

Peibiao Zhang

List of Publications by Year in descending order

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77
papers

3,267
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172457

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docs citations

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times ranked

4091
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of Biodegradable and Electroactive Multiblock Polylactide and Aniline Pentamer Copolymer for Tissue Engineering Applications. <i>Biomacromolecules</i> , 2008, 9, 850-858.	5.4	255
2	Synthesis and characterization of electroactive and biodegradable ABA block copolymer of polylactide and aniline pentamer. <i>Biomaterials</i> , 2007, 28, 1741-1751.	11.4	252
3	In vivo mineralization and osteogenesis of nanocomposite scaffold of poly(lactide-co-glycolide) and hydroxyapatite surface-grafted with poly(L-lactide). <i>Biomaterials</i> , 2009, 30, 58-70.	11.4	245
4	Preparation and antibacterial effects of PVA-PVP hydrogels containing silver nanoparticles. <i>Journal of Applied Polymer Science</i> , 2007, 103, 125-133.	2.6	203
5	Electroactive composite scaffold with locally expressed osteoinductive factor for synergistic bone repair upon electrical stimulation. <i>Biomaterials</i> , 2020, 230, 119617.	11.4	162
6	The nanocomposite scaffold of poly(lactide-co-glycolide) and hydroxyapatite surface-grafted with L-lactic acid oligomer for bone repair. <i>Acta Biomaterialia</i> , 2009, 5, 2680-2692.	8.3	157
7	RGD-Conjugated Copolymer Incorporated into Composite of Poly(lactide-co-glycotide) and Poly(L-lactide)-Grafted Nanohydroxyapatite for Bone Tissue Engineering. <i>Biomacromolecules</i> , 2011, 12, 2667-2680.	5.4	108
8	Synthesis of Biodegradable and Electroactive Tetraaniline Grafted Poly(ester amide) Copolymers for Bone Tissue Engineering. <i>Biomacromolecules</i> , 2012, 13, 2881-2889.	5.4	106
9	In Vitro Study of Electroactive Tetraaniline-Containing Thermosensitive Hydrogels for Cardiac Tissue Engineering. <i>Biomacromolecules</i> , 2014, 15, 1115-1123.	5.4	97
10	Improved Cell Adhesion and Osteogenesis of op-HA/PLGA Composite by Poly(dopamine)-Assisted Immobilization of Collagen Mimetic Peptide and Osteogenic Growth Peptide. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26559-26569.	8.0	93
11	In Vitro Studies on Regulation of Osteogenic Activities by Electrical Stimulus on Biodegradable Electroactive Polyelectrolyte Multilayers. <i>Biomacromolecules</i> , 2014, 15, 3146-3157.	5.4	70
12	Composite PLA/PEG/nHA/Dexamethasone Scaffold Prepared by 3D Printing for Bone Regeneration. <i>Macromolecular Bioscience</i> , 2018, 18, e1800068.	4.1	62
13	Micro-porous polyetheretherketone implants decorated with BMP-2 via phosphorylated gelatin coating for enhancing cell adhesion and osteogenic differentiation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 169, 233-241.	5.0	62
14	The Surface Modification of Hydroxyapatite Nanoparticles by the Ring Opening Polymerization of ϵ -Benzyl-L-glutamate N-carboxyanhydride. <i>Macromolecular Bioscience</i> , 2009, 9, 4.1 631-638.	4.1	61
15	Biodegradable Microcarriers of Poly(Lactide-co-Glycolide) and Nano-Hydroxyapatite Decorated with IGF-1 via Polydopamine Coating for Enhancing Cell Proliferation and Osteogenic Differentiation. <i>Macromolecular Bioscience</i> , 2015, 15, 1070-1080.	4.1	61
16	A comparative study on the in vivo degradation of poly(L-lactide) based composite implants for bone fracture fixation. <i>Scientific Reports</i> , 2016, 6, 20770.	3.3	59
17	Synergistic osteogenesis promoted by magnetically actuated nano-mechanical stimuli. <i>Nanoscale</i> , 2019, 11, 23423-23437.	5.6	57
18	Improved hemostatic effects by Fe ³⁺ modified biomimetic PLLA cotton-like mat via sodium alginate grafted with dopamine. <i>Bioactive Materials</i> , 2021, 6, 2346-2359.	15.6	51

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19	Mussel-Inspired Conducting Copolymer with Aniline Tetramer as Intelligent Biological Adhesive for Bone Tissue Engineering. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 634-646.	5.2	49
20	Gaseous sulfur trioxide induced controllable sulfonation promoting biomineralization and osseointegration of polyetheretherketone implants. <i>Bioactive Materials</i> , 2020, 5, 1004-1017.	15.6	49
21	Biomimetic porous collagen/hydroxyapatite scaffold for bone tissue engineering. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45271.	2.6	47
22	A Novel Nano/Micro-Fibrous Scaffold by Melt-Spinning Method for Bone Tissue Engineering. <i>Journal of Bionic Engineering</i> , 2015, 12, 117-128.	5.0	46
23	Preparation of Mesoporous Nano-Hydroxyapatite Using a Surfactant Template Method for Protein Delivery. <i>Journal of Bionic Engineering</i> , 2012, 9, 224-233.	5.0	45
24	Environmental pH-controlled loading and release of protein on mesoporous hydroxyapatite nanoparticles for bone tissue engineering. <i>Materials Science and Engineering C</i> , 2015, 46, 158-165.	7.3	44
25	Gadolinium-Doped BTO-Functionalized Nanocomposites with Enhanced MRI and X-ray Dual Imaging to Simulate the Electrical Properties of Bone. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 49464-49479.	8.0	41
26	Nano-hydroxyapatite Surfaces Grafted with Electroactive Aniline Tetramers for Bone Tissue Engineering. <i>Macromolecular Bioscience</i> , 2013, 13, 356-365.	4.1	38
27	Modulation of Osteogenesis in MC3T3-E1 Cells by Different Frequency Electrical Stimulation. <i>PLoS ONE</i> , 2016, 11, e0154924.	2.5	36
28	A chitin film containing basic fibroblast growth factor with a chitin-binding domain as wound dressings. <i>Carbohydrate Polymers</i> , 2017, 174, 723-730.	10.2	36
29	Enhanced in Vitro Mineralization and in Vivo Osteogenesis of Composite Scaffolds through Controlled Surface Grafting of L-Lactic Acid Oligomer on Nanohydroxyapatite. <i>Biomacromolecules</i> , 2016, 17, 818-829.	5.4	35
30	A micropatterned conductive electrospun nanofiber mesh combined with electrical stimulation for synergistically enhancing differentiation of rat neural stem cells. <i>Journal of Materials Chemistry B</i> , 2020, 8, 2673-2688.	5.8	31
31	Enhancing antibacterial capability and osseointegration of polyetheretherketone (PEEK) implants by dual-functional surface modification. <i>Materials and Design</i> , 2021, 205, 109733.	7.0	31
32	Immobilization via polydopamine of dual growth factors on polyetheretherketone: improvement of cell adhesion, proliferation, and osteo-differentiation. <i>Journal of Materials Science</i> , 2019, 54, 11179-11196.	3.7	27
33	Ba/Mg co-doped hydroxyapatite/PLGA composites enhance X-ray imaging and bone defect regeneration. <i>Journal of Materials Chemistry B</i> , 2021, 9, 6691-6702.	5.8	27
34	A Bioorthogonal Approach for the Preparation of a Titanium-Binding Insulin-Like Growth Factor-1 Derivative by Using Tyrosinase. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 11447-11451.	13.8	26
35	Cotton-like micro- and nanoscale poly(lactic acid) nonwoven fibers fabricated by centrifugal melt-spinning for tissue engineering. <i>RSC Advances</i> , 2018, 8, 5166-5179.	3.6	25
36	Covalently functionalized poly(etheretherketone) implants with osteogenic growth peptide (OGP) to improve osteogenesis activity. <i>RSC Advances</i> , 2020, 10, 9777-9785.	3.6	25

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37	3D-printing of solvent exchange deposition modeling (SEDM) for a bilayered flexible skin substitute of poly (lactide-co-glycolide) with bioorthogonally engineered EGF. <i>Materials Science and Engineering C</i> , 2020, 112, 110942.	7.3	25
38	An injectable hydroxyapatite/poly(lactide-co-glycolide) composite reinforced by micro/nano-hybrid poly(glycolide) fibers for bone repair. <i>Materials Science and Engineering C</i> , 2017, 80, 326-334.	7.3	24
39	Preparation and Characterization of Silver Sulfadiazine-Loaded Polyvinyl Alcohol Hydrogels as an Antibacterial Wound Dressing. <i>Journal of Pharmaceutical Sciences</i> , 2018, 107, 2377-2384.	3.3	24
40	Photo-immobilization of bone morphogenic protein 2 on PLGA/HA nanocomposites to enhance the osteogenesis of adipose-derived stem cells. <i>RSC Advances</i> , 2016, 6, 20202-20210.	3.6	23
41	Simultaneous engineering of nanofillers and patterned surface macropores of graphene/hydroxyapatite/polyetheretherketone ternary composites for potential bone implants. <i>Materials Science and Engineering C</i> , 2021, 123, 111967.	7.3	22
42	DOPA-derived electroactive copolymer and IGF-1 immobilized poly(lactic-co-glycolic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (acid) Journal, 2021, 416, 129129.	12.7	22
43	In Vivo MRI and X-Ray Bifunctional Imaging of Polymeric Composite Supplemented with GdPO ₄ ·H ₂ O Nanobundles for Tracing Bone Implant and Bone Regeneration. <i>Advanced Healthcare Materials</i> , 2016, 5, 2182-2190.	7.6	21
44	Porous Scaffolds of Poly(lactic-co-glycolic acid) and Mesoporous Hydroxyapatite Surface Modified by Poly(¹³ -benzyl-glutamate) (PBLG) for in Vivo Bone Repair. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 2466-2481.	5.2	20
45	Spatiotemporal Magnetocaloric Microenvironment for Guiding the Fate of Biodegradable Polymer Implants. <i>Advanced Functional Materials</i> , 2021, 31, 2009661.	14.9	19
46	Intracellular calcium ions and morphological changes of cardiac myoblasts response to an intelligent biodegradable conducting copolymer. <i>Materials Science and Engineering C</i> , 2018, 90, 168-179.	7.3	16
47	Methylsulfonylmethane-loaded electrospun poly(lactide-co-glycolide) mats for cartilage tissue engineering. <i>RSC Advances</i> , 2015, 5, 96725-96732.	3.6	14
48	In vitro degradation behavior of a hydroxyapatite/poly(lactide-co-glycolide) composite reinforced by micro/nano-hybrid poly(glycolide) fibers for bone repair. <i>Journal of Materials Chemistry B</i> , 2017, 5, 8695-8706.	5.8	13
49	In situ polymerization of poly(¹³ -benzyl-glutamate) on mesoporous hydroxyapatite with high graft amounts for the direct fabrication of biodegradable cell microcarriers and their osteogenic induction. <i>Journal of Materials Chemistry B</i> , 2018, 6, 3315-3330.	5.8	13
50	An electrically and magnetically responsive nanocomposite of GdPO ₄ ·H ₂ O/P3HT/PLGA with electrical stimulation for synergistically enhancing the proliferation and differentiation of pre-osteoblasts. <i>New Journal of Chemistry</i> , 2019, 43, 17315-17326.	2.8	13
51	Conductive stretchable shape memory elastomers combining with electrical stimulation for synergistic osteogenic differentiation. <i>Polymer Testing</i> , 2020, 90, 106672.	4.8	13
52	Electroactive Nanocomposite Porous Scaffolds of PAP _n /op-HA/PLGA Enhance Osteogenesis in Vivo. <i>ACS Applied Bio Materials</i> , 2019, 2, 1464-1476.	4.6	12
53	Stem Cell Seeded and Silver Nanoparticles Loaded Bilayer PLGA/PVA Dressings for Wound Healing. <i>Macromolecular Bioscience</i> , 2020, 20, e2000141.	4.1	12
54	Porous polyetheretherketone microcarriers fabricated via hydroxylation together with cell-derived mineralized extracellular matrix coatings promote cell expansion and bone regeneration. <i>International Journal of Energy Production and Management</i> , 2021, 8, rbab013.	3.7	12

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55	Bioorthogonal DOPA-NGF activated tissue engineering microunits for recovery from traumatic brain injury by microenvironment regulation. <i>Acta Biomaterialia</i> , 2022, 150, 67-82.	8.3	12
56	Improved cellular infiltration into 3D interconnected microchannel scaffolds formed by using melt-spun sacrificial microfibers. <i>RSC Advances</i> , 2016, 6, 2131-2134.	3.6	11
57	A Novel Approach via Surface Modification of Degradable Polymers With Adhesive DOPA-IGF-1 for Neural Tissue Engineering. <i>Journal of Pharmaceutical Sciences</i> , 2019, 108, 551-562.	3.3	11
58	Synthesis of electroactive and biodegradable multiblock copolymers based on poly(ester amide) and aniline pentamer. <i>Journal of Polymer Science Part A</i> , 2013, 51, 4722-4731.	2.3	10
59	Preparation of polycarbonate/gelatine microspheres using a high-voltage electrostatic technique for enhancing the adhesion and proliferation of mesenchymal stem cells. <i>Journal of Materials Science</i> , 2019, 54, 7180-7197.	3.7	10
60	Electroactive Composite of FeCl ₃ -Doped P3HT/PLGA with Adjustable Electrical Conductivity for Potential Application in Neural Tissue Engineering. <i>Macromolecular Bioscience</i> , 2019, 19, e1900147.	4.1	9
61	Shape-memory and biocompatibility properties of segmented polyurethanes based on poly(L-lactide). <i>Frontiers of Chemistry in China: Selected Publications From Chinese Universities</i> , 2007, 2, 331-336.	0.4	8
62	EDTMP ligand-enhanced water interactions endowing iron oxide nanoparticles with dual-modal MRI contrast ability. <i>Journal of Materials Chemistry B</i> , 2021, 9, 9055-9066.	5.8	8
63	Synergistically Promoting Bone Regeneration by Icaritin-Incorporated Porous Microcarriers and Decellularized Extracellular Matrix Derived From Bone Marrow Mesenchymal Stem Cells. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 824025.	4.1	8
64	Microcarriers with Controllable Size via Electrified Liquid Jets and Phase Separation Technique Promote Cell Proliferation and Osteogenic Differentiation. <i>ACS Applied Bio Materials</i> , 2019, 2, 4134-4141.	4.6	6
65	Highly Permeable Gelatin/Poly(lactic acid) Fibrous Scaffolds with a Three-Dimensional Spatial Structure for Efficient Cell Infiltration, Mineralization and Bone Regeneration. <i>ACS Applied Bio Materials</i> , 2020, 3, 6932-6943.	4.6	5
66	A rapid quantitation of cell attachment and spreading based on digital image analysis: Application for cell affinity and compatibility assessment of synthetic polymers. <i>Materials Science and Engineering C</i> , 2021, 128, 112267.	7.3	5
67	Binding efficiency of recombinant collagen-binding basic fibroblast growth factors (CBD-bFGFs) and their promotion for NIH-3T3 cell proliferation. <i>Biopolymers</i> , 2018, 109, e23105.	2.4	4
68	Biomimetic polyetheretherketone microcarriers with specific surface topography and self-secreted extracellular matrix for large-scale cell expansion. <i>International Journal of Energy Production and Management</i> , 2019, 7, 109-118.	3.7	4
69	Enhanced osteogenic activities of polyetheretherketone surface modified by poly(sodium p-styrene) Tj ETQq1 1 0,784314 rgBT /Over	2.6	4
70	Antibacterial microspheres with a bionic red-blood-cell like hollow structure and superior swelling recovery capacity for efficient traumatic hemostasis. <i>Applied Materials Today</i> , 2022, 29, 101559.	4.3	4
71	Peptide-Grafted Microspheres for Mesenchymal Stem Cell Sorting and Expansion by Selective Adhesion. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 873125.	4.1	3
72	A Bioorthogonal Approach for the Preparation of a Titanium-Binding Insulin-Like Growth Factor-1 Derivative by Using Tyrosinase. <i>Angewandte Chemie</i> , 2016, 128, 11619-11623.	2.0	2

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73	Incorporation of Gadolinium Oxide and Gadolinium Oxysulfide Microspheres: MRI/CT Monitoring and Promotion of Osteogenic/Chondrogenic Differentiation for Bone Implants. <i>ChemNanoMat</i> , 2020, 6, 1819-1832.	2.8	2
74	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. <i>International Journal of Energy Production and Management</i> , 2015, 2, 153-158.	3.7	1
75	Biodegradable GdPO ₄ ·H ₂ O/PLGA microcarriers for stem cell delivery and non-invasive MRI translocation tracing. <i>Journal of Materials Science</i> , 2022, 57, 13632-13646.	3.7	1
76	Back Cover: <i>Macromol. Biosci.</i> 8/2015. <i>Macromolecular Bioscience</i> , 2015, 15, 1174-1174.	4.1	0
77	Innenr¼cktitelbild: A Bioorthogonal Approach for the Preparation of a Titanium-Binding Insulin-like Growth-Factor-1 Derivative by Using Tyrosinase (<i>Angew. Chem.</i> 38/2016). <i>Angewandte Chemie</i> , 2016, 128, 11861-11861.	2.0	0