Dan Kai

List of Publications by Year
in descending order

79 papers	6,509 citations	61984 43 h-index	64796 79 g-index
82 all docs	82 docs citations	82 times ranked	8825 citing authors

#	Article	IF	Citations
1	Towards lignin-based functional materials in a sustainable world. Green Chemistry, 2016, 18, 1175-1200.	9.0	931
2	Biodegradable polymers for electrospinning: Towards biomedical applications. Materials Science and Engineering C, 2014, 45, 659-670.	7.3	318
3	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.	3.4	241
4	Tissue engineered plant extracts as nanofibrous wound dressing. Biomaterials, 2013, 34, 724-734.	11.4	216
5	Engineering Poly(lactide)â€“Lignin Nanofibers with Antioxidant Activity for Biomedical Application. ACS Sustainable Chemistry and Engineering, 2016, 4, 5268-5276.	6.7	209
6	Polypyrroleâ€contained electrospun conductive nanofibrous membranes for cardiac tissue engineering. Journal of Biomedical Materials Research - Part A, 2011, 99A, 376-385.	4.0	208
7	Biodegradable electronics: cornerstone for sustainable electronics and transient applications. Journal of Materials Chemistry C, 2016, 4, 5531-5558.	5.5	184
8	Thermogels: In Situ Gelling Biomaterial. ACS Biomaterials Science and Engineering, 2016, 2, 295-316.	5.2	176
9	Electrospinning of poly(glycerol sebacate)-based nanofibers for nerve tissue engineering. Materials Science and Engineering C, 2017, 70, 1089-1094.	7.3	171
10	Polyester elastomers for soft tissue engineering. Chemical Society Reviews, 2018, 47, 4545-4580.	38.1	168
11	Mechanical properties and<i>in vitro</i>behavior of nanofiberâ€“hydrogel composites for tissue engineering applications. Nanotechnology, 2012, 23, 095705.	2.6	163
12	Development of Lignin Supramolecular Hydrogels with Mechanically Responsive and Self-Healing Properties. ACS Sustainable Chemistry and Engineering, 2015, 3, 2160-2169.	6.7	162
13	Engineering highly stretchable lignin-based electrospun nanofibers for potential biomedical applications. Journal of Materials Chemistry B, 2015, 3, 6194-6204.	5.8	156
14	Sustainable and Antioxidant Ligninâ€“Polyester Copolymers and Nanofibers for Potential Healthcare Applications. ACS Sustainable Chemistry and Engineering, 2017, 5, 6016-6025.	6.7	152
15	Longâ€Term Realâ€Time In Vivo Drug Release Monitoring with AIE Thermogelling Polymer. Small, 2017, 13, 1603404.	10.0	140
16	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.	5.0	121
17	Polyhydroxyalkanoates: Chemical Modifications Toward Biomedical Applications. ACS Sustainable Chemistry and Engineering, 2014, 2, 106-119.	6.7	120
18	Elastic poly(<i>Îµ</i> -caprolactone)-polydimethylsiloxane copolymer fibers with shape memory effect for bone tissue engineering. Biomedical Materials (Bristol), 2016, 11, 015007.	3.3	117

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19	How far is Lignin from being a biomedical material?. Bioactive Materials, 2022, 8, 71-94.	15.6	117
20	Electrospun biocomposite nanofibrous patch for cardiac tissue engineering. Biomedical Materials (Bristol), 2011, 6, 055001.	3.3	115
21	Controlled release of multiple epidermal induction factors through coreâ€"shell nanofibers for skin regeneration. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 689-698.	4.3	113
22	Emulsion electrospun vascular endothelial growth factor encapsulated poly(l-lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (acid-c Materials Science, 2012, 47, 3272-3281.	3.7	108
23	Biocompatible electrically conductive nanofibers from inorganic-organic shape memory polymers. Colloids and Surfaces B: Biointerfaces, 2016, 148, 557-565.	5.0	105
24	Implantable and degradable antioxidant poly(Îµ-caprolactone)-lignin nanofiber membrane for effective osteoarthritis treatment. Biomaterials, 2020, 230, 119601.	11.4	100
25	Electrospun synthetic and natural nanofibers for regenerative medicine and stem cells. Biotechnology Journal, 2013, 8, 59-72.	3.5	91
26	Biocompatibility evaluation of electrically conductive nanofibrous scaffolds for cardiac tissue engineering. Journal of Materials Chemistry B, 2013, 1, 2305.	5.8	77
27	Stem cell-loaded nanofibrous patch promotes the regeneration of infarcted myocardium with functional improvement in rat model. Acta Biomaterialia, 2014, 10, 2727-2738.	8.3	77
28	Multi-arm carriers composed of an antioxidant lignin core and poly(glycidyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Td (methacrylate- Journal of Materials Chemistry B, 2015, 3, 6897-6904.	5.8	74
29	Biomimetic material strategies for cardiac tissue engineering. Materials Science and Engineering C, 2011, 31, 503-513.	7.3	72
30	Mechanically cartilage-mimicking poly(PCL-PTHF urethane)/collagen nanofibers induce chondrogenesis by blocking NFâ€"kappa B signaling pathway. Biomaterials, 2018, 178, 281-292.	11.4	72
31	Strong and biocompatible lignin /poly (3-hydroxybutyrate) composite nanofibers. Composites Science and Technology, 2018, 158, 26-33.	7.8	70
32	Engineered Janus amphipathic polymeric fiber films with unidirectional drainage and anti-adhesion abilities to accelerate wound healing. Chemical Engineering Journal, 2021, 421, 127725.	12.7	65
33	Electrospun composite scaffolds containing poly(octanediolâ€‹<i>co</i>â€‹citrate) for cardiac tissue engineering. Biopolymers, 2012, 97, 529-538.	2.4	62
34	Lignin-Incorporated Nanogel Serving As an Antioxidant Biomaterial for Wound Healing. ACS Applied Bio Materials, 2021, 4, 3-13.	4.6	58
35	pH-responsive and hyaluronic acid-functionalized metalâ€"organic frameworks for therapy of osteoarthritis. Journal of Nanobiotechnology, 2020, 18, 139.	9.1	58
36	New Dual Functional PHB-Grafted Lignin Copolymer: Synthesis, Mechanical Properties, and Biocompatibility Studies. ACS Applied Bio Materials, 2019, 2, 127-134.	4.6	57

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37	Electrospun cellulose acetate butyrate/polyethylene glycol (CAB/PEG) composite nanofibers: A potential scaffold for tissue engineering. Colloids and Surfaces B: Biointerfaces, 2020, 188, 110713.	5.0	57
38	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.	3.6	54
39	Electrospun Pectin-Polyhydroxybutyrate Nanofibers for Retinal Tissue Engineering. ACS Omega, 2017, 2, 8959-8968.	3.5	54
40	Using Artificial Skin Devices as Skin Replacements: Insights into Superficial Treatment. Small, 2019, 15, e1805453.	10.0	53
41	Dual functional anti-oxidant and SPF enhancing lignin-based copolymers as additives for personal and healthcare products. RSC Advances, 2016, 6, 86420-86427.	3.6	49
42	A new highly transparent injectable PHA-based thermogelling vitreous substitute. Biomaterials Science, 2020, 8, 926-936.	5.4	47
43	Bioimaging and biodetection assisted with TTA-UC materials. Drug Discovery Today, 2017, 22, 1400-1411.	6.4	45
44	Human cardiomyocyte interaction with electrospun fibrinogen/gelatin nanofibers for myocardial regeneration. Journal of Biomaterials Science, Polymer Edition, 2013, 24, 1660-1675.	3.5	44
45	Electrospun Poly(L-Lactic Acid)-co-Poly(<i>Ïµ</i> -Caprolactone) Nanofibres Containing Silver Nanoparticles for Skin-Tissue Engineering. Journal of Biomaterials Science, Polymer Edition, 2012, 23, 2337-2352.	3.5	37
46	Biocompatibility evaluation of protein-incorporated electrospun polyurethane-based scaffolds with smooth muscle cells for vascular tissue engineering. Journal of Materials Science, 2013, 48, 5113-5124.	3.7	37
47	Gold-decorated TiO2 nanofibrous hybrid for improved solar-driven photocatalytic pollutant degradation. Chemosphere, 2021, 265, 129114.	8.2	37
48	Potential of VEGF-encapsulated electrospun nanofibers for <i>in vitro</i> cardiomyogenic differentiation of human mesenchymal stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1002-1010.	2.7	36
49	Recycling of spent coffee grounds for useful extracts and green composites. RSC Advances, 2021, 11, 2682-2692.	3.6	36
50	Differentiation of embryonic stem cells to cardiomyocytes on electrospun nanofibrous substrates. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 447-454.	3.4	34
51	PLA-lignin nanofibers as antioxidant biomaterials for cartilage regeneration and osteoarthritis treatment. Journal of Nanobiotechnology, 2022, 20, .	9.1	33
52	Engineering Porous Waterâ€Responsive Poly(PEG/PCL/PDMS Urethane) Shape Memory Polymers. Macromolecular Materials and Engineering, 2017, 302, 1700174.	3.6	32
53	Addition of sodium hyaluronate and the effect on performance of the injectable calcium phosphate cement. Journal of Materials Science: Materials in Medicine, 2009, 20, 1595-1602.	3.6	30
54	Emulsion electrospun nanofibers as substrates for cardiomyogenic differentiation of mesenchymal stem cells. Journal of Materials Science: Materials in Medicine, 2013, 24, 2577-2587.	3.6	26

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55	Electrospun photosensitive nanofibers: potential for photocurrent therapy in skin regeneration. Photochemical and Photobiological Sciences, 2012, 12, 124-134.	2.9	24
56	Pitfalls and Protocols: Evaluating Catalysts for CO₂ Reduction in Electrolyzers Based on Gas Diffusion Electrodes. ACS Energy Letters, 2022, 7, 2012-2023.	17.4	24
57	Advances in sustainable polymeric materials from lignocellulosic biomass. Materials Today Chemistry, 2022, 26, 101022.	3.5	24
58	A Triazolylâ€Pyridineâ€Supported Cu^I Dimer: Tunable Luminescence and Fabrication of Composite Fibers. ChemPlusChem, 2015, 80, 1235-1240.	2.8	22
59	Highly Washable and Reusable Green Nanofibrous Sorbent with Superoleophilicity, Biodegradability, and Mechanical Robustness. ACS Applied Polymer Materials, 2020, 2, 4825-4835.	4.4	22
60	In situ construction of thiol-silver interface for selectively electrocatalytic CO2 reduction. Nano Research, 2022, 15, 3283-3289.	10.4	22
61	A tough, biodegradable and water-resistant plastic alternative from coconut husk. Composites Part B: Engineering, 2022, 241, 110031.	12.0	20
62	Polyethylenimine-Mediated CpG Oligodeoxynucleotide Delivery Stimulates Bifurcated Cytokine Induction. ACS Biomaterials Science and Engineering, 2018, 4, 1013-1018.	5.2	18
63	Surface Migration of Fluorinated-Siloxane Copolymer with Unusual Liquid Crystal Behavior for Highly Efficient Oil/Water Separation. ACS Applied Polymer Materials, 2020, 2, 3612-3620.	4.4	17
64	Stem Cells and Nanostructures for Advanced Tissue Regeneration. Advances in Polymer Science, 2011, , 21-62.	0.8	16
65	Biomimetic Poly(Poly(Îµ-caprolactone)-Polytetrahydrofuran urethane) Based Nanofibers Enhanced Chondrogenic Differentiation and Cartilage Regeneration. Journal of Biomedical Nanotechnology, 2019, 15, 1005-1017.	1.1	16
66	Konjac glucomannan biopolymer as a multifunctional binder to build a solid permeable interface on Na₃V₂(PO₄)₃/C cathodes for high-performance sodium ion batteries. Journal of Materials Chemistry A, 2021, 9, 9864-9874.	10.3	16
67	An Injectable Double-Network Hydrogel for Cell Encapsulation. Australian Journal of Chemistry, 2016, 69, 388.	0.9	12
68	Methods for Nano/Micropatterning of Substrates: Toward Stem Cells Differentiation. International Journal of Polymeric Materials and Polymeric Biomaterials, 2015, 64, 338-353.	3.4	9
69	Enhanced transfection of a macromolecular lignin-based DNA complex with low cellular toxicity. Bioscience Reports, 2018, 38, .	2.4	8
70	Cationic Lignin-Based Hyperbranched Polymers to Circumvent Drug Resistance in <i>Pseudomonas</i> Keratitis. ACS Biomaterials Science and Engineering, 2021, 7, 4659-4668.	5.2	6
71	Synergistic UV protection effects of the lignin nanodiamond complex. Materials Today Chemistry, 2021, 22, 100574.	3.5	6
72	Biomass Hyaluronic Acid to Construct Highâ€Loading Electrode with Fast Na⁺ Transport Structure for Na₃V₂(PO₄)₃ Sodiumâ€Ion Batteries. Batteries and Supercaps, 2022, 5, .	4.7	6

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73	Lignin and Its Properties. Sustainable Chemistry Series, 2018, , 1-28.	0.1	5
74	Reinforcement of aligned cellulose fibers by lignin-polyester copolymers. Materials Today Chemistry, 2020, 18, 100358.	3.5	5
75	Preparation of Tetracalcium Phosphate and the Effect on the Properties of Calcium Phosphate Cement. Materials Science Forum, 0, 610-613, 1356-1359.	0.3	4
76	Design and development of multilayer cotton masks via machine learning. Materials Today Advances, 2021, 12, 100178.	5.2	4
77	Antioxidative and Antiâ€UV Lignin Carrier for Peptide Delivery. Macromolecular Chemistry and Physics, 2022, 223, 2100364.	2.2	4
78	Facile Synthesis of Iron Oxide Nanozymes for Synergistically Colorimetric and Magnetic Resonance Detection Strategy. Journal of Biomedical Nanotechnology, 2021, 17, 582-594.	1.1	2
79	CHAPTER 10. Thermogelling Polymers: A Cutting Edge Rheology Modifier. RSC Polymer Chemistry Series, 2016, , 178-204.	0.2	0