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	How far is Lignin from being a biomedical material?. Bioactive Materials, 2022, 8, 71-94.	15.6	117
2	Antioxidative and Antiâ€UV Lignin Carrier for Peptide Delivery. Macromolecular Chemistry and Physics, 2022, 223, 2100364.	2.2	4
3	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
4	In situ construction of thiol-silver interface for selectively electrocatalytic CO2 reduction. Nano Research, 2022, 15, 3283-3289.	10.4	22
5	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
6	A tough, biodegradable and water-resistant plastic alternative from coconut husk. Composites Part B: Engineering, 2022, 241, 110031.	12.0	20
7	PLA-lignin nanofibers as antioxidant biomaterials for cartilage regeneration and osteoarthritis treatment. Journal of Nanobiotechnology, 2022, 20, .	9.1	33
8	Advances in sustainable polymeric materials from lignocellulosic biomass. Materials Today Chemistry, 2022, 26, 101022.	3.5	24
9	Lignin-Incorporated Nanogel Serving As an Antioxidant Biomaterial for Wound Healing. ACS Applied Bio Materials, 2021, 4, 3-13.	4.6	58
10	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
11	Gold-decorated TiO2 nanofibrous hybrid for improved solar-driven photocatalytic pollutant degradation. Chemosphere, 2021, 265, 129114.	8.2	37
12	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
13	Recycling of spent coffee grounds for useful extracts and green composites. RSC Advances, 2021, 11, 2682-2692.	3.6	36
14	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
15	Synergistic UV protection effects of the lignin nanodiamond complex. Materials Today Chemistry, 2021, 22, 100574.	3.5	6
16	Design and development of multilayer cotton masks via machine learning. Materials Today Advances, 2021, 12, 100178.	5.2	4
17	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
18	Implantable and degradable antioxidant poly(Îµ-caprolactone)-lignin nanofiber membrane for effective osteoarthritis treatment. Biomaterials, 2020, 230, 119601.	11.4	100

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19	A new highly transparent injectable PHA-based thermogelling vitreous substitute. Biomaterials Science, 2020, 8, 926-936.	5.4	47
20	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
21	Reinforcement of aligned cellulose fibers by lignin-polyester copolymers. Materials Today Chemistry, 2020, 18, 100358.	3.5	5
22	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
23	Highly Washable and Reusable Green Nanofibrous Sorbent with Superoleophilicity, Biodegradability, and Mechanical Robustness. ACS Applied Polymer Materials, 2020, 2, 4825-4835.	4.4	22
24	pH-responsive and hyaluronic acid-functionalized metalâ€“organic frameworks for therapy of osteoarthritis. Journal of Nanobiotechnology, 2020, 18, 139.	9.1	58
25	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
26	Using Artificial Skin Devices as Skin Replacements: Insights into Superficial Treatment. Small, 2019, 15, e1805453.	10.0	53
27	New Dual Functional PHB-Grafted Lignin Copolymer: Synthesis, Mechanical Properties, and Biocompatibility Studies. ACS Applied Bio Materials, 2019, 2, 127-134.	4.6	57
28	Polyethylenimine-Mediated CpG Oligodeoxynucleotide Delivery Stimulates Bifurcated Cytokine Induction. ACS Biomaterials Science and Engineering, 2018, 4, 1013-1018.	5.2	18
29	Strong and biocompatible lignin /poly (3-hydroxybutyrate) composite nanofibers. Composites Science and Technology, 2018, 158, 26-33.	7.8	70
30	Polyester elastomers for soft tissue engineering. Chemical Society Reviews, 2018, 47, 4545-4580.	38.1	168
31	Enhanced transfection of a macromolecular lignin-based DNA complex with low cellular toxicity. Bioscience Reports, 2018, 38, .	2.4	8
32	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
33	Lignin and Its Properties. Sustainable Chemistry Series, 2018, , 1-28.	0.1	5
34	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
35	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
36	Electrospinning of poly(glycerol sebacate)-based nanofibers for nerve tissue engineering. Materials Science and Engineering C, 2017, 70, 1089-1094.	7.3	171

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37	Bioimaging and biodetection assisted with TTA-UC materials. Drug Discovery Today, 2017, 22, 1400-1411.	6.4	45
38	Sustainable and Antioxidant Ligninâ€"Polyester Copolymers and Nanofibers for Potential Healthcare Applications. ACS Sustainable Chemistry and Engineering, 2017, 5, 6016-6025.	6.7	152
39	Longâ€Term Realâ€Time In Vivo Drug Release Monitoring with AIE Thermogelling Polymer. Small, 2017, 13, 1603404.	10.0	140
40	Engineering Porous Waterâ€Responsive Poly(PEG/PCL/PDMS Urethane) Shape Memory Polymers. Macromolecular Materials and Engineering, 2017, 302, 1700174.	3.6	32
41	Electrospun Pectin-Polyhydroxybutyrate Nanofibers for Retinal Tissue Engineering. ACS Omega, 2017, 2, 8959-8968.	3.5	54
42	Biodegradable electronics: cornerstone for sustainable electronics and transient applications. Journal of Materials Chemistry C, 2016, 4, 5531-5558.	5.5	184
43	Biocompatible electrically conductive nanofibers from inorganic-organic shape memory polymers. Colloids and Surfaces B: Biointerfaces, 2016, 148, 557-565.	5.0	105
44	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
45	Engineering Poly(lactide)â€"Lignin Nanofibers with Antioxidant Activity for Biomedical Application. ACS Sustainable Chemistry and Engineering, 2016, 4, 5268-5276.	6.7	209
46	Thermogels: In Situ Gelling Biomaterial. ACS Biomaterials Science and Engineering, 2016, 2, 295-316.	5.2	176
47	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
48	Towards lignin-based functional materials in a sustainable world. Green Chemistry, 2016, 18, 1175-1200.	9.0	931
49	An Injectable Double-Network Hydrogel for Cell Encapsulation. Australian Journal of Chemistry, 2016, 69, 388.	0.9	12
50	CHAPTER 10. Thermogelling Polymers: A Cutting Edge Rheology Modifier. RSC Polymer Chemistry Series, 2016, , 178-204.	0.2	0
51	A Triazolylâ€Pyridineâ€Supported Cu^I Dimer: Tunable Luminescence and Fabrication of Composite Fibers. ChemPlusChem, 2015, 80, 1235-1240.	2.8	22
52	Development of Lignin Supramolecular Hydrogels with Mechanically Responsive and Self-Healing Properties. ACS Sustainable Chemistry and Engineering, 2015, 3, 2160-2169.	6.7	162
53	Multi-arm carriers composed of an antioxidant lignin core and poly(glycidyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Td (me Journal of Materials Chemistry B, 2015, 3, 6897-6904.	5.8	74
54	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

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55	Engineering highly stretchable lignin-based electrospun nanofibers for potential biomedical applications. Journal of Materials Chemistry B, 2015, 3, 6194-6204.	5.8	156
56	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
57	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
58	Biodegradable polymers for electrospinning: Towards biomedical applications. Materials Science and Engineering C, 2014, 45, 659-670.	7.3	318
59	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
60	Polyhydroxyalkanoates: Chemical Modifications Toward Biomedical Applications. ACS Sustainable Chemistry and Engineering, 2014, 2, 106-119.	6.7	120
61	Human cardiomyocyte interaction with electrospun fibrinogen/gelatin nanofibers for myocardial regeneration. Journal of Biomaterials Science, Polymer Edition, 2013, 24, 1660-1675.	3.5	44
62	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
63	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
64	Tissue engineered plant extracts as nanofibrous wound dressing. Biomaterials, 2013, 34, 724-734.	11.4	216
65	Electrospun synthetic and natural nanofibers for regenerative medicine and stem cells. Biotechnology Journal, 2013, 8, 59-72.	3.5	91
66	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
67	Biocompatibility evaluation of electrically conductive nanofibrous scaffolds for cardiac tissue engineering. Journal of Materials Chemistry B, 2013, 1, 2305.	5.8	77
68	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
69	Mechanical properties and<i>in vitro</i>behavior of nanofiberâ€“hydrogel composites for tissue engineering applications. Nanotechnology, 2012, 23, 095705.	2.6	163
70	Electrospun composite scaffolds containing poly(octanediolâ€‹<i>co</i>â€‹citrate) for cardiac tissue engineering. Biopolymers, 2012, 97, 529-538.	2.4	62
71	Emulsion electrospun vascular endothelial growth factor encapsulated poly(l-lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 T Materials Science, 2012, 47, 3272-3281.	3.7	108
72	Electrospun photosensitive nanofibers: potential for photocurrent therapy in skin regeneration. Photochemical and Photobiological Sciences, 2012, 12, 124-134.	2.9	24

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73	Electrospun biocomposite nanofibrous patch for cardiac tissue engineering. Biomedical Materials (Bristol), 2011, 6, 055001.	3.3	115
74	Polypyrroleâ€contained electrospun conductive nanofibrous membranes for cardiac tissue engineering. Journal of Biomedical Materials Research - Part A, 2011, 99A, 376-385.	4.0	208
75	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
76	Biomimetic material strategies for cardiac tissue engineering. Materials Science and Engineering C, 2011, 31, 503-513.	7.3	72
77	Stem Cells and Nanostructures for Advanced Tissue Regeneration. Advances in Polymer Science, 2011, , 21-62.	0.8	16
78	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
79	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