

# Lei Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

2,078  
citations

279798

23  
h-index

233421

45  
g-index

47  
all docs

47  
docs citations

47  
times ranked

2222  
citing authors

#	ARTICLE	IF	CITATIONS
1	Universally autonomous self-healing elastomer with high stretchability. <i>Nature Communications</i> , 2020, 11, 2037.	12.8	300
2	A Multifunctional Pro-Healing Zwitterionic Hydrogel for Simultaneous Optical Monitoring of pH and Glucose in Diabetic Wound Treatment. <i>Advanced Functional Materials</i> , 2020, 30, 1905493.	14.9	248
3	Zwitterionic Osmolyte-Based Hydrogels with Antifreezing Property, High Conductivity, and Stable Flexibility at Subzero Temperature. <i>Advanced Functional Materials</i> , 2020, 30, 1907986.	14.9	201
4	A Robust Cotton Textile-Based Material for High-Flux Oil-Water Separation. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 13704-13713.	8.0	125
5	One-step synthesis of an antibacterial and pro-healing wound dressing that can treat wound infections. <i>Journal of Materials Chemistry B</i> , 2017, 5, 8451-8458.	5.8	75
6	Novel Balanced Charged Alginate/PEI Polyelectrolyte Hydrogel that Resists Foreign-Body Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 6879-6886.	8.0	72
7	Pro-Healing Zwitterionic Skin Sensor Enables Multi-Indicator Distinction and Continuous Real-Time Monitoring. <i>Advanced Functional Materials</i> , 2021, 31, 2106406.	14.9	72
8	Beetle-Inspired Hierarchical Antibacterial Interface for Reliable Fog Harvesting. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 34330-34337.	8.0	70
9	A near-infrared light-mediated antimicrobial based on Ag/Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> for effective synergetic antibacterial applications. <i>Nanoscale</i> , 2020, 12, 19129-19141.	5.6	69
10	Bioinspired Multifunctional Protein Coating for Antifogging, Self-Cleaning, and Antimicrobial Properties. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 24504-24511.	8.0	65
11	Exploring the Potential of Biocompatible Osmoprotectants as Highly Efficient Cryoprotectants. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 42516-42524.	8.0	60
12	Amphiphilic Marine Antifouling Coatings Based on a Hydrophilic Polyvinylpyrrolidone and Hydrophobic Fluorine-Silicon-Containing Block Copolymer. <i>Langmuir</i> , 2020, 36, 14573-14581.	3.5	49
13	Environmentally Friendly Marine Antifouling Coating Based on a Synergistic Strategy. <i>Langmuir</i> , 2020, 36, 2396-2402.	3.5	46
14	Reusable ternary PVA films containing bacterial cellulose fibers and $\hat{\mu}$ -polylysine with improved mechanical and antibacterial properties. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 183, 110486.	5.0	38
15	Metal-Organic Framework Traps with Record-High Bilirubin Removal Capacity for Hemoperfusion Therapy. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 25546-25556.	8.0	36
16	A mussel-inspired chimeric protein as a novel facile antifouling coating. <i>Chemical Communications</i> , 2018, 54, 11328-11331.	4.1	35
17	A Bifunctional Zwitterion-Modified Porphyrin for Photodynamic Nondestructive Tooth Whitening and Biofilm Eradication. <i>Advanced Functional Materials</i> , 2021, 31, 2104799.	14.9	33
18	Betaine Combined with Membrane Stabilizers Enables Solvent-Free Whole Blood Cryopreservation and One-Step Cryoprotectant Removal. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 1083-1091.	5.2	31

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19	A comprehensive study and comparison of four types of zwitterionic hydrogels. <i>Journal of Materials Science</i> , 2018, 53, 13813-13825.	3.7	30
20	Novel Mussel-Inspired Universal Surface Functionalization Strategy: Protein-Based Coating with Residue-Specific Post-Translational Modification in Vivo. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 12846-12853.	8.0	28
21	Precision-porous templated scaffolds of varying pore size drive dendritic cell activation. <i>Biotechnology and Bioengineering</i> , 2018, 115, 1086-1095.	3.3	27
22	Environment-Resistant Organohydrogel-Based Sensor Enables Highly Sensitive Strain, Temperature, and Humidity Responses. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 23692-23700.	8.0	27
23	Rapid and Long-Term Glycemic Regulation with a Balanced Charged Immune-Evasive Hydrogel in T1DM Mice. <i>Advanced Functional Materials</i> , 2019, 29, 1900140.	14.9	24
24	DMSO-free cryopreservation of chondrocytes based on zwitterionic molecule and polymers. <i>Biomacromolecules</i> , 2019, 20, 3980-3988.	5.4	22
25	A polyvinylpyrrolidone-based surface-active copolymer for an effective marine antifouling coating. <i>Progress in Organic Coatings</i> , 2021, 150, 105975.	3.9	22
26	MOF-Based Antibiofouling Hemoabsorbent for Highly Efficient Removal of Protein-Bound Bilirubin. <i>Langmuir</i> , 2020, 36, 8753-8763.	3.5	20
27	Universal Intraductal Surface Antifouling Coating Based on an Amphiphilic Copolymer. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 21051-21059.	8.0	19
28	Encapsulation of AgNPs within Zwitterionic Hydrogels for Highly Efficient and Antifouling Catalysis in Biological Environments. <i>Langmuir</i> , 2019, 35, 1563-1570.	3.5	17
29	A Degradable-Renewable Ionic Skin Based on Edible Glutinous Rice Gel. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 5122-5133.	8.0	17
30	The hypothermic preservation of mammalian cells with assembling extracellular-matrix-mimetic microparticles. <i>Journal of Materials Chemistry B</i> , 2017, 5, 1535-1541.	5.8	16
31	In Situ Encapsulation of Postcryopreserved Cells Using Alginate Polymer and Zwitterionic Betaine. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 2621-2630.	5.2	16
32	A zwitterionic hydrogel coated titanium surface with high-efficiency endothelial cell selectivity for rapid re-endothelialization. <i>Biomaterials Science</i> , 2020, 8, 5441-5451.	5.4	16
33	Cellular Engineering and Biocatalysis Strategies toward Sustainable Cadaverine Production: State of the Art and Perspectives. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 1061-1072.	6.7	15
34	A poly(hydroxyethyl methacrylate)-Ag nanoparticle porous hydrogel for simultaneous <i>in vivo</i> prevention of the foreign-body reaction and bacterial infection. <i>Nanotechnology</i> , 2018, 29, 395101.	2.6	14
35	A hemocompatible cryoprotectant inspired by freezing-tolerant plants. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 176, 106-114.	5.0	14
36	A Humidity-Powered Soft Robot with Fast Rolling Locomotion. <i>Research</i> , 2022, 2022, .	5.7	14

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37	Encapsulation of laccase within zwitterionic poly-carboxybetaine hydrogels for improved activity and stability. <i>Catalysis Science and Technology</i> , 2018, 8, 5217-5224.	4.1	11
38	Nanoliposomal multi-drug delivery system with reduced toxicity and multi-drug resistance. <i>Journal of Materials Science</i> , 2019, 54, 9718-9728.	3.7	11
39	Size-Dependent Uptake and Distribution of AgNPs by Silkworms. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 460-468.	6.7	11
40	Design of a Thiol-Responsive, Traceless Prodrug with Rapid Self-Immolation for Cancer Chemotherapy. <i>ACS Applied Bio Materials</i> , 2021, 4, 4982-4989.	4.6	11
41	Antifouling Fibrous Membrane Enables High Efficiency and High-Flux Microfiltration for Water Treatment. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 49254-49265.	8.0	11
42	Controlled Engineering of Nano-Povidones for Efficient Iodine Recovery and Antibacterial Reutilization. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 11704-11712.	6.7	10
43	Cell-friendly regulation of ice crystals by antifreeze organism-inspired materials. <i>AIChE Journal</i> , 2022, 68, .	3.6	10
44	Influence of divalent cations on the biofouling behaviors of alginate hydrogels. <i>Biomedical Materials (Bristol)</i> , 2020, 15, 015003.	3.3	7
45	Development of Organogels for Live <i>Yarrowia lipolytica</i> Encapsulation. <i>Journal of the American Chemical Society</i> , 2022, 144, 10251-10258.	13.7	7
46	2D Black Phosphorus-Based Cytomembrane Mimics with Stimuli-Responsive Antibacterial Action Inspired by Endotoxin-Associated Toxic Behavior. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 43820-43829.	8.0	3
47	Zwitterionic peptide-functionalized highly dispersed carbon nanotubes for efficient wastewater treatment. <i>Journal of Materials Chemistry B</i> , 2022, 10, 2661-2669.	5.8	3