Qihui Zhou

List of Publications by Year
in descending order

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66 papers	2,846 citations	172457 29 h-index	189892 50 g-index
68 all docs	68 docs citations	68 times ranked	2807 citing authors

#	Article	IF	Citations
1	Reactive Oxygen Species-Related Nanoparticle Toxicity in the Biomedical Field. Nanoscale Research Letters, 2020, 15, 115.	5.7	341
2	Electrospun Biomimetic Fibrous Scaffold from Shape Memory Polymer of PDLLA-co-TMC for Bone Tissue Engineering. ACS Applied Materials & Interfaces, 2014, 6, 2611-2621.	8.0	212
3	A biodegradable antibacterial alginate/carboxymethyl chitosan/Kangfuxin sponges for promoting blood coagulation and full-thickness wound healing. International Journal of Biological Macromolecules, 2021, 167, 182-192.	7.5	123
4	Surface Topography Guides Morphology and Spatial Patterning of Induced Pluripotent Stem Cell Colonies. Stem Cell Reports, 2017, 9, 654-666.	4.8	120
5	Bio-multifunctional alginate/chitosan/fucoidan sponges with enhanced angiogenesis and hair follicle regeneration for promoting full-thickness wound healing. Materials and Design, 2020, 193, 108863.	7.0	120
6	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.	5.8	99
7	Carboxymethyl chitosan-based hydrogels containing fibroblast growth factors for triggering diabetic wound healing. Carbohydrate Polymers, 2022, 287, 119336.	10.2	98
8	High-Throughput Methods in the Discovery and Study of Biomaterials and Materiobiology. Chemical Reviews, 2021, 121, 4561-4677.	47.7	89
9	Nanofibrous patterns by direct electrospinning of nanofibers onto topographically structured non-conductive substrates. Nanoscale, 2013, 5, 4993.	5.6	74
10	Screening Platform for Cell Contact Guidance Based on Inorganic Biomaterial Micro/nanotopographical Gradients. ACS Applied Materials & Interfaces, 2017, 9, 31433-31445.	8.0	67
11	Preparation of triamcinolone acetonide-loaded chitosan/fucoidan hydrogel and its potential application as an oral mucosa patch. Carbohydrate Polymers, 2021, 272, 118493.	10.2	65
12	Enhanced Eradication of Bacterial/Fungi Biofilms by Glucose Oxidase-Modified Magnetic Nanoparticles as a Potential Treatment for Persistent Endodontic Infections. ACS Applied Materials & Interfaces, 2021, 13, 17289-17299.	8.0	64
13	Hierarchically hybrid biocoatings on Ti implants for enhanced antibacterial activity and osteogenesis. Colloids and Surfaces B: Biointerfaces, 2021, 204, 111802.	5.0	64
14	Ultrasound-Modulated Shape Memory and Payload Release Effects in a Biodegradable Cylindrical Rod Made of Chitosan-Functionalized PLGA Microspheres. Biomacromolecules, 2013, 14, 1971-1979.	5.4	62
15	Bioâ€Multifunctional Hydrogel Patches for Repairing Fullâ€Thickness Abdominal Wall Defects. Advanced Functional Materials, 2021, 31, 2105614.	14.9	57
16	Directional nanotopographic gradients: a high-throughput screening platform for cell contact guidance. Scientific Reports, 2015, 5, 16240.	3.3	55
17	Implication of stable jet length in electrospinning for collecting well-aligned ultrafine PLLA fibers. Polymer, 2013, 54, 6867-6876.	3.8	51
18	NanoZnO-modified titanium implants for enhanced anti-bacterial activity, osteogenesis and corrosion resistance. Journal of Nanobiotechnology, 2021, 19, 353.	9.1	50

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19	The effect of doxycycline-containing chitosan/carboxymethyl chitosan nanoparticles on NLRP3 inflammasome in periodontal disease. Carbohydrate Polymers, 2020, 237, 116163.	10.2	48
20	Marine polysaccharide-based composite hydrogels containing fucoidan: Preparation, physicochemical characterization, and biocompatible evaluation. International Journal of Biological Macromolecules, 2021, 183, 1978-1986.	7.5	47
21	Fucoidan as a marine-origin prebiotic modulates the growth and antibacterial ability of Lactobacillus rhamnosus. International Journal of Biological Macromolecules, 2021, 180, 599-607.	7.5	45
22	Injectable and Self-Healing Probiotics-Loaded Hydrogel for Promoting Superbacteria-Infected Wound Healing. ACS Applied Materials & Interfaces, 2022, 14, 20538-20550.	8.0	45
23	Direct printing of patterned three-dimensional ultrafine fibrous scaffolds by stable jet electrospinning for cellular ingrowth. Biofabrication, 2015, 7, 045004.	7.1	43
24	Mechanical and biological properties of electrodeposited calcium phosphate coatings. Materials Science and Engineering C, 2019, 100, 475-484.	7.3	43
25	Unidirectional rotating molecular motors dynamically interact with adsorbed proteins to direct the fate of mesenchymal stem cells. Science Advances, 2020, 6, eaay2756.	10.3	42
26	Topography induced stiffness alteration of stem cells influences osteogenic differentiation. Biomaterials Science, 2020, 8, 2638-2652.	5.4	41
27	Nanoparticles for Oral Cancer Diagnosis and Therapy. Bioinorganic Chemistry and Applications, 2021, 2021, 1-14.	4.1	36
28	Cell membrane-camouflaged inorganic nanoparticles for cancer therapy. Journal of Nanobiotechnology, 2022, 20, .	9.1	34
29	Alkaliâ€Mediated Miscibility of Gelatin/Polycaprolactone for Electrospinning Homogeneous Composite Nanofibers for Tissue Scaffolding. Macromolecular Bioscience, 2017, 17, 1700268.	4.1	33
30	Directing Mesenchymal Stem Cells with Gold Nanowire Arrays. Advanced Materials Interfaces, 2018, 5, 1800334.	3.7	32
31	Biomaterial-based encapsulated probiotics for biomedical applications: Current status and future perspectives. Materials and Design, 2021, 210, 110018.	7.0	32
32	Injectable Self-Healing First-Aid Tissue Adhesives with Outstanding Hemostatic and Antibacterial Performances for Trauma Emergency Care. ACS Applied Materials & Interfaces, 2022, 14, 16006-16017.	8.0	30
33	Directional topography gradients drive optimum alignment and differentiation of human myoblasts. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 2234-2245.	2.7	28
34	Directional Topography Influences Adipose Mesenchymal Stromal Cell Plasticity: Prospects for Tissue Engineering and Fibrosis. Stem Cells International, 2019, 2019, 1-14.	2.5	28
35	Aptamer-based biosensors for the diagnosis of sepsis. Journal of Nanobiotechnology, 2021, 19, 216.	9.1	26
36	Development of a Novel Orthogonal Double Gradient for Highâ€Throughput Screening of Mesenchymal Stem Cellsâ€“Materials Interaction. Advanced Materials Interfaces, 2018, 5, 1800504.	3.7	24

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37	Fucoidan-derived carbon dots against Enterococcus faecalis biofilm and infected dentinal tubules for the treatment of persistent endodontic infections. Journal of Nanobiotechnology, 2022, 20, .	9.1	24
38	Mechanical Properties of Aligned Nanotopologies for Directing Cellular Behavior. Advanced Materials Interfaces, 2016, 3, 1600275.	3.7	23
39	Chitosan-CaP microflowers and metronidazole loaded calcium alginate sponges with enhanced antibacterial, hemostatic and osteogenic properties for the prevention of dry socket after tooth removal. International Journal of Biological Macromolecules, 2022, 212, 134-145.	7.5	21
40	Biomimetic Multiscale Hierarchical Topography Enhances Osteogenic Differentiation of Human Mesenchymal Stem Cells. Advanced Materials Interfaces, 2020, 7, 2000385.	3.7	20
41	Catalytic hairpin assembly indirectly covalent on Fe3O4@C nanoparticles with signal amplification for intracellular detection of miRNA. Talanta, 2021, 223, 121675.	5.5	19
42	A wearable and high-performance capacitive pressure sensor based on a biocompatible PVP nanofiber membrane via electrospinning and UV treatment. Journal of Materials Chemistry C, 2022, 10, 10491-10499.	5.5	18
43	Doxycycline inhibits NAcht Leucine-rich repeat Protein 3 inflammasome activation and interleukin-1Î² production induced by Porphyromonas gingivalis-lipopolysaccharide and adenosine triphosphate in human gingival fibroblasts. Archives of Oral Biology, 2019, 107, 104514.	1.8	17
44	Role of Circular RNAs in the Pathogenesis of Cardiovascular Disease. Journal of Cardiovascular Translational Research, 2020, 13, 572-583.	2.4	17
45	Double Linear Gradient Biointerfaces for Determining Twoâ€Parameter Dependent Stem Cell Behavior. ChemNanoMat, 2016, 2, 407-413.	2.8	16
46	Collagen morphology influences macrophage shape and marker expression inÂvitro. Journal of Immunology and Regenerative Medicine, 2018, 1, 13-20.	0.4	15
47	Light-induced molecular rotation triggers on-demand release from liposomes. Chemical Communications, 2020, 56, 8774-8777.	4.1	15
48	Biointerface topography regulates phenotypic switching and cell apoptosis in vascular smooth muscle cells. Biochemical and Biophysical Research Communications, 2020, 526, 841-847.	2.1	15
49	Dihydrotanshinone I Attenuates Plaque Vulnerability in Apolipoprotein E-Deficient Mice: Role of Receptor-Interacting Protein 3. Antioxidants and Redox Signaling, 2021, 34, 351-363.	5.4	15
50	Development of an Aptamer-Conjugated Polyrotaxane-Based Biodegradable Magnetic Resonance Contrast Agent for Tumor-Targeted Imaging. ACS Applied Bio Materials, 2019, 2, 406-416.	4.6	14
51	Biological effects on tooth root surface topographies induced by various mechanical treatments. Colloids and Surfaces B: Biointerfaces, 2020, 188, 110748.	5.0	14
52	Glucose-responsive nanogels efficiently maintain the stability and activity of therapeutic enzymes. Nanotechnology Reviews, 2022, 11, 1511-1524.	5.8	14
53	A â€œgreenâ€•all-organic heterostructure functionalized by self-assembled fullerene small molecule with enhanced photocatalytic activity. Applied Surface Science, 2022, 585, 152738.	6.1	12
54	Recent progress in advanced biomaterials for long-acting reversible contraception. Journal of Nanobiotechnology, 2022, 20, 138.	9.1	11

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55	Electrospun Nanofibers Containing Strontium for Bone Tissue Engineering. Journal of Nanomaterials, 2020, 2020, 1-14.	2.7	10
56	Well Plate Integrated Topography Gradient Screening Technology for Studying Cellâ€Surface Topography Interactions. Advanced Biology, 2020, 4, e1900218.	3.0	9
57	Preparation and Characterization of Vancomycin Hydrochloride-Loaded Mesoporous Silica Composite Hydrogels. Frontiers in Bioengineering and Biotechnology, 2022, 10, 826971.	4.1	9
58	Aligned Electrospun PLLA/Graphene Microfibers with Nanotopographical Surface Modulate the Mitochondrial Responses of Vascular Smooth Muscle Cells. Advanced Materials Interfaces, 2021, 8, 2100229.	3.7	8
59	Regulation of T Cell Responses by Nano-Hydroxyapatite to Mediate the Osteogenesis. Frontiers in Bioengineering and Biotechnology, 2022, 10, 884291.	4.1	8
60	Enhanced Eradication of Enterococcus faecalis Biofilms by Quaternized Chitosan-Coated Upconversion Nanoparticles for Photodynamic Therapy in Persistent Endodontic Infections. Frontiers in Microbiology, 2022, 13, .	3.5	7
61	Decoupling the Amplitude and Wavelength of Anisotropic Topography and the Influence on Osteogenic Differentiation of Mesenchymal Stem Cells Using a High-Throughput Screening Approach. ACS Applied Bio Materials, 2020, 3, 3690-3697.	4.6	6
62	Biointerface topography mediates the interplay between endothelial cells and monocytes. RSC Advances, 2020, 10, 13848-13854.	3.6	6
63	A Transcriptome Sequencing Study on Genome-Wide Gene Expression Differences of Lung Cancer Cells Modulated by Fucoidan. Frontiers in Bioengineering and Biotechnology, 2022, 10, 844924.	4.1	6
64	Preparation of Fucoidan-Based Electrospun Nanofibers and Their Interaction With Endothelial Cells. Frontiers in Bioengineering and Biotechnology, 2021, 9, 739209.	4.1	4
65	Biomaterials modulate macrophage polarization and inflammatory responses. , 2022, , 99-110.		2
66	Modulation of T Cell Responses by Fucoidan to Inhibit Osteogenesis. Frontiers in Immunology, 0, 13, .	4.8	1