Jingwei Xie

List of Publications by Year in Descending Order

96 papers	7,174 citations	44 h-index	84 g-index
104 ext. papers	8,275 ext. citations	9 avg, IF	6.33 L-index

#	Paper	IF	Citations
96	Electrospun nanofiber matrix for tissue repair and regeneration **2022**, 175-191		
95	Bioinspired elastomer composites with programmed mechanical and electrical anisotropies.. *Nature Communications*, **2022**, 13, 524	17.4	5
94	Codelivery of 1,25-Dihydroxyvitamin D and CYP24A1 Inhibitor VID400 by Nanofiber Dressings Promotes Endogenous Antimicrobial Peptide LL-37 Induction.. *Molecular Pharmaceutics*, **2022**, 19, 974-984	5.6	1
93	3D bioprinting of multilayered scaffolds with spatially differentiated ADMSCs for rotator cuff tendon-to-bone interface regeneration. *Applied Materials Today*, **2022**, 27, 101510	6.6	2
92	Electrostatic flocking of salt-treated microfibers and nanofiber yarns for regenerative engineering.. *Materials Today Bio*, **2021**, 12, 100166	9.9	1
91	Minimally Invasive Delivery of 3D Shape Recoverable Constructs with Ordered Structures for Tissue Repair. *ACS Biomaterials Science and Engineering*, **2021**, 7, 2204-2211	5.5	7
90	Simultaneous Delivery of Multiple Antimicrobial Agents by Biphasic Scaffolds for Effective Treatment of Wound Biofilms. *Advanced Healthcare Materials*, **2021**, 10, e2100135	10.1	5
89	Short and Robust Anti-Infective Lipopeptides Engineered Based on the Minimal Antimicrobial Peptide KR12 of Human LL-37. *ACS Infectious Diseases*, **2021**, 7, 1795-1808	5.5	9
88	Freeze-Casting with 3D-Printed Templates Creates Anisotropic Microchannels and Patterned Macrochannels within Biomimetic Nanofiber Aerogels for Rapid Cellular Infiltration. *Advanced Healthcare Materials*, **2021**, 10, e2100238	10.1	11
87	Electrostatic Flocking of Insulative and Biodegradable Polymer Microfibers for Biomedical Applications. *Advanced Healthcare Materials*, **2021**, 10, e2100766	10.1	5
86	Ultra-absorptive Nanofiber Swabs for Improved Collection and Test Sensitivity of SARS-CoV-2 and other Biological Specimens. *Nano Letters*, **2021**, 21, 1508-1516	11.5	9
85	Tannic acid-inspired, self-healing, and dual stimuli responsive dynamic hydrogel with potent antibacterial and anti-oxidative properties. *Journal of Materials Chemistry B*, **2021**, 9, 7182-7195	7.3	21
84	Large-scale synthesis of compressible and re-expandable three-dimensional nanofiber matrices. *Nano Select*, **2021**, 2, 1566-1579	3.1	4
83	Biomaterials with structural hierarchy and controlled 3D nanotopography guide endogenous bone regeneration. *Science Advances*, **2021**, 7,	14.3	12
82	Understanding and utilizing textile-based electrostatic flocking for biomedical applications.. *Applied Physics Reviews*, **2021**, 8, 041326	17.3	1
81	Fast transformation of 2D nanofiber membranes into pre-molded 3D scaffolds with biomimetic and oriented porous structure for biomedical applications. *Applied Physics Reviews*, **2020**, 7, 021406	17.3	16
80	Nanofiber Microspheres: Engineering Biomimetic Nanofiber Microspheres with Tailored Size, Predesigned Structure, and Desired Composition via Gas Bubble-Mediated Coaxial Electrospray (Small 19/2020). *Small*, **2020**, 16, 2070104	11	2

79	New forms of electrospun nanofiber materials for biomedical applications. *Journal of Materials Chemistry B*, **2020**, 8, 3733-3746	7.3	54
78	Complexation-induced resolution enhancement of 3D-printed hydrogel constructs. *Nature Communications*, **2020**, 11, 1267	17.4	83
77	Engineering Biomimetic Nanofiber Microspheres with Tailored Size, Predesigned Structure, and Desired Composition via Gas Bubble-Mediated Coaxial Electrospray. *Small*, **2020**, 16, e1907393	11	14
76	Laser-Induced Graphene for Electrothermally Controlled, Mechanically Guided, 3D Assembly and Human-Soft Actuators Interaction. *Advanced Materials*, **2020**, 32, e1908475	24	57
75	Dual Delivery of Alendronate and E7-BMP-2 Peptide via Calcium Chelation to Mineralized Nanofiber Fragments for Alveolar Bone Regeneration. *ACS Biomaterials Science and Engineering*, **2020**, 6, 2368-2375	5.5	10
74	Mesenchymal stem cell-laden, personalized 3D scaffolds with controlled structure and fiber alignment promote diabetic wound healing. *Acta Biomaterialia*, **2020**, 108, 153-167	10.8	33
73	Expanding sacrificially printed microfluidic channel-embedded paper devices for construction of volumetric tissue models in vitro. *Biofabrication*, **2020**, 12, 045027	10.5	10
72	A mouse model for vitamin D-induced human cathelicidin antimicrobial peptide gene expression. *Journal of Steroid Biochemistry and Molecular Biology*, **2020**, 198, 105552	5.1	6
71	Periosteum Mimetic Coating on Structural Bone Allografts Electrospray Deposition Enhances Repair and Reconstruction of Segmental Defects. *ACS Biomaterials Science and Engineering*, **2020**, 6, 6241-6252	5.5	4
70	Dissolvable Microneedles Coupled with Nanofiber Dressings Eradicate Biofilms Effectively Delivering a Database-Designed Antimicrobial Peptide. *ACS Nano*, **2020**, 14, 11775-11786	16.7	53
69	Converting 2D Nanofiber Membranes to 3D Hierarchical Assemblies with Structural and Compositional Gradients Regulates Cell Behavior. *Advanced Materials*, **2020**, 32, e2003754	24	24
68	3D Hybrid Nanofiber Aerogels Combining with Nanoparticles Made of a Biocleavable and Targeting Polycation and MiR-26a for Bone Repair. *Advanced Functional Materials*, **2020**, 30, 2005531	15.6	13
67	Bioprinting: 3D Bioprinting: from Benches to Translational Applications (Small 23/2019). *Small*, **2019**, 15, 1970126	11	50
66	3D Bioprinting: from Benches to Translational Applications. *Small*, **2019**, 15, e1805510	11	137
65	Nanofiber Dressings Topically Delivering Molecularly Engineered Human Cathelicidin Peptides for the Treatment of Biofilms in Chronic Wounds. *Molecular Pharmaceutics*, **2019**, 16, 2011-2020	5.6	23
64	Expansion of Two-dimension Electrospun Nanofiber Mats into Three-dimension Scaffolds. *Journal of Visualized Experiments*, **2019**,	1.6	2
63	Tethering peptides onto biomimetic and injectable nanofiber microspheres to direct cellular response. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2019**, 22, 102081	6	15
62	Eluted 25-hydroxyvitamin D from radially aligned nanofiber scaffolds enhances cathelicidin production while reducing inflammatory response in human immune system-engrafted mice. *Acta Biomaterialia*, **2019**, 97, 187-199	10.8	10

61	Decorating 3D Printed Scaffolds with Electrospun Nanofiber Segments for Tissue Engineering. *Advanced Biology*, **2019**, 3, e1900137	3.5	14
60	Three-Dimensional Objects Consisting of Hierarchically Assembled Nanofibers with Controlled Alignments for Regenerative Medicine. *Nano Letters*, **2019**, 19, 2059-2065	11.5	36
59	Mineralized nanofiber segments coupled with calcium-binding BMP-2 peptides for alveolar bone regeneration. *Acta Biomaterialia*, **2019**, 85, 282-293	10.8	63
58	Novel 3D Hybrid Nanofiber Aerogels Coupled with BMP-2 Peptides for Cranial Bone Regeneration. *Advanced Healthcare Materials*, **2018**, 7, e1701415	10.1	60
57	Electrospraying an enabling technology for pharmaceutical and biomedical applications: A review. *Journal of Aerosol Science*, **2018**, 125, 164-181	4.3	79
56	CO-expanded nanofiber scaffolds maintain activity of encapsulated bioactive materials and promote cellular infiltration and positive host response. *Acta Biomaterialia*, **2018**, 68, 237-248	10.8	47
55	Electrospinning: An enabling nanotechnology platform for drug delivery and regenerative medicine. *Advanced Drug Delivery Reviews*, **2018**, 132, 188-213	18.5	197
54	Electrospraying Electrospun Nanofiber Segments into Injectable Microspheres for Potential Cell Delivery. *ACS Applied Materials & Interfaces*, **2018**, 10, 25069-25079	9.5	38
53	Electrical Field Guided Electrospray Deposition for Production of Gradient Particle Patterns. *ACS Applied Materials & Interfaces*, **2018**, 10, 18499-18506	9.5	17
52	1,25-dihydroxyvitamin D-eluting nanofibrous dressings induce endogenous antimicrobial peptide expression. *Nanomedicine*, **2018**, 13, 1417-1432	5.6	13
51	Bone Regeneration: Novel 3D Hybrid Nanofiber Aerogels Coupled with BMP-2 Peptides for Cranial Bone Regeneration (Adv. Healthcare Mater. 10/2018). *Advanced Healthcare Materials*, **2018**, 7, 1870042	10.1	1
50	Fabrication of injectable and superelastic nanofiber rectangle matrices ("peanuts") and their potential applications in hemostasis. *Biomaterials*, **2018**, 179, 46-59	15.6	55
49	Emerging Roles of Electrospun Nanofibers in Cancer Research. *Advanced Healthcare Materials*, **2018**, 7, e1701024	10.1	75
48	Highly controlled coating of strontium-doped hydroxyapatite on electrospun poly(e-caprolactone) fibers. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2017**, 105, 753-763	3.5	8
47	Twisting electrospun nanofiber fine strips into functional sutures for sustained co-delivery of gentamicin and silver. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2017**, 13, 1435-1445	6	39
46	Thermally Triggered Mechanically Destructive Electronics Based On Electrospun Poly(ε-caprolactone) Nanofibrous Polymer Films. *Scientific Reports*, **2017**, 7, 947	4.9	21
45	Recent advances in electrospun nanofibers for wound healing. *Nanomedicine*, **2017**, 12, 1335-1352	5.6	197
44	Nanofiber-based sutures induce endogenous antimicrobial peptide. *Nanomedicine*, **2017**, 12, 2597-2609	5.6	12

43	Electrospun Nanofibers: New Concepts, Materials, and Applications. *Accounts of Chemical Research*, **2017**, 50, 1976-1987	24.3	577
42	Three-dimensional nanofiber scaffolds with arrayed holes for engineering skin tissue constructs. *MRS Communications*, **2017**, 7, 361-366	2.7	17
41	Binary Doping of Strontium and Copper Enhancing Osteogenesis and Angiogenesis of Bioactive Glass Nanofibers while Suppressing Osteoclast Activity. *ACS Applied Materials & Interfaces*, **2017**, 9, 24484-24496	9.5	86
40	Cell Scaffolds: Expanded 3D Nanofiber Scaffolds: Cell Penetration, Neovascularization, and Host Response (Adv. Healthcare Mater. 23/2016). *Advanced Healthcare Materials*, **2016**, 5, 2962-2962	10.1	
39	Expanded 3D Nanofiber Scaffolds: Cell Penetration, Neovascularization, and Host Response. *Advanced Healthcare Materials*, **2016**, 5, 2993-3003	10.1	85
38	Local Sustained Delivery of 25-Hydroxyvitamin D3 for Production of Antimicrobial Peptides. *Pharmaceutical Research*, **2015**, 32, 2851-62	4.5	18
37	Expanding Two-Dimensional Electrospun Nanofiber Membranes in the Third Dimension By a Modified Gas-Foaming Technique. *ACS Biomaterials Science and Engineering*, **2015**, 1, 991-1001	5.5	83
36	Electrohydrodynamic atomization: A two-decade effort to produce and process micro-/nanoparticulate materials. *Chemical Engineering Science*, **2015**, 125, 32-57	4.4	181
35	Electrospun nanofiber scaffolds with gradations in fiber organization. *Journal of Visualized Experiments*, **2015**,	1.6	2
34	Smart electrospun nanofibers for controlled drug release: recent advances and new perspectives. *Current Pharmaceutical Design*, **2015**, 21, 1944-59	3.3	118
33	Nerve guidance conduits based on double-layered scaffolds of electrospun nanofibers for repairing the peripheral nervous system. *ACS Applied Materials & Interfaces*, **2014**, 6, 9472-80	9.5	113
32	Neurite outgrowth on electrospun nanofibers with uniaxial alignment: the effects of fiber density, surface coating, and supporting substrate. *ACS Nano*, **2014**, 8, 1878-85	16.7	140
31	Nanofiber scaffolds with gradients in mineral content for spatial control of osteogenesis. *ACS Applied Materials & Interfaces*, **2014**, 6, 2842-9	9.5	115
30	Sandwich-type fiber scaffolds with square arrayed microwells and nanostructured cues as microskin grafts for skin regeneration. *Biomaterials*, **2014**, 35, 630-41	15.6	41
29	Controlled biomineralization of electrospun poly(Ecaprolactone) fibers to enhance their mechanical properties. *Acta Biomaterialia*, **2013**, 9, 5698-707	10.8	82
28	Rational design of nanofiber scaffolds for orthopedic tissue repair and regeneration. *Nanomedicine*, **2013**, 8, 1459-81	5.6	53
27	Fabrication of nanofiber scaffolds with gradations in fiber organization and their potential applications. *Macromolecular Bioscience*, **2012**, 12, 1336-41	5.5	27
26	Fabrication of novel 3D nanofiber scaffolds with anisotropic property and regular pores and their potential applications. *Advanced Healthcare Materials*, **2012**, 1, 674-8	10.1	24

25	Submicron bioactive glass tubes for bone tissue engineering. *Acta Biomaterialia*, **2012**, 8, 811-9	10.8	53
24	Proliferation of genetically modified human cells on electrospun nanofiber scaffolds. *Molecular Therapy - Nucleic Acids*, **2012**, 1, e59	10.7	22
23	Nanofiber membranes with controllable microwells and structural cues and their use in forming cell microarrays and neuronal networks. *Small*, **2011**, 7, 293-7	11	31
22	Enhancing the stiffness of electrospun nanofiber scaffolds with a controlled surface coating and mineralization. *Langmuir*, **2011**, 27, 9088-93	4	97
21	Electrospun nanofibers for neural tissue engineering. *Nanoscale*, **2010**, 2, 35-44	7.7	281
20	Radially aligned, electrospun nanofibers as dural substitutes for wound closure and tissue regeneration applications. *ACS Nano*, **2010**, 4, 5027-36	16.7	224
19	Nanoparticulate formulations for paclitaxel delivery across MDCK cell monolayer. *Current Pharmaceutical Design*, **2010**, 16, 2331-40	3.3	11
18	"Aligned-to-random" nanofiber scaffolds for mimicking the structure of the tendon-to-bone insertion site. *Nanoscale*, **2010**, 2, 923-6	7.7	173
17	Electric field controlled electrospray deposition for precise particle pattern and cell pattern formation. *AICHE Journal*, **2010**, 56, 2607-2621	3.6	20
16	Conductive Core-Sheath Nanofibers and Their Potential Application in Neural Tissue Engineering. *Advanced Functional Materials*, **2009**, 19, 2312-2318	15.6	286
15	The differentiation of embryonic stem cells seeded on electrospun nanofibers into neural lineages. *Biomaterials*, **2009**, 30, 354-62	15.6	378
14	Neurite outgrowth on nanofiber scaffolds with different orders, structures, and surface properties. *ACS Nano*, **2009**, 3, 1151-9	16.7	211
13	Nanofiber scaffolds with gradations in mineral content for mimicking the tendon-to-bone insertion site. *Nano Letters*, **2009**, 9, 2763-8	11.5	274
12	Coating electrospun poly(epsilon-caprolactone) fibers with gelatin and calcium phosphate and their use as biomimetic scaffolds for bone tissue engineering. *Langmuir*, **2008**, 24, 14145-50	4	207
11	Biodegradable films developed by electrospray deposition for sustained drug delivery. *Journal of Pharmaceutical Sciences*, **2008**, 97, 3109-22	3.9	29
10	Putting Electrospun Nanofibers to Work for Biomedical Research. *Macromolecular Rapid Communications*, **2008**, 29, 1775-1792	4.8	286
9	Biodegradable microparticles and fiber fabrics for sustained delivery of cisplatin to treat C6 glioma in vitro. *Journal of Biomedical Materials Research - Part A*, **2008**, 85, 897-908	5.4	59
8	Encapsulation of protein drugs in biodegradable microparticles by co-axial electrospray. *Journal of Colloid and Interface Science*, **2008**, 317, 469-76	9.3	141

7	Encapsulation of proteins in biodegradable polymeric microparticles using electrospray in the Taylor cone-jet mode. *Biotechnology and Bioengineering*, **2007**, 97, 1278-90	4.9	121
6	Electrospray in the dripping mode for cell microencapsulation. *Journal of Colloid and Interface Science*, **2007**, 312, 247-55	9.3	108
5	Microparticles developed by electrohydrodynamic atomization for the local delivery of anticancer drug to treat C6 glioma in vitro. *Biomaterials*, **2006**, 27, 3321-32	15.6	167
4	Electrohydrodynamic atomization for biodegradable polymeric particle production. *Journal of Colloid and Interface Science*, **2006**, 302, 103-12	9.3	198
3	Electrospun micro- and nanofibers for sustained delivery of paclitaxel to treat C6 glioma in vitro. *Pharmaceutical Research*, **2006**, 23, 1817-26	4.5	272
2	Self-assembled biodegradable nanoparticles developed by direct dialysis for the delivery of paclitaxel. *Pharmaceutical Research*, **2005**, 22, 2079-90	4.5	76
1	Advances in Modeling Alzheimer's Disease In Vitro. *Advanced NanoBiomed Research*,2100097	0	