

# Wei Wang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

74  
papers

8,148  
citations

35  
h-index

76  
g-index

76  
ext. papers

9,186  
ext. citations

9  
avg, IF

5.78  
L-index

#	Paper	IF	Citations
74	An MMP-degradable and conductive hydrogel to stabilize HIF-1 $\alpha$ for recovering cardiac functions.. <i>Theranostics</i> , <b>2022</b> , 12, 127-142	12.1	3
73	A removable, antibacterial and strong adhesive based on hyperbranched catechol polymers. <i>Materials Letters</i> , <b>2022</b> , 316, 132019	3.3	0
72	A change-prone zwitterionic hyperbranched terpolymer-based diabetic wound dressing. <i>Applied Materials Today</i> , <b>2022</b> , 27, 101477	6.6	1
71	An Extensively Adhesive Patch with Multiple Physical Interactions and Chemical Crosslinking as a Wound Dressing and Strain Sensor. <i>ACS Applied Polymer Materials</i> , <b>2022</b> , 4, 3926-3941	4.3	1
70	Restoring Cardiac Functions after Myocardial Infarction-Ischemia/Reperfusion via an Exosome Anchoring Conductive Hydrogel. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 56892-56908	9.5	5
69	MMP-2 Responsive Unidirectional Hydrogel-Electrospun Patch Loading TGF- $\beta$ 1 siRNA Polyplexes for Peritendinous Anti-Adhesion. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008364	15.6	12
68	An injectable hydrogel to reverse the adverse microenvironment of diabetic infarcted heart. <i>Materialia</i> , <b>2021</b> , 15, 100957	3.2	4
67	An injectable hydrogel based on phenylboronic acid hyperbranched macromer encapsulating gold nanorods and Astragaloside IV nanodrug for myocardial infarction. <i>Chemical Engineering Journal</i> , <b>2021</b> , 413, 127423	14.7	12
66	Advances in Nanomaterials for Injured Heart Repair. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2021</b> , 9, 686684	5.8	
65	Polyethylenimine-based nanovector grafted with mannitol moieties to achieve effective gene delivery and transfection. <i>Nanotechnology</i> , <b>2020</b> , 31, 325101	3.4	4
64	Shape memory materials promoting cell adhesion and tissue invasion towards the applications requiring minimally invasive implantation. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2020</b> , 31, 1820-1835 <sup>2</sup>	2.5	
63	Strong and Injectable Hydrogels Based on Multivalent Metal Ion-Peptide Cross-linking. <i>Chemical Research in Chinese Universities</i> , <b>2020</b> , 36, 962-969	2.2	3
62	Particulate-Aggregated Adhesives with Exudate-Sensitive Properties and Sustained Bacteria Disinfection to Facilitate Wound Healing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 31090-31098	9.5	7
61	Wound dressing change facilitated by spraying zinc ions. <i>Materials Horizons</i> , <b>2020</b> , 7, 605-614	14.4	54
60	Injectable Hypoxia-Induced Conductive Hydrogel to Promote Diabetic Wound Healing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 56681-56691	9.5	17
59	Berrero-like nanoparticles knotted injectable hydrogels to initially scavenge ROS and lastingly promote vascularization in infarcted hearts. <i>Science China Technological Sciences</i> , <b>2020</b> , 63, 2435-2448	3.5	4
58	A conductive and biodegradable hydrogel for minimally delivering adipose-derived stem cells. <i>Science China Technological Sciences</i> , <b>2019</b> , 62, 1747-1754	3.5	17

57	Bacteria-Resistant Single Chain Cyclized/Knotted Polymer Coatings. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 10726-10730	3.6	
56	Bacteria-Resistant Single Chain Cyclized/Knotted Polymer Coatings. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 10616-10620	16.4	8
55	Conductive Hydrogen Sulfide-Releasing Hydrogel Encapsulating ADSCs for Myocardial Infarction Treatment. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 14619-14629	9.5	54
54	Rebuilding Postinfarcted Cardiac Functions by Injecting TIIA@PDA Nanoparticle-Cross-linked ROS-Sensitive Hydrogels. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 2880-2890	9.5	59
53	Paintable and Rapidly Bondable Conductive Hydrogels as Therapeutic Cardiac Patches. <i>Advanced Materials</i> , <b>2018</b> , 30, e1704235	24	198
52	An injectable conductive hydrogel encapsulating plasmid DNA-eNOs and ADSCs for treating myocardial infarction. <i>Biomaterials</i> , <b>2018</b> , 160, 69-81	15.6	99
51	Injectable hyperbranched poly(Eamino ester) hydrogels with on-demand degradation profiles to match wound healing processes. <i>Chemical Science</i> , <b>2018</b> , 9, 2179-2187	9.4	87
50	Catechol functionalized hyperbranched polymers as biomedical materials. <i>Progress in Polymer Science</i> , <b>2018</b> , 78, 47-55	29.6	67
49	NIR-Activated Polydopamine-Coated Carrier-Free "Nanobomb" for In Situ On-Demand Drug Release. <i>Advanced Science</i> , <b>2018</b> , 5, 1800155	13.6	85
48	Versatile Hyperbranched Poly(Ehydrazide ester) Macromers as Injectable Antioxidative Hydrogels. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 39494-39504	9.5	20
47	A hybrid injectable hydrogel from hyperbranched PEG macromer as a stem cell delivery and retention platform for diabetic wound healing. <i>Acta Biomaterialia</i> , <b>2018</b> , 75, 63-74	10.8	137
46	A robust, highly stretchable supramolecular polymer conductive hydrogel with self-healability and thermo-processability. <i>Scientific Reports</i> , <b>2017</b> , 7, 41566	4.9	101
45	A Eonjugation-containing soft and conductive injectable polymer hydrogel highly efficiently rebuilds cardiac function after myocardial infarction. <i>Biomaterials</i> , <b>2017</b> , 122, 63-71	15.6	103
44	Bioinspired fabrication of high strength hydrogels from non-covalent interactions. <i>Progress in Polymer Science</i> , <b>2017</b> , 71, 1-25	29.6	269
43	A Mineralized High Strength and Tough Hydrogel for Skull Bone Regeneration. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1604327	15.6	85
42	Hyperbranched PEG-based multi-NHS polymer and bioconjugation with BSA. <i>Polymer Chemistry</i> , <b>2017</b> , 8, 1283-1287	4.9	12
41	Understanding the Capsanthin Tails in Regulating the Hydrophilic-Lipophilic Balance of Carbon Dots for a Rapid Crossing Cell Membrane. <i>Langmuir</i> , <b>2017</b> , 33, 10259-10270	4	19
40	Effects of annulus defects and implantation of poly(lactic-co-glycolic acid) (PLGA)/fibrin gel scaffolds on nerves ingrowth in a rabbit model of annular injury disc degeneration. <i>Journal of Orthopaedic Surgery and Research</i> , <b>2017</b> , 12, 73	2.8	6

39	The transition from linear to highly branched poly( $\epsilon$ -amino ester)s: Branching matters for gene delivery. <i>Science Advances</i> , <b>2016</b> , 2, e1600102	14.3	117
38	Minimal invasive annulotomy for induction of disc degeneration and implantation of poly (lactic-co-glycolic acid) (PLGA) plugs for annular repair in a rabbit model. <i>European Journal of Medical Research</i> , <b>2016</b> , 21, 7	4.8	10
37	Synthesis of ROS scavenging microspheres from a dopamine containing poly( $\epsilon$ -amino ester) for applications for neurodegenerative disorders. <i>Biomaterials Science</i> , <b>2016</b> , 4, 400-4	7.4	23
36	Directed neural stem cell differentiation on polyaniline-coated high strength hydrogels. <i>Materials Today Chemistry</i> , <b>2016</b> , 1-2, 15-22	6.2	32
35	Enhanced Therapeutic siRNA to Tumor Cells by a pH-Sensitive Agmatine-Chitosan Bioconjugate. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 8114-24	9.5	47
34	Tailoring highly branched poly( $\epsilon$ -amino ester)s: a synthetic platform for epidermal gene therapy. <i>Chemical Communications</i> , <b>2015</b> , 51, 8473-6	5.8	52
33	Nano-silver in situ hybridized collagen scaffolds for regeneration of infected full-thickness burn skin. <i>Journal of Materials Chemistry B</i> , <b>2015</b> , 3, 4231-4241	7.3	48
32	A Mechanically Strong, Highly Stable, Thermoplastic, and Self-Healable Supramolecular Polymer Hydrogel. <i>Advanced Materials</i> , <b>2015</b> , 27, 3566-71	24	542
31	Intramolecular Cyclization Dominating Homopolymerization of Multivinyl Monomers toward Single-Chain Cyclized/Knotted Polymeric Nanoparticles. <i>Macromolecules</i> , <b>2015</b> , 48, 6882-6889	5.5	33
30	Highly Branched Poly( $\epsilon$ -Amino Esters): Synthesis and Application in Gene Delivery. <i>Biomacromolecules</i> , <b>2015</b> , 16, 2609-17	6.9	64
29	Electrospun gelatin/polycaprolactone nanofibrous membranes combined with a coculture of bone marrow stromal cells and chondrocytes for cartilage engineering. <i>International Journal of Nanomedicine</i> , <b>2015</b> , 10, 2089-99	7.3	43
28	Biological applications of carbon dots. <i>Science China Chemistry</i> , <b>2014</b> , 57, 522-539	7.9	64
27	Ultrastable core-shell structured nanoparticles directly made from zwitterionic polymers. <i>Chemical Communications</i> , <b>2014</b> , 50, 15030-3	5.8	13
26	UV light-triggered unpacking of DNA to enhance gene transfection of azobenzene-containing polycations. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 3868-3878	7.3	14
25	An anti-inflammatory cell-free collagen/resveratrol scaffold for repairing osteochondral defects in rabbits. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 4983-4995	10.8	77
24	Surface passivated carbon nanodots prepared by microwave assisted pyrolysis: effect of carboxyl group in precursors on fluorescence properties. <i>RSC Advances</i> , <b>2014</b> , 4, 18818-18826	3.7	32
23	Water-soluble and phosphorus-containing carbon dots with strong green fluorescence for cell labeling. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 46-48	7.3	199
22	Introducing primary and tertiary amino groups into a neutral polymer: A simple way to fabricating highly efficient nonviral vectors for gene delivery. <i>Journal of Applied Polymer Science</i> , <b>2014</b> , 131, n/a-n/a	2.9	2

21	Fenton reaction-initiated formation of biocompatible injectable hydrogels for cell encapsulation. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 3932-3939	7.3	16
20	Fabrication of a shape memory hydrogel based on imidazole-zinc ion coordination for potential cell-encapsulating tubular scaffold application. <i>Soft Matter</i> , <b>2013</b> , 9, 132-137	3.6	96
19	A systemic gene vector constructed by zwitterionic polymer modified low molecular weight PEI. <i>Reactive and Functional Polymers</i> , <b>2013</b> , 73, 993-1000	4.6	17
18	One-pot hydrothermal synthesis of highly luminescent nitrogen-doped amphoteric carbon dots for bioimaging from Bombyx mori silk - natural proteins. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 2868-2873	7.3	388
17	Stable gene transfection mediated by polysulfobetaine/PDMAEMA diblock copolymer in salted medium. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2013</b> , 24, 330-43	3.5	6
16	The biocompatibility of fatty acid modified dextran-arginine bioconjugate gene delivery vector. <i>Biomaterials</i> , <b>2012</b> , 33, 604-13	15.6	67
15	Nano-carrier for gene delivery and bioimaging based on carbon dots with PEI-passivation enhanced fluorescence. <i>Biomaterials</i> , <b>2012</b> , 33, 3604-13	15.6	573
14	High-strength hydrogel as a reusable adsorbent of copper ions. <i>Journal of Hazardous Materials</i> , <b>2012</b> , 213-214, 258-64	12.8	28
13	Restoration of rat calvarial defects by poly(lactide-co-glycolide)/hydroxyapatite scaffolds loaded with bone mesenchymal stem cells and DNA complexes. <i>Science Bulletin</i> , <b>2012</b> , 57, 435-444		7
12	ZnO quantum dots-embedded collagen/polyanion composite hydrogels with integrated functions of degradation tracking/inhibition and gene delivery. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 512-519		20
11	PDMAEMA-b-polysulfobetaine brushes-modified $\epsilon$ -polylysine as a serum-resistant vector for highly efficient gene delivery. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 23576		19
10	Zinc ion-triggered two-way macro-/microscopic shape changing and memory effects in high strength hydrogels with pre-programmed unilateral patterned surfaces. <i>Soft Matter</i> , <b>2012</b> , 8, 6846	3.6	44
9	A hybrid scaffold of poly(lactide-co-glycolide) sponge filled with fibrin gel for cartilage tissue engineering. <i>Chinese Journal of Polymer Science (English Edition)</i> , <b>2011</b> , 29, 233-240	3.5	17
8	Cationic polymer brush grafted-nanodiamond via atom transfer radical polymerization for enhanced gene delivery and bioimaging. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 7755		71
7	Proliferation and osteogenesis of immortalized bone marrow-derived mesenchymal stem cells in porous polylactic glycolic acid scaffolds under perfusion culture. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2010</b> , 92, 817-29	5.4	23
6	The restoration of full-thickness cartilage defects with BMSCs and TGF-beta 1 loaded PLGA/fibrin gel constructs. <i>Biomaterials</i> , <b>2010</b> , 31, 8964-73	15.6	127
5	Amphoteric hyaluronic acid derivative for targeting gene delivery. <i>Biomaterials</i> , <b>2010</b> , 31, 9357-65	15.6	54
4	In vivo restoration of full-thickness cartilage defects by poly(lactide-co-glycolide) sponges filled with fibrin gel, bone marrow mesenchymal stem cells and DNA complexes. <i>Biomaterials</i> , <b>2010</b> , 31, 5953-65	15.6	121

3	Reconstruction of rat calvarial defects with human mesenchymal stem cells and osteoblast-like cells in poly-lactic-co-glycolic acid scaffolds. <i>European Cells and Materials</i> , <b>2010</b> , 20, 109-20	4.3	82
2	Quantum-sized carbon dots for bright and colorful photoluminescence. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 7756-7	16.4	3362
1	A multifunctional biomedical patch based on hyperbranched epoxy polymer and MXene. <i>Science China Technological Sciences</i> , 1	3.5	1