Hang Lin

List of Publications by Year
in descending order

91 papers	4,731 citations	81889 39 h-index	102480 66 g-index
94 all docs	94 docs citations	94 times ranked	6054 citing authors

#	Article	IF	Citations
1	Osteoblast Differentiation and Bone Matrix Formation<i>In Vivo</i>and<i>In Vitro</i>. Tissue Engineering - Part B: Reviews, 2017, 23, 268-280.	4.8	329
2	Application of visible light-based projection stereolithography for live cell-scaffold fabrication with designed architecture. Biomaterials, 2013, 34, 331-339.	11.4	311
3	Bone marrow mesenchymal stem cells: Aging and tissue engineering applications to enhance bone healing. Biomaterials, 2019, 203, 96-110.	11.4	234
4	Multilayered polycaprolactone/gelatin fiber-hydrogel composite for tendon tissue engineering. Acta Biomaterialia, 2016, 35, 68-76.	8.3	164
5	Homogeneous osteogenesis and bone regeneration by demineralized bone matrix loading with collagen-targeting bone morphogenetic protein-2. Biomaterials, 2007, 28, 1027-1035.	11.4	163
6	Influence of decellularized matrix derived from human mesenchymal stem cells on their proliferation, migration and multi-lineage differentiation potential. Biomaterials, 2012, 33, 4480-4489.	11.4	162
7	Enhancement of tenogenic differentiation of human adipose stem cells by tendon-derived extracellular matrix. Biomaterials, 2013, 34, 9295-9306.	11.4	155
8	Linear Ordered Collagen Scaffolds Loaded with Collagen-Binding Brain-Derived Neurotrophic Factor Improve the Recovery of Spinal Cord Injury in Rats. Tissue Engineering - Part A, 2009, 15, 2927-2935.	3.1	126
9	Cartilage Tissue Engineering Application of Injectable Gelatin Hydrogel with <i>In Situ</i> Visible-Light-Activated Gelation Capability in Both Air and Aqueous Solution. Tissue Engineering - Part A, 2014, 20, 2402-2411.	3.1	122
10	The effect of collagen-binding NGF-Î² on the promotion of sciatic nerve regeneration in a rat sciatic nerve crush injury model. Biomaterials, 2009, 30, 4649-4656.	11.4	116
11	Collagen-Targeting Vascular Endothelial Growth Factor Improves Cardiac Performance After Myocardial Infarction. Circulation, 2009, 119, 1776-1784.	1.6	115
12	Stem Cell-Based Microphysiological Osteochondral System to Model Tissue Response to Interleukin-1Î². Molecular Pharmaceutics, 2014, 11, 2203-2212.	4.6	114
13	Pathogenesis of Osteoarthritis: Risk Factors, Regulatory Pathways in Chondrocytes, and Experimental Models. Biology, 2020, 9, 194.	2.8	111
14	Alternative Translation of <i>OCT4</i> by an Internal Ribosome Entry Site and its Novel Function in Stress Response. Stem Cells, 2009, 27, 1265-1275.	3.2	108
15	Stem-cell-capturing collagen scaffold promotes cardiac tissue regeneration. Biomaterials, 2011, 32, 2508-2515.	11.4	102
16	Mesenchymal stem cell-derived extracellular matrix enhances chondrogenic phenotype of and cartilage formation by encapsulated chondrocytes in vitro and in vivo. Acta Biomaterialia, 2018, 69, 71-82.	8.3	102
17	The effect of collagen-targeting platelet-derived growth factor on cellularization and vascularization of collagen scaffolds. Biomaterials, 2006, 27, 5708-5714.	11.4	101
18	The effect of crosslinking heparin to demineralized bone matrix on mechanical strength and specific binding to human bone morphogenetic protein-2. Biomaterials, 2008, 29, 1189-1197.	11.4	91

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19	Chondrogenesis of human bone marrow mesenchymal stem cells in 3-dimensional, photocrosslinked hydrogel constructs: Effect of cell seeding density and material stiffness. Acta Biomaterialia, 2017, 58, 302-311.	8.3	85
20	Novel nerve guidance material prepared from bovine aponeurosis. Journal of Biomedical Materials Research - Part A, 2006, 79A, 591-598.	4.0	73
21	Osteochondral Tissue Chip Derived From iPSCs: Modeling OA Pathologies and Testing Drugs. Frontiers in Bioengineering and Biotechnology, 2019, 7, 411.	4.1	71
22	Vascularization and cellularization of collagen scaffolds incorporated with two different collagen-targeting human basic fibroblast growth factors. Journal of Biomedical Materials Research - Part A, 2007, 82A, 630-636.	4.0	69
23	Collagen membranes loaded with collagen-binding human PDGF-BB accelerate wound healing in a rabbit dermal ischemic ulcer model. Growth Factors, 2007, 25, 309-318.	1.7	65
24	Three-dimensional osteochondral microtissue to model pathogenesis of osteoarthritis. Stem Cell Research and Therapy, 2013, 4, S6.	5.5	62
25	Projection Stereolithographic Fabrication of Human Adipose Stem Cell-Incorporated Biodegradable Scaffolds for Cartilage Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2015, 3, 115.	4.1	61
26	Three-dimensional osteogenic and chondrogenic systems to model osteochondral physiology and degenerative joint diseases. Experimental Biology and Medicine, 2014, 239, 1080-1095.	2.4	60
27	Optimization of photocrosslinked gelatin/hyaluronic acid hybrid scaffold for the repair of cartilage defect. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 1418-1429.	2.7	59
28	Engineering hyaline cartilage from mesenchymal stem cells with low hypertrophy potential via modulation of culture conditions and Wnt/Î²-catenin pathway. Biomaterials, 2019, 192, 569-578.	11.4	58
29	Acceleration of chondrogenic differentiation of human mesenchymal stem cells by sustained growth factor release in 3D graphene oxide incorporated hydrogels. Acta Biomaterialia, 2020, 105, 44-55.	8.3	58
30	Activation of demineralized bone matrix by genetically engineered human bone morphogenetic protein-2 with a collagen binding domain derived from von Willebrand factor propolypeptide. Journal of Biomedical Materials Research - Part A, 2007, 80A, 428-434.	4.0	57
31	Enhancing chondrogenesis and mechanical strength retention in physiologically relevant hydrogels with incorporation of hyaluronic acid and direct loading of TGF-Î². Acta Biomaterialia, 2019, 83, 167-176.	8.3	57
32	Promotion of peripheral nerve growth by collagen scaffolds loaded with collagenâ€targeting human nerve growth factorâ€Î². Journal of Biomedical Materials Research - Part A, 2007, 83A, 1054-1061.	4.0	55
33	Efficient in vivo bone formation by BMP-2 engineered human mesenchymal stem cells encapsulated in a projection stereolithographically fabricated hydrogel scaffold. Stem Cell Research and Therapy, 2019, 10, 254.	5.5	55
34	In Vitro Repair of Meniscal Radial Tear With Hydrogels Seeded With Adipose Stem Cells and TGF-Î²3. American Journal of Sports Medicine, 2018, 46, 2402-2413.	4.2	53
35	Tendon-Derived Extracellular Matrix Enhances Transforming Growth Factor-Î²3-Induced Tenogenic Differentiation of Human Adipose-Derived Stem Cells. Tissue Engineering - Part A, 2017, 23, 166-176.	3.1	50
36	Improvement of Sciatic Nerve Regeneration Using Laminin-Binding Human NGF-Î². PLoS ONE, 2009, 4, e6180.	2.5	46

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37	Phenotypical analysis of adult rat olfactory ensheathing cells on 3-D collagen scaffolds. Neuroscience Letters, 2006, 401, 65-70.	2.1	43
38	Improved neovascularization and wound repair by targeting human basic fibroblast growth factor (bFGF) to fibrin. Journal of Molecular Medicine, 2008, 86, 1127-1138.	3.9	42
39	Exploration of metformin as novel therapy for osteoarthritis: preventing cartilage degeneration and reducing pain behavior. Arthritis Research and Therapy, 2020, 22, 34.	3.5	42
40	Graphene oxide-functionalized nanocomposites promote osteogenesis of human mesenchymal stem cells via enhancement of BMP-SMAD1/5 signaling pathway. Biomaterials, 2021, 277, 121082.	11.4	41
41	Influence of cholesterol/caveolin-1/caveolae homeostasis on membrane properties and substrate adhesion characteristics of adult human mesenchymal stem cells. Stem Cell Research and Therapy, 2018, 9, 86.	5.5	40
42	Robust bone regeneration through endochondral ossification of human mesenchymal stem cells within their own extracellular matrix. Biomaterials, 2019, 218, 119336.	11.4	40
43	Chondroinductive factor-free chondrogenic differentiation of human mesenchymal stem cells in graphene oxide-incorporated hydrogels. Journal of Materials Chemistry B, 2018, 6, 908-917.	5.8	38
44	In Vitro Repair of Meniscal Radial Tear Using Aligned Electrospun Nanofibrous Scaffold. Tissue Engineering - Part A, 2015, 21, 2066-2075.	3.1	36
45	Crosslinked Three-Dimensional Demineralized Bone Matrix for the Adipose-Derived Stromal Cell Proliferation and Differentiation. Tissue Engineering - Part A, 2009, 15, 13-21.	3.1	34
46	Current Models for Development of Disease-Modifying Osteoarthritis Drugs. Tissue Engineering - Part C: Methods, 2021, 27, 124-138.	2.1	33
47	Macrophage Effects on Mesenchymal Stem Cell Osteogenesis in a Three-Dimensional<i>In Vitro</i>Bone Model. Tissue Engineering - Part A, 2020, 26, 1099-1111.	3.1	31
48	Human Basic Fibroblast Growth Factor Fused with Kringle4 Peptide Binds to a Fibrin Scaffold and Enhances Angiogenesis. Tissue Engineering - Part A, 2009, 15, 991-998.	3.1	28
49	Projection Stereolithographic Fabrication of BMP-2 Gene-activated Matrix for Bone Tissue Engineering. Scientific Reports, 2017, 7, 11327.	3.3	27
50	Collagen scaffolds loaded with collagenâ€binding NGFâ€Î² accelerate ulcer healing. Journal of Biomedical Materials Research - Part A, 2010, 92A, 887-895.	4.0	26
51	Muscle injury promotes heterotopic ossification by stimulating local bone morphogenetic protein-7 production. Journal of Orthopaedic Translation, 2019, 18, 142-153.	3.9	24
52	Adipose Tissue-Derived Stem Cells Retain Their Adipocyte Differentiation Potential in Three-Dimensional Hydrogels and Bioreactors. Biomolecules, 2020, 10, 1070.	4.0	24
53	Human Mesenchymal Stem Cellâ€Derived Miniature Joint System for Disease Modeling and Drug Testing. Advanced Science, 2022, 9, e2105909.	11.2	22
54	The boneâ€derived collagen containing mineralized matrix for the loading of collagenâ€binding bone morphogenetic proteinâ€2. Journal of Biomedical Materials Research - Part A, 2009, 88A, 725-734.	4.0	21

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55	Injectable <i>BMP-2</i> gene-activated scaffold for the repair of cranial bone defect in mice. Stem Cells Translational Medicine, 2020, 9, 1631-1642.	3.3	20
56	Point-of-Care Procedure for Enhancement of Meniscal Healing in a Goat Model Utilizing Infrapatellar Fat Padâ€“Derived Stromal Vascular Fraction Cells Seeded in Photocrosslinkable Hydrogel. American Journal of Sports Medicine, 2019, 47, 3396-3405.	4.2	18
57	Role of mitochondria in mediating chondrocyte response to mechanical stimuli. Life Sciences, 2020, 263, 118602.	4.3	17
58	The efficacy and safety of tranexamic acid for reducing blood loss following simultaneous bilateral total knee arthroplasty: a multicenter retrospective study. BMC Musculoskeletal Disorders, 2019, 20, 325.	1.9	16
59	Photopolymerizable biogel scaffold seeded with mesenchymal stem cells: safety and efficacy evaluation of novel treatment for intervertebral disc degeneration. Journal of Orthopaedic Research, 2019, 37, 1451-1459.	2.3	15
60	Senolytic Peptide FOXO4-DRI Selectively Removes Senescent Cells From in vitro Expanded Human Chondrocytes. Frontiers in Bioengineering and Biotechnology, 2021, 9, 677576.	4.1	15
61	The effect of three-dimensional demineralized bone matrix on in vitro cumulus-free oocyte maturation. Biomaterials, 2007, 28, 3198-3207.	11.4	14
62	Dynamic loading enhances chondrogenesis of human chondrocytes within a biodegradable resilient hydrogel. Biomaterials Science, 2021, 9, 5011-5024.	5.4	14
63	One-Step Fabrication of Bone Morphogenetic Protein-2 Gene-Activated Porous Poly-L-Lactide Scaffold for Bone Induction. Molecular Therapy - Methods and Clinical Development, 2017, 7, 50-59.	4.1	13
64	Urolithin A Protects Chondrocytes From Mechanical Overloading-Induced Injuries. Frontiers in Pharmacology, 2021, 12, 703847.	3.5	12
65	A Cellularized Biphasic Implant Based on a Bioactive Silk Fibroin Promotes Integration and Tissue Organization during Osteochondral Defect Repair in a Porcine Model. International Journal of Molecular Sciences, 2019, 20, 5145.	4.1	11
66	The Effects of Macrophage Phenotype on Osteogenic Differentiation of MSCs in the Presence of Polyethylene Particles. Biomedicines, 2021, 9, 499.	3.2	11
67	Caveolin-1 mediates soft scaffold-enhanced adipogenesis of human mesenchymal stem cells. Stem Cell Research and Therapy, 2021, 12, 347.	5.5	11
68	Engineering pre-vascularized bone-like tissue from human mesenchymal stem cells through simulating endochondral ossification. Biomaterials, 2022, 283, 121451.	11.4	10
69	Incorporating silicaâ€coated graphene in bioceramic nanocomposites to simultaneously enhance mechanical and biological performance. Journal of Biomedical Materials Research - Part A, 2020, 108, 1016-1027.	4.0	9
70	Engineering osteoarthritic cartilage model through differentiating senescent human mesenchymal stem cells for testing disease-modifying drugs. Science China Life Sciences, 2022, 65, 309-327.	4.9	9
71	Tissue Engineering for Musculoskeletal Regeneration and Disease Modeling. Handbook of Experimental Pharmacology, 2020, 265, 235-268.	1.8	9
72	Condensationâ€Driven Chondrogenesis of Human Mesenchymal Stem Cells within Their Own Extracellular Matrix: Formation of Cartilage with Low Hypertrophy and Physiologically Relevant Mechanical Properties. Advanced Biology, 2019, 3, e1900229.	3.0	8

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73	Dead muscle tissue promotes dystrophic calcification by lowering circulating TGF-Î²1 level. Bone and Joint Research, 2020, 9, 742-750.	3.6	8
74	Novel role of estrogen receptor-Î± on regulating chondrocyte phenotype and response to mechanical loading. Osteoarthritis and Cartilage, 2022, 30, 302-314.	1.3	8
75	Infiltration and In-Tissue Polymerization of Photocross-Linked Hydrogel for Effective Fixation of Implants into Cartilageâ€"An In Vitro Study. ACS Omega, 2019, 4, 18540-18544.	3.5	7
76	TGF-Î²1 plays a protective role in glucocorticoid-induced dystrophic calcification. Bone, 2020, 136, 115355.	2.9	7
77	Role of Canonical Wnt/Î²-Catenin Pathway in Regulating Chondrocytic Hypertrophy in Mesenchymal Stem Cell-Based Cartilage Tissue Engineering. Frontiers in Cell and Developmental Biology, 2022, 10, 812081.	3.7	7
78	Transplantation of adult spinal cord tissue: Transection spinal cord repair and potential clinical translation. Science China Life Sciences, 2019, 62, 870-872.	4.9	6
79	Overview: State of the Art and Future Prospectives for Cartilage Repair. , 2017, , 1-34.		5
80	A Bioactive Cartilage Graft of IGF1-Transduced Adipose Mesenchymal Stem Cells Embedded in an Alginate/Bovine Cartilage Matrix Tridimensional Scaffold. Stem Cells International, 2019, 2019, 1-15.	2.5	5
81	Enhancing the potential of aged human articular chondrocytes for highâ€quality cartilage regeneration. FASEB Journal, 2021, 35, e21410.	0.5	5
82	Nucleous Pulposus Tissue Engineering Using a Novel Photopolymerizable Hydrogel and Minimally Invasive Delivery. Spine Journal, 2014, 14, S173.	1.3	4
83	Stem Cell Therapy for Musculoskeletal Diseases. , 2019, , 953-970.		4
84	Mesenchymal stem cell-derived extracellular matrix (mECM): a bioactive and versatile scaffold for musculoskeletal tissue engineering. Biomedical Materials (Bristol), 2021, 16, 012002.	3.3	4
85	Modeling Joint Pain on a Chip: integrating sensory neurons in the microJoint to model osteoarthritis. Journal of Pain, 2021, 22, 583.	1.4	3
86	Generation of hyaline-like cartilage tissue from human mesenchymal stromal cells within the self-generated extracellular matrix. Acta Biomaterialia, 2022, 149, 150-166.	8.3	3
87	Potential Methods of Targeting Cellular Aging Hallmarks to Reverse Osteoarthritic Phenotype of Chondrocytes. Biology, 2022, 11, 996.	2.8	3
88	Aging of Human Mesenchymal Stem Cells. , 2018, , 975-994.		2
89	Sequential growth factor exposure of human Adâ€'MSCs improves chondrogenic differentiation in an osteochondral biphasic implant. Experimental and Therapeutic Medicine, 2021, 22, 1282.	1.8	2
90	Macrophages Modulate the Function of MSC- and iPSC-Derived Fibroblasts in the Presence of Polyethylene Particles. International Journal of Molecular Sciences, 2021, 22, 12837.	4.1	2

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91	524. Injectable BMP-2 Gene-Activated Scaffold for the Repair of Mouse Cranial Bone Defect. Molecular Therapy, 2016, 24, S209.	8.2	1