Jayakumar Rangasamy

List of Publications by Year in Descending Order

253 papers	19,487 citations	73 h-index	132 g-index
302 ext. papers	21,609 ext. citations	6.8 avg, IF	7.02 L-index

#	Paper	IF	Citations
253	Antiseptic chitosan bandage for preventing topical skin infections. *International Journal of Biological Macromolecules*, **2021**, 193, 1653-1653	7.9	3
252	Vasoconstrictor and coagulation activator entrapped chitosan based composite hydrogel for rapid bleeding control. *Carbohydrate Polymers*, **2021**, 258, 117634	10.3	14
251	Nanocurcumin and arginine entrapped injectable chitosan hydrogel for restoration of hypoxia induced endothelial dysfunction. *International Journal of Biological Macromolecules*, **2021**, 166, 471-482	7.9	7
250	Recent developments in controlling sternal wound infection after cardiac surgery and measures to enhance sternal healing. *Medicinal Research Reviews*, **2021**, 41, 709-724	14.4	5
249	Different Forms of Chitosan and Its Derivatives as Hemostatic Agent and Tissue Sealants. *Advances in Polymer Science*, **2021**, 1-28	1.3	2
248	Perspectives and Challenges of Using Chitosan in Various Biological Applications. *Advances in Polymer Science*, **2021**, 1-22	1.3	3
247	Chitosan Based Biomaterials for Periodontal Therapy. *Advances in Polymer Science*, **2021**, 163-189	1.3	1
246	Addition of lactoferrin and substance P in a chitin/PLGA-CaSO hydrogel for regeneration of calvarial bone defects. *Materials Science and Engineering C*, **2021**, 126, 112172	8.3	3
245	Prospection of chitosan and its derivatives in wound healing: Proof of patent analysis (2010-2020). *International Journal of Biological Macromolecules*, **2021**, 184, 701-712	7.9	11
244	Combinatorial effect of plasma treatment, fiber alignment and fiber scale of poly (ε-caprolactone)/collagen multiscale fibers in inducing tenogenesis in non-tenogenic media. *Materials Science and Engineering C*, **2021**, 127, 112206	8.3	8
243	In-situ silver nanoparticles incorporated N, O-carboxymethyl chitosan based adhesive, self-healing, conductive, antibacterial and anti-biofilm hydrogel. *International Journal of Biological Macromolecules*, **2021**, 188, 501-511	7.9	6
242	Hydrogels: A potential platform for induced pluripotent stem cell culture and differentiation. *Colloids and Surfaces B: Biointerfaces*, **2021**, 207, 111991	6	1
241	Application of Chitosan and Its Derivatives in Transdermal Drug Delivery. *Advances in Polymer Science*, **2021**, 411-446	1.3	1
240	Chitosan-Based Biosensor Fabrication and Biosensing Applications. *Advances in Polymer Science*, **2021**, 233-255	1.3	3
239	Synthesis-Structure Relationship of Chitosan Based Hydrogels. *Advances in Polymer Science*, **2021**, 105-129	1.3	2
238	Combinatorial effect of nano whitlockite/nano bioglass with FGF-18 in an injectable hydrogel for craniofacial bone regeneration. *Biomaterials Science*, **2021**, 9, 2439-2453	7.4	9
237	Bioinspired inorganic nanoparticles and vascular factor microenvironment directed neo-bone formation. *Biomaterials Science*, **2020**, 8, 2627-2637	7.4	2

236	Human Adipose Tissue Derivatives as a Potent Native Biomaterial for Tissue Regenerative Therapies. *Tissue Engineering and Regenerative Medicine*, **2020**, 17, 123-140	4.5	13
235	Antibacterial, anti-biofilm and angiogenic calcium sulfate-nano MgO composite bone void fillers for inhibiting Staphylococcus aureus infections. *Colloids and Interface Science Communications*, **2020**, 39, 100332	5.4	8
234	Nano polydopamine crosslinked thiol-functionalized hyaluronic acid hydrogel for angiogenic drug delivery. *Colloids and Surfaces B: Biointerfaces*, **2019**, 177, 41-49	6	27
233	Development of Mangifera indica leaf extract incorporated carbopol hydrogel and its antibacterial efficacy against Staphylococcus aureus. *Colloids and Surfaces B: Biointerfaces*, **2019**, 178, 377-384	6	8
232	Functionalized Antibacterial Nanoparticles for Controlling Biofilm and Intracellular Infections **2019**, 183-206		4
231	Injectable chitosan-nano bioglass composite hemostatic hydrogel for effective bleeding control. *International Journal of Biological Macromolecules*, **2019**, 129, 936-943	7.9	43
230	Retraction of "Flexible and Microporous Chitosan Hydrogel/Nano ZnO Composite Bandages for Wound Dressing: In Vitro and In Vivo Evaluation". *ACS Applied Materials & Interfaces*, **2019**, 11, 28598	8.5	3
229	Bioengineered Braided Micro-Nano (Multiscale) Fibrous Scaffolds for Tendon Reconstruction. *ACS Biomaterials Science and Engineering*, **2019**, 5, 1476-1486	5.5	22
228	Targeted nanoparticles for treating infectious diseases **2019**, 169-185		1
227	Ciprofloxacin- and Fluconazole-Containing Fibrin-Nanoparticle-Incorporated Chitosan Bandages for the Treatment of Polymicrobial Wound Infections.. *ACS Applied Bio Materials*, **2019**, 2, 243-254	4.1	28
226	Chaulmoogra oil based methotrexate loaded topical nanoemulsion for the treatment of psoriasis. *Journal of Drug Delivery Science and Technology*, **2019**, 49, 463-476	4.5	38
225	Injectable Nano Whitlockite Incorporated Chitosan Hydrogel for Effective Hemostasis.. *ACS Applied Bio Materials*, **2019**, 2, 865-873	4.1	32
224	Chitosan hydrogel scaffold reinforced with twisted poly(l lactic acid) aligned microfibrous bundle to mimic tendon extracellular matrix. *International Journal of Biological Macromolecules*, **2019**, 122, 37-44	7.9	21
223	Injectable angiogenic and osteogenic carrageenan nanocomposite hydrogel for bone tissue engineering. *International Journal of Biological Macromolecules*, **2019**, 122, 320-328	7.9	43
222	Antistaphylococcal and Neutrophil Chemotactic Injectable κ-Carrageenan Hydrogel for Infectious Wound Healing.. *ACS Applied Bio Materials*, **2019**, 2, 378-387	4.1	10
221	Nanoengineered biomaterials for tendon/ligament regeneration **2019**, 73-93		4
220	Injectable chitosan-fibrin/nanocurcumin composite hydrogel for the enhancement of angiogenesis. *Research on Chemical Intermediates*, **2018**, 44, 4873-4887	2.8	18
219	Process study, development and degradation behavior of different size scale electrospun poly(caprolactone) and poly(lactic acid) fibers. *Journal of Polymer Research*, **2018**, 25, 1	2.7	10

218	Bioadhesive, Hemostatic, and Antibacterial in Situ Chitin–Fibrin Nanocomposite Gel for Controlling Bleeding and Preventing Infections at Mediastinum. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7826-7840	8.3	33
217	Biological macromolecules based targeted nanodrug delivery systems for the treatment of intracellular infections. *International Journal of Biological Macromolecules*, **2018**, 110, 2-6	7.9	11
216	In vivo anti-psoriatic activity, biodistribution, sub-acute and sub-chronic toxicity studies of orally administered methotrexate loaded chitin nanogel in comparison with methotrexate tablet. *International Journal of Biological Macromolecules*, **2018**, 110, 259-268	7.9	14
215	Amphotericin B loaded sulfonated chitosan nanoparticles for targeting macrophages to treat intracellular Candida glabrata infections. *International Journal of Biological Macromolecules*, **2018**, 110, 133-139	7.9	31
214	Preparation, characterization and efficacy of lysostaphin-chitosan gel against Staphylococcus aureus. *International Journal of Biological Macromolecules*, **2018**, 110, 157-166	7.9	27
213	Fabrication of micropatterned alginate-gelatin and k-carrageenan hydrogels of defined shapes using simple wax mould method as a platform for stem cell/induced Pluripotent Stem Cells (iPSC) culture. *International Journal of Biological Macromolecules*, **2018**, 112, 737-744	7.9	17
212	Bi-layered nanocomposite bandages for controlling microbial infections and overproduction of matrix metalloproteinase activity. *International Journal of Biological Macromolecules*, **2018**, 110, 124-132	7.9	7
211	Injectable deferoxamine nanoparticles loaded chitosan-hyaluronic acid coacervate hydrogel for therapeutic angiogenesis. *Colloids and Surfaces B: Biointerfaces*, **2018**, 161, 129-138	6	52
210	Alginate nanobeads interspersed fibrin network as forming hydrogel for soft tissue engineering. *Bioactive Materials*, **2018**, 3, 194-200	16.7	39
209	Carrageenan based hydrogels for drug delivery, tissue engineering and wound healing. *Carbohydrate Polymers*, **2018**, 198, 385-400	10.3	170
208	Chitosan based metallic nanocomposite scaffolds as antimicrobial wound dressings. *Bioactive Materials*, **2018**, 3, 267-277	16.7	129
207	Carboxymethylated ?-carrageenan conjugated amphotericin B loaded gelatin nanoparticles for treating intracellular Candida glabrata infections. *International Journal of Biological Macromolecules* , **2018**, 110, 140-149	7.9	24
206	Synthesis, characterisation and biomedical applications of curcumin conjugated chitosan microspheres. *International Journal of Biological Macromolecules*, **2018**, 110, 227-233	7.9	43
205	Engineering poly(hydroxy butyrate-co-hydroxy valerate) based vascular scaffolds to mimic native artery. *International Journal of Biological Macromolecules*, **2018**, 109, 85-98	7.9	25
204	Poly(L-lactic acid) nanofibers containing Cissus quadrangularis induced osteogenic differentiation in vitro. *International Journal of Biological Macromolecules*, **2018**, 110, 514-521	7.9	19
203	Injectable in Situ Shape-Forming Osteogenic Nanocomposite Hydrogel for Regenerating Irregular Bone Defects.. *ACS Applied Bio Materials*, **2018**, 1, 1037-1046	4.1	16
202	Bioglass-Incorporated Methacrylated Gelatin Cryogel for Regeneration of Bone Defects. *Polymers*, **2018**, 10,	4.5	36
201	Development of drug delivery systems for taxanes using ionic gelation of carboxyacyl derivatives of chitosan. *Carbohydrate Polymers*, **2017**, 162, 49-55	10.3	32

200	Tri-Layered Nanocomposite Hydrogel Scaffold for the Concurrent Regeneration of Cementum, Periodontal Ligament, and Alveolar Bone. *Advanced Healthcare Materials*, **2017**, 6, 1601251	10.1	60
199	In vivo evaluation of cetuximab-conjugated poly(Eglutamic acid)-docetaxel nanomedicines in EGFR-overexpressing gastric cancer xenografts. *International Journal of Nanomedicine*, **2017**, 12, 7165-7182	7.3	19
198	Preparation, characterization, drug release and computational modelling studies of antibiotics loaded amorphous chitin nanoparticles. *Carbohydrate Polymers*, **2017**, 177, 67-76	10.3	21
197	Tunable pH and redox-responsive drug release from curcumin conjugated Epolyglutamic acid nanoparticles in cancer microenvironment. *Colloids and Surfaces B: Biointerfaces*, **2017**, 159, 809-819	6	16
196	Fucoidan coated ciprofloxacin loaded chitosan nanoparticles for the treatment of intracellular and biofilm infections of Salmonella. *Colloids and Surfaces B: Biointerfaces*, **2017**, 160, 40-47	6	49
195	Bone Tissue Engineering: Biomimetic Materials and Fabrication Approaches for Bone Tissue Engineering (Adv. Healthcare Mater. 23/2017). *Advanced Healthcare Materials*, **2017**, 6, 1770120	10.1	4
194	Biomimetic Materials and Fabrication Approaches for Bone Tissue Engineering. *Advanced Healthcare Materials*, **2017**, 6, 1700612	10.1	113
193	Injectable Shear-Thinning CaSO/FGF-18-Incorporated Chitin-PLGA Hydrogel Enhances Bone Regeneration in Mice Cranial Bone Defect Model. *ACS Applied Materials & Interfaces*, **2017**, 9, 42639-42652	9.5	43
192	Comparative anti-psoriatic efficacy studies of clobetasol loaded chitin nanogel and marketed cream. *European Journal of Pharmaceutical Sciences*, **2017**, 96, 193-206	5.1	38
191	Characterization of chitosan matters **2017**, 81-114		4
190	Pro-angiogenic Molecules for Therapeutic Angiogenesis. *Current Medicinal Chemistry*, **2017**, 24, 3413-3432	4.3	9
189	Controlled Delivery of Bioactive Molecules for the Treatment of Chronic Wounds. *Current Pharmaceutical Design*, **2017**, 23, 3529-3537	3.3	8
188	Methotrexate in the Treatment of Psoriasis and Rheumatoid Arthritis: Mechanistic Insights, Current Issues and Novel Delivery Approaches. *Current Pharmaceutical Design*, **2017**, 23, 3550-3566	3.3	34
187	Chitosan-Gelatin Composite Scaffolds in Bone Tissue Engineering. *Springer Series on Polymer and Composite Materials*, **2016**, 99-121	0.9	5
186	Chitin and Chitosan as Hemostatic Agents **2016**, 1-12		4
185	Sequential layer-by-layer electrospinning of nano SrCO3/PRP loaded PHBV fibrous scaffold for bone tissue engineering. *Composites Part B: Engineering*, **2016**, 99, 445-452	10	31
184	Breast Tumor Targetable Fe3O4 Embedded Thermo-Responsive Nanoparticles for Radiofrequency Assisted Drug Delivery. *Journal of Biomedical Nanotechnology*, **2016**, 12, 43-55	4	30
183	Injectable osteogenic and angiogenic nanocomposite hydrogels for irregular bone defects. *Biomedical Materials (Bristol)*, **2016**, 11, 035017	3.5	39

182	Nano-fibrin stabilized CaSO4 crystals incorporated injectable chitin composite hydrogel for enhanced angiogenesis & osteogenesis. *Carbohydrate Polymers*, **2016**, 140, 144-53	10.3	32
181	An overview of chitin or chitosan/nano ceramic composite scaffolds for bone tissue engineering. *International Journal of Biological Macromolecules*, **2016**, 93, 1338-1353	7.9	177
180	Integration of in silico modeling, prediction by binding energy and experimental approach to study the amorphous chitin nanocarriers for cancer drug delivery. *Carbohydrate Polymers*, **2016**, 142, 240-9	10.3	35
179	Colloidal chitin nanogels: A plethora of applications under one shell. *Carbohydrate Polymers*, **2016**, 136, 609-17	10.3	24
178	Chitosan□anohydroxyapatite nanocomposite for bone-tissue regeneration **2016**, 161-174		
177	Accelerated Wound Healing Using Nanoparticles **2016**, 287-306		6
176	Acitretin and aloe-emodin loaded chitin nanogel for the treatment of psoriasis. *European Journal of Pharmaceutics and Biopharmaceutics*, **2016**, 107, 97-109	5.7	52
175	Prolonged release of TGF-□from polyelectrolyte nanoparticle loaded macroporous chitin-poly(caprolactone) scaffold for chondrogenesis. *International Journal of Biological Macromolecules*, **2016**, 93, 1402-1409	7.9	16
174	Chitosan nanoparticles in drug therapy of infectious and inflammatory diseases. *Expert Opinion on Drug Delivery*, **2016**, 13, 1177-94	8	65
173	Nanostrontium ranelate incorporated injectable hydrogel enhanced matrix production supporting chondrogenesis in vitro. *Journal of Materials Chemistry B*, **2016**, 4, 4092-4103	7.3	34
172	Synthesis of electrospun silica nanofibers for protein/DNA binding. *Materials Letters*, **2016**, 184, 5-8	3.3	8
171	Layered chitosan-collagen hydrogel/aligned PLLA nanofiber construct for flexor tendon regeneration. *Carbohydrate Polymers*, **2016**, 153, 492-500	10.3	94
170	Anti-staphylococcal Activity of Injectable Nano Tigecycline/Chitosan-PRP Composite Hydrogel Using Drosophila melanogaster Model for Infectious Wounds. *ACS Applied Materials & Interfaces*, **2016**, 8, 22074-83	9.5	63
169	Skin and muscle permeating antibacterial nanoparticles for treating Staphylococcus aureus infected wounds. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2016**, 104, 797-807	3.5	19
168	Bilayered construct for simultaneous regeneration of alveolar bone and periodontal ligament. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2016**, 104, 761-70	3.5	29
167	Combinatorial nanomedicines for colon cancer therapy. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2016**, 8, 151-9	9.2	29
166	Comparative efficacy of chloramphenicol loaded chondroitin sulfate and dextran sulfate nanoparticles to treat intracellular Salmonella infections. *Colloids and Surfaces B: Biointerfaces*, **2015**, 127, 33-40	6	31
165	Nanogels for delivery, imaging and therapy. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2015**, 7, 509-33	9.2	80

164	Manganese doped nano-bioactive glass for magnetic resonance imaging. *Materials Letters*, **2015**, 160, 335-338	3.3	6
163	Drug loaded bi-layered sponge for wound management in hyperfibrinolytic conditions. *Journal of Materials Chemistry B*, **2015**, 3, 5795-5805	7.3	17
162	Injectable Chitin-Poly(ε-caprolactone)/Nanohydroxyapatite Composite Microgels Prepared by Simple Regeneration Technique for Bone Tissue Engineering. *ACS Applied Materials & Interfaces*, **2015**, 7, 9399-409	9.5	103
161	An overview of injectable polymeric hydrogels for tissue engineering. *European Polymer Journal*, **2015**, 72, 543-565	5.2	221
160	Radio frequency responsive nano-biomaterials for cancer therapy. *Journal of Controlled Release*, **2015**, 204, 85-97	11.7	34
159	Multi Drug Loaded Thermo-Responsive Fibrinogen-graft-Poly(N-vinyl Caprolactam) Nanogels for Breast Cancer Drug Delivery. *Journal of Biomedical Nanotechnology*, **2015**, 11, 392-402	4	22
158	Composite hydrogel of chitosan-poly(hydroxybutyrate-co-valerate) with chondroitin sulfate nanoparticles for nucleus pulposus tissue engineering. *Colloids and Surfaces B: Biointerfaces*, **2015**, 136, 84-92	6	46
157	Delivery of rifampicin-chitin nanoparticles into the intracellular compartment of polymorphonuclear leukocytes. *International Journal of Biological Macromolecules*, **2015**, 74, 36-43	7.9	36
156	Fabrication of poly (L-lactic acid)/gelatin composite tubular scaffolds for vascular tissue engineering. *International Journal of Biological Macromolecules*, **2015**, 72, 1048-55	7.9	67
155	Chitosan–hyaluronic acid hydrogel coated poly(caprolactone) multiscale bilayer scaffold for ligament regeneration. *Chemical Engineering Journal*, **2015**, 260, 478-485	14.7	64
154	Injectable Amorphous Chitin-Agarose Composite Hydrogels for Biomedical Applications. *Journal of Functional Biomaterials*, **2015**, 6, 849-62	4.8	11
153	Exploration of alginate hydrogel/nano zinc oxide composite bandages for infected wounds. *International Journal of Nanomedicine*, **2015**, 10 Suppl 1, 53-66	7.3	35
152	Periodontal Specific Differentiation of Dental Follicle Stem Cells into Osteoblast, Fibroblast, and Cementoblast. *Tissue Engineering - Part C: Methods*, **2015**, 21, 1044-58	2.9	29
151	Injectable alginate-O-carboxymethyl chitosan/nano fibrin composite hydrogels for adipose tissue engineering. *International Journal of Biological Macromolecules*, **2015**, 74, 318-26	7.9	81
150	Chitosan-hyaluronic acid/VEGF loaded fibrin nanoparticles composite sponges for enhancing angiogenesis in wounds. *Colloids and Surfaces B: Biointerfaces*, **2015**, 127, 105-13	6	120
149	Anti-cancer, pharmacokinetics and tumor localization studies of pH-, RF- and thermo-responsive nanoparticles. *International Journal of Biological Macromolecules*, **2015**, 74, 249-62	7.9	28
148	Development of Alginate-Chitosan-Collagen Based Hydrogels for Tissue Engineering. *Journal of Biomaterials and Tissue Engineering*, **2015**, 5, 458-464	0.3	22
147	Chitin and chitosan in selected biomedical applications. *Progress in Polymer Science*, **2014**, 39, 1644-1667	29.6	645

146	MnO2 nano/micro hybrids for supercapacitors: Nano's Envy, Micro's pride. *RSC Advances*, **2014**, 4, 15863-158698	3.7	
145	In vitro combinatorial anticancer effects of 5-fluorouracil and curcumin loaded N,O-carboxymethyl chitosan nanoparticles toward colon cancer and in vivo pharmacokinetic studies. *European Journal of Pharmaceutics and Biopharmaceutics*, **2014**, 88, 238-51	5.7	110
144	Amidase encapsulated O-carboxymethyl chitosan nanoparticles for vaccine delivery. *International Journal of Biological Macromolecules*, **2014**, 63, 154-7	7.9	11
143	Bio-responsive chitin-poly(L-lactic acid) composite nanogels for liver cancer. *Colloids and Surfaces B: Biointerfaces*, **2014**, 113, 394-402	6	31
142	Flexible, micro-porous chitosan–gelatin hydrogel/nanofibrin composite bandages for treating burn wounds. *RSC Advances*, **2014**, 4, 65081-65087	3.7	42
141	Versatile carboxymethyl chitin and chitosan nanomaterials: a review. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2014**, 6, 574-98	9.2	53
140	Combinatorial anticancer effects of curcumin and 5-fluorouracil loaded thiolated chitosan nanoparticles towards colon cancer treatment. *Biochimica Et Biophysica Acta - General Subjects*, **2014**, 1840, 2730-43	4	110
139	Gold–chitin–manganese dioxide ternary composite nanogels for radio frequency assisted cancer therapy. *RSC Advances*, **2014**, 4, 5819	3.7	18
138	Redox-responsive cystamine conjugated chitin–hyaluronic acid composite nanogels. *RSC Advances*, **2014**, 4, 49547-49555	3.7	23
137	Surface plasma treatment of poly(caprolactone) micro, nano, and multiscale fibrous scaffolds for enhanced osteoconductivity. *Tissue Engineering - Part A*, **2014**, 20, 1689-702	3.9	43
136	Dual drug encapsulated thermo-sensitive fibrinogen-graft-poly (N-isopropyl acrylamide) nanogels for breast cancer therapy. *Colloids and Surfaces B: Biointerfaces*, **2014**, 114, 209-17	6	31
135	Multifaceted chitin/poly(lactic-co-glycolic) acid composite nanogels. *International Journal of Biological Macromolecules*, **2014**, 67, 279-88	7.9	11
134	Tetracycline nanoparticles loaded calcium sulfate composite beads for periodontal management. *Biochimica Et Biophysica Acta - General Subjects*, **2014**, 1840, 2080-90	4	38
133	Actively targeted cetuximab conjugated gamma-poly(glutamic acid)-docetaxel nanomedicines for epidermal growth factor receptor over expressing colon cancer cells. *Journal of Biomedical Nanotechnology*, **2014**, 10, 1416-28	4	35
132	Chitosan cross-linked docetaxel loaded EGF receptor targeted nanoparticles for lung cancer cells. *International Journal of Biological Macromolecules*, **2014**, 69, 532-41	7.9	37
131	In vitro and in vivo biological evaluation of O-carboxymethyl chitosan encapsulated metformin nanoparticles for pancreatic cancer therapy. *Pharmaceutical Research*, **2014**, 31, 3361-70	4.5	26
130	Antimicrobial Activity of Chitosan-Carbon Nanotube Hydrogels. *Materials*, **2014**, 7, 3946-3955	3.5	82
129	Fabrication of Chitin/Poly(butylene succinate)/Chondroitin Sulfate Nanoparticles Ternary Composite Hydrogel Scaffold for Skin Tissue Engineering. *Polymers*, **2014**, 6, 2974-2984	4.5	26

128	Carbohydrate-based nanogels as drug and gene delivery systems. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 694-704	1.3	23
127	PTH 1-34 loaded thiolated chitosan nanoparticles for osteoporosis: oral bioavailability and anabolic effect on primary osteoblast cells. *Journal of Biomedical Nanotechnology*, **2014**, 10, 166-78	4	5
126	Synthesis, characterization and biological activities of curcumin nanospheres. *Journal of Biomedical Nanotechnology*, **2014**, 10, 238-50	4	24
125	Silymarin encapsulated poly(D,L-lactic-co-glycolic acid) nanoparticles: a prospective candidate for prostate cancer therapy. *Journal of Biomedical Nanotechnology*, **2014**, 10, 559-70	4	30
124	Synthesis and anti-staphylococcal activity of TiO2 nanoparticles and nanowires in ex vivo porcine skin model. *Journal of Biomedical Nanotechnology*, **2014**, 10, 864-70	4	39
123	Hyaluronic acid-based conjugates for tumor-targeted drug delivery and imaging. *Journal of Biomedical Nanotechnology*, **2014**, 10, 17-31	4	41
122	Antimicrobial drugs encapsulated in fibrin nanoparticles for treating microbial infested wounds. *Pharmaceutical Research*, **2014**, 31, 1338-51	4.5	23
121	In vitro and in vivo evaluation of microporous chitosan hydrogel/nanofibrin composite bandage for skin tissue regeneration. *Tissue Engineering - Part A*, **2013**, 19, 380-92	3.9	51
120	Development and evaluation of 5-fluorouracil loaded chitin nanogels for treatment of skin cancer. *Carbohydrate Polymers*, **2013**, 91, 48-57	10.3	82
119	In vitro evaluation of paclitaxel loaded amorphous chitin nanoparticles for colon cancer drug delivery. *Colloids and Surfaces B: Biointerfaces*, **2013**, 104, 245-53	6	49
118	Biocompatible conducting chitosan/polypyrrole-alginate composite scaffold for bone tissue engineering. *International Journal of Biological Macromolecules*, **2013**, 62, 465-71	7.9	122
117	Doxorubicin-chitin-poly(caprolactone) composite nanogel for drug delivery. *International Journal of Biological Macromolecules*, **2013**, 62, 35-43	7.9	38
116	Electrospun continuous nanofibers based on a TiO2/ZnO/graphene composite. *RSC Advances*, **2013**, 3, 25312	3.7	17
115	In vitro and in vivo evaluation of osteoporosis therapeutic peptide PTH 1-34 loaded pegylated chitosan nanoparticles. *Molecular Pharmaceutics*, **2013**, 10, 4159-67	5.6	27
114	Chitosan-hyaluronic acid/nano silver composite sponges for drug resistant bacteria infected diabetic wounds. *International Journal of Biological Macromolecules*, **2013**, 62, 310-20	7.9	193
113	Evaluation of wound healing potential of chitin hydrogel/nano zinc oxide composite bandage. *Pharmaceutical Research*, **2013**, 30, 523-37	4.5	125
112	Biochemical properties of Hemigraphis alternata incorporated chitosan hydrogel scaffold. *Carbohydrate Polymers*, **2013**, 92, 1561-5	10.3	24
111	Cetuximab conjugated O-carboxymethyl chitosan nanoparticles for targeting EGFR overexpressing cancer cells. *Carbohydrate Polymers*, **2013**, 93, 661-9	10.3	81

110	Drug delivery and tissue engineering applications of biocompatible pectin-chitin/nano CaCO3 composite scaffolds. *Colloids and Surfaces B: Biointerfaces*, **2013**, 106, 109-16	6	50
109	Role of nanostructured biopolymers and bioceramics in enamel, dentin and periodontal tissue regeneration. *Progress in Polymer Science*, **2013**, 38, 1748-1772	29.6	67
108	Chitosan-hyaluronan/nano chondroitin sulfate ternary composite sponges for medical use. *Carbohydrate Polymers*, **2013**, 92, 1470-6	10.3	92
107	Poly (lactic acid)-chitosan-collagen composite nanofibers as substrates for blood outgrowth endothelial cells. *International Journal of Biological Macromolecules*, **2013**, 58, 220-4	7.9	23
106	Fabrication and characterization of chitosan/gelatin/nSiO2 composite scaffold for bone tissue engineering. *International Journal of Biological Macromolecules*, **2013**, 59, 255-63	7.9	137
105	Preparation of chitin nanogels containing nickel nanoparticles. *Carbohydrate Polymers*, **2013**, 97, 469-74	10.3	22
104	Fluconazole loaded chitin nanogels as a topical ocular drug delivery agent for corneal fungal infections. *Journal of Biomedical Nanotechnology*, **2013**, 9, 1521-31	4	31
103	Development of small diameter fibrous vascular grafts with outer wall multiscale architecture to improve cell penetration. *Journal of Biomedical Nanotechnology*, **2013**, 9, 1299-305	4	11
102	Effect of incorporation of nanoscale bioactive glass and hydroxyapatite in PCL/chitosan nanofibers for bone and periodontal tissue engineering. *Journal of Biomedical Nanotechnology*, **2013**, 9, 430-40	4	93
101	Antibacterial and bioactive alpha- and beta-chitin hydrogel/nanobioactive glass ceramic/nano silver composite scaffolds for periodontal regeneration. *Journal of Biomedical Nanotechnology*, **2013**, 9, 1803-16	4	29
100	Functionalised gold nanoparticles for selective induction of in vitro apoptosis among human cancer cell lines. *Journal of Experimental Nanoscience*, **2013**, 8, 32-45	1.9	37
99	Paclitaxel loaded fibrinogen coated CdTe/ZnTe core shell nanoparticles for targeted imaging and drug delivery to breast cancer cells. *Journal of Biomedical Nanotechnology*, **2013**, 9, 1657-71	4	14
98	High thick layer-by-layer 3D multiscale fibrous scaffolds for enhanced cell infiltration and it's potential in tissue engineering. *Journal of Biomedical Nanotechnology*, **2013**, 9, 2117-22	4	8
97	Enhanced delivery system of flutamide loaded chitosan-dextran sulphate nanoparticles for prostate cancer. *Journal of Biomedical Nanotechnology*, **2013**, 9, 335-47	4	20
96	Smart stimuli sensitive nanogels in cancer drug delivery and imaging: a review. *Current Pharmaceutical Design*, **2013**, 19, 7203-18	3.3	116
95	Fabrication of Multifunctional Chitin Nanogels as a Theragnostic Nanomedicine. *Journal of Chitin and Chitosan Science*, **2013**, 1, 71-75		2
94	One Pot Green Synthesis of Iron Oxide Nanoparticles by O-carboxymethyl Chitosan Assisted Hydrothermal Method. *Journal of Chitin and Chitosan Science*, **2013**, 1, 76-85		5
93	In vitro targeted imaging and delivery of camptothecin using cetuximab-conjugated multifunctional PLGA-ZnS nanoparticles. *Nanomedicine*, **2012**, 7, 507-19	5.6	37

92	Fabrication of three-dimensional nano, micro and micro/nano scaffolds of porous poly(lactic acid) by electrospinning and comparison of cell infiltration by Z-stacking/three-dimensional projection technique. *IET Nanobiotechnology*, **2012**, 6, 16-25	2	23
91	Curcumin-loaded N,O-carboxymethyl chitosan nanoparticles for cancer drug delivery. *Journal of Biomaterials Science, Polymer Edition*, **2012**, 23, 1381-400	3.5	88
90	Embedded silica nanoparticles in poly(caprolactone) nanofibrous scaffolds enhanced osteogenic potential for bone tissue engineering. *Tissue Engineering - Part A*, **2012**, 18, 1867-81	3.9	64
89	Synthesis and characterization of chitosan/chondroitin sulfate/nano-SiO2 composite scaffold for bone tissue engineering. *Journal of Biomedical Nanotechnology*, **2012**, 8, 149-60	4	50
88	Biocompatible and Antibacterial Nanofibrous Poly(?-caprolactone)-Nanosilver Composite Scaffolds for Tissue Engineering Applications. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2012**, 49, 131-138	2.2	36
87	5-flourouracil loaded N,O-carboxymethyl chitosan nanoparticles as an anticancer nanomedicine for breast cancer. *Journal of Biomedical Nanotechnology*, **2012**, 8, 29-42	4	63
86	Fabrication of aligned poly(lactic acid)-chitosan nanofibers by novel parallel blade collector method for skin tissue engineering. *Journal of Biomedical Nanotechnology*, **2012**, 8, 405-16	4	37
85	Flexible and microporous chitosan hydrogel/nano ZnO composite bandages for wound dressing: in vitro and in vivo evaluation. *ACS Applied Materials & Interfaces*, **2012**, 4, 2618-29	9.5	583
84	O-carboxymethyl chitosan nanoparticles for metformin delivery to pancreatic cancer cells. *Carbohydrate Polymers*, **2012**, 89, 1003-7	10.3	80
83	Fabrication of chitin/poly(3-hydroxybutyrate-co-3-hydroxyvalerate) hydrogel scaffold. *Carbohydrate Polymers*, **2012**, 90, 725-9	10.3	45
82	Efficacy of tetracycline encapsulated O-carboxymethyl chitosan nanoparticles against intracellular infections of Staphylococcus aureus. *International Journal of Biological Macromolecules*, **2012**, 51, 392-9	7.9	124
81	Phytomedicine-Loaded Polymeric Nanomedicines: Potential Cancer Therapeutics. *Advances in Polymer Science*, **2012**, 203-239	1.3	5
80	Approaches for Functional Modification or Cross-Linking of Chitosan **2012**, 107-124		15
79	Curcumin loaded chitin nanogels for skin cancer treatment via the transdermal route. *Nanoscale*, **2012**, 4, 239-50	7.7	181
78	Biocompatible alginate/nano bioactive glass ceramic composite scaffolds for periodontal tissue regeneration. *Carbohydrate Polymers*, **2012**, 87, 274-283	10.3	202
77	Synthesis, characterization and in vitro cytocompatibility studies of chitin nanogels for biomedical applications. *Carbohydrate Polymers*, **2012**, 87, 943-949	10.3	48
76	Development of a phytochemical scaffold for bone tissue engineering using Cissus quadrangularis extract. *Carbohydrate Polymers*, **2012**, 87, 1787-1795	10.3	41
75	Doxorubicin-loaded pH-responsive chitin nanogels for drug delivery to cancer cells. *Carbohydrate Polymers*, **2012**, 87, 2352-2356	10.3	75

74	Synthesis, characterization and preliminary in vitro evaluation of PTH 1-34 loaded chitosan nanoparticles for osteoporosis. *Journal of Biomedical Nanotechnology*, **2012**, 8, 98-106	4	26
73	Synthesis and biological evaluation of chitin hydrogel/nano ZnO composite bandage as antibacterial wound dressing. *Journal of Biomedical Nanotechnology*, **2012**, 8, 891-900	4	86
72	Multifunctional chitin nanogels for simultaneous drug delivery, bioimaging, and biosensing. *ACS Applied Materials & Interfaces*, **2011**, 3, 3654-65	9.5	76
71	Chitin scaffolds in tissue engineering. *International Journal of Molecular Sciences*, **2011**, 12, 1876-87	6.3	133
70	Chitosan-Based Nanoparticles in Cancer Therapy. *Advances in Polymer Science*, **2011**, 55-91	1.3	28
69	Multiscale Fibrous Scaffolds in Regenerative Medicine. *Advances in Polymer Science*, **2011**, 1-20	1.3	12
68	5-fluorouracil loaded fibrinogen nanoparticles for cancer drug delivery applications. *International Journal of Biological Macromolecules*, **2011**, 48, 98-105	7.9	47
67	Fabrication of chitin-chitosan/nano TiO2-composite scaffolds for tissue engineering applications. *International Journal of Biological Macromolecules*, **2011**, 48, 336-44	7.9	116
66	Fabrication of chitosan/poly(caprolactone) nanofibrous scaffold for bone and skin tissue engineering. *International Journal of Biological Macromolecules*, **2011**, 48, 571-6	7.9	125
65	Synthesis, characterization and cytocompatibility studies of □chitin hydrogel/nano hydroxyapatite composite scaffolds. *International Journal of Biological Macromolecules*, **2011**, 49, 20-31	7.9	57
64	Sodium alginate/poly(vinyl alcohol)/nano ZnO composite nanofibers for antibacterial wound dressings. *International Journal of Biological Macromolecules*, **2011**, 49, 247-54	7.9	386
63	Biocompatible, biodegradable and thermo-sensitive chitosan-g-poly (N-isopropylacrylamide) nanocarrier for curcumin drug delivery. *International Journal of Biological Macromolecules*, **2011**, 49, 161-72	7.9	127
62	Fabrication of chitin-chitosan/nano ZrO(2) composite scaffolds for tissue engineering applications. *International Journal of Biological Macromolecules*, **2011**, 49, 274-80	7.9	74
61	Electrospun Nanofibrous Scaffolds-Current Status and Prospects in Drug Delivery. *Advances in Polymer Science*, **2011**, 241-262	1.3	30
60	Hierarchically designed electrospun tubular scaffolds for cardiovascular applications. *Journal of Biomedical Nanotechnology*, **2011**, 7, 609-20	4	23
59	Biomaterials based on chitin and chitosan in wound dressing applications. *Biotechnology Advances*, **2011**, 29, 322-37	17.8	1311
58	Biomedical applications of chitin hydrogel membranes and scaffolds. *Carbohydrate Polymers*, **2011**, 84, 820-824	10.3	108
57	A novel chitosan/polyoxometalate nano-complex for anti-cancer applications. *Carbohydrate Polymers*, **2011**, 84, 887-893	10.3	64

56	Development of mucoadhesive thiolated chitosan nanoparticles for biomedical applications. *Carbohydrate Polymers*, **2011**, 83, 66-73	10.3	122
55	Efficient water soluble O-carboxymethyl chitosan nanocarrier for the delivery of curcumin to cancer cells. *Carbohydrate Polymers*, **2011**, 83, 452-461	10.3	260
54	Biodegradable and thermo-sensitive chitosan-g-poly(N-vinylcaprolactam) nanoparticles as a 5-fluorouracil carrier. *Carbohydrate Polymers*, **2011**, 83, 776-786	10.3	141
53	Fabrication of alginate/nanoTiO2 needle composite scaffolds for tissue engineering applications. *Carbohydrate Polymers*, **2011**, 83, 858-864	10.3	38
52	Saponin-loaded chitosan nanoparticles and their cytotoxicity to cancer cell lines in vitro. *Carbohydrate Polymers*, **2011**, 84, 407-416	10.3	70
51	Preparation, characterization, in vitro drug release and biological studies of curcumin loaded dextran sulphate–chitosan nanoparticles. *Carbohydrate Polymers*, **2011**, 84, 1158-1164	10.3	347
50	β-Chitin hydrogel/nano hydroxyapatite composite scaffolds for tissue engineering applications. *Carbohydrate Polymers*, **2011**, 85, 584-591	10.3	93
49	Curcumin-loaded biocompatible thermoresponsive polymeric nanoparticles for cancer drug delivery. *Journal of Colloid and Interface Science*, **2011**, 360, 39-51	9.3	193
48	Role of nanofibrous poly(caprolactone) scaffolds in human mesenchymal stem cell attachment and spreading for in vitro bone tissue engineering--response to osteogenic regulators. *Tissue Engineering - Part A*, **2010**, 16, 393-404	3.9	108
47	Preparation of Silver Nanoparticles Incorporated Electrospun Polyurethane Nano-fibrous Mat for Wound Dressing. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2010**, 47, 1012-1018	2.2	81
46	Development of novel fibrinogen nanoparticles by two-step co-acervation method. *International Journal of Biological Macromolecules*, **2010**, 47, 37-43	7.9	34
45	Preparation, Characterization and Cell Attachment Studies of Electrospun Multi-scale Poly(caprolactone) Fibrous Scaffolds for Tissue Engineering. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2010**, 48, 21-30	2.2	23
44	Novel carboxymethyl chitin nanoparticles for cancer drug delivery applications. *Carbohydrate Polymers*, **2010**, 79, 1073-1079	10.3	114
43	Folate conjugated carboxymethyl chitosan–manganese doped zinc sulphide nanoparticles for targeted drug delivery and imaging of cancer cells. *Carbohydrate Polymers*, **2010**, 80, 442-448	10.3	144
42	Preparation and characterization of novel β-chitin/nanosilver composite scaffolds for wound dressing applications. *Carbohydrate Polymers*, **2010**, 80, 761-767	10.3	232
41	Biomedical applications of chitin and chitosan based nanomaterials—A short review. *Carbohydrate Polymers*, **2010**, 82, 227-232	10.3	940
40	Development of novel chitin/nanosilver composite scaffolds for wound dressing applications. *Journal of Materials Science: Materials in Medicine*, **2010**, 21, 807-13	4.5	291
39	Novel chitin and chitosan nanofibers in biomedical applications. *Biotechnology Advances*, **2010**, 28, 142-50	17.8	769

38	Novel carboxymethyl derivatives of chitin and chitosan materials and their biomedical applications. *Progress in Materials Science*, **2010**, 55, 675-709	42.2	382
37	Preparation of poly(lactic acid)/chitosan nanoparticles for anti-HIV drug delivery applications. *Carbohydrate Polymers*, **2010**, 80, 833-838	10.3	172
36	Novel biodegradable chitosan–gelatin/nano-bioactive glass ceramic composite scaffolds for alveolar bone tissue engineering. *Chemical Engineering Journal*, **2010**, 158, 353-361	14.7	306
35	Nanocomposite scaffolds of bioactive glass ceramic nanoparticles disseminated chitosan matrix for tissue engineering applications. *Carbohydrate Polymers*, **2010**, 79, 284-289	10.3	153
34	Chitosan conjugated DNA nanoparticles in gene therapy. *Carbohydrate Polymers*, **2010**, 79, 1-8	10.3	248
33	Preparation and characterization of chitosan–gelatin/nanohydroxyapatite composite scaffolds for tissue engineering applications. *Carbohydrate Polymers*, **2010**, 80, 687-694	10.3	270
32	Electrospinning of carboxymethyl chitin/poly(vinyl alcohol) nanofibrous scaffolds for tissue engineering applications. *Carbohydrate Polymers*, **2009**, 77, 863-869	10.3	228
31	Synthesis, characterization, and thermal properties of phosphorylated chitin for biomedical applications. *Polymer Engineering and Science*, **2009**, 49, 844-849	2.3	36
30	Synthesis, characterization, cytotoxicity and antibacterial studies of chitosan, O-carboxymethyl and N,O-carboxymethyl chitosan nanoparticles. *Carbohydrate Polymers*, **2009**, 78, 672-677	10.3	283
29	Development of novel chitin/nanobioactive glass ceramic composite scaffolds for tissue engineering applications. *Carbohydrate Polymers*, **2009**, 78, 926-931	10.3	102
28	Preparation and characterization of novel chitosan/gelatin membranes using chitosan hydrogel. *Carbohydrate Polymers*, **2009**, 76, 255-260	10.3	146
27	Preparation and characterization of novel beta-chitin-hydroxyapatite composite membranes for tissue engineering applications. *International Journal of Biological Macromolecules*, **2009**, 44, 1-5	7.9	111
26	Preparation, characterization, bioactive and metal uptake studies of alginate/phosphorylated chitin blend films. *International Journal of Biological Macromolecules*, **2009**, 44, 107-11	7.9	61
25	Chitosan-graft-beta-cyclodextrin scaffolds with controlled drug release capability for tissue engineering applications. *International Journal of Biological Macromolecules*, **2009**, 44, 320-5	7.9	99
24	Preparation, characterization, bioactive and cell attachment studies of alpha-chitin/gelatin composite membranes. *International Journal of Biological Macromolecules*, **2009**, 44, 333-7	7.9	33
23	Wet chemical synthesis of chitosan hydrogel-hydroxyapatite composite membranes for tissue engineering applications. *International Journal of Biological Macromolecules*, **2009**, 45, 12-5	7.9	136
22	Bioactive and metal uptake studies of carboxymethyl chitosan-graft-D-glucuronic acid membranes for tissue engineering and environmental applications. *International Journal of Biological Macromolecules*, **2009**, 45, 135-9	7.9	24
21	Bioactive and osteoblast cell attachment studies of novel alpha- and beta-chitin membranes for tissue-engineering applications. *International Journal of Biological Macromolecules*, **2009**, 45, 260-4	7.9	59

20	Novel chitin/nanosilica composite scaffolds for bone tissue engineering applications. *International Journal of Biological Macromolecules*, **2009**, 45, 289-92	7.9	103
19	Synthesis, characterization and thermal properties of chitin-g-poly(epsilon-caprolactone) copolymers by using chitin gel. *International Journal of Biological Macromolecules*, **2008**, 43, 32-6	7.9	57
18	Synthesis of phosphorylated chitosan by novel method and its characterization. *International Journal of Biological Macromolecules*, **2008**, 42, 335-9	7.9	91
17	Synthesis, characterization and bioactivity studies of novel beta-chitin scaffolds for tissue-engineering applications. *International Journal of Biological Macromolecules*, **2008**, 42, 463-7	7.9	73
16	Preparative methods of phosphorylated chitin and chitosan--an overview. *International Journal of Biological Macromolecules*, **2008**, 43, 221-5	7.9	132
15	Synthesis, Characterization and Biospecific Degradation Behavior of Sulfated Chitin. *Macromolecular Symposia*, **2008**, 264, 163-167	0.8	19
14	Preparation of Chitinous Compound/Gelatin Composite and Their Biological Application. *Macromolecular Symposia*, **2008**, 264, 8-12	0.8	4
13	Novel biodegradable chitin membranes for tissue engineering applications. *Carbohydrate Polymers*, **2008**, 73, 295-302	10.3	97
12	Preparation of biodegradable chitin/gelatin membranes with GlcNAc for tissue engineering applications. *Carbohydrate Polymers*, **2008**, 73, 456-463	10.3	69
11	Synthesis and characterization of pH-sensitive thiol-containing chitosan beads for controlled drug delivery applications. *Drug Delivery*, **2007**, 14, 9-17	7	73
10	Synthesis and Characterization of N-methylenephenyl Phosphonic Chitosan. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2007**, 44, 271-275	2.2	22
9	Sulfated chitin and chitosan as novel biomaterials. *International Journal of Biological Macromolecules*, **2007**, 40, 175-81	7.9	511
8	Studies on Metal-Containing Co-polyurethanes Based on Mono(hydroxyethoxyethyl)phthalate. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **2006**, 43, 945-954	2.2	4
7	Developments in Metal-Containing Polyurethanes, Co-polyurethanes and Polyurethane Ionomers. *Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics*, **2005**, 45, 231-261		12
6	Calcium-containing poly(urethane-urea)s: Synthesis, spectral, and thermal studies. *Journal of Polymer Science Part A*, **2004**, 42, 1809-1819	2.5	8
5	Synthesis, characterization, and antibacterial activity of metal-containing polyurethanes. *Journal of Applied Polymer Science*, **2004**, 91, 288-295	2.9	38
4	Synthesis and coating characteristics of novel calcium-containing poly(urethane ethers). *Journal of Applied Polymer Science*, **2004**, 92, 710-721	2.9	15
3	Synthesis and characterization of calcium-containing poly(urethane-urea)s. *Journal of Applied Polymer Science*, **2003**, 90, 3488-3496	2.9	9

2	Studies on metal-containing copolyurethanes. *Reactive and Functional Polymers*, **2003**, 55, 267-276	4.6	40
1	Studies on calcium-containing poly(urethane ether)s. *Journal of Polymer Science Part A*, **2003**, 41, 2865-2878	2.5	8