Haiyan Li

List of Publications by Year in descending order

108 papers	5,965 citations	66315 42 h-index	76872 74 g-index
112 all docs	112 docs citations	112 times ranked	7072 citing authors

#	Article	IF	Citations
1	Enhanced osteoporotic bone regeneration by strontium-substituted calcium silicate bioactive ceramics. Biomaterials, 2013, 34, 10028-10042.	5.7	311
2	Exosomes/tricalcium phosphate combination scaffolds can enhance bone regeneration by activating the PI3K/Akt signaling pathway. Stem Cell Research and Therapy, 2016, 7, 136.	2.4	302
3	Silicate bioceramics enhanced vascularization and osteogenesis through stimulating interactions between endothelia cells and bone marrow stromal cells. Biomaterials, 2014, 35, 3803-3818.	5.7	216
4	Stimulation of proangiogenesis by calcium silicate bioactive ceramic. Acta Biomaterialia, 2013, 9, 5379-5389.	4.1	203
5	Surface acoustic wave concentration of particle and bioparticle suspensions. Biomedical Microdevices, 2007, 9, 647-656.	1.4	191
6	Embryonic Stem Cellsâ€Derived Exosomes Endowed with Targeting Properties as Chemotherapeutics Delivery Vehicles for Glioblastoma Therapy. Advanced Science, 2019, 6, 1801899.	5.6	182
7	Bioglass Activated Skin Tissue Engineering Constructs for Wound Healing. ACS Applied Materials & Interfaces, 2016, 8, 703-715.	4.0	180
8	Bioactive Injectable Hydrogels Containing Desferrioxamine and Bioglass for Diabetic Wound Healing. ACS Applied Materials & Interfaces, 2018, 10, 30103-30114.	4.0	165
9	Fabrication and characterization of bioactive wollastonite/PHBV composite scaffolds. Biomaterials, 2004, 25, 5473-5480.	5.7	158
10	pH-compensation effect of bioactive inorganic fillers on the degradation of PLGA. Composites Science and Technology, 2005, 65, 2226-2232.	3.8	147
11	in vitro Evaluation of Biodegradable Poly(butylene succinate) as a Novel Biomaterial. Macromolecular Bioscience, 2005, 5, 433-440.	2.1	133
12	The calcium silicate/alginate composite: Preparation and evaluation of its behavior as bioactive injectable hydrogels. Acta Biomaterialia, 2013, 9, 9107-9117.	4.1	129
13	Modulation of macrophages by bioactive glass/sodium alginate hydrogel is crucial in skin regeneration enhancement. Biomaterials, 2020, 256, 120216.	5.7	128
14	Synergy effects of copper and silicon ions on stimulation of vascularization by copper-doped calcium silicate. Journal of Materials Chemistry B, 2014, 2, 1100-1110.	2.9	124
15	Bioglass promotes wound healing by affecting gap junction connexin 43 mediated endothelial cell behavior. Biomaterials, 2016, 84, 64-75.	5.7	114
16	An injectable continuous stratified structurally and functionally biomimetic construct for enhancing osteochondral regeneration. Biomaterials, 2019, 192, 149-158.	5.7	107
17	Bioglass promotes wound healing through modulating the paracrine effects between macrophages and repairing cells. Journal of Materials Chemistry B, 2017, 5, 5240-5250.	2.9	105
18	Preparation, characterization and in vitro release of gentamicin from PHBV/wollastonite composite microspheres. Journal of Controlled Release, 2005, 107, 463-473.	4.8	93

#	Article	IF	Citations
19	The degradation and transport mechanism of a Mg-Nd-Zn-Zr stent in rabbit common carotid artery: A 20-month study. Acta Biomaterialia, 2018, 69, 372-384.	4.1	93
20	Electrospun membranes: control of the structure and structure related applications in tissue regeneration and drug delivery. Journal of Materials Chemistry B, 2014, 2, 5492-5510.	2.9	90
21	Preparation and characterization of bioactive and biodegradable Wollastonite/poly(D,L-lactic acid) composite scaffolds. Journal of Materials Science: Materials in Medicine, 2004, 15, 1089-1095.	1.7	89
22	Design of a thermosensitive bioglass/agaroseâ€“alginate composite hydrogel for chronic wound healing. Journal of Materials Chemistry B, 2015, 3, 8856-8864.	2.9	87
23	Preparation of hydrophilic poly(l-lactide) electrospun fibrous scaffolds modified with chitosan for enhanced cell biocompatibility. Polymer, 2012, 53, 2298-2305.	1.8	85
24	In vitro degradation of porous degradable and bioactive PHBV/wollastonite composite scaffolds. Polymer Degradation and Stability, 2005, 87, 301-307.	2.7	76
25	Human urine-derived stem cells can be induced into osteogenic lineage by silicate bioceramics via activation of the Wnt/Î²-catenin signaling pathway. Biomaterials, 2015, 55, 1-11.	5.7	76
26	A scaffold cell seeding method driven by surface acoustic waves. Biomaterials, 2007, 28, 4098-4104.	5.7	74
27	Microfluidic Colloidal Island Formation and Erasure Induced by Surface Acoustic Wave Radiation. Physical Review Letters, 2008, 101, 084502.	2.9	74
28	Injectable bioactive akermanite/alginate composite hydrogels for in situ skin tissue engineering. Journal of Materials Chemistry B, 2017, 5, 3315-3326.	2.9	73
29	An Anisotropically and Heterogeneously Aligned Patterned Electrospun Scaffold with Tailored Mechanical Property and Improved Bioactivity for Vascular Tissue Engineering. ACS Applied Materials & Interfaces, 2015, 7, 8706-8718.	4.0	70
30	Bioglass/alginate composite hydrogel beads as cell carriers for bone regeneration. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 42-51.	1.6	68
31	Fabrication, Characterization, and in vitro Degradation of Composite Scaffolds Based on PHBV and Bioactive Glass. Journal of Biomaterials Applications, 2005, 20, 137-155.	1.2	67
32	Modulating degradation of sodium alginate/bioglass hydrogel for improving tissue infiltration and promoting wound healing. Bioactive Materials, 2021, 6, 3692-3704.	8.6	67
33	Influence of proteins and cells on in vitro corrosion of Mgâ€“Ndâ€“Znâ€“Zr alloy. Corrosion Science, 2014, 85, 477-481.	3.0	65
34	High frequency acoustic cell stimulation promotes exosome generation regulated by a calcium-dependent mechanism. Communications Biology, 2020, 3, 553.	2.0	65
35	Effect of surface acoustic waves on the viability, proliferation and differentiation of primary osteoblast-like cells. Biomicrofluidics, 2009, 3, 034102.	1.2	64
36	Preparation, characterization and in vitro angiogenic capacity of cobalt substituted Î²-tricalcium phosphate ceramics. Journal of Materials Chemistry, 2012, 22, 21686.	6.7	63

#	Article	IF	Citations
37	Bioglass enhances the production of exosomes and improves their capability of promoting vascularization. Bioactive Materials, 2021, 6, 823-835.	8.6	61
38	Improvement of PHBV Scaffolds with Bioglass for Cartilage Tissue Engineering. PLoS ONE, 2013, 8, e71563.	1.1	59
39	Macroporous poly(3-hydroxybutyrate-co-3-hydroxyvalerate) matrices for cartilage tissue engineering. European Polymer Journal, 2005, 41, 2443-2449.	2.6	52
40	The Role of Vascular Actors in Two Dimensional Dialogue of Human Bone Marrow Stromal Cell and Endothelial Cell for Inducing Self-Assembled Network. PLoS ONE, 2011, 6, e16767.	1.1	49
41	Human Urine Derived Stem Cells in Combination with Î²-TCP Can Be Applied for Bone Regeneration. PLoS ONE, 2015, 10, e0125253.	1.1	49
42	Role of neural-cadherin in early osteoblastic differentiation of human bone marrow stromal cells cocultured with human umbilical vein endothelial cells. American Journal of Physiology - Cell Physiology, 2010, 299, C422-C430.	2.1	48
43	Effects of Wollastonite on Proliferation and Differentiation of Human Bone Marrow-derived Stromal Cells in PHBV/Wollastonite Composite Scaffolds. Journal of Biomaterials Applications, 2009, 24, 231-246.	1.2	41
44	Combined chemical and structural signals of biomaterials synergistically activate cell-cell communications for improving tissue regeneration. Acta Biomaterialia, 2017, 55, 249-261.	4.1	41
45	Electrospun Poly(L-Lactide) Fiber with Ginsenoside Rg3 for Inhibiting Scar Hyperplasia of Skin. PLoS ONE, 2013, 8, e68771.	1.1	41
46	Pro-chondrogenic and immunomodulatory melatonin-loaded electrospun membranes for tendon-to-bone healing. Journal of Materials Chemistry B, 2019, 7, 6564-6575.	2.9	40
47	Reversing the surface charge of MSCâ€derived small extracellular vesicles by ÎµPLâ€PEGâ€DSPE for enhanced osteoarthritis treatment. Journal of Extracellular Vesicles, 2021, 10, e12160.	5.5	40
48	Alginate-aker injectable composite hydrogels promoted irregular bone regeneration through stem cell recruitment and osteogenic differentiation. Journal of Materials Chemistry B, 2018, 6, 1951-1964.	2.9	38
49	Multilayer Injectable Hydrogel System Sequentially Delivers Bioactive Substances for Each Wound Healing Stage. ACS Applied Materials & Interfaces, 2020, 12, 29787-29806.	4.0	37
50	Controlled release of MSC-derived small extracellular vesicles by an injectable Diels-Alder crosslinked hyaluronic acid/PEG hydrogel for osteoarthritis improvement. Acta Biomaterialia, 2021, 128, 163-174.	4.1	37
51	High strength and antibacterial polyelectrolyte complex CS/HS hydrogel films for wound healing. Soft Matter, 2019, 15, 7686-7694.	1.2	34
52	Incorporation of Bioglass Improved the Mechanical Stability and Bioactivity of Alginate/Carboxymethyl Chitosan Hydrogel Wound Dressing. ACS Applied Bio Materials, 2021, 4, 1677-1692.	2.3	34
53	Fabrication and characterization of Î²-dicalcium silicate/poly(d,l-lactic acid) composite scaffolds. Materials Letters, 2005, 59, 2214-2218.	1.3	33
54	InÂvitro degradation and surface bioactivity of iron-matrix composites containing silicate-based bioceramic. Bioactive Materials, 2017, 2, 10-18.	8.6	33

#	Article	IF	Citations
55	Controlled drug release from a polymer matrix by patterned electrospun nanofibers with controllable hydrophobicity. Journal of Materials Chemistry B, 2013, 1, 4182.	2.9	32
56	Influence of fluoride treatment on surface properties, biodegradation and cytocompatibility of Mgâ€“Ndâ€“Znâ€“Zr alloy. Journal of Materials Science: Materials in Medicine, 2014, 25, 791-799.	1.7	32
57	Smart Âµâ€Fiber Hydrogels with Macroâ€Porous Structure for Sequentially Promoting Multiple Phases of Articular Cartilage Regeneration. Advanced Functional Materials, 2022, 32, .	7.8	30
58	Anti-Inflammatory and Prochondrogenic In Situ-Formed Injectable Hydrogel Crosslinked by Strontium-Doped Bioglass for Cartilage Regeneration. ACS Applied Materials & Interfaces, 2021, 13, 59772-59786.	4.0	30
59	The dynamics of surface acoustic waveâ€driven scaffold cell seeding. Biotechnology and Bioengineering, 2009, 103, 387-401.	1.7	29
60	Multifunctional superparamagnetic nanoshells: combining two-photon luminescence imaging, surface-enhanced Raman scattering and magnetic separation. Nanoscale, 2014, 6, 14360-14370.	2.8	29
61	Effect of macrophages on in vitro corrosion behavior of magnesium alloy. Journal of Biomedical Materials Research - Part A, 2016, 104, 2476-2487.	2.1	29
62	Bifunctional Cx43 Mimic Peptide Grafted Hyaluronic Acid Hydrogels Inhibited Tumor Recurrence and Stimulated Wound Healing for Postsurgical Tumor Treatment. Advanced Functional Materials, 2020, 30, 2004709.	7.8	28
63	A magnetic bead-mediated selective adsorption strategy for extracellular vesicle separation and purification. Acta Biomaterialia, 2021, 124, 336-347.	4.1	26
64	An effective strategy for preparing macroporous and self-healing bioactive hydrogels for cell delivery and wound healing. Chemical Engineering Journal, 2021, 425, 130677.	6.6	26
65	Applications of extracellular vesicles in tissue regeneration. Biomicrofluidics, 2020, 14, 011501.	1.2	24
66	InÂvitro biocompatibility assessment of PHBV/Wollastonite composites. Journal of Materials Science: Materials in Medicine, 2008, 19, 67-73.	1.7	23
67	Control of the Dissolution of <scp><scp>Ca</scp></scp> and <scp><scp>Si</scp></scp> Ions from <scp><scp>CaSiO</scp></scp>₃ Bioceramic via Tailoring Its Surface Structure and Chemical Composition. Journal of the American Ceramic Society, 2013, 96, 691-696.	1.9	23
68	Bioglass enhanced wound healing ability of urineâ€derived stem cells through promoting paracrine effects between stem cells and recipient cells. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1609-e1622.	1.3	23
69	PHBV/bioglass composite scaffolds with co-cultures of endothelial cells and bone marrow stromal cells improve vascularization and osteogenesis for bone tissue engineering. RSC Advances, 2017, 7, 22197-22207.	1.7	22
70	Local intramyocardial delivery of bioglass with alginate hydrogels for post-infarct myocardial regeneration. Biomedicine and Pharmacotherapy, 2020, 129, 110382.	2.5	21
71	Tough hydrogels with tunable soft and wet interfacial adhesion. Polymer Testing, 2021, 93, 106976.	2.3	21
72	45S5 BioglassÂ® works synergistically with siRNA to downregulate the expression of matrix metalloproteinase-9 in diabetic wounds. Acta Biomaterialia, 2022, 145, 372-389.	4.1	21

#	Article	IF	Citations
73	uPA and MMPâ€2 were involved in selfâ€assembled network formation in a two dimensional coâ€culture model of bone marrow stromal cells and endothelial cells. Journal of Cellular Biochemistry, 2013, 114, 650-657.	1.2	20
74	Multiple Hydrogen Bondsâ€“Reinforced Hydrogels with High Strength, Shape Memory, and Adsorption Antiâ€inflammatory Molecules. Macromolecular Rapid Communications, 2020, 41, e2000202.	2.0	20
75	Construction and properties of poly(lactic-co-glycolic acid)/calcium phosphate cement composite pellets with microspheres-in-pellet structure for bone repair. Ceramics International, 2016, 42, 5587-5592.	2.3	19
76	Macrophage phagocytosis of biomedical Mg alloy degradation products prepared by electrochemical method. Materials Science and Engineering C, 2017, 75, 1178-1183.	3.8	19
77	The stimulation of osteogenic differentiation of embryoid bodies from human induced pluripotent stem cells by akermanite bioceramics. Journal of Materials Chemistry B, 2016, 4, 2369-2376.	2.9	18
78	Enhancement of rotator cuff tendonâ€“bone healing using combined aligned electrospun fibrous membranes and kartogenin. RSC Advances, 2019, 9, 15582-15592.	1.7	18
79	Bioceramic akermanite enhanced vascularization and osteogenic differentiation of human induced pluripotent stem cells in 3D scaffolds in vitro and vivo. RSC Advances, 2019, 9, 25462-25470.	1.7	17
80	Bioactive injectable polymethylmethacrylate/silicate bioceramic hybrid cements for percutaneous vertebroplasty and kyphoplasty. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 96, 125-135.	1.5	17
81	Injectable Quercetin-Loaded Hydrogel with Cartilage-Protection and Immunomodulatory Properties for Articular Cartilage Repair. ACS Applied Bio Materials, 2020, 3, 761-771.	2.3	17
82	Electrospun nanofibrous sheets of collagen/elastin/polycaprolactone improve cardiac repair after myocardial infarction. American Journal of Translational Research (discontinued), 2016, 8, 1678-94.	0.0	15
83	Super Bulk and Interfacial Toughness of Amylopectin Reinforced PAAm/PVA Doubleâ€Network Hydrogels via Multiple Hydrogen Bonds. Macromolecular Materials and Engineering, 2020, 305, 1900450.	1.7	14
84	Biomaterials affect cell-cell interactions in vitro in tissue engineering. Journal of Materials Science and Technology, 2021, 63, 62-72.	5.6	14
85	Calcium silicate enhances immunosuppressive function of MSCs to indirectly modulate the polarization of macrophages. International Journal of Energy Production and Management, 2021, 8, rbab056.	1.9	14
86	Regulating the production and biological function of small extracellular vesicles: current strategies, applications and prospects. Journal of Nanobiotechnology, 2021, 19, 422.	4.2	13
87	Preparation and in vitro cell-biological performance of sodium alginate/nano-zinc silicate co-modified calcium silicate bioceramics. RSC Advances, 2015, 5, 8329-8339.	1.7	11
88	Combined biomaterial signals stimulate communications between bone marrow stromal cell and endothelial cell. RSC Advances, 2017, 7, 5306-5314.	1.7	11
89	Bioglass could increase cell membrane fluidity with ion products to develop its bioactivity. Cell Proliferation, 2020, 53, e12906.	2.4	11
90	Sodium alginate-bioglass-encapsulated hAECs restore ovarian function in premature ovarian failure by stimulating angiogenic factor secretion. Stem Cell Research and Therapy, 2021, 12, 223.	2.4	11

#	Article	IF	Citations
91	Preparation of macroporous polymer scaffolds using calcined cancellous bone as a template. Journal of Biomaterials Science, Polymer Edition, 2005, 16, 575-584.	1.9	10
92	Programmed Transformations of Strong Polyvinyl Alcohol/Sodium Alginate Hydrogels via Ionic Crosslink Lithography. Macromolecular Rapid Communications, 2020, 41, 2000127.	2.0	10
93	Macrophages activated by akermanite/alginate composite hydrogel stimulate migration of bone marrow-derived mesenchymal stem cells. Biomedical Materials (Bristol), 2021, 16, 045004.	1.7	10
94	Eliminating the original cargos of glioblastoma cell-derived small extracellular vesicles for efficient drug delivery to glioblastoma with improved biosafety. Bioactive Materials, 2022, 16, 204-217.	8.6	10
95	Tetrandrine inhibits the occurrence and development of frozen shoulder by inhibiting inflammation, angiogenesis, and fibrosis. Biomedicine and Pharmacotherapy, 2021, 140, 111700.	2.5	9
96	Stem Cell-Based Tissue Engineering for the Treatment of Burn Wounds: A Systematic Review of Preclinical Studies. Stem Cell Reviews and Reports, 2022, 18, 1926-1955.	1.7	9
97	Synergetic stimulation of nanostructure and chemistry cues on behaviors of fibroblasts and endothelial cells. Colloids and Surfaces B: Biointerfaces, 2017, 160, 500-509.	2.5	8
98	Injectable bioactive polymethyl methacrylateâ€“hydrogel hybrid bone cement loaded with BMP-2 to improve osteogenesis for percutaneous vertebroplasty and kyphoplasty. Bio-Design and Manufacturing, 2022, 5, 318-332.	3.9	8
99	TiO₂ Nanotubes Enhance Vascularization and Osteogenic Differentiation Through Stimulating Interactions Between Bone Marrow Stromal Cells and Endothelial Cells. Journal of Biomedical Nanotechnology, 2018, 14, 765-777.	0.5	7
100	Bioglass for skin regeneration. , 2019, , 225-250.		7
101	Interfacial adhesion and water resistance of stainless steelâ€“polyolefin improved by functionalized silane. Polymer Engineering and Science, 2019, 59, 1866-1873.	1.5	6
102	Bioactive calcium silicate extracts regulate the morphology and stemness of human embryonic stem cells at the initial stage. RSC Advances, 2016, 6, 104666-104674.	1.7	5
103	Small extracellular vesicles secreted by urine-derived stem cells enhanced wound healing in aged mice by ameliorating cellular senescence. Journal of Materials Science and Technology, 2021, 63, 216-227.	5.6	5
104	Superparamagnetic plasmonic nanoshells for improved imaging, separation and seeding of co-cultured cells. Journal of Materials Chemistry B, 2015, 3, 7787-7795.	2.9	4
105	Application of hydrophobic coatings in biodegradable devices. Bio-Medical Materials and Engineering, 2015, 25, 77-88.	0.4	3
106	Juxtamembrane 2 mimic peptide competitively inhibits mitochondrial trafficking and activates ROS-mediated apoptosis pathway to exert anti-tumor effects. Cell Death and Disease, 2022, 13, 264.	2.7	2
107	Nanoparticle patterning in a microfluidic drop induced by surface acoustic waves. , 2009, , .		1
108	Design of Silicate-Based Bioactive Materials for Bone Tissue Repair and Reconstruction. Frontiers in Nanobiomedical Research, 2017, , 257-284.	0.1	0