Xian Jun Loh

List of Publications by Year
in descending order

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Version: 2024-02-01

368 papers	28,690 citations	2970 93 h-index	7511 151 g-index
393 all docs	393 docs citations	393 times ranked	29687 citing authors

#	Article	IF	Citations
1	Supramolecular polymeric hydrogels. Chemical Society Reviews, 2012, 41, 6195.	18.7	988
2	Towards lignin-based functional materials in a sustainable world. Green Chemistry, 2016, 18, 1175-1200.	4.6	931
3	Structures, mechanical properties and applications of silk fibroin materials. Progress in Polymer Science, 2015, 46, 86-110.	11.8	811
4	Cyclodextrin-based supramolecular architectures: Syntheses, structures, and applications for drug and gene delivery. Advanced Drug Delivery Reviews, 2008, 60, 1000-1017.	6.6	725
5	Nanoparticleâ€“Hydrogel Composites: Concept, Design, and Applications of These Promising, Multiâ€Functional Materials. Advanced Science, 2015, 2, 1400010.	5.6	653
6	Methods and strategies for the synthesis of diverse nanoparticles and their applications: a comprehensive overview. RSC Advances, 2015, 5, 105003-105037.	1.7	519
7	Silk Fibroin for Flexible Electronic Devices. Advanced Materials, 2016, 28, 4250-4265.	11.1	466
8	Polyhydroxyalkanoates: opening doors for a sustainable future. NPG Asia Materials, 2016, 8, e265-e265.	3.8	441
9	Ultrahigh-Water-Content Supramolecular Hydrogels Exhibiting Multistimuli Responsiveness. Journal of the American Chemical Society, 2012, 134, 11767-11773.	6.6	409
10	Pectin as a rheology modifier: Origin, structure, commercial production and rheology. Carbohydrate Polymers, 2017, 161, 118-139.	5.1	356
11	Biodegradable polymers for electrospinning: Towards biomedical applications. Materials Science and Engineering C, 2014, 45, 659-670.	3.8	318
12	Recent Advances in Shape Memory Soft Materials for Biomedical Applications. ACS Applied Materials & Interfaces, 2016, 8, 10070-10087.	4.0	313
13	Face Masks in the New COVID-19 Normal: Materials, Testing, and Perspectives. Research, 2020, 2020, 7286735.	2.8	306
14	Utilising inorganic nanocarriers for gene delivery. Biomaterials Science, 2016, 4, 70-86.	2.6	297
15	Editable Supercapacitors with Customizable Stretchability Based on Mechanically Strengthened Ultralong MnO₂ Nanowire Composite. Advanced Materials, 2018, 30, 1704531.	11.1	270
16	Water soluble polyhydroxyalkanoates: future materials for therapeutic applications. Chemical Society Reviews, 2015, 44, 2865-2879.	18.7	257
17	New Biodegradable Thermogelling Copolymers Having Very Low Gelation Concentrations. Biomacromolecules, 2007, 8, 585-593.	2.6	254
18	Multi-functional fluorescent carbon dots with antibacterial and gene delivery properties. RSC Advances, 2015, 5, 46817-46822.	1.7	242

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19	Guided orientation of cardiomyocytes on electrospun aligned nanofibers for cardiac tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 98B, 379-386.	1.6	241
20	Recent Advances of Using Hybrid Nanocarriers in Remotely Controlled Therapeutic Delivery. Small, 2016, 12, 4782-4806.	5.2	226
21	Tissue engineered plant extracts as nanofibrous wound dressing. Biomaterials, 2013, 34, 724-734.	5.7	216
22	Engineering Poly(lactide)â€“Lignin Nanofibers with Antioxidant Activity for Biomedical Application. ACS Sustainable Chemistry and Engineering, 2016, 4, 5268-5276.	3.2	209
23	Polypyrroleâ€contained electrospun conductive nanofibrous membranes for cardiac tissue engineering. Journal of Biomedical Materials Research - Part A, 2011, 99A, 376-385.	2.1	208
24	Surface Strain Redistribution on Structured Microfibers to Enhance Sensitivity of Fiberâ€Shaped Stretchable Strain Sensors. Advanced Materials, 2018, 30, 1704229.	11.1	208
25	Controlled drug release from biodegradable thermoresponsive physical hydrogel nanofibers. Journal of Controlled Release, 2010, 143, 175-182.	4.8	206
26	Supramolecular hydrogels for antimicrobial therapy. Chemical Society Reviews, 2018, 47, 6917-6929.	18.7	196
27	Hydrolytic degradation and protein release studies of thermogelling polyurethane copolymers consisting of poly[(R)-3-hydroxybutyrate], poly(ethylene glycol), and poly(propylene glycol). Biomaterials, 2007, 28, 4113-4123.	5.7	193
28	Supramolecular Peptide Amphiphile Vesicles through Hostâ€“Guest Complexation. Angewandte Chemie - International Edition, 2012, 51, 9633-9637.	7.2	191
29	Biodegradable electronics: cornerstone for sustainable electronics and transient applications. Journal of Materials Chemistry C, 2016, 4, 5531-5558.	2.7	184
30	Thermogels: In Situ Gelling Biomaterial. ACS Biomaterials Science and Engineering, 2016, 2, 295-316.	2.6	176
31	Triply Triggered Doxorubicin Release From Supramolecular Nanocontainers. Biomacromolecules, 2012, 13, 84-91.	2.6	174
32	Electrospinning of poly(glycerol sebacate)-based nanofibers for nerve tissue engineering. Materials Science and Engineering C, 2017, 70, 1089-1094.	3.8	171
33	Polyester elastomers for soft tissue engineering. Chemical Society Reviews, 2018, 47, 4545-4580.	18.7	168
34	An artificial sensory neuron with visual-haptic fusion. Nature Communications, 2020, 11, 4602.	5.8	166
35	Recent progress of atomic layer deposition on polymeric materials. Materials Science and Engineering C, 2017, 70, 1182-1191.	3.8	165
36	Bio-inspired crosslinking and matrix-drug interactions for advanced wound dressings with long-term antimicrobial activity. Biomaterials, 2017, 138, 153-168.	5.7	165

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37	Mechanical properties andin vitrobehavior of nanofiberâ€“hydrogel composites for tissue engineering applications. Nanotechnology, 2012, 23, 095705.	1.3	163
38	Development of Lignin Supramolecular Hydrogels with Mechanically Responsive and Self-Healing Properties. ACS Sustainable Chemistry and Engineering, 2015, 3, 2160-2169.	3.2	162
39	Anisotropically branched metal nanostructures. Chemical Society Reviews, 2015, 44, 6001-6017.	18.7	161
40	Sanitizing agents for virus inactivation and disinfection. View, 2020, 1, e16.	2.7	158
41	Synthesis and water-swelling of thermo-responsive poly(ester urethane)s containing poly(Îµ-caprolactone), poly(ethylene glycol) and poly(propylene glycol). Biomaterials, 2008, 29, 3185-3194.	5.7	157
42	Advances in hydrogel delivery systems for tissue regeneration. Materials Science and Engineering C, 2014, 45, 690-697.	3.8	157
43	Engineering highly stretchable lignin-based electrospun nanofibers for potential biomedical applications. Journal of Materials Chemistry B, 2015, 3, 6194-6204.	2.9	156
44	Biodegradable thermogelling poly(ester urethane)s consisting of poly(lactic acid) â€“ Thermodynamics of micellization and hydrolytic degradation. Biomaterials, 2008, 29, 2164-2172.	5.7	153
45	Sustainable and Antioxidant Ligninâ€“Polyester Copolymers and Nanofibers for Potential Healthcare Applications. ACS Sustainable Chemistry and Engineering, 2017, 5, 6016-6025.	3.2	152
46	Honeycombâ€Lanternâ€Inspired 3D Stretchable Supercapacitors with Enhanced Specific Areal Capacitance. Advanced Materials, 2018, 30, e1805468.	11.1	152
47	Layer-by-layer assemblies for antibacterial applications. Biomaterials Science, 2015, 3, 1505-1518.	2.6	149
48	Polymeric Hydrogels and Nanoparticles: A Merging and Emerging Field. Australian Journal of Chemistry, 2013, 66, 997.	0.5	148
49	Pseudo-Block Copolymer Based on Star-Shaped Poly(N-isopropylacrylamide) with a Î²-Cyclodextrin Core and Guest-Bearing PEG: Controlling Thermoresponsivity through Supramolecular Self-Assembly. Macromolecules, 2008, 41, 5967-5970.	2.2	145
50	Longâ€Term Realâ€Time In Vivo Drug Release Monitoring with AIE Thermogelling Polymer. Small, 2017, 13, 1603404.	5.2	140
51	Sustained release of proteins from high water content supramolecular polymer hydrogels. Biomaterials, 2012, 33, 4646-4652.	5.7	139
52	Supramolecular hostâ€“guest polymeric materials for biomedical applications. Materials Horizons, 2014, 1, 185-195.	6.4	139
53	Recent development of unimolecular micelles as functional materials and applications. Polymer Chemistry, 2016, 7, 5898-5919.	1.9	131
54	Synthesis of Novel Biodegradable Thermoresponsive Triblock Copolymers Based on Poly[(R)-3-hydroxybutyrate] and Poly(N-isopropylacrylamide) and Their Formation of Thermoresponsive Micelles. Macromolecules, 2009, 42, 194-202.	2.2	130

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55	Effective Targeted Photothermal Ablation of Multidrug Resistant Bacteria and Their Biofilms with NIRâ€Absorbing Gold Nanocrosses. Advanced Healthcare Materials, 2016, 5, 2122-2130.	3.9	126
56	Nanomaterial mediated optogenetics: opportunities and challenges. RSC Advances, 2016, 6, 60896-60906.	1.7	125
57	Poly(glycerol sebacate) biomaterial: synthesis and biomedical applications. Journal of Materials Chemistry B, 2015, 3, 7641-7652.	2.9	124
58	Custom-Made Electrochemical Energy Storage Devices. ACS Energy Letters, 2019, 4, 606-614.	8.8	123
59	Biodegradable thermosensitive copolymer hydrogels for drug delivery. Expert Opinion on Therapeutic Patents, 2007, 17, 965-977.	2.4	121
60	Biodegradable Thermogelling Polymers: Working Towards Clinical Applications. Advanced Healthcare Materials, 2014, 3, 977-988.	3.9	121
61	Engineering PCL/lignin nanofibers as an antioxidant scaffold for the growth of neuron and Schwann cell. Colloids and Surfaces B: Biointerfaces, 2018, 169, 356-365.	2.5	121
62	Polyhydroxyalkanoates: Chemical Modifications Toward Biomedical Applications. ACS Sustainable Chemistry and Engineering, 2014, 2, 106-119.	3.2	120
63	Mechanically Interlocked Hydrogelâ€“Elastomer Hybrids for Onâ€Skin Electronics. Advanced Functional Materials, 2020, 30, 1909540.	7.8	120
64	The in vitro hydrolysis of poly(ester urethane)s consisting of poly[(R)-3-hydroxybutyrate] and poly(ethylene glycol). Biomaterials, 2006, 27, 1841-1850.	5.7	117
65	A Perspective on the Trends and Challenges Facing Porphyrinâ€Based Antiâ€Microbial Materials. Small, 2016, 12, 3609-3644.	5.2	117
66	Elastic poly(Îµ -caprolactone)-polydimethylsiloxane copolymer fibers with shape memory effect for bone tissue engineering. Biomedical Materials (Bristol), 2016, 11, 015007.	1.7	117
67	How far is Lignin from being a biomedical material?. Bioactive Materials, 2022, 8, 71-94.	8.6	117
68	Fluorescent gels: a review of synthesis, properties, applications and challenges. Materials Chemistry Frontiers, 2019, 3, 1489-1502.	3.2	115
69	Review of Adaptive Programmable Materials and Their Bioapplications. ACS Applied Materials & Interfaces, 2016, 8, 33351-33370.	4.0	112
70	Purification and Characterization of a Vaterite-Inducing Peptide, Pelovaterin, from the Eggshells ofPelodiscussinensis(Chinese Soft-Shelled Turtle). Biomacromolecules, 2005, 6, 1429-1437.	2.6	109
71	Nanoâ€Staraâ€Shaped Polymers for Drug Delivery Applications. Macromolecular Rapid Communications, 2017, 38, 1700410.	2.0	109
72	Emulsion electrospun vascular endothelial growth factor encapsulated poly(l-lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (acid-co Materials Science, 2012, 47, 3272-3281.	1.7	108

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73	Recent Advances in the Development of Antimicrobial Nanoparticles for Combating Resistant Pathogens. Advanced Healthcare Materials, 2018, 7, e1701400.	3.9	106
74	Formation of Transient Amorphous Calcium Carbonate Precursor in Quail Eggshell Mineralization:Â An In Vitro Study. Biomacromolecules, 2006, 7, 3202-3209.	2.6	105
75	Supramolecular soft biomaterials for biomedical applications. Materials Today, 2014, 17, 194-202.	8.3	105
76	Biocompatible electrically conductive nanofibers from inorganic-organic shape memory polymers. Colloids and Surfaces B: Biointerfaces, 2016, 148, 557-565.	2.5	105
77	Structure mapping of dengue and Zika viruses reveals functional long-range interactions. Nature Communications, 2019, 10, 1408.	5.8	104
78	PHBâ€Based Gels as Delivery Agents of Chemotherapeutics for the Effective Shrinkage of Tumors. Advanced Healthcare Materials, 2016, 5, 2679-2685.	3.9	103
79	Metal carbonyl-gold nanoparticle conjugates for highly sensitive SERS detection of organophosphorus pesticides. Biosensors and Bioelectronics, 2017, 96, 167-172.	5.3	103
80	Poly(ester urethane)s Consisting of Poly[(R)-3-hydroxybutyrate] and Poly(ethylene glycol) as Candidate Biomaterials:Â Characterization and Mechanical Property Study. Biomacromolecules, 2005, 6, 2740-2747.	2.6	102
81	Molecular gel sorbent materials for environmental remediation and wastewater treatment. Journal of Materials Chemistry A, 2019, 7, 18759-18791.	5.2	102
82	New biocompatible thermogelling copolymers containing ethylene-butylene segments exhibiting very low gelation concentrations. Soft Matter, 2011, 7, 2150.	1.2	101
83	Highly Efficient Supramolecular Aggregation-Induced Emission-Active Pseudorotaxane Luminogen for Functional Bioimaging. Biomacromolecules, 2017, 18, 886-897.	2.6	101
84	Biodegradable Thermogelling Poly[(R)-3-hydroxybutyrate]-Based Block Copolymers: Micellization, Gelation, and Cytotoxicity and Cell Culture Studies. Journal of Physical Chemistry B, 2009, 113, 11822-11830.	1.2	100
85	Implantable and degradable antioxidant poly(Îµ-caprolactone)-lignin nanofiber membrane for effective osteoarthritis treatment. Biomaterials, 2020, 230, 119601.	5.7	100
86	â€˜Livingâ€™ Controlled in Situ Gelling Systems: Thiolâ^'Disulfide Exchange Method toward Tailor-Made Biodegradable Hydrogels. Journal of the American Chemical Society, 2010, 132, 15140-15143.	6.6	99
87	Co-delivery of drug and DNA from cationic dual-responsive micelles derived from poly(DMAEMA-co-PPGMA). Materials Science and Engineering C, 2013, 33, 4545-4550.	3.8	99
88	Recent Progress in Using Biomaterials as Vitreous Substitutes. Biomacromolecules, 2015, 16, 3093-3102.	2.6	98
89	Emerging Supramolecular Therapeutic Carriers Based on Hostâ€“Guest Interactions. Chemistry - an Asian Journal, 2016, 11, 1300-1321.	1.7	98
90	Magnetic Anisotropic Particles: Toward Remotely Actuated Applications. Particle and Particle Systems Characterization, 2016, 33, 709-728.	1.2	98

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91	Sustained delivery of doxorubicin from thermogelling poly(PEG/PPG/PTMC urethane)s for effective eradication of cancer cells. Journal of Materials Chemistry, 2012, 22, 21249.	6.7	97
92	Biodegradable Polysaccharides for Controlled Drug Delivery. ChemPlusChem, 2016, 81, 504-514.	1.3	97
93	Poly(DMAEMAâ€coâ€PPGMA): Dualâ€responsive â€œreversibleâ€micelles. Journal of Applied Polymer Science, 2013, 127, 992-1000.	1.3	96
94	Recent development of synthetic nonviral systems for sustained gene delivery. Drug Discovery Today, 2017, 22, 1318-1335.	3.2	96
95	Control of PLA Stereoisomers-Based Polyurethane Elastomers as Highly Efficient Shape Memory Materials. ACS Sustainable Chemistry and Engineering, 2017, 5, 1217-1227.	3.2	96
96	Highly Stable and Stretchable Conductive Films through Thermalâ€Radiationâ€Assisted Metal Encapsulation. Advanced Materials, 2019, 31, e1901360.	11.1	96
97	Encapsulation of basic fibroblast growth factor in thermogelling copolymers preserves its bioactivity. Journal of Materials Chemistry, 2011, 21, 2246.	6.7	94
98	Injectable Supramolecular Hydrogels as Delivery Agents of Bclâ€2 Conversion Gene for the Effective Shrinkage of Therapeutic Resistance Tumors. Advanced Healthcare Materials, 2017, 6, 1700159.	3.9	93
99	Biomechanoâ€Interactive Materials and Interfaces. Advanced Materials, 2018, 30, e1800572.	11.1	93
100	Recent advances in supramolecular hydrogels for biomedical applications. Materials Today Advances, 2019, 3, 100021.	2.5	93
101	Safe and efficient membrane permeabilizing polymers based on PLLA for antibacterial applications. RSC Advances, 2016, 6, 28947-28955.	1.7	92
102	Thermo-Responsive Hydrogels: From Recent Progress to Biomedical Applications. Gels, 2021, 7, 77.	2.1	92
103	Electrospun synthetic and natural nanofibers for regenerative medicine and stem cells. Biotechnology Journal, 2013, 8, 59-72.	1.8	91
104	An experimental and theoretical investigation of the anisotropic branching in gold nanocrosses. Nanoscale, 2016, 8, 543-552.	2.8	90
105	Lightâ€Induced Redoxâ€Responsive Smart Drug Delivery System by Using Seleniumâ€Containing Polymer@MOF Shell/Core Nanocomposite. Advanced Healthcare Materials, 2019, 8, e1900406.	3.9	90
106	Micellization and phase transition behavior of thermosensitive poly(N-isopropylacrylamide)â€“poly(É›-caprolactone)â€“poly(N-isopropylacrylamide) triblock copolymers. Polymer, 2008, 49, 5084-5094.	1.8	89
107	Polyolefins and Polystyrene as Chemical Resources for a Sustainable Future: Challenges, Advances, and Prospects. , 2021, 3, 1660-1676.		89
108	Efficient gene delivery with paclitaxel-loaded DNA-hybrid polyplexes based on cationic polyhedral oligomeric silsesquioxanes. Journal of Materials Chemistry, 2010, 20, 10634.	6.7	85

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109	Sustained delivery of paclitaxel using thermogelling poly(PEG/PPG/PCL urethane)s for enhanced toxicity against cancer cells. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2686-2694.	2.1	85
110	Controlling cell adhesion using layer-by-layer approaches for biomedical applications. Materials Science and Engineering C, 2017, 70, 1163-1175.	3.8	84
111	Retinal-detachment repair and vitreous-like-body reformation via a thermogelling polymer endotamponade. Nature Biomedical Engineering, 2019, 3, 598-610.	11.6	84
112	Acrylamide-derived freestanding polymer gel electrolyte for flexible metal-air batteries. Journal of Power Sources, 2018, 400, 566-571.	4.0	83
113	Dual responsive micelles based on poly[(R)-3-hydroxybutyrate] and poly(2-(di-methylamino)ethyl) Tj ETQq1 1 0.784314 rgBT /Overlock	1.9	81
114	Surface Coating with a Thermoresponsive Copolymer for the Culture and Nonâ€Enzymatic Recovery of Mouse Embryonic Stem Cells. Macromolecular Bioscience, 2009, 9, 1069-1079.	2.1	80
115	Enhanced stability and activity of temozolomide in primary glioblastoma multiforme cells with cucurbit[n]uril. Chemical Communications, 2012, 48, 9843.	2.2	80
116	Triggered insulin release studies of triply responsive supramolecular micelles. Polymer Chemistry, 2012, 3, 3180.	1.9	80
117	New stimuli-responsive copolymers of N -acryloyl- N â€²-alkyl piperazine and methyl methacrylate and their hydrogels. Polymer, 2001, 42, 65-69.	1.8	79
118	New Linear and Starâ€Shaped Thermogelling Poly([R]â€3â€hydroxybutyrate) Copolymers. Chemistry - A European Journal, 2016, 22, 10501-10512.	1.7	79
119	Novel poly(N-isopropylacrylamide)-poly[(R)-3-hydroxybutyrate]-poly(N-isopropylacrylamide) triblock copolymer surface as a culture substrate for human mesenchymal stem cells. Soft Matter, 2009, 5, 2937.	1.2	78
120	â€œOn-demandâ€•control of thermoresponsive properties of poly(N-isopropylacrylamide) with cucurbit[8]uril hostâ€“guest complexes. Chemical Communications, 2011, 47, 6000.	2.2	78
121	Rational Design of Biomolecular Templates for Synthesizing Multifunctional Noble Metal Nanoclusters toward Personalized Theranostic Applications. Advanced Healthcare Materials, 2016, 5, 1844-1859.	3.9	78
122	Biocompatibility evaluation of electrically conductive nanofibrous scaffolds for cardiac tissue engineering. Journal of Materials Chemistry B, 2013, 1, 2305.	2.9	77
123	Stem cell-loaded nanofibrous patch promotes the regeneration of infarcted myocardium with functional improvement in rat model. Acta Biomaterialia, 2014, 10, 2727-2738.	4.1	77
124	Recent advances of using polyhydroxyalkanoateâ€based nanovehicles as therapeutic delivery carriers. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2017, 9, e1429.	3.3	77
125	Thermoelectric materials and transport physics. Materials Today Physics, 2021, 21, 100519.	2.9	77
126	Cationic star copolymers based on Î²-cyclodextrins for efficient gene delivery to mouse embryonic stem cell colonies. Chemical Communications, 2015, 51, 10815-10818.	2.2	76

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127	Current research progress and perspectives on liquid hydrogen rich molecules in sustainable hydrogen storage. Energy Storage Materials, 2021, 35, 695-722.	9.5	76
128	â€œYâ€•shape armed amphiphilic star-like copolymers: design, synthesis and dual-responsive unimolecular micelle formation for controlled drug delivery. Polymer Chemistry, 2017, 8, 5611-5620.	1.9	75
129	Multi-arm carriers composed of an antioxidant lignin core and poly(glycidyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 667 Td (meth Journal of Materials Chemistry B, 2015, 3, 6897-6904.	2.9	74
130	Mechanically cartilage-mimicking poly(PCL-PTHF urethane)/collagen nanofibers induce chondrogenesis by blocking NFâ€“kappa B signaling pathway. Biomaterials, 2018, 178, 281-292.	5.7	72
131	Hydrogels as Emerging Materials for Translational Biomedicine. Advanced Therapeutics, 2019, 2, 1800088.	1.6	72
132	Supramolecular cyclodextrin nanocarriers for chemo- and gene therapy towards the effective treatment of drug resistant cancers. Nanoscale, 2016, 8, 18876-18881.	2.8	70
133	Strong and biocompatible lignin /poly (3-hydroxybutyrate) composite nanofibers. Composites Science and Technology, 2018, 158, 26-33.	3.8	70
134	An adherent tissue-inspired hydrogel delivery vehicle utilised in primary human glioma models. Biomaterials, 2018, 179, 199-208.	5.7	69
135	Multifunctional Antimicrobial Nanofiber Dressings Containing Îµ-Polylysine for the Eradication of Bacterial Bioburden and Promotion of Wound Healing in Critically Colonized Wounds. ACS Applied Materials & Interfaces, 2020, 12, 15989-16005.	4.0	69
136	Interaction of gelatin with polyenes modulates antifungal activity and biocompatibility of electrospun fiber mats. International Journal of Nanomedicine, 2014, 9, 2439.	3.3	68
137	Supramolecular polymeric peptide amphiphile vesicles for the encapsulation of basic fibroblast growth factor. Chemical Communications, 2014, 50, 3033-3035.	2.2	68
138	Multifunctional Polyphenols- and Catecholamines-Based Self-Defensive Films for Health Care Applications. ACS Applied Materials & Interfaces, 2016, 8, 1220-1232.	4.0	68
139	Machine Learningâ€Ðriven Biomaterials Evolution. Advanced Materials, 2022, 34, e2102703.	11.1	68
140	Design of a micellized Î±-cyclodextrin based supramolecular hydrogel system. Soft Matter, 2015, 11, 5425-5434.	1.2	67
141	PLA-based thermogel for the sustained delivery of chemotherapeutics in a mouse model of hepatocellular carcinoma. RSC Advances, 2016, 6, 44506-44513.	1.7	66
142	Small molecule therapeutic-loaded liposomes as therapeutic carriers: from development to clinical applications. RSC Advances, 2016, 6, 70592-70615.	1.7	65
143	Formulation, characterization and evaluation of mRNA-loaded dissolvable polymeric microneedles (RNApatch). Scientific Reports, 2018, 8, 11842.	1.6	65
144	Engineered Janus amphipathic polymeric fiber films with unidirectional drainage and anti-adhesion abilities to accelerate wound healing. Chemical Engineering Journal, 2021, 421, 127725.	6.6	65

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145	Structural Reconstruction of Cu₂O Superparticles toward Electrocatalytic CO₂ Reduction with High C₂₊ Products Selectivity. Advanced Science, 2022, 9, e2105292.	5.6	65
146	Engineering Bioresponsive Hydrogels toward Healthcare Applications. Macromolecular Chemistry and Physics, 2016, 217, 175-188.	1.1	64
147	Biocompatible pH-responsive nanoparticles with a core-anchored multilayer shell of triblock copolymers for enhanced cancer therapy. Journal of Materials Chemistry B, 2017, 5, 4421-4425.	2.9	64
148	Unexpected formation of gold nanoflowers by a green synthesis method as agents for a safe and effective photothermal therapy. Nanoscale, 2017, 9, 15753-15759.	2.8	64
149	Stimuli-Responsive Cationic Hydrogels in Drug Delivery Applications. Gels, 2018, 4, 13.	2.1	64
150	Cyberâ€“Physiochemical Interfaces. Advanced Materials, 2020, 32, e1905522.	11.1	64
151	Artificial Sense Technology: Emulating and Extending Biological Senses. ACS Nano, 2021, 15, 18671-18678.	7.3	64
152	Current treatment options and drug delivery systems as potential therapeutic agents for ovarian cancer: A review. Materials Science and Engineering C, 2014, 45, 609-619.	3.8	62
153	Machine Learningâ€Reinforced Noninvasive Biosensors for Healthcare. Advanced Healthcare Materials, 2021, 10, e2100734.	3.9	62
154	Use of biomaterials for sustained delivery of anti-VEGF to treat retinal diseases. Eye, 2020, 34, 1341-1356.	1.1	62
155	A thixotropic polyglycerol sebacate-based supramolecular hydrogel showing UCST behavior. RSC Advances, 2015, 5, 48720-48728.	1.7	61
156	Polymeric Janus Nanoparticles: Recent Advances in Synthetic Strategies, Materials Properties, and Applications. Macromolecular Rapid Communications, 2019, 40, e1800203.	2.0	61
157	Unusual thermogelling behaviour of poly[2-(dimethylamino)ethyl methacrylate] (PDMAEMA)-based polymers polymerized in bulk. RSC Advances, 2015, 5, 62314-62318.	1.7	60
158	Devising Materials Manufacturing Toward Labâ€toâ€Fab Translation of Flexible Electronics. Advanced Materials, 2020, 32, e2001903.	11.1	60
159	Sensors, Biosensors, and Analytical Technologies for Aquaculture Water Quality. Research, 2020, 2020, 8272705.	2.8	59
160	Lab-on-Mask for Remote Respiratory Monitoring. , 2020, 2, 1178-1181.		58
161	Lignin-Incorporated Nanogel Serving As an Antioxidant Biomaterial for Wound Healing. ACS Applied Bio Materials, 2021, 4, 3-13.	2.3	58
162	pH-responsive and hyaluronic acid-functionalized metalâ€“organic frameworks for therapy of osteoarthritis. Journal of Nanobiotechnology, 2020, 18, 139.	4.2	58

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163	New Dual Functional PHB-Grafted Lignin Copolymer: Synthesis, Mechanical Properties, and Biocompatibility Studies. ACS Applied Bio Materials, 2019, 2, 127-134.	2.3	57
164	Electrospun cellulose acetate butyrate/polyethylene glycol (CAB/PEG) composite nanofibers: A potential scaffold for tissue engineering. Colloids and Surfaces B: Biointerfaces, 2020, 188, 110713.	2.5	57
165	Limiting the Uncoordinated N Species in Mâ€“N_x Singleâ€Atom Catalysts toward Electrocatalytic CO₂ Reduction in Broad Voltage Range. Advanced Materials, 2022, 34, e2104090.	11.1	57
166	Conjugation of poly(ethylene glycol) to poly(lactide)-based polyelectrolytes: An effective method to modulate cytotoxicity in gene delivery. Materials Science and Engineering C, 2017, 73, 275-284.	3.8	56
167	Sustained delivery of anti-VEGFs from thermogel depots inhibits angiogenesis without the need for multiple injections. Biomaterials Science, 2019, 7, 4603-4614.	2.6	56
168	Codelivery for Paclitaxel and Bclâ€2 Conversion Gene by PHBâ€PDMAEMA Amphiphilic Cationic Copolymer for Effective Drug Resistant Cancer Therapy. Macromolecular Bioscience, 2017, 17, 1700186.	2.1	55
169	Hierarchically Self-Assembled Supramolecular Hostâ€“Guest Delivery System for Drug Resistant Cancer Therapy. Biomacromolecules, 2018, 19, 1926-1938.	2.6	55
170	Targeted and Sustained Corelease of Chemotherapeutics and Gene by Injectable Supramolecular Hydrogel for Drugâ€Resistant Cancer Therapy. Macromolecular Rapid Communications, 2019, 40, e1800117.	2.0	55
171	The role of hydrogen bonding in alginate/poly(acrylamide-co-dimethylacrylamide) and alginate/poly(ethylene glycol) methyl ether methacrylate-based tough hybrid hydrogels. RSC Advances, 2015, 5, 57678-57685.	1.7	54
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