Changsheng Liu

List of Publications by Year
in descending order

46 papers	3,321 citations	186209 28 h-index	223716 46 g-index
46 all docs	46 docs citations	46 times ranked	4961 citing authors

#	Article	IF	Citations
1	Biomimetic porous scaffolds for bone tissue engineering. Materials Science and Engineering Reports, 2014, 80, 1-36.	14.8	854
2	The Horizon of Materiobiology: A Perspective on Material-Guided Cell Behaviors and Tissue Engineering. Chemical Reviews, 2017, 117, 4376-4421.	23.0	424
3	Bioinspired trimodal macro/micro/nano-porous scaffolds loading rhBMP-2 for complete regeneration of critical size bone defect. Acta Biomaterialia, 2016, 32, 309-323.	4.1	202
4	Magnesium modification of a calcium phosphate cement alters bone marrow stromal cell behavior via an integrin-mediated mechanism. Biomaterials, 2015, 53, 251-264.	5.7	181
5	Enhanced bioactivity of bone morphogenetic protein-2 with low dose of 2-N, 6-O-sulfated chitosan in vitro and in vivo. Biomaterials, 2009, 30, 1715-1724.	5.7	150
6	Bone regeneration using photocrosslinked hydrogel incorporating rhBMP-2 loaded 2-N, 6-O-sulfated chitosan nanoparticles. Biomaterials, 2014, 35, 2730-2742.	5.7	108
7	Rapid initiation of guided bone regeneration driven by spatiotemporal delivery of IL-8 and BMP-2 from hierarchical MBG-based scaffold. Biomaterials, 2019, 196, 122-137.	5.7	108
8	Charge-Reversal APTES-Modified Mesoporous Silica Nanoparticles with High Drug Loading and Release Controllability. ACS Applied Materials & Interfaces, 2016, 8, 17166-17175.	4.0	101
9	PEGylated poly(glycerol sebacate)-modified calcium phosphate scaffolds with desirable mechanical behavior and enhanced osteogenic capacity. Acta Biomaterialia, 2016, 44, 110-124.	4.1	67
10	Î²-Tricalcium phosphate/poly(glycerol sebacate) scaffolds with robust mechanical property for bone tissue engineering. Materials Science and Engineering C, 2015, 56, 37-47.	3.8	66
11	Preferential tumor accumulation and desirable interstitial penetration of poly(lactic-co-glycolic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 glycol-poly(d,l-lactic acid). Acta Biomaterialia, 2016, 29, 248-260.	4.1	65
12	Sulfated polysaccharide directs therapeutic angiogenesis via endogenous VEGF secretion of macrophages. Science Advances, 2021, 7, .	4.7	65
13	Enhancement and orchestration of osteogenesis and angiogenesis by a dual-modular design of growth factors delivery scaffolds and 26SCS decoration. Biomaterials, 2020, 232, 119645.	5.7	54
14	Multicellularity-interweaved bone regeneration of BMP-2-loaded scaffold with orchestrated kinetics of resorption and osteogenesis. Biomaterials, 2019, 216, 119216.	5.7	46
15	A poly(glycerol sebacate)-coated mesoporous bioactive glass scaffold with adjustable mechanical strength, degradation rate, controlled-release and cell behavior for bone tissue engineering. Colloids and Surfaces B: Biointerfaces, 2015, 131, 1-11.	2.5	45
16	Manipulation of VEGF-induced angiogenesis by 2-N, 6-O-sulfated chitosan. Acta Biomaterialia, 2018, 71, 510-521.	4.1	45
17	Enhancement of VEGF-Mediated Angiogenesis by 2-N,6-O-Sulfated Chitosan-Coated Hierarchical PLGA Scaffolds. ACS Applied Materials & Interfaces, 2015, 7, 9982-9990.	4.0	44
18	Nanostructured hydroxyapatite surfaces-mediated adsorption alters recognition of BMP receptor IA and bioactivity of bone morphogenetic protein-2. Acta Biomaterialia, 2015, 27, 275-285.	4.1	44

#	Article	IF	Citations
19	Formation of graphene oxide-hybridized nanogels for combinative anticancer therapy. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 2387-2395.	1.7	43
20	2- N , 6- O -sulfated chitosan-assisted BMP-2 immobilization of PCL scaffolds for enhanced osteoinduction. Materials Science and Engineering C, 2017, 74, 298-306.	3.8	38
21	Formation of enzymatic/redox-switching nanogates on mesoporous silica nanoparticles for anticancer drug delivery. Materials Science and Engineering C, 2019, 100, 855-861.	3.8	38
22	Urethane-based low-temperature curing, highly-customized and multifunctional poly(glycerol) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	4.1	37
23	Direct three-dimensional printing of a highly customized freestanding hyperelastic bioscaffold for complex craniomaxillofacial reconstruction. Chemical Engineering Journal, 2021, 411, 128541.	6.6	37
24	Controllable Synthesis of Biomimetic Hydroxyapatite Nanorods with High Osteogenic Bioactivity. ACS Biomaterials Science and Engineering, 2020, 6, 320-328.	2.6	36
25	Localization and promotion of recombinant human bone morphogenetic protein-2 bioactivity on extracellular matrix mimetic chondroitin sulfate-functionalized calcium phosphate cement scaffolds. Acta Biomaterialia, 2018, 71, 184-199.	4.1	34
26	RhBMP-2 loaded MBG/PEGylated poly(glycerol sebacate) composite scaffolds for rapid bone regeneration. Journal of Materials Chemistry B, 2017, 5, 4633-4647.	2.9	33
27	Spatiotemporal Immunomodulation Using Biomimetic Scaffold Promotes Endochondral Ossificationâ€Mediated Bone Healing. Advanced Science, 2021, 8, e2100143.	5.6	33
28	Recapitulation of In Situ Endochondral Ossification Using an Injectable Hypoxiaâ€Mimetic Hydrogel. Advanced Functional Materials, 2021, 31, 2008515.	7.8	32
29	Incorporating redox-sensitive nanogels into bioabsorbable nanofibrous membrane to acquire ROS-balance capacity for skin regeneration. Bioactive Materials, 2021, 6, 3461-3472.	8.6	30
30	The immunomodulatory role of sulfated chitosan in BMP-2-mediated bone regeneration. Biomaterials Science, 2018, 6, 2496-2507.	2.6	28
31	Kaolin-reinforced 3D MBG scaffolds with hierarchical architecture and robust mechanical strength for bone tissue engineering. Journal of Materials Chemistry B, 2014, 2, 3782-3790.	2.9	26
32	Preparation of an rhBMP-2 loaded mesoporous bioactive glass/calcium phosphate cement porous composite scaffold for rapid bone tissue regeneration. Journal of Materials Chemistry B, 2015, 3, 8558-8566.	2.9	26
33	Accelerated Bone Regenerative Efficiency by Regulating Sequential Release of BMP-2 and VEGF and Synergism with Sulfated Chitosan. ACS Biomaterials Science and Engineering, 2019, 5, 1944-1955.	2.6	26
34	Strontium doping promotes bioactivity of rhBMP-2 upon calcium phosphate cement via elevated recognition and expression of BMPR-IA. Colloids and Surfaces B: Biointerfaces, 2017, 159, 684-695.	2.5	20
35	Synergistic effects of dual growth factor delivery from composite hydrogels incorporating 2-N,6-O-sulphated chitosan on bone regeneration. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 1-17.	1.9	20
36	Microporous density-mediated response of MSCs on 3D trimodal macro/micro/nano-porous scaffolds via fibronectin/integrin and FAK/MAPK signaling pathways. Journal of Materials Chemistry B, 2017, 5, 3586-3599.	2.9	17

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37	In situ biodegradable crosslinking of cationic oligomer coating on mesoporous silica nanoparticles for drug delivery. Colloids and Surfaces B: Biointerfaces, 2017, 153, 272-279.	2.5	15
38	Development of bioabsorbable polylactide membrane with controllable hydrophilicity for adjustment of cell behaviours. Royal Society Open Science, 2018, 5, 170868.	1.1	15
39	Potentiation effect of HB-EGF on facilitating wound healing via 2-N,6-O-sulfated chitosan nanoparticles modified PLGA scaffold. RSC Advances, 2017, 7, 43161-43171.	1.7	14
40	Biomaterial-guided immobilization and osteoactivity of bone morphogenetic protein-2. Applied Materials Today, 2020, 19, 100599.	2.3	13
41	In Situ formation of pH-/thermo-sensitive nanohybrids via friendly-assembly of poly(N-vinylpyrrolidone) onto LAPONITEÂ®. RSC Advances, 2016, 6, 31816-31823.	1.7	12
42	Robust hierarchical porous MBG scaffolds with promoted biomineralization ability. Colloids and Surfaces B: Biointerfaces, 2019, 178, 22-31.	2.5	10
43	The regulatory role of sulfated polysaccharides in facilitating rhBMP-2-induced osteogenesis. Biomaterials Science, 2019, 7, 4375-4387.	2.6	9
44	Dual-function injectable fibrin gel incorporated with sulfated chitosan nanoparticles for rhBMP-2-induced bone regeneration. Applied Materials Today, 2022, 26, 101347.	2.3	5
45	Bioactive Filmâ€Guided Softâ€“Hard Interface Design Technology for Multiâ€Tissue Integrative Regeneration. Advanced Science, 2022, , 2105945.	5.6	4
46	Rational Design and Fabrication of Biomimetic Hierarchical Scaffolds With Bone-Matchable Strength for Bone Regeneration. Frontiers in Materials, 2021, 7, .	1.2	1