Yanzhong Zhang

List of Publications by Year
in descending order

93 papers	18,304 citations	38660 50 h-index	38300 95 g-index
100 all docs	100 docs citations	100 times ranked	18972 citing authors

#	Article	IF	Citations
1	A review on polymer nanofibers by electrospinning and their applications in nanocomposites. Composites Science and Technology, 2003, 63, 2223-2253.	3.8	6,630
2	Electrospinning of gelatin fibers and gelatin/PCL composite fibrous scaffolds. Journal of Biomedical Materials Research Part B, 2005, 72B, 156-165.	3.0	924
3	Evaluation of electrospun PCL/gelatin nanofibrous scaffold for wound healing and layered dermal reconstitutionâ˜†. Acta Biomaterialia, 2007, 3, 321-330.	4.1	784
4	Electrospun biomimetic nanocomposite nanofibers of hydroxyapatite/chitosan for bone tissue engineering. Biomaterials, 2008, 29, 4314-4322.	5.7	637
5	Electrospinning and mechanical characterization of gelatin nanofibers. Polymer, 2004, 45, 5361-5368.	1.8	629
6	Crosslinking of the electrospun gelatin nanofibers. Polymer, 2006, 47, 2911-2917.	1.8	571
7	Recent development of polymer nanofibers for biomedical and biotechnological applications. Journal of Materials Science: Materials in Medicine, 2005, 16, 933-946.	1.7	561
8	Tissue scaffolds for skin wound healing and dermal reconstruction. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2010, 2, 510-525.	3.3	512
9	Coaxial Electrospinning of (Fluorescein Isothiocyanate-Conjugated Bovine Serum) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td 2006, 7, 1049-1057.	2.6	459
10	Characterization of the Surface Biocompatibility of the Electrospun PCL-Collagen Nanofibers Using Fibroblasts. Biomacromolecules, 2005, 6, 2583-2589.	2.6	455
11	Preparation of Coreâ^'Shell Structured PCL-r-Gelatin Bi-Component Nanofibers by Coaxial Electrospinning. Chemistry of Materials, 2004, 16, 3406-3409.	3.2	359
12	Encapsulating drugs in biodegradable ultrafine fibers through co-axial electrospinning. Journal of Biomedical Materials Research - Part A, 2006, 77A, 169-179.	2.1	314
13	The promotion of bone regeneration by nanofibrous hydroxyapatite/chitosan scaffolds by effects on integrin-BMP/Smad signaling pathway in BMSCs. Biomaterials, 2013, 34, 4404-4417.	5.7	290
14	Flower-like PEGylated MoS2 nanoflakes for near-infrared photothermal cancer therapy. Scientific Reports, 2015, 5, 17422.	1.6	219
15	Electrospun Biomimetic Fibrous Scaffold from Shape Memory Polymer of PDLLA-<i>co</i>-TMC for Bone Tissue Engineering. ACS Applied Materials & Interfaces, 2014, 6, 2611-2621.	4.0	212
16	In Vitro Culture of Human Dermal Fibroblasts on Electrospun Polycaprolactone Collagen Nanofibrous Membrane. Artificial Organs, 2006, 30, 440-446.	1.0	197
17	Three-dimensional porous scaffold by self-assembly of reduced graphene oxide and nano-hydroxyapatite composites for bone tissue engineering. Carbon, 2017, 116, 325-337.	5.4	191
18	Fabrication of Large Pores in Electrospun Nanofibrous Scaffolds for Cellular Infiltration: A Review. Tissue Engineering - Part B: Reviews, 2012, 18, 77-87.	2.5	190

#	Article	IF	Citations
19	Fabrication of porous electrospun nanofibres. Nanotechnology, 2006, 17, 901-908.	1.3	177
20	Well-aligned chitosan-based ultrafine fibers committed teno-lineage differentiation of human induced pluripotent stem cells for Achilles tendon regeneration. Biomaterials, 2015, 53, 716-730.	5.7	154
21	Engineering ear-shaped cartilage using electrospun fibrous membranes of gelatin/polycaprolactone. Biomaterials, 2013, 34, 2624-2631.	5.7	144
22	Improved cellular response on multiwalled carbon nanotube-incorporated electrospun polyvinyl alcohol/chitosan nanofibrous scaffolds. Colloids and Surfaces B: Biointerfaces, 2011, 84, 528-535.	2.5	138
23	Biomimetic hydroxyapatite-containing composite nanofibrous substrates for bone tissue engineering. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2065-2081.	1.6	136
24	Fabrication of modified and functionalized polycaprolactone nanofibre scaffolds for vascular tissue engineering. Nanotechnology, 2005, 16, 2138-2142.	1.3	135
25	Au/Polypyrrole@Fe₃O₄Nanocomposites for MR/CT Dual-Modal Imaging Guided-Photothermal Therapy: An<i>in Vitro</i>Study. ACS Applied Materials & Interfaces, 2015, 7, 4354-4367.	4.0	128
26	Osteogenic differentiation and bone regeneration of iPSC-MSCs supported by a biomimetic nanofibrous scaffold. Acta Biomaterialia, 2016, 29, 365-379.	4.1	126
27	Chitosan Nanofibers from an Easily Electrospinnable UHMWPEO-Doped Chitosan Solution System. Biomacromolecules, 2008, 9, 136-141.	2.6	122
28	Polyelectrolyte multilayer functionalized mesoporous silica nanoparticles for pH-responsive drug delivery: layer thickness-dependent release profiles and biocompatibility. Journal of Materials Chemistry B, 2013, 1, 5886.	2.9	122
29	Enhanced Biomineralization in Osteoblasts on a Novel Electrospun Biocomposite Nanofibrous Substrate of Hydroxyapatite/Collagen/Chitosan. Tissue Engineering - Part A, 2010, 16, 1949-1960.	1.6	112
30	Acetic-Acid-Mediated Miscibility toward Electrospinning Homogeneous Composite Nanofibers of GT/PCL. Biomacromolecules, 2012, 13, 3917-3925.	2.6	107
31	One-Pot Synthesis of MoS₂ Nanoflakes with Desirable Degradability for Photothermal Cancer Therapy. ACS Applied Materials & Interfaces, 2017, 9, 17347-17358.	4.0	104
32	Encapsulation of self-assembled FePt magnetic nanoparticles in PCL nanofibers by coaxial electrospinning. Chemical Physics Letters, 2005, 415, 317-322.	1.2	102
33	Multifunctional Redox-Responsive Mesoporous Silica Nanoparticles for Efficient Targeting Drug Delivery and Magnetic Resonance Imaging. ACS Applied Materials & Interfaces, 2016, 8, 33829-33841.	4.0	102
34	Engineering aligned electrospun PLLA microfibers with nano-porous surface nanotopography for modulating the responses of vascular smooth muscle cells. Journal of Materials Chemistry B, 2015, 3, 4439-4450.	2.9	99
35	Nanotechnology for Nanomedicine and Delivery of Drugs. Current Pharmaceutical Design, 2008, 14, 2184-2200.	0.9	92
36	Drug Delivery to the Brain â€“ Realization by Novel Drug Carriers. Journal of Nanoscience and Nanotechnology, 2004, 4, 471-483.	0.9	91

#	Article	IF	Citations
37	Electrospun biomimetic scaffold of hydroxyapatite/chitosan supports enhanced osteogenic differentiation of mMSCs. Nanotechnology, 2012, 23, 485102.	1.3	86
38	Marriage of Albuminâ€"Gadolinium Complexes and MoS₂ Nanoflakes as Cancer Theranostics for Dual-Modality Magnetic Resonance/Photoacoustic Imaging and Photothermal Therapy. ACS Applied Materials & Interfaces, 2017, 9, 17786-17798.	4.0	81
39	Genipin-crosslinked electrospun chitosan nanofibers: Determination of crosslinking conditions and evaluation of cytocompatibility. Carbohydrate Polymers, 2015, 130, 166-174.	5.1	80
40	An epigenetic bioactive composite scaffold with well-aligned nanofibers for functional tendon tissue engineering. Acta Biomaterialia, 2018, 66, 141-156.	4.1	78
41	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
42	Nanofibrous patterns by direct electrospinning of nanofibers onto topographically structured non-conductive substrates. Nanoscale, 2013, 5, 4993.	2.8	74
43	Stiffness of Aligned Fibers Regulates the Phenotypic Expression of Vascular Smooth Muscle Cells. ACS Applied Materials & Interfaces, 2019, 11, 6867-6880.	4.0	72
44	Ultrasound-Modulated Shape Memory and Payload Release Effects in a Biodegradable Cylindrical Rod Made of Chitosan-Functionalized PLGA Microspheres. Biomacromolecules, 2013, 14, 1971-1979.	2.6	62
45	Highly aligned coreâ€"shell structured nanofibers for promoting phenotypic expression of vSMCs for vascular regeneration. Nanoscale, 2016, 8, 16307-16322.	2.8	62
46	Double-layered composite nanofibers and their mechanical performance. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2852-2861.	2.4	56
47	Facile synthesis of novel albumin-functionalized flower-like MoS₂ nanoparticles for in vitro chemo-photothermal synergistic therapy. RSC Advances, 2016, 6, 13040-13049.	1.7	56
48	Effect of inhomogeneity of the electrospun fibrous scaffolds of gelatin/polycaprolactone hybrid on cell proliferation. Journal of Biomedical Materials Research - Part A, 2015, 103, 431-438.	2.1	53
49	Electrospun acid-neutralizing fibers for the amelioration of inflammatory response. Acta Biomaterialia, 2019, 97, 200-215.	4.1	53
50	Zirconia toughened alumina ceramic foams for potential bone graft applications: fabrication, bioactivation, and cellular responses. Journal of Materials Science: Materials in Medicine, 2008, 19, 2743-2749.	1.7	52
51	Regulating drug release from pH- and temperature-responsive electrospun CTS-g-PNIPAAm/poly(ethylene oxide) hydrogel nanofibers. Biomedical Materials (Bristol), 2014, 9, 055001.	1.7	52
52	HAp incorporated ultrafine polymeric fibers with shape memory effect for potential use in bone screw hole healing. Journal of Materials Chemistry B, 2016, 4, 5308-5320.	2.9	52
53	Fabrication of high performance silk fibroin fibers <i>via</i> stable jet electrospinning for potential use in anisotropic tissue regeneration. Journal of Materials Chemistry B, 2018, 6, 3934-3945.	2.9	52
54	Stable jet electrospinning for easy fabrication of aligned ultrafine fibers. Journal of Materials Chemistry, 2012, 22, 19634.	6.7	51

#	Article	IF	Citations
55	Implication of stable jet length in electrospinning for collecting well-aligned ultrafine PLLA fibers. Polymer, 2013, 54, 6867-6876.	1.8	51
56	Transparent PMMA-based nanocomposite using electrospun graphene-incorporated PA-6 nanofibers as the reinforcement. Composites Science and Technology, 2013, 89, 134-141.	3.8	50
57	Effect of Molecular Orientation on Mechanical Property of Single Electrospun Fiber of Poly[(<i>R</i>)-3-hydroxybutyrate-<i>co</i>-(<i>R</i>)-3-hydroxyvalerate]. Journal of Physical Chemistry B, 2009, 113, 13179-13185.	1.2	46
58	A newly identified mechanism involved in regulation of human mesenchymal stem cells by fibrous substrate stiffness. Acta Biomaterialia, 2016, 42, 247-257.	4.1	46
59	Rapid mineralization of porous gelatin scaffolds by electrodeposition for bone tissue engineering. Journal of Materials Chemistry, 2012, 22, 2111-2119.	6.7	44
60	Direct printing of patterned three-dimensional ultrafine fibrous scaffolds by stable jet electrospinning for cellular ingrowth. Biofabrication, 2015, 7, 045004.	3.7	43
61	Fabrication of magnetic composite nanofibers of poly(Îµ-caprolactone) with FePt nanoparticles by coaxial electrospinning. Journal of Magnetism and Magnetic Materials, 2006, 303, e286-e289.	1.0	37
62	Optical and mechanical anisotropies of aligned electrospun nanofibers reinforced transparent PMMA nanocomposites. Composites Part A: Applied Science and Manufacturing, 2016, 90, 380-389.	3.8	37
63	Stiffness of the aligned fibers affects structural and functional integrity of the oriented endothelial cells. Acta Biomaterialia, 2020, 108, 237-249.	4.1	37
64	Alkaliâ€Mediated Miscibility of Gelatin/Polycaprolactone for Electrospinning Homogeneous Composite Nanofibers for Tissue Scaffolding. Macromolecular Bioscience, 2017, 17, 1700268.	2.1	33
65	Polymeric Nanoparticles Induce NLRP3 Inflammasome Activation and Promote Breast Cancer Metastasis. Macromolecular Bioscience, 2017, 17, 1700273.	2.1	32
66	Collagen and chondroitin sulfate functionalized bioinspired fibers for tendon tissue engineering application. International Journal of Biological Macromolecules, 2021, 170, 248-260.	3.6	31
67	Engineering a Highly Biomimetic Chitosan-Based Cartilage Scaffold by Using Short Fibers and a Cartilage-Decellularized Matrix. Biomacromolecules, 2021, 22, 2284-2297.	2.6	30
68	Fabrication of the composite nanofibers of NiO/Î³-Al2O3 for potential application in photocatalysis. Ceramics International, 2016, 42, 17405-17409.	2.3	29
69	One-Pot Synthesis of Silver Nanoparticle Incorporated Mesoporous Silica Granules for Hemorrhage Control and Antibacterial Treatment. ACS Biomaterials Science and Engineering, 2018, 4, 3588-3599.	2.6	29
70	Tendon ECM modified bioactive electrospun fibers promote MSC tenogenic differentiation and tendon regeneration. Applied Materials Today, 2020, 18, 100495.	2.3	26
71	Rapid mineralization of hierarchical poly(l-lactic acid)/poly(Îµ-caprolactone) nanofibrous scaffolds by electrodeposition for bone regeneration . International Journal of Nanomedicine, 2019, Volume 14, 3929-3941.	3.3	21
72	Modeling of the progressive failure behavior of multilayer knitted fabric-reinforced composite laminates. Composites Science and Technology, 2001, 61, 2033-2046.	3.8	19

#	Article	IF	Citations
73	Asiaticoside loading into polylacticâ€coâ€glycolic acid electrospun nanofibers attenuates host inflammatory response and promotes M2 macrophage polarization. Journal of Biomedical Materials Research - Part A, 2020, 108, 69-80.	2.1	19
74	Shape Memory and Osteogenesis Capabilities of the Electrospun Poly(3-Hydroxybutyrate-co-3-Hydroxyvalerate) Modified Poly(l-Lactide) Fibrous Mats. Tissue Engineering - Part A, 2021, 27, 142-152.	1.6	19
75	Preclinical Evaluation of Tegadermâ„¢ Supported Nanofibrous Wound Matrix Dressing on Porcine Wound Healing Model. Advances in Wound Care, 2015, 4, 110-118.	2.6	17
76	Understanding the cellular responses based on low-density electrospun fiber networks. Materials Science and Engineering C, 2021, 119, 111470.	3.8	17
77	Lysine-doped polydopamine coating enhances antithrombogenicity and endothelialization of an electrospun aligned fibrous vascular graft. Applied Materials Today, 2021, 25, 101198.	2.3	16
78	Synthesis and characterization of nanofibrous hollow microspheres with tunable size and morphology via thermally induced phase separation technique. RSC Advances, 2015, 5, 61580-61585.	1.7	11
79	Growth factors have a protective effect on neomycinâ€induced hair cell loss. Cell Biology International, 2015, 39, 65-73.	1.4	11
80	Development of a novel elastic and macroporous chitosan hydrogel for wound healing application. Journal of Controlled Release, 2015, 213, e43-e44.	4.8	9
81	Tensile Behaviour of Multilayer Knitted Fabric Composites with Different Stacking Configuration. Applied Composite Materials, 2001, 8, 279-295.	1.3	7
82	Comparing the cultivated cochlear cells derived from neonatal and adult mouse. Journal of Translational Medicine, 2014, 12, 150.	1.8	7
83	Electrospun nanofibers of hydroxyapatite/collagen/chitosan promote osteogenic differentiation of the induced pluripotent stem cell-derived mesenchymal stem cells. Journal of Controlled Release, 2015, 213, e53.	4.8	6
84	The development of biocomposite nanofibers for tissue scaffolding applications. Jom, 2008, 60, 45-48.	0.9	5
85	Effects of GO and rGO incorporated nanofibrous scaffolds on the proliferation of Schwann cells. Biomedical Physics and Engineering Express, 2019, 5, 025002.	0.6	5
86	Comparison of sphere-forming capabilities of the cochlear stem cells derived from apical, middle and basal turns of murine organ of Corti. Neuroscience Letters, 2014, 579, 1-6.	1.0	4
87	<scp>POSS</scp>â€based fluorinated azobenzeneâ€containing polymers: Photoâ€responsive behavior and evaluation of water repellency. Journal of Applied Polymer Science, 2016, 133, .	1.3	4
88	Engineering a Mechanoactive Fibrous Substrate with Enhanced Efficiency in Regulating Stem Cell Tenodifferentiation. ACS Applied Materials & Interfaces, 2022, 14, 23219-23231.	4.0	4
89	Prediction of Tensile Strength of Multilayer Knitted-Fabric-Reinforced Laminated Composites. Journal of Thermoplastic Composite Materials, 2001, 14, 70-83.	2.6	3
90	Aligned Ultrafine Chitosan Fibers from Stable Jet Electrospinning. Acta Polymerica Sinica, 2014, 014, 131-140.	0.0	3

#	Article	IF	Citations
91	Fracture Characteristics of Knitted Fabric Composites under Tensile Load. Advanced Composites Letters, 2000, 9, 096369350000900.	1.3	2
92	Electrospinning Nanocomposite Nanofibers of Hydroxyapatite/Chitosan. Advanced Materials Research, 2008, 47-50, 1363-1366.	0.3	0
93	Small molecule purmorphamine enhanced the osteoinductive capacity of electrospun HAp/SF fibers. Journal of Controlled Release, 2017, 259, e12.	4.8	0