
607	Pickering emulsion gels stabilized by novel complex particles of high-pressure-induced WPI gel and chitosan: Fabrication, characterization and encapsulation. **2020**, 108, 105992	30
606	Fibrous Materials for Antimicrobial Applications. **2020**, 927-951	2
605	Fabrication of Bioinspired Gallic Acid-Grafted Chitosan/Polysulfone Composite Membranes for Dye Removal Nanofiltration. **2020**, 5, 13077-13086	16

604	Emerging and Potential Bio-Applications of Agro-Industrial By-products Through Implementation of Nanobiotechnology. **2020**, 413-443	
603	Biogenic nanoparticles as immunomodulator for tumor treatment. **2020**, 12, e1646	12
602	Stimuli-responsive sugar-derived hydrogels: A modern approach in cancer biology. **2020**, 617-649	2
601	Adhesive, Conductive, Self-Healing, and Antibacterial Hydrogel Based on Chitosan–Polyoxometalate Complexes for Wearable Strain Sensor. **2020**, 2, 2541-2549	41
600	Production of biodegradable PLGA foams processed with high pressure CO2. **2020**, 164, 104886	6
599	Osteoimmunomodulatory effects of biomaterial modification strategies on macrophage polarization and bone regeneration. **2020**, 7, 233-245	41
598	Callophycin A loaded chitosan and spicules based nanocomposites as an alternative strategy to overcome vaginal candidiasis. **2020**, 161, 656-665	7
597	Adaptive Hybrid Molecular Brushes Composed of Chitosan, Polylactide, and Poly(-vinyl pyrrolidone) for Support and Guiding Human Dermal Fibroblasts.. **2020**, 3, 4118-4127	2
596	Trigonelline-loaded chitosan nanoparticles prompted antitumor activity on glioma cells and biocompatibility with pheochromocytoma cells. **2020**, 163, 36-43	8
595	Effect of chitosan and Dysphania ambrosioides on the bone regeneration process: A randomized controlled trial in an animal model. **2020**, 83, 1208-1216	1
594	ZnO nanorods functionalized with chitosan hydrogels crosslinked with azelaic acid for transdermal drug delivery. **2020**, 194, 111170	14
593	Biodegradable Polymers for Biomedical Additive Manufacturing. **2020**, 20, 100700	37
592	Chitosan hydrogels for sustained drug delivery. **2020**, 326, 150-163	95
591	The mechanism of stabilization of silver nanoparticles by chitosan in carbonic acid solutions. **2020**, 298, 1135-1148	3
590	A Review on Surface-Functionalized Cellulosic Nanostructures as Biocompatible Antibacterial Materials. **2020**, 12, 73	73
589	Chitosan aerogel containing silver nanoparticles: From metal-chitosan powder to porous material. **2020**, 86, 106481	11
588	Reducing-End Functionalization of 2,5-Anhydro-d-mannofuranose-Linked Chitooligosaccharides by Dioxyamine: Synthesis and Characterization. **2020**, 25,	3
587	Poly(ethylene glycol)-interpenetrated genipin-crosslinked chitosan hydrogels: Structure, pH responsiveness, gelation kinetics, and rheology. **2020**, 137, 49259	9

586	Recovery of chitosan from natural biotic waste. **2020**, 115-133	2
585	Chitosan, magnetite, silicon dioxide, and graphene oxide nanocomposites: Synthesis, characterization, efficiency as cisplatin drug delivery, and DFT calculations. **2020**, 154, 621-633	33
584	Modulating cationicity of chitosan hydrogel to prevent hypertrophic scar formation during wound healing. **2020**, 154, 835-843	23
583	Hyaluronic Acid Reduces Bacterial Fouling and Promotes Fibroblasts' Adhesion onto Chitosan 2D-Wound Dressings. **2020**, 21,	10
582	Formulation and In-Vitro Characterization of Chitosan-Nanoparticles Loaded with the Iron Chelator Deferoxamine Mesylate (DFO). **2020**, 12,	31
581	How the Lack of Chitosan Characterization Precludes Implementation of the Safe-by-Design Concept. **2020**, 8, 165	22
580	Distinctive Viewpoint on the Rapid Dissolution Mechanism of Chitin in Aqueous Potassium Hydroxide Urea Solution at Low Temperatures. **2020**, 53, 5588-5598	17
579	Applications of chitosan (CHI)-reduced graphene oxide (rGO)-polyaniline (PAni) conducting composite electrode for energy generation in glucose biofuel cell. **2020**, 10, 10428	37
578	Green synthesis, characterization, antimicrobial and cytotoxic effect of silver nanoparticles using arabinoxylan isolated from Kalmegh. **2020**, 162, 1025-1034	18
577	Electrospun nanofibers in wound healing. **2020**, 29, 1-6	14
576	Dual charged folate labelled chitosan nanogels with enhanced mucoadhesion capacity for targeted drug delivery. **2020**, 134, 109847	4
575	Recent Advancement of Molecular Structure and Biomaterial Function of Chitosan from Marine Organisms for Pharmaceutical and Nutraceutical Application. **2020**, 10, 4719	15
574	Chitosan-based bifunctional composite aerogel combining absorption and phototherapy for bacteria elimination. **2020**, 247, 116739	11
573	Ultrasensitive detection of alpha-synuclein oligomer using a PolyD-glucosamine/gold nanoparticle/carbon-based nanomaterials modified electrochemical immunosensor in human plasma. **2020**, 158, 105195	7
572	Dual spinneret electrospun nanofibrous/gel structure of chitosan-gelatin/chitosan-hyaluronic acid as a wound dressing: In-vitro and in-vivo studies. **2020**, 162, 359-373	40
571	Improvement of in vitro and in situ antifungal, AFB inhibitory and antioxidant activity of Origanum majorana L. essential oil through nanoemulsion and recommending as novel food preservative. **2020**, 143, 111536	46
570	Chitosan polymer electrolytes doped with a dysprosium ionic liquid. **2020**, 27, 1	6
569	Chilean crab (Aegla cholchol) as a new source of chitin and chitosan with antifungal properties against Candida spp. **2020**, 149, 962-975	15

568	A Smart Drug Delivery System Based on Biodegradable Chitosan/Poly(allylamine hydrochloride) Blend Films. **2020**, 12,	31
567	Optical, Functional Impact and Antimicrobial of Chitosan/Phosphosilicate/Al2O3 Nanosheets. **2020**, 30, 3084-3094	18
566	Improvement of Peptide Affinity and Stability by Complexing to Cyclodextrin-Grafted Ammonium Chitosan. **2020**, 12,	6
565	Biopolymers in sorbent-based microextraction methods. **2020**, 125, 115839	23
564	Antibacterial biohybrid nanofibers for wound dressings. **2020**, 107, 25-49	203
563	Sustained release of TGF-□from polysaccharide nanoparticles induces chondrogenic differentiation of human mesenchymal stromal cells. **2020**, 189, 110843	4
562	3D printing of hydrogels: Rational design strategies and emerging biomedical applications. **2020**, 140, 100543	241
561	Ethyl vanillin incorporated chitosan/poly(vinyl alcohol) active films for food packaging applications. **2020**, 236, 116049	47
560	Dynamics in Cellulose-Based Hydrogels with Reversible Cross-Links. **2020**, 319-354	1
559	Biocompatible fungal chitosan encapsulated phytogenic silver nanoparticles enhanced antidiabetic, antioxidant and antibacterial activity. **2020**, 153, 63-71	65
558	Prospects and challenges for cell-cultured fat as a novel food ingredient. **2020**, 98, 53-67	26
557	Chitosan based bioactive materials in tissue engineering applications-A review. **2020**, 5, 164-183	149
556	Chitosan-based biodegradable active food packaging film containing Chinese chive (Allium tuberosum) root extract for food application. **2020**, 150, 595-604	55
555	Hybrid Bilayer PLA/Chitosan Nanofibrous Scaffolds Doped with ZnO, FeO, and Au Nanoparticles with Bioactive Properties for Skin Tissue Engineering. **2020**, 12,	18
554	Nanoparticles as Anti-Microbial, Anti-Inflammatory, and Remineralizing Agents in Oral Care Cosmetics: A Review of the Current Situation. **2020**, 10,	63
553	Biopolymeric photonic structures: design, fabrication, and emerging applications. **2020**, 49, 983-1031	65
552	Electrophoretic deposition of hydroxyapatite-iron oxide-chitosan composite coatings on Ti□13Nb□13Zr alloy for biomedical applications. **2020**, 697, 137801	18
551	Macrophage Polarization Mediated by Chitooligosaccharide (COS) and Associated Osteogenic and Angiogenic Activities. **2020**, 6, 1614-1629	16

550	Enhanced efficiency in isolation and expansion of hAMSCs via dual enzyme digestion and micro-carrier. **2020**, 10, 2	6
549	Adipose-Derived Mesenchymal Stem Cell Chondrospheroids Cultured in Hypoxia and a 3D Porous Chitosan/Chitin Nanocrystal Scaffold as a Platform for Cartilage Tissue Engineering. **2020**, 21,	25
548	Thin film composite polyesteramide nanofiltration membranes fabricated from carboxylated chitosan and trimesoyl chloride. **2020**, 37, 307-321	1
547	Exosome-mimetics as an engineered gene-activated matrix induces in-situ vascularized osteogenesis. **2020**, 247, 119985	28
546	Production of liposomes loaded alginate aerogels using two supercritical CO2 assisted techniques. **2020**, 39, 101161	17
545	Patterns matter part 1: Chitosan polymers with non-random patterns of acetylation. **2020**, 151, 104583	19
544	Preparation of nanoscale liquid metal droplet wrapped with chitosan and its tribological properties as water-based lubricant additive. **2020**, 148, 106349	9
543	Anisotropic Hydrogels with High Mechanical Strength by Stretching-Induced Oriented Crystallization and Drying. **2020**, 2, 2142-2150	3
542	Biological Safety and Biodistribution of Chitosan Nanoparticles. **2020**, 10,	18
541	Tracking Sulfonated Polystyrene Diffusion in a Chitosan/Carboxymethyl Cellulose Layer-by-Layer Film: Exploring the Internal Architecture of Nanocoatings. **2020**, 36, 4985-4994	6
540	Interaction of chitosan derivatives with cell membrane models in a biologically relevant medium. **2020**, 192, 111048	7
539	Nanomaterials in Biomedical Application and Biosensors (NAP-2019). **2020**,	1
538	Importance of biomaterials in biomedical engineering. **2020**, 151-177	5
537	Cutoff Ostwald ripening stability of eugenol-in-water emulsion by co-stabilization method and antibacterial activity evaluation. **2020**, 107, 105925	5
536	Diminishing Cohesion of Chitosan Films in Acidic Solution by Multivalent Metal Cations. **2020**, 36, 4964-4974	3
535	Nanofluid to Nanocomposite Film: Chitosan and Cellulose-Based Edible Packaging. **2020**, 10,	4
534	3D Hierarchical, Nanostructured Chitosan/PLA/HA Scaffolds Doped with TiO/Au/Pt NPs with Tunable Properties for Guided Bone Tissue Engineering. **2020**, 12,	19
533	Novel chemically cross-linked chitosan-cellulose based ionogel with self-healability, high ionic conductivity, and high thermo-mechanical stability. **2020**, 27, 5121-5133	10

532	Polysaccharides. **2021**,	6
531	Adsorption of caffeic acid on chitosan powder. **2021**, 78, 2139-2154	
530	Synthesis and characterization of chitosan nanoparticles containing teicoplanin using sol gel. **2021**, 78, 1133-1148	13
529	New strategies to fabricate starch/chitosan-based composites by extrusion. **2021**, 290, 110224	9
528	Preparation of carboxylmethylchitosan and alginate blend membrane for diffusion-controlled release of diclofenac diethylamine. **2021**, 63, 210-215	6
527	Polymer-based porous microcarriers as cell delivery systems for applications in bone and cartilage tissue engineering. **2021**, 66, 77-113	20
526	Preparation and characterization of pickering emulsion stabilized by hordein-chitosan complex particles. **2021**, 292, 110275	11
525	Aqueous solutions of ´glycolic, propionic, or lactic acid in substitution of acetic acid to prepare chitosan dispersions: a study based on rheological and physicochemical properties. **2021**, 58, 1797-1807	3
524	Self-assembled nanogels of luminescent thiolated silver nanoclusters and chitosan as bactericidal agent and bacterial sensor. **2021**, 118, 111520	12
523	Exploiting self-assembled soft systems based on surfactants, biopolymers and their mixtures for inhibition of Citral degradation under harsh acidic Conditions. **2021**, 340, 128168	2
522	Chitosan 3D cell culture system promotes naïve-like features of human induced pluripotent stem cells: A novel tool to sustain pluripotency and facilitate differentiation. **2021**, 268, 120575	15
521	Porous polymeric membranes: fabrication techniques and biomedical applications. **2021**, 9, 2129-2154	14
520	Optimal loading of omecamtiv mecarbil by chitosan: A comprehensive and comparative molecular dynamics study. **2021**, 322, 114908	
519	Synthesis and characterization of iron oxide-hydroxyapatite-chitosan composite coating and its biological assessment for biomedical applications. **2021**, 150, 106011	15
518	Chitosan as a machine for biomolecule delivery: A review. **2021**, 256, 117414	17
517	Study on the mechanical properties and microstructure of chitosan reinforced metakaolin-based geopolymer. **2021**, 271, 121522	7
516	Preparation of novel chitosan polymeric nanocomposite as an efficient material for the removal of Acid Blue 25 from aqueous environment. **2021**, 168, 760-768	19
515	Superabsorbent polymers used for agricultural water retention. **2021**, 94, 107021	18

514	Effect of Ŧocopherol on the physicochemical, antioxidant and antibacterial properties of levofloxacin loaded hybrid lipid nanocarriers. **2021**, 45, 1029-1042	1
513	A novel cationic waterborne polyurethane coating modified by chitosan biguanide hydrochloride with application potential in medical catheters. **2021**, 138, 50290	3
512	Chitosan microparticles as entrapment system for trans- cinnamaldehyde: Synthesis, drug loading, and in vitro cytotoxicity evaluation. **2021**, 166, 322-332	2
511	Preparation, characterization and antimicrobial activity of betel-leaf-extract-doped polysaccharide blend films. **2021**, 9, 49-68	3
510	Covalently injectable chitosan/chondroitin sulfate hydrogel integrated gelatin/heparin microspheres for soft tissue engineering. **2021**, 70, 149-157	12
509	Green Fabrication of Chitin/Chitosan Composite Hydrogels and Their Potential Applications. **2021**, 21, e2000389	1
508	Biological Conjugates: Potential Role in Biomedical and Pharmaceutical Applications. **2021**, 359-390	
507	Synthesis and characterization of an injectable rifampicin-loaded chitosan/hydroxyapatite bone cement for drug delivery. **2021**, 36, 487-498	2
506	A roadmap to UV-protective natural resources: classification, characteristics, and applications.	4
505	Excellent Fire Retardant Properties of CNF/VMT Based LBL Coatings Deposited on Polypropylene and Wood-Ply. **2021**, 13,	5
504	Influence of nanoparticulated chitosan on the biomodification of eroded dentin: clinical and photographic longitudinal analysis of restorations. **2021**, 32, 11	0
503	Near-infrared inorganic nanomaterial-based nanosystems for photothermal therapy. **2021**, 13, 8751-8772	22
502	An overview of chitosan and its application in infectious diseases. **2021**, 11, 1340-1351	11
501	Chitosan and its derivatives-based dimensional frameworks as carrier for gene delivery. **2021**, 41-57	0
500	Chitin and chitosan on the nanoscale. **2021**, 6, 505-542	19
499	Turning leftover to treasure: An overview of astaxanthin from shrimp shell wastes. **2021**, 253-279	
498	Fabrication and Characterization of Chitosan Based Injectable Thermosensitive Hydrogels Containing Silica/Calcium Phosphate Nanocomposite Particles. **2021**, 12, 34-48	1
497	Potential Biomedical Applications of Marine Sponge-Derived Chitosan: Current Breakthroughs in Drug Delivery for Wound Care. **2021**, 487-507	

496	Seawater desalination derived entirely from ocean biomass.	7
495	Recent advancements in applications of chitosan-based biomaterials for skin tissue engineering. **2021**, 6, 11-25	54
494	Functionalized Graphene Oxide-Reinforced Chitosan Hydrogel as Biomimetic Dressing for Wound Healing. **2021**, 21, e2000432	4
493	Crustacean Waste-Derived Chitosan: Antioxidant Properties and Future Perspective. **2021**, 10,	21
492	Physically cross-linked chitosan-based hydrogels for tissue engineering applications: A state-of-the-art review. **2021**, 145, 110176	34
491	Use of combined nanocarrier system based on chitosan nanoparticles and phospholipids complex for improved delivery of ferulic acid. **2021**, 171, 288-307	9
490	One-step ultrasonic production of the chitosan/lactose/g-C3N4 nanocomposites with lactose as a biological capping agent: Photocatalytic activity study. **2021**, 68, 1205-1213	1
489	Multifunctional hydrogels for wound healing: Special focus on biomacromolecular based hydrogels. **2021**, 170, 728-750	37
488	A novel kinetic approach to crystallization mechanisms in polymers. **2021**, 61, 1502-1517	1
487	POLY(VINYLPYRROLIDONE)-CHITOSAN HYDROGELS AS MATRICES FOR CONTROLLED DRUG RELEASE. **2021**, 55, 63-73	1
486	Challenges and Innovations in Osteochondral Regeneration: Insights from Biology and Inputs from Bioengineering toward the Optimization of Tissue Engineering Strategies. **2021**, 12,	3
485	Polymeric Materials with Antibacterial Activity: A Review. **2021**, 13,	10
484	Dielectric and optical properties of chitosan-Pb and chitosan-Bi nanocomposites. **2021**, 32, 3603-3611	4
483	Characterization of chitosan with different degree of deacetylation and equal viscosity in dissolved and solid state - Insights by various complimentary methods. **2021**, 171, 242-261	10
482	Boosting of Antibacterial Performance of Cellulose Based Paper Sheet via TiO Nanoparticles. **2021**, 22,	2
481	A LCMS Metabolomic Workflow to Investigate Metabolic Patterns in Human Intestinal Cells Exposed to Hydrolyzed Crab Waste Materials. **2021**, 9, 629083	0
480	Biodegradable polyelectrolyte complexes of chitosan and partially crosslinked dextran phosphate with potential for biomedical applications. **2021**, 169, 500-512	8
479	Influence of gamma radiation on Amphotericin B incorporated in PVP hydrogel as an alternative treatment for cutaneous leishmaniosis. **2021**, 215, 105805	1

478	A State-of-the-Art of Functional Scaffolds for 3D Nervous Tissue Regeneration. **2021**, 9, 639765	10
477	Three-Dimensional Printing of Hydroxyapatite Composites for Biomedical Application. **2021**, 11, 353	11
476	Clarithromycin Loaded Chitosan Nanoparticles: Development and Characterization. **2021**, 4, 55-71	
475	Increased Stability of Polysaccharide/Silica Hybrid Sub-Millicarriers for Retarded Release of Hydrophilic Substances. **2021**, 222, 2100027	0
474	Chitosan-Coating Effect on the Characteristics of Liposomes: A Focus on Bioactive Compounds and Essential Oils: A Review. **2021**, 9, 445	9
473	Recent advances of hydrogel-based biomaterials for intervertebral disc tissue treatment: A literature review. **2021**, 15, 299-321	6
472	Evaluation of Anti-Biofilm Activity of Mouthrinses Containing Tannic Acid or Chitosan on Dentin In Situ. **2021**, 26,	2
471	Photo-induced programmable degradation of carboxymethyl chitosan-based hydrogels. **2021**, 256, 117609	7
470	New Perspectives of Using Chitosan, Silver, and Chitosan–Silver Nanoparticles against Multidrug-Resistant Bacteria. **2021**, 38, 2100009	8
469	Genipin-Cross-Linked Layer-by-Layer Chitosan/Hydroxyapatite Composite Rod for Bone Fracture Fixation. **2021**, 13, 364-370	1
468	Fabrication of glycerophosphate-based nanochitin hydrogels for prolonged release under in vitro physiological conditions. **2021**, 28, 4887-4897	2
467	Understanding Electrodeposition of Chitosan-Hydroxyapatite Structures for Regeneration of Tubular-Shaped Tissues and Organs. **2021**, 14,	6
466	Development of Inherently Antibacterial, Biodegradable, and Biologically Active Chitosan/Pseudo-Protein Hybrid Hydrogels as Biofunctional Wound Dressings. **2021**, 13, 14688-14699	21
465	Mechanical properties of Tungsten Tri-oxide (WO3) reinforced poly (lactic-acid) (PLA) nanocomposites. **2021**, 1128, 012030	1
464	Exploring Mycosporine-Like Amino Acids (MAAs) as Safe and Natural Protective Agents against UV-Induced Skin Damage. **2021**, 10,	8
463	A versatile chitosan nanogel capable of generating AgNPs in-situ and long-acting slow-release of Ag for highly efficient antibacterial. **2021**, 257, 117636	17
462	pH-Sensitive Chitosan Nanoparticles for Salivary Protein Delivery. **2021**, 11,	4
461	Investigation on the role of the free radicals and the controlled degradation of chitosan under solution plasma process based on radical scavengers. **2021**, 257, 117567	4

460	Prospects of Delivering Natural Compounds by Polymer-Drug Conjugates in Cancer Therapeutics. **2021**,	1
459	Cationic nanoparticles self-assembled from amphiphilic chitosan derivatives containing poly(amidoamine) dendrons and deoxycholic acid as a vector for co-delivery of doxorubicin and gene. **2021**, 258, 117706	4
458	Chitosan/polycaprolactone multilayer hydrogel: A sustained Kartogenin delivery model for cartilage regeneration. **2021**, 177, 589-600	16
457	Toward CNT-reinforced chitosan-based ceramic composite coatings on biodegradable magnesium for surgical implants. **2021**, 18, 971-988	5
456	QUANTITY AND QUALITY YIELD OF ESSENTIAL OIL FROM Mentha piperita L. UNDER FOLIAR-APPLIED CHITOSAN AND INOCULA-TION OF ARBUSCULAR MYCORRHIZAL FUNGI. **2021**, 20, 43-52	0
455	Crystallization of Polysaccharides. **2021**, 283-300	0
454	Flexible dielectric ZnO-doped reduced graphene oxide bionanocomposites from solution blending for potential application in bio-related devices. **2021**, 138, 51186	2
453	Recent development on physical and biological properties of chitosan-based composite films with natural extracts: A review. **2021**, 36, 225-236	2
452	Sustainable Agriculture Systems in Vegetable Production Using Chitin and Chitosan as Plant Biostimulants. **2021**, 11,	27
451	Wheat germin-like protein: Studies on chitin/chitosan matrix for tissue engineering applications. **2021**, 131, 549-556	3
450	Analysis of CO2 Mass Transfer on Gas Absorption into Phase-Separated Gel. **2021**, 60, 8236-8243	0
449	Preparation, Characterization and Biocompatibility of Chitosan/TEMPO-oxidized Bacterial Cellulose Composite Film for Potential Wound Dressing Applications. **2021**, 22, 1790-1799	2
448	Nanoparticles for the Treatment of Inner Ear Infections. **2021**, 11,	5
447	Characterization and molecular dynamic studies of chitosan iron complexes. **2021**, 44, 1	4
446	Agarose, Alginate and Chitosan Nanostructured Aerogels for Pharmaceutical Applications: A Short Review. **2021**, 9, 688477	10
445	pH-Responsive Electrospun Nanofibers and Their Applications. 1-49	12
444	New advances in gated materials of mesoporous silica for drug controlled release. **2021**,	10
443	Preparation and Antimicrobial Activity of Chitosan and Its Derivatives: A Concise Review. **2021**, 26,	22

442	Chemical and physical Chitosan modification for designing enzymatic industrial biocatalysts: How to choose the best strategy?. **2021**, 181, 1124-1170	34
441	Heterogeneous Dynamics and Microdomain Structure of High-Performance Chitosan Film as Revealed by Solid-State NMR. **2021**, 125, 13572-13580	2
440	Carbon nanotubes reinforced with natural/synthetic polymers to mimic the extracellular matrices of bone a review. **2021**, 20, 100420	4
439	Current trends and challenges in the synthesis and applications of chitosan-based nanocomposites for plants: A review. **2021**, 261, 117904	33
438	Continuous Pilot-Scale Wet-Spinning of Biocompatible Chitin/Chitosan Multifilaments from an Aqueous KOH/Urea Solution. **2021**, 42, e2100252	3
437	Microbots Gene Delivery System Based on Bifidobacteria in a Tumor Model. **2021**, 11, 5544	
436	Marine Polysaccharides as a Versatile Biomass for the Construction of Nano Drug Delivery Systems. **2021**, 19,	18
435	Turning Toxic Nanomaterials into a Safe and Bioactive Nanocarrier for Co-delivery of DOX/pCRISPR.. **2021**, 4, 5336-5351	21
434	Fabrication and characterization of chitosan-based composite scaffolds for neural tissue engineering. 1-11	2
433	3D printing to innovate biopolymer materials for demanding applications: A review. **2021**, 20, 100459	23
432	Effects of reinforcement of sodium alginate functionalized halloysite clay nanotubes on thermo-mechanical properties and biocompatibility of poly (vinyl alcohol) nanocomposites. **2021**, 118, 104441	15
431	Formulation and cognitive evaluation of self-assembled phosphatidylserine-chitosan nanoparticles of lycopene, an innovative technique to lessen STZ-induced oxidative stress: A vital persuader of major neurological diseases. **2021**, 63, 102534	0
430	Experimental and theoretical studies of chitosan dissolution in ionic liquids: Contribution ratio effect of cations and anions. **2021**, 331, 115762	2
429	Imaging Constructs: The Rise of Iron Oxide Nanoparticles. **2021**, 26,	9
428	Facile production of three-dimensional chitosan fiber embedded with zinc oxide as recoverable photocatalyst for organic dye degradation. **2021**, 181, 150-159	3
427	Innovative Nanotechnology a Boon for Fight Against Pandemic COVID19. **2021**, 3,	1
426	Thiolated-Polymer-Based Nanoparticles as an Avant-Garde Approach for Anticancer Therapies-Reviewing Thiomers from Chitosan and Hyaluronic Acid. **2021**, 13,	5
425	Extended Release of Metronidazole Drug Using Chitosan/Graphene Oxide Bionanocomposite Beads as the Drug Carrier. **2021**, 6, 20433-20444	5

424	Functional properties of chitosan derivatives obtained through Maillard reaction: A novel promising food preservative. **2021**, 349, 129072	21
423	Applications of Chitosan Based Schiff bases and its Complexes □A Review. 157-170	
422	3D Bioprinting of Nature-Inspired Hydrogel Inks Based on Synthetic Polymers. **2021**, 3, 3685-3701	6
421	A review on the applications of electrospun chitosan nanofibers for the cancer treatment. **2021**, 183, 790-810	13
420	Colloidal nanodispersions for the topical delivery of Ibuprofen: Structure, dynamics and bioperformances. **2021**, 334, 116021	7
419	Determination of chitosan content with Schiff base method and HPLC. **2021**, 182, 1537-1542	5
418	Nanoparticle conjugation of ginsenoside Rb3 inhibits myocardial fibrosis by regulating PPAR□ pathway. **2021**, 139, 111630	3
417	Preclinical assessment of chitosan□polyvinyl alcohol□graphene oxide nanocomposite scaffolds as a wound dressing. 096739112110292	1
416	Thermal-reversible and self-healing hydrogel containing magnetic microspheres derived from natural polysaccharides for drug delivery. **2021**, 157, 110644	5
415	Brij-functionalized chitosan nanocarrier system enhances the intestinal permeability of P-glycoprotein substrate-like drugs. **2021**, 266, 118112	1
414	Saccharomyces Cerevisiae as an Untapped Source of Fungal Chitosan for Antimicrobial Action. **2021** , 193, 3765-3786	3
413	An Acetylcholinesterase-Functionalized Biosensor for Sensitive Detection of Organophosphorus Pesticides Based on Solution-Gated Graphene Transistors. **2021**, 1, 372-378	3
412	A Review of Biomaterials and Scaffold Fabrication for Organ-on-a-Chip (OOAC) Systems. **2021**, 8,	6
411	Proline Isomerization Regulates the Phase Behavior of Elastin-Like Polypeptides in Water. **2021**, 125, 9751-9756	4
410	Biodegradable polymer hydrogel-based tissue adhesives: A´review. **2021**, 7, 163	1
409	Chemical and biological characterization of sulfated chitosan oligomer as heparin mimics. 096739112110350	1
408	Increased stability of curcumin-loaded pickering emulsions based on glycated proteins and chitooligosaccharides for functional food application. **2021**, 148, 111742	15
407	Development of marine oligosaccharides for potential wound healing biomaterials engineering. **2021**, 7, 100113	6

406	Binary Graft of Poly(-vinylcaprolactam) and Poly(acrylic acid) onto Chitosan Hydrogels Using Ionizing Radiation for the Retention and Controlled Release of Therapeutic Compounds. **2021**, 13,	2
405	Thermal degradation kinetics of ethyl vanillin crosslinked chitosan/poly(vinyl alcohol) blend films for food packaging applications. **2021**, 34, 100739	1
404	Recent Advances and Challenges in Nanodelivery Systems for Antimicrobial Peptides (AMPs). **2021**, 10,	7
403	A review on chitosan and chitosan-based bionanocomposites: Promising material for combatting global issues and its applications. **2021**, 185, 832-848	45
402	Chitosan coatings with distinct innate immune bioactivities differentially stimulate angiogenesis, osteogenesis and chondrogenesis in poly-caprolactone scaffolds with controlled interconnecting pore size.. **2022**, 10, 430-442	1
401	Nature-Based Biomaterials and Their Application in Biomedicine. **2021**, 13,	9
400	Carbon nanomaterials with chitosan: A winning combination for drug delivery systems. **2021**, 66, 102847	7
399	Fabrication and applications of bioactive chitosan-based organic-inorganic hybrid materials: A review. **2021**, 267, 118179	12
398	Chitotriazolan (poly([1-4)-2-(1H-1,2,3-triazol-1-yl)-2-deoxy-d-glucose)) derivatives: Synthesis, characterization, and evaluation of antibacterial activity. **2021**, 267, 118162	2
397	Thermal Stability and Dynamic Mechanical Properties of Poly(-caprolactone)/Chitosan Composite Membranes. **2021**, 14,	1
396	Microwave Atmospheric Plasma: A Versatile and Fast Way to Confer Antimicrobial Activity toward Direct Chitosan Immobilization onto Poly(lactic acid) Substrate.. **2021**, 4, 7445-7455	1
395	Metabolomic analysis of honey bees (Apis mellifera) response to carbendazim based on UPLC-MS. **2021**, 179, 104975	2
394	Biodegradable Small-Scale Swimmers for Biomedical Applications. **2021**, 33, e2102049	12
393	A mussel-inspired flexible chitosan-based bio-hydrogel as a tailored medical adhesive. **2021**, 189, 183-193	3
392	Functionalities of chitosan conjugated with lauric acid and l-carnitine and application of the modified chitosan in an oil-in-water emulsion. **2021**, 359, 129851	3
391	Comparative Green and Conventional Synthesis of 2-Hydroxy-1-Naphthaldehyde Based Barbiturates and Their DFT Study. 1-17	0
390	Polyelectrolytic nature of chitosan: Influence on physicochemical properties and synthesis of nanoparticles. **2021**, 65, 102730	5
389	An ultrasensitive aptamer-antibody sandwich cortisol sensor for the noninvasive monitoring of stress state. **2021**, 190, 113451	8

388	Biotinylated chitosan macromolecule based nanosystems: A review from chemical design to biological targets. **2021**, 188, 82-93	1
387	Synergistic Effects of Curcumin and Nano-Curcumin against Toxicity, Carcinogenicity, and Oxidative Stress Induced by Tartrazine at Normal and Cancer Cell Levels. **2021**, 11, 1203	1
386	Organoselenium-chitosan derivative: Synthesis via "click" reaction, characterization and antioxidant activity. **2021**, 191, 19-26	2
385	Chitosan-based nanodelivery systems for cancer therapy: Recent advances. **2021**, 272, 118464	18
384	Synthesis optimization, DFT and physicochemical study of chitosan sulfates. **2021**, 1245, 131083	12
383	CO2 absorption and desorption using phase-separation gel. **2022**, 428, 131126	2
382	Crystalline polysaccharides: A review. **2022**, 275, 118624	8
381	Mediated differentiation of stem cells by engineered silicon nanowires. **2022**, 153-180	
380	Preparation of camellia oil pickering emulsion stabilized by glycated whey protein isolate and chitooligosaccharide: Effect on interfacial behavior and emulsion stability. **2022**, 153, 112515	6
379	Classification, material types, and design approaches of long-acting and implantable drug delivery systems. **2022**, 17-59	1
378	Chitin-based nanomaterials. **2021**, 61-99	
377	Fabrication and characterization of carrageenan-based green materials. **2021**, 257-277	
376	Application of compounds from grape processing by-products: Formulation of dietary fiber and encapsulated bioactive compounds. **2021**, 355-366	
375	Biopolymers in the food and nutraceutical industries. **2021**, 149-173	1
374	Radiation-initiated high strength chitosan/lithium sulfonate double network hydrogel/aerogel with porosity and stability for efficient CO capture.. **2021**, 11, 20486-20497	2
373	A review on hybrid materials based polysaccharide systems for the applications in the field of biomedical. **2021**,	
372	Electrospun and co-electrospun biopolymer nanofibers for skin wounds on diabetic patients: an overview.. **2021**, 11, 15340-15350	4
371	Chitin, chitosan, and their derivatives. **2021**, 1045-1058	

370	Chitosan Nanoparticles: An Overview on Preparation, Characterization and Biomedical Applications. **2021**, 393-427	1
369	Thermosensitive chitosan-based hydrogels supporting motor neuron-like NSC-34 cell differentiation. **2021**, 9, 7492-7503	2
368	Biopolymeric nanomaterials: water purification. **2021**, 407-422	
367	Chitosan-Based Nanoparticles for Biomedical Applications. 1	1
366	Chitosan-based Polyelectrolyte Complexes: Characteristics and Application in Formulation of Particulate Drug Carriers. 235-270	1
365	Synthesis and Characterization and Application of Chitin and Chitosan-Based Eco-friendly Polymer Composites. **2019**, 1365-1405	3
364	Antimicrobial Hydrogels: Key Considerations and Engineering Strategies for Biomedical Applications. **2020**, 511-542	5
363	Chitosan. **2014**, 1-24	2
362	Advances in Spray Drying Technology for Nanoparticle Formation. **2016**, 329-346	4
361	Bioactive Coatings. **2018**, 361-406	2
360	Synthetic Biopolymers. **2019**, 1-43	3
359	Nanostructured Hemostatic Sponges Made from Chitosan: Structural and Biological Evaluation. **2020**, 95-110	1
358	ECM turnover-stimulated gene delivery through collagen-mimetic peptide-plasmid integration in collagen. **2017**, 62, 167-178	16
357	First report of electrospun cellulose acetate nanofibers mats with chitin and chitosan nanowhiskers: Fabrication, characterization, and antibacterial activity. **2020**, 250, 116954	16
356	Thymol enriched bacterial cellulose hydrogel as effective material for third degree burn wound repair. **2019**, 122, 452-460	54
355	Progresses in targeted drug delivery systems using chitosan nanoparticles in cancer therapy: A mini-review. **2020**, 58, 101813	26
354	Synthesis and application of chitosan/tripolyphosphate/graphene oxide hydrogel as a new drug delivery system for Sumatriptan Succinate. **2020**, 315, 113835	32
353	Flexible, dense and porous chitosan and alginate membranes containing the standardized extract of Arrabidaea chica Verlot for the treatment of skin lesions. **2020**, 112, 110869	6

352	Polysaccharide-Based Supramolecular Hydrogel for Efficiently Treating Bacterial Infection and Enhancing Wound Healing. **2021**, 22, 534-539	11
351	Chapter 6:Thermogels for Stem Cell Culture. **2018**, 102-112	1
350	Bacterial infection microenvironment-responsive enzymatically degradable multilayer films for multifunctional antibacterial properties. **2017**, 5, 8532-8541	45
349	Formulation development, and evaluation of chitosan engineered nanoparticles for ocular delivery of insulin.. **2020**, 10, 43629-43639	11
348	Induction of extrinsic and intrinsic apoptosis in cervical cancer cells by mediated gold nanoparticles. **2020**, 14, 172-179	4
347	Colloid Drug Delivery Systems. **2017**, 301-311	1
346	Adhesives: Tissue Repair and Reconstruction. **2017**, 1-18	1
345	The Effect of Chitosan in Wound Healing: A Systematic Review. **2021**, 34, 262-266	4
344	Synthesis of Methacrylamide/Chitosan Polymeric Cryogels and Swelling/Dye Sorption Properties. **2020**, 62, 481-493	1
343	Green Strategy to Develop Novel Drug-Containing Poly (Ε-Caprolactone)-Chitosan-Silica Xerogel Hybrid Fibers for Biomedical Applications. **2020**, 2020, 1-6	5
342	Synthesis, Characterization and Biomedical Applications of Chitosan and Its Derivatives. **2013**, 15-68	1
341	Chitosan and Its Roles in Transdermal Drug Delivery. **2016**, 590-619	1
340	Regioselective Sequential Modification of Chitosan via Azide-Alkyne Click Reaction: Synthesis, Characterization, and Antimicrobial Activity of Chitosan Derivatives and Nanoparticles. **2015**, 10, e0123084	62
339	Stability, Intracellular Delivery, and Release of siRNA from Chitosan Nanoparticles Using Different Cross-Linkers. **2015**, 10, e0128963	55
338	An accurate coarse-grained model for chitosan polysaccharides in aqueous solution. **2017**, 12, e0180938	18
337	Chitosan coating as an antibacterial surface for biomedical applications. **2017**, 12, e0189537	26
336	Chitin and Chitinases: Biomedical And Environmental Applications of Chitin and its Derivatives. **2018**, 1, 20-43	21
335	Development of Theophylline Microbeads Using Pregelatinized Breadfruit Starch () as a Novel Co-polymer for Controlled Release. **2019**, 9, 93-101	9

334	Perspective highlights on biodegradable polymeric nanosystems for targeted therapy of solid tumors. **2017**, 7, 49-57	21
333	PREPARATION OF CHITOSAN WITH HIGH BLOOD CLOTTING ACTIVITY AND ITS HEMOSTATIC POTENTIAL ASSESSMENT. **2015**, 8, 32-40	2
332	pH Controlled Reversible Interaction of Remazol Orange with Chitin. 75, 25-36	1
331	In situ Crosslinkable Thiol-ene Hydrogels Based on PEGylated Chitosan and Cyclodextrin. 1327-1336	7
330	Potential of Natural Biomaterials in Nano-scale Drug Delivery. **2018**, 24, 5188-5206	6
329	Biocompatible Polymers and their Potential Biomedical Applications: A Review. **2019**, 25, 3608-3619	20
328	Some Approaches to Viscometric Study of Chitosan in Acetic Acid Solution. **2016**, 10, 135-139	4
327	Preparation, Bioactivities and Applications in Food Industry of Chitosan-Based Maillard Products: A Review. **2020**, 26,	6
326	Biomaterials-based Hydrogels and their Drug Delivery Potentialities. **2017**, 13, 864-873	16
325	Chitosan-collagen porous scaffold and bone marrow mesenchymal stem cell transplantation for ischemic stroke. **2015**, 10, 1421-6	21
324	Synthesis and Characterization of New Biodegradable Chitosan/Polyvinyl Alcohol/Cellulose Nanocomposite. **2016**, 05, 18-26	15
323	Controlled Release of Diclofenac Sodium from Silica-Chitosan Composites. **2013**, 03, 69-78	21
322	Chitosan-gold Nano Composite for Dopamine Analysis using Raman Scattering. **2013**, 34, 237-242	18
321	Operative Hemostasis in Trauma and Acute Care Surgery: The Role of Biosurgical Agents.	0
320	A Novel Drug Delivery System Based on Nanoparticles of Magnetite Fe3O4 Embedded in an Auto Cross-Linked Chitosan.	1
319	In Vivo Therapeutic Effects of Four Synthesized Antileishmanial Nanodrugs in the Treatment of Leishmaniasis. **2018**, In Press,	3
318	Chitosan-apatite composites: synthesis and properties. **2016**, 32, 83-97	3
317	Chitosan-Based Hydrogels for Tissue Engineering. **2021**, 519-571	0

316	Chitosan for Wound Healing in the Light of Skin Tissue Engineering and Stem Cell Research. **2021**, 351-379		
315	Chitosan-based multifunctional flexible hemostatic bio-hydrogel. **2021**, 136, 170-183		6
314	Antimicrobial Activities of Chitosan Derivatives. **2021**, 13,		2
313	Utilization of water-soluble chitosan as a sizing agent incorporated in a paper composite: effects of pulp weight and water-soluble chitosan concentration. 1		0
312	Acetoxy DMU-loaded carboxymethylchitosan nanocapsules: preparation and in vitro release evaluation followed by an analytical methodology validation. 1-13		
311	Increase in the physical performance of nanostructured starch/chitosan blends with montmorillonite. **2021**, 299, 1901		1
310	Sustainable polymer composites: functionality and applications. **2021**, 2,		0
309	Mussel-Inspired Chemistry: A Promising Strategy for Natural Polysaccharides in Biomedical Applications. *Progress in Polymer Science*, **2021**, 101472	29.6	7
308	Chemical syntheses of bioinspired and biomimetic polymers toward biobased materials.		24
307	Hierarchical Self-Assembly of Metal-Ion-Modulated Chitosan Tubules. **2021**, 37, 12690-12696		4
306	Biodegradation of Chitin Extracted from Labeo catla Fish Scales and Production of Chitooligosaccharides by Novel Chitinolytic Bacteria Streptomyces chilikensis RC1830. 1-14		1
305	Polymeric Silver Nanoparticles: Potential for Folate-Targeted Delivery of Cisplatin In Vitro.		
304	Preparation of pH-sensitive carboxymethyl cellulose/chitosan/alginate hydrogel beads with reticulated shell structure to deliver Bacillus subtilis natto. **2021**, 192, 684-691		8
303	Biopolymers. **2012**, 17-68		
302	SYNTHESIS OF CHITOSAN-O-POLY(ETHYLENE GLYCOL) THROUGH DIELS-ALDER REACTION. **2013**, 013, 903-908		
301	THERMO-SENSITIVE GALACTOSYLATED CHITOSAN-g POLY(N-ISOPROPYLACRYLAMIDE) HYDROGELS AND THEIR EFFECTS ON HL-7702 CELLSBEHAVIORS. **2013**, 013, 888-895		
300	Modified Polysaccharides as Drug Delivery. **2014**, 1-26		1
299	Elution of amikacin and vancomycin from a calcium sulfate/chitosan bone scaffold. **2015**, 2, 159-172		

298 Biosensor Based on Chitosan Nanocomposite. 277-307

297 Chitosan: Drug Delivery Systems. 1709-1721

296 Bone Tissue Engineering: Biocompatible, Biodegradable Polymers, and Composites. 1137-1147

295 Cancer Therapy: Polymeric Nanoparticles. 1258-1284

294 Alginate Hydrogels: Properties and Applications. **2016**, 465-514

293 Colloid Drug Delivery Systems. 1890-1900

292 Crosslinkers: Functionalized Polymeric. 2230-2242

291 Study of Indian Marine Mollusks: A Glycomic Approach. **2016**, 287-300

290 Chapter 2 InNovemberative Green Foams. **2016**, 19-30

289 Shrimp Waste Fermentation by Isoptericola sp. Strain A10-1 as a Feed Ingredient for Improving Yield Carcass and Performance of Magelang Duck. **2017**, 345-352

288 Selected analyses of chitosan from dietary supplement on market: Development of modified methods for degree of deacetylation determination. **2017**, 58, 27-34

287 Marine Biopolymers for Anticancer Drugs. **2017**, 289-304

286 Preparation and Characterisation of Novel Hybrid Hydrogel Fibres. **2018**, 57-77

285 Synthesis and Anti/Bacteriostasis of Nano-Silver Composites Based Modified Chitosan. **2018**, 08, 265-272

284 The overview of methods for obtaining alginate hydrogels and nanofibers using the electrospinning technique. **2018**, 59, 327-337

283 Application of Biopreparations on the Basis of Chitozan in Agriculture. **2018**, 22-28

282 Chitosan and Its Derivatives: A New Versatile Biopolymer for Various Applications. **2019**, 1-42

281 Biodegradable antimicrobial hydrogels and their use in biomedical purposes. **2019**, 23-52

280	Biomedical Applications of Chitosan. **2019**, 3473-3484		1
279	Biocompatible Polymer Based Nanofibers for Tissue Engineering. **2019**, 43-66		
278	S□ntesis y caracterizaci□n de un novedoso biomaterial a base de quitosano modificado con amino□idos. **2019**, 24,		
277	Biocompatible chitosan in unique applications for tissue engineering. **2019**, 279-308		0
276	Fabrication and Amphiphilicity of Acylated Chitosan Derivatives. **2019**, 09, 117-125		
275	Dehydroabietyl Glycidyl Ether Grafted Hydroxyethyl Chitosan: Synthesis, Characterization and Physicochemical Properties. **2019**, 56, 252-259		0
274	The potential of laser interferometry for a non-invasive assessment of biopolymer film structure and biological properties. **2019**,		0
273	Synthesis and characterisation of chitosan nanoparticle as a potential delivery carrier. 80-84		
272	Fluorescent Chitosan Modified with Heterocyclic Aromatic Dyes. **2021**, 14,		1
271	Amphiphilic chitosan-g-poly(trimethylene carbonate) - A new approach for biomaterials design. **2021**, 193, 414-424		3
270	Process Design in Fungal-Based Biofuel Production Systems. **2020**, 177-198		
269	Yb/Chitosan Catalyzed Synthesis of Highly Substituted Piperidine Derivatives for Potential Nuclease Activity and DNA Binding Study. **2021**, 27, 2252-2263		1
268	Chitosan for delivery of biomolecules. **2022**, 433-460		
267	Chitosan-based nanobiocomposites in drug delivery. **2022**, 411-432		0
266	Safe-by-design development of a topical patch for drug delivery. 56,		
265	Biotransformation of Chitinous Waste into Value-Added Products. **2020**, 113-139		1
264	Agarose-Chitosan Based Hydrogel Waveguide Matrix: Comparison Synthesis and Performance for Optical Leaky Waveguide (OLW) Biosensor. 301, 87-96		0
263	Superabsorbent Polymers: From long-established, microplastics generating systems, to sustainable, biodegradable and future proof alternatives. *Progress in Polymer Science*, **2021**, 125, 101475	29.6	4

262	Biomineralization induced by chitosan and collagen-based materials with fluoride for dentin coverage: Chemical and morphological analysis. **2021**,	
261	A sandcastle worm-inspired strategy to functionalize wet hydrogels. **2021**, 12, 6331	4
260	Anti-Bacterial Activity of Chitosan-Alginate-Poly (Vinyl Alcohol) Hydrogel Containing Entrapped Peppermint Essential Oil. 1-13	2
259	Bioresorbable Composites for Bone Reconstruction. **2020**, 15, 400-414	
258	Kitosan Esaslı Taşıyıcı Sistem Üretimi ve In vitro Performansının Belirlenmesi.	
257	A novel image analysis algorithm reveals that media conditioned with chitosan and platelet-rich plasma biomaterial dose dependently increases fibroblast migration in a scratch assay. **2020**, 6,	
256	Kitosanın Özellikleri, Uygulama Alanları, Bitki Sistemlerine Etkileri. 222-235	0
255	Principles of Gold Nanoparticles Stabilization with Chitosan in Carbonic Acid Solutions Under High CO2 Pressure. **2020**, 495, 166-170	0
254	Cartilage tissue engineering. **2022**, 555-586	
253	Peripheral nerve tissue engineering. **2022**, 481-517	
252	Phytochemical and morpho-physiological changes of hyssop in response to chitosan-spraying under different levels of irrigation. **2022**, 176, 114330	2
251	Multifunctional antimicrobial materials: From rational design to biomedical applications. **2022**, 125, 100887	13
250	3D Cell Culture Systems: Tumor Application, Advantages, and Disadvantages. **2021**, 22,	13
249	Bioactive Collagen Hydrolysate-Chitosan/Essential Oil Electrospun Nanofibers Designed for Medical Wound Dressings. **2021**, 13,	1
248	Biomass-Derived, Highly Conductive Aqueous Inks for Superior Electromagnetic Interference Shielding, Joule Heating, and Strain Sensing. **2021**, 13, 57930-57942	3
247	Fabrication and properties of novel chitosan/ZnO composite bioplastic. 1	0
246	Synergistic effect of chitosan derivative and DOPO for simultaneous improvement of flame retardancy and mechanical property of epoxy resin. 1	0
245	Effect of Adding Water-Soluble Chitosan on Some Physiological Traits of Quail Males. **2021**, 910, 012082	

244	Rapid generation of functional engineered 3D human neuronal assemblies: network dynamics evaluated by micro-electrodes arrays. **2021**, 18,	1
243	Improved corrosion protective performance of chitosan coatings reinforced with nano-ZnO on degradable magnesium alloy in simulated body fluid. **2021**, 127, 1	0
242	Direct Ink Writing for 3D Bioprinting Applications. **2022**, 113-147	
241	Physicochemical and conductivity studies of chitosan-tapioca flour-LiBF4 gel polymer electrolytes. **2021**, 3, 100055	2
240	Effect of chitosan coating on polypropylene fibers on the deposition of copper ions. 52111	1
239	Chitin deacetylase: from molecular structure to practical applications. 1	0
238	Chitosan-Stabilized Oil-in-Water Nanoemulsions. **2022**, 44-58	
237	Biodegradable and antibacterial chlorinated polypropylene/chitosan based composite films for biomedical applications. 1	1
236	Synthesis, characterization, dielectric properties and gas sensing application of polythiophene/chitosan nanocomposites. **2022**, 136, 109184	4
235	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
234	Performance improvement of PES membrane decorated by Mil-125(Ti)/chitosan nanocomposite for removal of organic pollutants and heavy metal.. **2021**, 290, 133335	2
233	Microstructure and Mechanical Strength Properties of Chitosan Sponges Obtained from Polymer Solutions in Carbonic Acid. **2021**, 63, 749-756	0
232	Microfluidics-based production of chitosan-gellan nanocomplexes encapsulating caffeine.. **2022**, 151, 110885	2
231	Environmental stimuli-sensitive chitosan nanocarriers in therapeutics. **2022**, 189-209	
230	Chitosan-Based Conversion Coatings. **2022**, 377-394	
229	Mollification of Doxorubicin (DOX)-Mediated Cardiotoxicity Using Conjugated Chitosan Nanoparticles with Supplementation of Propionic Acid.. **2022**, 12,	0
228	Antibacterial noncytotoxic chitosan coatings on polytetrafluoroethylene films by plasma grafting for medical device applications. 1	
227	Sustainable adsorptive removal of antibiotic residues by chitosan composites: An insight into current developments and future recommendations.. **2022**, 103743	15

226	Chitosan nanocomposites for biomedical applications. **2022**, 111-138	2
225	Chitosan. **2022**, 1-11	
224	Exploring new marine bacterial species, Alcaligenes faecalis Alca F2018 valued for bioconversion of shrimp chitin to chitosan for concomitant biotechnological applications.. **2021**, 196, 35-45	4
223	Recent advances in 3D hydrogel culture systems for mesenchymal stem cell-based therapy and cell behavior regulation.. **2022**,	0
222	Antimicrobial Peptides and Macromolecules for Combating Microbial Infections: From Agents to Interfaces.. **2022**,	6
221	Chitosan-Based Films with 2-Aminothiophene Derivative: Formulation, Characterization and Potential Antifungal Activity.. **2022**, 20,	1
220	Additive Manufacturing Approaches toward the Fabrication of Biomaterials. 2100670	2
219	Tuning the properties of porous chitosan: Aerogels and cryogels.. **2022**, 202, 215-223	2
218	Chitosan: A review of molecular structure, bioactivities and interactions with the human body and micro-organisms.. **2022**, 282, 119132	18
217	Recent advances of chitosan-based nanoparticles for biomedical and biotechnological applications.. **2022**, 203, 379-388	8
216	Recent advances in drug delivery systems for glaucoma treatment. **2022**, 100178	6
215	Quaternized Polysaccharide-Based Cationic Micelles as a Macromolecular Approach to Eradicate Multidrug-Resistant Bacterial Infections while Mitigating Antimicrobial Resistance.. **2022**, e2104885	2
214	Chemical Modification of Chitosan for Removal of Pb(II) Ions from Aqueous Solutions.. **2021**, 14,	3
213	A Review: Uses of Chitosan in Pharmaceutical Forms.. **2022**, 1	0
212	Recent advances in renewable polymer/metal oxide systems used for tissue engineering. **2022**, 395-445	
211	Mechanical Characterization of Additive Manufactured Polymeric Scaffolds for Tissue Engineering. **2022**, 99-148	
210	Polylactide/chitosan blends. **2022**, 251-270	
209	Design and development of advanced glucose biosensors via tuned interactions between marine polysaccharides and diagnostic elements A survey. **2022**, 3, 100170	2

208	Development and Characterization of Highly Stable Silver NanoParticles as Novel Potential Antimicrobial Agents for Wound Healing Hydrogels.. **2022**, 23,	3
207	Universal Microcarriers Based on Natural and Synthetic Polymers for Co-Delivery of Hydrophilic and Hydrophobic Compounds.. **2022**, 14,	
206	Structures, properties, and challenges of emerging 2D materials in bioelectronics and biosensors.	2
205	Carrageenan-Based Hybrids with Biopolymers and Nano-Structured Materials for Biomimetic Applications. 2200018	3
204	Polymers from Renewable Resources: Macromolecular Materials for the Twenty-First Century?. 1-79	
203	Universal Strategy for Designing Shape Memory Hydrogels. **2022**, 4, 701-706	1
202	Chitosan hydrogels chemically crosslinked with L-glutamic acid and their potential use in drug delivery. 1	0
201	Carbohydrates Used in Polymeric Systems for Drug Delivery: From Structures to Applications.. **2022**, 14,	1
200	Advances in chitosan biopolymer composite materials: from bioengineering, wastewater treatment to agricultural applications.	8
199	Polymeric Hydrogels for In Vitro 3D Ovarian Cancer Modeling.. **2022**, 23,	1
198	In Vitro Studies Regarding the Safety of Chitosan and Hyaluronic Acid-Based Nanohydrogels Containing Contrast Agents for Magnetic Resonance Imaging.. **2022**, 23,	1
197	Injectable Slow-Release Hydrogel Formulation of a Plant Virus-Based COVID-19 Vaccine Candidate.. **2022**,	3
196	Influence of Temperature and Polymer Concentration on the Nonlinear Response of Highly Acetylated Chitosan-Genipin Hydrogels.. **2022**, 8,	1
195	Bile Acid Sequestrants for Hypercholesterolemia Treatment Using Sustainable Biopolymers: Recent Advances and Future Perspectives.. **2022**,	1
194	Chitin □A Natural Bio-feedstock and Its Derivatives. **2022**, 207-233	
193	Bio-Based Materials in Anti-HIV Drug Delivery. **2022**, 181-205	
192	Responsive oligochitosan nano-vesicles with ursodeoxycholic acid and exenatide for NAFLD synergistic therapy via SIRT1.. **2022**, 288, 119388	0
191	Facile method to synthesize fluorescent chitosan hydrogels for selective detection and adsorption of Hg/Hg.. **2022**, 288, 119417	2

190	Nanocarriers for Inner Ear Disease Therapy.. **2021**, 15, 791573	3
189	Efficacy and safety of a thermosensitive hydrogel for endoscopic submucosal dissection: An in vivo swine study. **2021**, 16, e0260458	
188	Biomedyczne w□□iwo□i chitozanu □zastosowanie w in□□nierii tkankowej Biomedical properties of chitosan: Application in tissue engineering. **2021**, 75, 1020-1037	
187	Pharmacokinetic and pharmacodynamic evaluation of gemifloxacin chitosan nanoparticles as an antibacterial ocular dosage form.. **2021**,	2
186	Monomers and Macromolecular Materials from Renewable Resources: State of the Art and Perspectives.. **2021**, 27,	1
185	The Expanded Role of Chitosan in Localized Antimicrobial Therapy.. **2021**, 19,	3
184	Nanoparticles as Alternatives for the Control of : A Systematic Approach to Unveil New Anti-haemonchiasis Agents.. **2021**, 8, 789977	
183	Chitosan Reinforced with Kenaf Nanocrystalline Cellulose as an Effective Carrier for the Delivery of Platelet Lysate in the Acceleration of Wound Healing.. **2021**, 13,	4
182	Chitosan-based materials: Preparation, modification and application. **2022**, 131825	6
181	Evaluation of mechanical behavior, bioactivity, and cytotoxicity of chitosan/akermanite-TiO2 3D-printed scaffolds for bone tissue applications. **2022**,	1
180	Recent development of aptamer conjugated chitosan nanoparticles as cancer therapeutics.. **2022**, 121751	6
179	Chitosan with pendant ()-5-((4-acetylphenyl)diazenyl)-6-aminouracil groups as synergetic antimicrobial agents.. **2022**,	1
178	Ancient Fibrous Materials from Silkworm and Spider Silks: Biomechanical Patterns.	
177	Hidrog□s de PVA/quitosana funcionalizados com □leo de melaleuca visando aplica□ como curativos. **2022**, 27,	
176	Lawsone-bentonite hybrid systems for pH-dependent sustained release of ciprofloxacin.	
175	Conversion of Aquaculture Waste into Biomedical Wealth: Chitin and Chitosan Journey. **2022**, 2022, 1-12	1
174	Investigation on thermal stability and adhesion property of chitosan based biodegradable composite. **2022**, 69, 290	
173	Natural polysaccharide-based biodegradable polymeric platforms for transdermal drug delivery system: a critical analysis.. **2022**, 1	2

172	Chitosan Film Functionalized with Grape Seed Oil: Preliminary Evaluation of Antimicrobial Activity. **2022**, 14, 5410	2
171	Polysaccharide Layer-by-Layer Coating for Polyimide-Based Neural Interfaces. **2022**, 13, 692	
170	Physicochemical and biological properties of chitosan derivatives with varying molecular weight produced by chemical depolymerization.	
169	Free Radical Copolymerization of Diallylamine and Itaconic Acid for the Synthesis of Chitosan Base Superabsorbent.. **2022**, 14,	1
168	Marine Biomaterials for Pharmaceutical Applications: A Review. **2022**, 08,	
167	Cellulose-Based Nanomaterials Advance Biomedicine: A Review. **2022**, 23, 5405	7
166	Differentiation of PC12 cell line into neuron by Valproic acid encapsulated in the stabilized core-shell liposome-chitosan Nano carriers.. **2022**, 210, 252-260	1
165	Preparation of norfloxacin-grafted chitosan antimicrobial sponge and its application in wound repair.. **2022**, 210, 243-251	1
164	Culture and maintenance of neural progressive cells on cellulose acetate/graphene-gold nanocomposites.. **2022**, 210, 63-75	1
163	Current Understanding of Hydrogel for Drug Release and Tissue Engineering. **2022**, 8, 301	1
162	Electrospun PHB/Chitosan Composite Fibrous Membrane and Its Degradation Behaviours in Different pH Conditions. **2022**, 13, 58	0
161	Chitosan–organosilica hybrid decorated with silver nanoparticles for antimicrobial wearable cotton fabrics.	0
160	A novel thermophilic chitinase directly mined from the marine metagenome using the deep learning tool Preoptem. **2022**, 9,	1
159	An injectable and self-healing hydrogel with antibacterial and angiogenic properties for diabetic wound healing.. **2022**,	1
158	Multi-factor Optimization for Joining of Polylactic Acid-Hydroxyapatite-Chitosan Based Scaffolds by Rapid Joining Process. **2022**, 93-103	
157	Natural Hydrogels and 3D-Bioprinting. **2022**, 411-438	
156	Assessment of physical and thermal behaviour of chitosan-based biocomposites reinforced with leaf and stem extract of Tectona grandis. **2022**, 30, 096739112210763	
155	Ultralight and Hydrophobic MXene/Chitosan-derived Hybrid Carbon Aerogel with Hierarchical Pore structure for Durable Electromagnetic Interference Shielding and Thermal Insulation. **2022**, 137093	4

154	Chitosan-Based Materials: An Overview of Potential Applications in Food Packaging. **2022**, 11, 1490	1
153	A multifunctional chitosan-derived conformal coating for the preservation of passion fruit. **2022**, 163, 113584	1
152	Recent advances on nanohybrid systems constituting clay□chitosan with organic molecules □A review. **2022**, 226, 106548	1
151	Delivery LL37 by chitosan nanoparticles for enhanced antibacterial and antibiofilm efficacy. **2022**, 291, 119634	1
150	Energy-Dissipative and Soften Resistant Hydrogels Based on Chitosan Physical Network: From Construction to Application.	0
149	Nanochitin: Chemistry, Structure, Assembly, and Applications.	4
148	The Use of Chitosan-Coated Nanovesicles in Repairing Alcohol-Induced Damage of Liver Cells in Mice. **2022**, 58, 762	1
147	Ultrasound-assisted preparation of chitosan/nano-silica aerogel/tea polyphenol biodegradable films: Physical and functional properties. **2022**, 87, 106052	0
146	Chemical, physical, and mechanical characterization of chitosan coatings on a chemically pre-treated Ti6Al4V alloy. **2022**, 441, 128571	1
145	Contribution of polysaccharides from crustacean in fermented food products. **2022**,	0
144	An Ultra-Strong, Water Stable and Antimicrobial Chitosan Film with Interdigitated Bouligand Structure. 2200033	0
143	Production-based solution for interactive healthcare apparels: biomedical applications for topical wound healing. 004051752211062	
142	Extrusion-based 3D printing of bioactive glass scaffolds-process parameters and mechanical properties: A review. **2022**, e00219	1
141	Quaternized Chitosan Thiol Hydrogel-Thickened Nanoemulsion: A Multifunctional Platform for Upgrading the Topical Applications of Virgin Olive Oil. **2022**, 14, 1319	0
140	Molecular modifications, biological activities, and applications of chitosan and derivatives: A recent update.	0
139	Polymeric bionanomaterials for diabetes applications. **2022**, 305-330	
138	Nanobubbles: A Novel Targeted Drug Delivery System. 58,	0
137	Nanostructured pharmaceutical formulations for topical application of clove oil and eugenol. **2022**, 363-403	

136	The period of application: From 1970 until now. **2022**, 125-148	
135	PVP/PVA blended hydrogels as a biofilm for use in food packaging applications. **2022**, 8, 172-180	1
134	References. **2022**, 213-253	
133	Chitin and chitosan: Production, properties, and applications. **2022**, 149-207	1
132	Incorporation of Fluorescent Fluorinated Methacrylate Nano-Sized Particles into Chitosan Matrix Formed as a Membranes or Beads. **2022**, 14, 2750	0
131	Reproducing ancient Chinese ink depending on gelatin/chitosan and modern experimental methodology. **2022**, 10,	0
130	Development of biodegradable chitosan/ graphene oxide nanocomposite via spray drying method for drug loading and delivery application. **2022**, 74, 103555	3
129	In vitro cytotoxic and antioxidant evaluation of quercetin loaded in ionic cross-linked chitosan nanoparticles. **2022**, 74, 103561	2
128	Abscisic acid, carbohydrate, and Glucosinolate metabolite profiles in Kimchi cabbage treated with extremely high temperatures and chitosan foliar application. **2022**, 304, 111311	0
127	Mechanically strong and on-demand dissoluble chitosan hydrogels for wound dressing applications. **2022**, 294, 119774	1
126	Tailorable antibacterial and cytotoxic chitosan derivatives by introducing quaternary ammonium salt and sulfobetaine. **2022**,	0
125	Cross-linking reaction of diastereomeric bis-limonene oxide with polyhydric carboxylic acid.	1
124	Carboxymethyl guar gum: A review of synthesis, properties and versatile applications. **2022**, 176, 111433	0
123	Vanillin-crosslinked chitosan/ZnO nanocomposites as a drug delivery system for 5-fluorouracil: study on the release behavior via mesoporous ZrO2□o3O4 nanoparticles modified sensor and antitumor activity. **2022**, 12, 21422-21439	1
122	Simulations of Extrusion 3D Printing of Chitosan Hydrogels. **2022**, 12, 7530	0
121	The recent development of topical nanoparticles for annihilating skin cancer. **2022**, 15, 843-869	1
120	Biodegradable Polymer Matrix Composites Containing Graphene-Related Materials for Antibacterial Applications: A Critical Review. **2022**,	5
119	Preparation and characterization of photo-oxidative dual-crosslinked chitosan/hyaluronic acid hydrogels. **2022**, 105378	

118	Porous chitosan particles doped by in situ formed silver nanoparticles: Electrorheological response in silicon oil.	0
117	Fabrication of Curcumin-Loaded Silk Fibroin and Polyvinyl Alcohol Composite Hydrogel Films for Skin Wound Healing.	1
116	Mucoadhesive Marine Polysaccharides. **2022**, 20, 522	2
115	An ultrasensitive hairpin sensor based on g-C3N4 nanocomposite for the detection of miRNA-155 in breast cancer patient serum.	
114	Characterization, antimicrobial and cytotoxic activity of polymer blends based on chitosan and fish collagen. **2022**, 12,	1
113	Biopolymer coating for particle surface engineering and their biomedical applications. **2022**, 100407	
112	Breast cancer vaccines: New insights into immunomodulatory and nano-therapeutic approaches. **2022**, 349, 844-875	2
111	In vitro anthelmintic activity of an R-carvone nanoemulsions toward multiresistant Haemonchus contortus. 1-32	1
110	Preparation of ZnO/Chitosan Nanocomposite and Its Applications to Durable Antibacterial, UV-Blocking, and Textile Properties. **2023**, 169-187	0
109	Graphene oxide modification enhances the activity of chitosan against Fusarium graminearum in vitro and in vivo. **2022**, 219, 1112-1121	0
108	High strength chitosan hydrogels prepared from NaOH/urea aqueous solutions: the role of thermal gelling. **2022**, 297, 120054	0
107	Grafted polysaccharides in drug delivery. **2023**, 157-175	0
106	Marine-derived polymer nanocomposites for water remediation. **2022**, 393-485	0
105	Recent Advancements in the Application of Chitosan-Based Nanocomposites in Tissue Engineering and Regenerative Medicine. **2022**, 145-163	0
104	Preparation of Chitin and Chitosan. **2022**, 17-50	0
103	Emerging Applications of Chitosan-Based Nanocomposites in Multifarious Cancer Diagnosis and Therapeutics. **2022**, 165-188	0
102	Synthesis of Water-Soluble Chitosan and Study of Water-Soluble Chitosan Nanospheres. **2022**, 2, 82-88	0
101	Applications of chitosan derivatives as adjuvant for nanoparticles based vaccines. **2022**, 22,	0

100	Preparation of Fluorescently Labeled Chitosan-Quercetin Drug-Loaded Nanoparticles with Excellent Antibacterial Properties. **2022**, 13, 141	0
99	Morchella esculenta -based chitosan bionanocomposites: Evaluation as an antifungal agent.	0
98	Dicalcium Phosphate Dihydrate Mineral Loaded Freeze-Dried Scaffolds for Potential Synthetic Bone Applications. **2022**, 15, 6245	1
97	High-Strength, Biomimetic Functional Chitosan-Based Hydrogels for Full-Thickness Osteochondral Defect Repair.	1
96	Recent Advances of Chitosan Formulations in Biomedical Applications. **2022**, 23, 10975	4
95	Ancient fibrous biomaterials from silkworm protein fibroin and spider silk blends: Biomechanical patterns. **2022**,	3
94	Biodegradable Superabsorbent Materials. **2022**, 141-171	0
93	Hydrogels as promising carriers for the delivery of food bioactive ingredients. 9,	0
92	Chitosan Nanoparticles: A Versatile Platform for Biomedical Applications. **2022**, 15, 6521	5
91	Preparation and characterization of microspheres embedded hydrogels for controlled release of avermectin. **2022**, 17, 1045-1055	0
90	Viewpoint of Chitosan Application in Grapevine for Abiotic Stress/Disease Management towards More Resilient Viticulture Practices. **2022**, 12, 1369	1
89	Controllable deposition of Ag nanoparticles on various substrates via interfacial polyphenol reduction strategy for antibacterial application. **2022**, 655, 130287	0
88	Facile mussel-inspired polymerization to facilitate biomimetic in situ homogeneous mineralization for bone regeneration. **2022**, 247, 110325	0
87	Incorporation of cerium oxide into hydroxyapatite/chitosan composite scaffolds for bone repair. **2022**, 16, 207-217	0
86	In-depth drug delivery to tumoral soft tissues via pH responsive hydrogel. **2022**, 12, 31402-31411	0
85	Effect of chitosan/inorganic nanomaterial scaffolds on bone regeneration and related influencing factors in animal models: A systematic review. 10,	0
84	pH-responsive drug release and antibacterial activity of chitosan-coated core/shell borate glass-hydroxyapatite microspheres. **2022**,	0
83	Chondrogenic potential of manganese-loaded composite scaffold combined with chondrocytes for articular cartilage defect. **2022**, 33,	0

82	Water Saturated with Pressurized CO2 as a Tool to Create Various 3D Morphologies of Composites Based on Chitosan and Copper Nanoparticles. **2022**, 27, 7261	1
81	Biopolymers and their derivatives: Key components of advanced biomedical technologies. **2022**, 108056	0
80	Partial Liquid Alloy Microdroplet Sedimentation Induced a Gradient Porous Structured Elastomer with a Tunable Property for an Anisotropic Robotic Bulk.	0
79	Chitosan Is the Ideal Resource for Plant Disease Management under Sustainable Agriculture.	0
78	Electrospinning of poly(□caprolactone) (PCL) and poly ethylene glycol (PEG) composite nanofiber membranes using methyl ethyl ketone (MEK) and N N□dimethyl acetamide (DMAc) solvent mixture for anti-adhesion applications. **2022**, 33, 104718	0
77	Application of biomaterials for glioblastoma treatment: Promises, advances, and challenges. **2022**, 33, 104562	0
76	High strength and biodegradable dielectric film with synergistic alignment of chitosan nanofibrous networks and BNNSs. **2023**, 299, 120234	0
75	Lidocaine- and chloramphenicol-loaded nanoparticles embedded in a chitosan/hyaluronic acid/glycerol matrix: Drug-eluting biomembranes with potential for guided tissue regeneration. 4,	0
74	Synthesis and Application of MOF-808 Decorated with Folic Acid-Conjugated Chitosan as a Strong Nanocarrier for the Targeted Drug Delivery of Quercetin.	1
73	Quality characteristics of strawberry fruit following a combined treatment of laser sterilization and guava leaf-based chitosan nanoparticle coating. **2022**, 9,	0
72	Fabrication of Multilayered Biofunctional Material with an Enamel-like Structure. **2022**, 23, 13810	0
71	Longitudinal analyses of composite resin restoration on erosive lesions. 22, e236839	0
70	Oromucosal delivery of macromolecules: Challenges and recent developments to improve bioavailability. **2022**, 352, 726-746	0
69	Tailoring the elasticity of nerve implants for regulating peripheral nerve regeneration. **2022**,	0
68	Valorization of Agri-Food Waste and By-Products: Shellfish. **2023**,	0
67	Chitosan-Linseed mucilage polyelectrolyte complex nanoparticles of Methotrexate: In vitro cytotoxic efficacy and toxicological studies. **2023**, 16, 104463	2
66	Influence of Triplaris gardneriana Wedd ethanolic extract in the chemic-mechanics properties of chitosan: Polyvinyl alcohol membranes as intelligent curatives. **2023**, 34, 105153	0
65	Bio-based nanomaterials□versatile materials for industrial and biomedical applications. **2016**, 4, 011109-011109	1

64	pH Controlled Reversible Interaction of Remazol Orange with Chitin. 75, 25-36	0
63	Intermolecular interaction and molecular dynamics study of carboxymethyl Chitosan–Vitamin C molecular complex for understanding encapsulation and kinetics-controlled released mechanism. **2022**,	0
62	A REVIEW ON CHITOSAN-BASED MATERIALS AS POTENTIAL WOUND DRESSING MATERIALS. 27-32	0
61	Uniquely trigger the death of cancer cells by destruction of lysosomes.	0
60	Insights on Some Polysaccharide Gel Type Materials and Their Structural Peculiarities. **2022**, 8, 771	1
59	Anti-MUC1 nanobody conjugated by chitosan nanoparticle with enhancement of anti-proliferation activity in breast cancer cell lines.	0
58	Polysaccharide-based hydrogels for drug delivery and wound management: a review. **2022**, 19, 1664-1695	1
57	PVA-Based Nanofibers Containing Chitosan Modified with Graphene Oxide and Carbon Quantum Dot-Doped TiO2 Enhance Wound Healing in a Rat Model. **2022**, 13, 300	0
56	Chemical characterization and antineoplastic effect of oligosaccharides from Cabernet Franc red wine in mammary tumor model in mice. **2022**, 109253	0
55	Melaleuca armillaris Essential Oil as an Antibacterial Agent: The Use of Mesoporous Bioactive Glass Nanoparticles as Drug Carrier. **2023**, 13, 34	0
54	One-step synthesis of silver nanoparticles exposed on the chitosan-covered polyamide 6 electrospinning nanofibers.	0
53	Extended-release of doxorubicin through green surface modification of gold nanoparticles: in vitro and in ovo assessment. **2022**, 16,	0
52	Bio-Inspired Muco-Adhesive Polymers for Drug Delivery Applications. **2022**, 14, 5459	0
51	Insight into the antibacterial activity and mechanism of chitosan caffeic acid graft against Pseudomonas fluorescens.	0
50	Advances in 3D bioprinting technology for functional corneal reconstruction and regeneration. 10,	0
49	INTRANASAL FORMULATION AND CHARACTERIZATION OF CHITOSAN MICROSPHERE FOR IMPROVING IN VITRO MUCOADHESION, RESIDENCE TIME AND ABSORPTION RATE OF PREGABALIN. 156-165	0
48	Composites Based on Chitosan and Inorganic Materials for Biomedical Applications. **2023**, 119-139	0
47	Construction and function of robust and moist bilayer chitosan-based hydrogel wound dressing. **2023**, 226, 111604	0

46	Engineering chitosan into fully bio-sourced, water-soluble and enhanced antibacterial poly(aprotic/protic ionic liquid)s packaging membrane. **2023**, 230, 123182	0
45	Extraction and Characterization of Chitin and Chitosan from Penaeus Monodon and its Application for Water Purification: An Approach to Utilize Waste. **2022**, 17, 795-804	0
44	Chitosan-Based Drug Delivery Systems for Respiratory Diseases. **2023**, 201-215	0
43	Nano based technologies for antibacterial, antifungal, and antiviral coatings. **2023**, 357-412	0
42	Hydrogels for additive manufacturing in scaffolding applications: A review. **2023**, 103-129	0
41	Nanospun membranes developed by electrospinning techniques for drug delivery applications. **2023**, 471-499	0
40	A Novel Zwitterionic Hydrogel Incorporated with Graphene Oxide for Bone Tissue Engineering: Synthesis, Characterization, and Promotion of Osteogenic Differentiation of Bone Mesenchymal Stem Cells. **2023**, 24, 2691	0
39	The growth of biopolymers and natural earthen sources as membrane/separator materials for microbial fuel cells: A comprehensive review. **2023**,	1
38	Biopolymers for Hygroscopic Material Development. 2209479	0
37	Biomass in Composite Materials. **2012**, 698-739	0
36	Pickering emulsions stabilized with spirulina protein-chitosan complex for astaxanthin delivery.	0
35	Chitosan Sponge/Cu□WO3□ Composite for Photodynamic Therapy of Wound Infection. **2023**, 39, 2631-2640	0
34	Novel Non-Toxic Highly Antibacterial Chitosan/Fe(III)-Based Nanoparticles That Contain a Deferoxamine□Trojan Horse Ligands: Combined Synthetic and Biological Studies. **2023**, 11, 870	0
33	A review on extraction of polysaccharides from crustacean wastes and their environmental applications. **2023**, 221, 115306	0
32	A review on chitosan-based biomaterial as carrier in tissue engineering and medical applications. **2023**, 191, 112059	0
31	Developments and application of chitosan-based adsorbents for wastewater treatments. **2023**, 226, 115530	0
30	Physical, chemical, and biological characterization of biodegradable chitosan dressing for biomedical applications: Could sodium bicarbonate act as a crosslinking agent?. **2023**, 301, 127636	0
29	Host-guest drug delivery by □cyclodextrin assisted polysaccharide vehicles: A review. **2023**, 240, 124338	0

28	Benzoxazine-grafted-chitosan biopolymer films with inherent disulfide linkage: Antimicrobial properties. **2023**, 328, 138587	0
27	Chitosan nanoparticles efficiently enhance the dispersibility, stability and selective antibacterial activity of insoluble isoflavonoids. **2023**, 232, 123420	0
26	Preparation of highly stable and ultrasmooth chemically grafted thin films of chitosan. **2023**, 19, 1606-1616	0
25	Preparation and Characterization of Chitosan/LDH Composite Membranes for Drug Delivery Application. **2023**, 13, 179	0
24	Chitosan nanoparticle loaded by epidermal growth factor as a potential protein carrier for wound healing: In vitro and in vivo studies.	0
23	Recent Progress in Chitosan-Containing Composite Materials for Sustainable Approaches to Adsorption and Catalysis. **2023**, 13, 367	1
22	Development of a sustainable and antibacterial food packaging material based in a biopolymeric multilayer system composed by polylactic acid, chitosan, cellulose nanocrystals and ethyl lauroyl arginate. **2023**, 36, 101050	0
21	Application of functionalized chitosan in food: A review. **2023**, 235, 123716	0
20	Green Composites for Drugs Capsule Coatings. **2023**, 1-20	0
19	Value addition to seafood processing waste by using enzymes. **2023**, 95-106	0
18	Valorization of cellulose-rich solid bio-waste to produce chitin: An important aminopolysaccharide. **2023**, 423-440	0
17	Characterizing the Impact of Chitosan on the Nucleation and Crystal Growth of Ritonavir from Supersaturated Solutions. **2023**, 15, 1282	0
16	Structural and functional properties of two phenolic acid-chitosan derivatives and their application in the preservation of Saimaiti apricot fruit. 43,	0
15	Biobased materials in nano drug delivery. **2023**, 447-462	0
14	A Carbonized Zeolite/Chitosan Composite as an Adsorbent for Copper (II) and Chromium (VI) Removal from Water. **2023**, 16, 2532	0
13	Release Kinetics of Dexamethasone Phosphate from Porous Chitosan: Comparison of Aerogels and Cryogels.	0
12	Autoclaving-Triggered Hydrogelation of Chitosan-Gluconic acid Conjugate Aqueous Solution for Wound Healing. **2023**, 9, 280	0
11	Recent Progress in Intensifying Synthesis of Acrylic Microspheres for Catalysis.	0

10	A clinical perspective of chitosan nanoparticles for infectious disease management.	0
9	Electrochemical signal amplification strategy based on trace metal ion modified WS2 for ultra-sensitive detection of miRNA-21. **2023**, 260, 124552	0
8	Chitosan-Based Nano Biomaterials and Their Applications in Dentistry. **2023**, 325-348	0
7	Chitosan: A Smart Biomaterial. **2023**, 1-25	0
6	Functionalized Chitosan and Biomedical Devices. **2023**, 109-133	0
5	Design, Physicochemical Characterisation, and in vitro Cytotoxicity of Cisplatin-loaded PEGylated Chitosan Injectable Nano / Sub-micron Crystals. **2023**,	0
4	Biomedical applications of chitosan/silk fibroin composites: A review. **2023**, 240, 124407	0
3	Nanoparticles-Based Delivery Systems for Salicylic Acid as Plant Growth Stimulator and Stress Alleviation. **2023**, 12, 1637	0
2	Preparation of Chitosan/Cyclodextrin Composite Membrane and Its Adsorption Mechanism for Proteins. **2023**, 28, 3484	0
1	The effects of foliar application of chitosan on the morphological and chemical characters of French lavender against water deficiency.	0