Peibiao Zhang

List of Publications by Year
in descending order

77 papers	3,267 citations	172457 29 h-index	155660 55 g-index
79 all docs	79 docs citations	79 times ranked	4091 citing authors

#	Article	IF	Citations
1	Synergistically Promoting Bone Regeneration by Icariin-Incorporated Porous Microcarriers and Decellularized Extracellular Matrix Derived From Bone Marrow Mesenchymal Stem Cells. Frontiers in Bioengineering and Biotechnology, 2022, 10, 824025.	4.1	8
2	Peptide-Grafted Microspheres for Mesenchymal Stem Cell Sorting and Expansion by Selective Adhesion. Frontiers in Bioengineering and Biotechnology, 2022, 10, 873125.	4.1	3
3	Antibacterial microspheres with a bionic red-blood-cell like hollow structure and superior swelling recovery capacity for efficient traumatic hemostasis. Applied Materials Today, 2022, 29, 101559.	4.3	4
4	Biodegradable GdPO4Â·H2O/PLGA microcarriers for stem cell delivery and non-invasive MRI translocation tracing. Journal of Materials Science, 2022, 57, 13632-13646.	3.7	1
5	Bioorthogonal DOPA-NGF activated tissue engineering microunits for recovery from traumatic brain injury by microenvironment regulation. Acta Biomaterialia, 2022, 150, 67-82.	8.3	12
6	Ba/Mg co-doped hydroxyapatite/PLGA composites enhance X-ray imaging and bone defect regeneration. Journal of Materials Chemistry B, 2021, 9, 6691-6702.	5.8	27
7	Spatiotemporal Magnetocaloric Microenvironment for Guiding the Fate of Biodegradable Polymer Implants. Advanced Functional Materials, 2021, 31, 2009661.	14.9	19
8	Porous polyetheretherketone microcarriers fabricated via hydroxylation together with cell-derived mineralized extracellular matrix coatings promote cell expansion and bone regeneration. International Journal of Energy Production and Management, 2021, 8, rbab013.	3.7	12
9	Simultaneous engineering of nanofillers and patterned surface macropores of graphene/hydroxyapatite/polyetheretherketone ternary composites for potential bone implants. Materials Science and Engineering C, 2021, 123, 111967.	7.3	22
10	Enhancing antibacterial capability and osseointegration of polyetheretherketone (PEEK) implants by dual-functional surface modification. Materials and Design, 2021, 205, 109733.	7.0	31
11	DOPA-derived electroactive copolymer and IGF-1 immobilized poly(lactic-co-glycolic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 347 Journal, 2021, 416, 129129.	12.7	22
12	Improved hemostatic effects by Fe3+ modified biomimetic PLLA cotton-like mat via sodium alginate grafted with dopamine. Bioactive Materials, 2021, 6, 2346-2359.	15.6	51
13	A rapid quantitation of cell attachment and spreading based on digital image analysis: Application for cell affinity and compatibility assessment of synthetic polymers. Materials Science and Engineering C, 2021, 128, 112267.	7.3	5
14	EDTMP ligand-enhanced water interactions endowing iron oxide nanoparticles with dual-modal MRI contrast ability. Journal of Materials Chemistry B, 2021, 9, 9055-9066.	5.8	8
15	Electroactive composite scaffold with locally expressed osteoinductive factor for synergistic bone repair upon electrical stimulation. Biomaterials, 2020, 230, 119617.	11.4	162
16	Mussel-Inspired Conducting Copolymer with Aniline Tetramer as Intelligent Biological Adhesive for Bone Tissue Engineering. ACS Biomaterials Science and Engineering, 2020, 6, 634-646.	5.2	49
17	Incorporation of Gadolinium Oxide and Gadolinium Oxysulfide Microspheres: MRI/CT Monitoring and Promotion of Osteogenic/Chondrogenic Differentiation for Bone Implants. ChemNanoMat, 2020, 6, 1819-1832.	2.8	2
18	Stem Cell Seeded and Silver Nanoparticles Loaded Bilayer PLGA/PVA Dressings for Wound Healing. Macromolecular Bioscience, 2020, 20, e2000141.	4.1	12

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19	Gadolinium-Doped BTO-Functionalized Nanocomposites with Enhanced MRI and X-ray Dual Imaging to Simulate the Electrical Properties of Bone. ACS Applied Materials & Interfaces, 2020, 12, 49464-49479.	8.0	41
20	Highly Permeable Gelatin/Poly(lactic acid) Fibrous Scaffolds with a Three-Dimensional Spatial Structure for Efficient Cell Infiltration, Mineralization and Bone Regeneration. ACS Applied Bio Materials, 2020, 3, 6932-6943.	4.6	5
21	Conductive stretchable shape memory elastomers combining with electrical stimulation for synergistic osteogenic differentiation. Polymer Testing, 2020, 90, 106672.	4.8	13
22	A micropatterned conductive electrospun nanofiber mesh combined with electrical stimulation for synergistically enhancing differentiation of rat neural stem cells. Journal of Materials Chemistry B, 2020, 8, 2673-2688.	5.8	31
23	Enhanced osteogenic activities of polyetheretherketone surface modified by poly(sodium pâ€styrene) Tj ETQq1 1 0.784314 rgBT /Overl	2.6	4
24	Covalently functionalized poly(etheretherketone) implants with osteogenic growth peptide (OGP) to improve osteogenesis activity. RSC Advances, 2020, 10, 9777-9785.	3.6	25
25	Gaseous sulfur trioxide induced controllable sulfonation promoting biomineralization and osseointegration of polyetheretherketone implants. Bioactive Materials, 2020, 5, 1004-1017.	15.6	49
26	3D-printing of solvent exchange deposition modeling (SEDM) for a bilayered flexible skin substitute of poly (lactide-co-glycolide) with bioorthogonally engineered EGF. Materials Science and Engineering C, 2020, 112, 110942.	7.3	25
27	Electroactive Composite of FeCl₃â€Doped P3HT/PLGA with Adjustable Electrical Conductivity for Potential Application in Neural Tissue Engineering. Macromolecular Bioscience, 2019, 19, e1900147.	4.1	9
28	Microcarriers with Controllable Size via Electrified Liquid Jets and Phase Separation Technique Promote Cell Proliferation and Osteogenic Differentiation. ACS Applied Bio Materials, 2019, 2, 4134-4141.	4.6	6
29	Biomimetic polyetheretherketone microcarriers with specific surface topography and self-secreted extracellular matrix for large-scale cell expansion. International Journal of Energy Production and Management, 2019, 7, 109-118.	3.7	4
30	Preparation of polycarbonate/gelatine microspheres using a high-voltage electrostatic technique for enhancing the adhesion and proliferation of mesenchymal stem cells. Journal of Materials Science, 2019, 54, 7180-7197.	3.7	10
31	Immobilization via polydopamine of dual growth factors on polyetheretherketone: improvement of cell adhesion, proliferation, and osteo-differentiation. Journal of Materials Science, 2019, 54, 11179-11196.	3.7	27
32	Electroactive Nanocomposite Porous Scaffolds of PAP_n/op-HA/PLGA Enhance Osteogenesis in Vivo. ACS Applied Bio Materials, 2019, 2, 1464-1476.	4.6	12
33	Porous Scaffolds of Poly(lactic-<i>co</i>-glycolic acid) and Mesoporous Hydroxyapatite Surface Modified by Poly(Î³-benzyl-<scp>l</scp>-glutamate) (PBLG) for in Vivo Bone Repair. ACS Biomaterials Science and Engineering, 2019, 5, 2466-2481.	5.2	20
34	An electrically and magnetically responsive nanocomposite of GdPO₄Â·H₂O/P3HT/PLGA with electrical stimulation for synergistically enhancing the proliferation and differentiation of pre-osteoblasts. New Journal of Chemistry, 2019, 43, 17315-17326.	2.8	13
35	Synergistic osteogenesis promoted by magnetically actuated nano-mechanical stimuli. Nanoscale, 2019, 11, 23423-23437.	5.6	57
36	A Novel Approach via Surface Modification of Degradable Polymers With Adhesive DOPA-IGF-1 for Neural Tissue Engineering. Journal of Pharmaceutical Sciences, 2019, 108, 551-562.	3.3	11

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37	Composite PLA/PEG/nHA/Dexamethasone Scaffold Prepared by 3D Printing for Bone Regeneration. Macromolecular Bioscience, 2018, 18, e1800068.	4.1	62
38	<i>In situ</i> polymerization of poly(Î³-benzyl-<scp>l</scp>-glutamate) on mesoporous hydroxyapatite with high graft amounts for the direct fabrication of biodegradable cell microcarriers and their osteogenic induction. Journal of Materials Chemistry B, 2018, 6, 3315-3330.	5.8	13
39	Binding efficiency of recombinant collagenâ€binding basic fibroblast growth factors (CBDâ€bFGFs) and their promotion for NIHâ€3T3 cell proliferation. Biopolymers, 2018, 109, e23105.	2.4	4
40	Cotton-like micro- and nanoscale poly(lactic acid) nonwoven fibers fabricated by centrifugal melt-spinning for tissue engineering. RSC Advances, 2018, 8, 5166-5179.	3.6	25
41	Preparation and Characterization of Silver Sulfadiazineâ€“Loaded Polyvinyl Alcohol Hydrogels as an Antibacterial Wound Dressing. Journal of Pharmaceutical Sciences, 2018, 107, 2377-2384.	3.3	24
42	Micro-porous polyetheretherketone implants decorated with BMP-2 via phosphorylated gelatin coating for enhancing cell adhesion and osteogenic differentiation. Colloids and Surfaces B: Biointerfaces, 2018, 169, 233-241.	5.0	62
43	Intracellular calcium ions and morphological changes of cardiac myoblasts response to an intelligent biodegradable conducting copolymer. Materials Science and Engineering C, 2018, 90, 168-179.	7.3	16
44	An injectable hydroxyapatite/poly(lactide-co-glycolide) composite reinforced by micro/nano-hybrid poly(glycolide) fibers for bone repair. Materials Science and Engineering C, 2017, 80, 326-334.	7.3	24
45	A chitin film containing basic fibroblast growth factor with a chitin-binding domain as wound dressings. Carbohydrate Polymers, 2017, 174, 723-730.	10.2	36
46	<i>In vitro</i> degradation behavior of a hydroxyapatite/poly(lactide-<i>co</i>-glycolide) composite reinforced by micro/nano-hybrid poly(glycolide) fibers for bone repair. Journal of Materials Chemistry B, 2017, 5, 8695-8706.	5.8	13
47	Biomimetic porous collagen/hydroxyapatite scaffold for bone tissue engineering. Journal of Applied Polymer Science, 2017, 134, 45271.	2.6	47
48	Modulation of Osteogenesis in MC3T3-E1 Cells by Different Frequency Electrical Stimulation. PLoS ONE, 2016, 11, e0154924.	2.5	36
49	Improved Cell Adhesion and Osteogenesis of op-HA/PLGA Composite by Poly(dopamine)-Assisted Immobilization of Collagen Mimetic Peptide and Osteogenic Growth Peptide. ACS Applied Materials & Interfaces, 2016, 8, 26559-26569.	8.0	93
50	A Bioorthogonal Approach for the Preparation of a Titaniumâ€Binding Insulinâ€like Growthâ€Factorâ€1 Derivative by Using Tyrosinase. Angewandte Chemie - International Edition, 2016, 55, 11447-11451.	13.8	26
51	In Vivo MRI and Xâ€Ray Bifunctional Imaging of Polymeric Composite Supplemented with GdPO₄Â·H₂O Nanobundles for Tracing Bone Implant and Bone Regeneration. Advanced Healthcare Materials, 2016, 5, 2182-2190.	7.6	21
52	InnenrÃ¼cktitelbild: A Bioorthogonal Approach for the Preparation of a Titaniumâ€Binding Insulinâ€like Growthâ€Factorâ€1 Derivative by Using Tyrosinase (Angew. Chem. 38/2016). Angewandte Chemie, 2016, 128, 11861-11861.	2.0	0
53	A Bioorthogonal Approach for the Preparation of a Titaniumâ€Binding Insulinâ€like Growthâ€Factorâ€1 Derivative by Using Tyrosinase. Angewandte Chemie, 2016, 128, 11619-11623.	2.0	2
54	A comparative study on the in vivo degradation of poly(L-lactide) based composite implants for bone fracture fixation. Scientific Reports, 2016, 6, 20770.	3.3	59

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55	Improved cellular infiltration into 3D interconnected microchannel scaffolds formed by using melt-spun sacrificial microfibers. RSC Advances, 2016, 6, 2131-2134.	3.6	11
56	Photo-immobilization of bone morphogenic protein 2 on PLGA/HA nanocomposites to enhance the osteogenesis of adipose-derived stem cells. RSC Advances, 2016, 6, 20202-20210.	3.6	23
57	Enhanced in Vitro Mineralization and in Vivo Osteogenesis of Composite Scaffolds through Controlled Surface Grafting of <scp>l</scp>-Lactic Acid Oligomer on Nanohydroxyapatite. Biomacromolecules, 2016, 17, 818-829.	5.4	35
58	Methylsulfonylmethane-loaded electrospun poly(lactide-co-glycolide) mats for cartilage tissue engineering. RSC Advances, 2015, 5, 96725-96732.	3.6	14
59	Important topics in the future of biomaterials and stem cells for bone tissue engineering: Comments from the participants of the International Symposium on Recent Trend of Biomaterials and Stem Cells for Bone Tissue Engineering at Changchun, China. International Journal of Energy Production and Management, 2015, 2, 153-158.	3.7	1
60	Back Cover: Macromol. Biosci. 8/2015. Macromolecular Bioscience, 2015, 15, 1174-1174.	4.1	0
61	A Novel Nano/Micro-Fibrous Scaffold by Melt-Spinning Method for Bone Tissue Engineering. Journal of Bionic Engineering, 2015, 12, 117-128.	5.0	46
62	Biodegradable Microcarriers of Poly(Lactide-co-Glycolide) and Nano-Hydroxyapatite Decorated with IGF-1 via Polydopamine Coating for Enhancing Cell Proliferation and Osteogenic Differentiation. Macromolecular Bioscience, 2015, 15, 1070-1080.	4.1	61
63	Environmental pH-controlled loading and release of protein on mesoporous hydroxyapatite nanoparticles for bone tissue engineering. Materials Science and Engineering C, 2015, 46, 158-165.	7.3	44
64	In Vitro Studies on Regulation of Osteogenic Activities by Electrical Stimulus on Biodegradable Electroactive Polyelectrolyte Multilayers. Biomacromolecules, 2014, 15, 3146-3157.	5.4	70
65	In Vitro Study of Electroactive Tetraaniline-Containing Thermosensitive Hydrogels for Cardiac Tissue Engineering. Biomacromolecules, 2014, 15, 1115-1123.	5.4	97
66	Nanoâ€hydroxyapatite Surfaces Grafted with Electroactive Aniline Tetramers for Boneâ€Tissue Engineering. Macromolecular Bioscience, 2013, 13, 356-365.	4.1	38
67	Synthesis of electroactive and biodegradable multiblock copolymers based on poly(ester amide) and aniline pentamer. Journal of Polymer Science Part A, 2013, 51, 4722-4731.	2.3	10
68	Synthesis of Biodegradable and Electroactive Tetraaniline Grafted Poly(ester amide) Copolymers for Bone Tissue Engineering. Biomacromolecules, 2012, 13, 2881-2889.	5.4	106
69	Preparation of Mesoporous Nano-Hydroxyapatite Using a Surfactant Template Method for Protein Delivery. Journal of Bionic Engineering, 2012, 9, 224-233.	5.0	45
70	RGD-Conjugated Copolymer Incorporated into Composite of Poly(lactide-co-glycotide) and Poly(l-lactide)-Grafted Nanohydroxyapatite for Bone Tissue Engineering. Biomacromolecules, 2011, 12, 2667-2680.	5.4	108
71	The Surface Modification of Hydroxyapatite Nanoparticles by the Ring Opening Polymerization of <i>Î³</i>â€Benzylâ€<scp>L</scp>â€glutamate <i>N</i>â€carboxyanhydride. Macromolecular Bioscience, 2009, 9, 631-638.	4.1	61
72	In vivo mineralization and osteogenesis of nanocomposite scaffold of poly(lactide-co-glycolide) and hydroxyapatite surface-grafted with poly(l-lactide). Biomaterials, 2009, 30, 58-70.	11.4	245

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73	The nanocomposite scaffold of poly(lactide-co-glycolide) and hydroxyapatite surface-grafted with l-lactic acid oligomer for bone repair. Acta Biomaterialia, 2009, 5, 2680-2692.	8.3	157
74	Synthesis of Biodegradable and Electroactive Multiblock Polylactide and Aniline Pentamer Copolymer for Tissue Engineering Applications. Biomacromolecules, 2008, 9, 850-858.	5.4	255
75	Preparation and antibacterial effects of PVA-PVP hydrogels containing silver nanoparticles. Journal of Applied Polymer Science, 2007, 103, 125-133.	2.6	203
76	Shape-memory and biocompatibility properties of segmented polyurethanes based on poly(L-lactide). Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2007, 2, 331-336.	0.4	8
77	Synthesis and characterization of electroactive and biodegradable ABA block copolymer of polylactide and aniline pentamer. Biomaterials, 2007, 28, 1741-1751.	11.4	252