Rocky S Tuan

List of Publications by Year
in descending order

223 papers	17,689 citations	17776 65 h-index	17891 125 g-index
229 all docs	229 docs citations	229 times ranked	21311 citing authors

#	Article	IF	Citations
1	A High-Throughput Mechanical Activator for Cartilage Engineering Enables Rapid Screening of in vitro Response of Tissue Models to Physiological and Supra-Physiological Loads. Cells Tissues Organs, 2022, 211, 670-688.	1.3	6
2	Efficient fabrication of monodisperse hepatocyte spheroids and encapsulation in hybrid hydrogel with controllable extracellular matrix effect. Biofabrication, 2022, 14, 015002.	3.7	6
3	Dextran sulfate-amplified extracellular matrix deposition promotes osteogenic differentiation of mesenchymal stem cells. Acta Biomaterialia, 2022, 140, 163-177.	4.1	14
4	Engineering microparticles based on solidified stem cell secretome with an augmented pro-angiogenic factor portfolio for therapeutic angiogenesis. Bioactive Materials, 2022, 17, 526-541.	8.6	5
5	Human Mesenchymal Stem Cellâ€Derived Miniature Joint System for Disease Modeling and Drug Testing. Advanced Science, 2022, 9, e2105909.	5.6	22
6	Tendon tissue engineering: Current progress towards an optimized tenogenic differentiation protocol for human stem cells. Acta Biomaterialia, 2022, 145, 25-42.	4.1	15
7	Role of synovial lymphatic function in osteoarthritis. Osteoarthritis and Cartilage, 2022, , .	0.6	7
8	Paediatric knee anterolateral capsule does not contain a distinct ligament: analysis of histology, immunohistochemistry and gene expression. Journal of ISAKOS, 2021, 6, 82-87.	1.1	4
9	Hyaluronic acid drives mesenchymal stromal cell-derived extracellular matrix assembly by promoting fibronectin fibrillogenesis. Journal of Materials Chemistry B, 2021, 9, 7205-7215.	2.9	12
10	Current Models for Development of Disease-Modifying Osteoarthritis Drugs. Tissue Engineering - Part C: Methods, 2021, 27, 124-138.	1.1	33
11	Enhancing the potential of aged human articular chondrocytes for highâ€quality cartilage regeneration. FASEB Journal, 2021, 35, e21410.	0.2	5
12	Load-induced regulation of tendon homeostasis by SPARC, a genetic predisposition factor for tendon and ligament injuries. Science Translational Medicine, 2021, 13, .	5.8	25
13	Development of a large animal rabbit model for chronic periprosthetic joint infection. Bone and Joint Research, 2021, 10, 156-165.	1.3	9
14	Histone Modifications and Chondrocyte Fate: Regulation and Therapeutic Implications. Frontiers in Cell and Developmental Biology, 2021, 9, 626708.	1.8	9
15	An in vitro chondro-osteo-vascular triphasic model of the osteochondral complex. Biomaterials, 2021, 272, 120773.	5.7	27
16	Engineering multi-tissue units for regenerative Medicine: Bone-tendon-muscle units of the rotator cuff. Biomaterials, 2021, 272, 120789.	5.7	32
17	The Effects of Macrophage Phenotype on Osteogenic Differentiation of MSCs in the Presence of Polyethylene Particles. Biomedicines, 2021, 9, 499.	1.4	11
18	Caveolin-1 mediates soft scaffold-enhanced adipogenesis of human mesenchymal stem cells. Stem Cell Research and Therapy, 2021, 12, 347.	2.4	11

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19	Wdpcp regulates cellular proliferation and differentiation in the developing limb via hedgehog signaling. BMC Developmental Biology, 2021, 21, 10.	2.1	3
20	Reduction of mechanical loading in tendons induces heterotopic ossification and activation of the Î²-catenin signaling pathway. Journal of Orthopaedic Translation, 2021, 29, 42-50.	1.9	6
21	Engineering Musculoskeletal Grafts for Multi-Tissue Unit Repair: Lessons From Developmental Biology and Wound Healing. Frontiers in Physiology, 2021, 12, 691954.	1.3	7
22	Sequential growth factor exposure of human Adâ€‘MSCs improves chondrogenic differentiation in an osteochondral biphasic implant. Experimental and Therapeutic Medicine, 2021, 22, 1282.	0.8	2
23	Graphene oxide-functionalized nanocomposites promote osteogenesis of human mesenchymal stem cells via enhancement of BMP-SMAD1/5 signaling pathway. Biomaterials, 2021, 277, 121082.	5.7	41
24	Cell-laden injectable microgels: Current status and future prospects for cartilage regeneration. Biomaterials, 2021, 279, 121214.	5.7	30
25	Macrophages Modulate the Function of MSC- and iPSC-Derived Fibroblasts in the Presence of Polyethylene Particles. International Journal of Molecular Sciences, 2021, 22, 12837.	1.8	2
26	American Society for Bone and Mineral Researchâ€Orthopaedic Research Society Joint Task Force Report on Cellâ€Based Therapies. Journal of Bone and Mineral Research, 2020, 35, 3-17.	3.1	11
27	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.	2.1	9
28	Gel and cells: A promising reparative strategy for degenerated intervertebral discs. EBioMedicine, 2020, 55, 102756.	2.7	0
29	Antimicrobial activity of mesenchymal stem cells against Staphylococcus aureus. Stem Cell Research and Therapy, 2020, 11, 293.	2.4	36
30	Tendon Tissue-Engineering Scaffolds. , 2020, , 1351-1371.		4
31	Dead muscle tissue promotes dystrophic calcification by lowering circulating TGF-Î²1 level. Bone and Joint Research, 2020, 9, 742-750.	1.3	8
32	Adipose Tissue-Derived Stem Cells Retain Their Adipocyte Differentiation Potential in Three-Dimensional Hydrogels and Bioreactors. Biomolecules, 2020, 10, 1070.	1.8	24
33	Pathogenesis of Osteoarthritis: Risk Factors, Regulatory Pathways in Chondrocytes, and Experimental Models. Biology, 2020, 9, 194.	1.3	111
34	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.	1.6	20
35	Mechanism of traumatic heterotopic ossification: In search of injuryâ€induced osteogenic factors. Journal of Cellular and Molecular Medicine, 2020, 24, 11046-11055.	1.6	21
36	Potential of Soluble Decellularized Extracellular Matrix for Musculoskeletal Tissue Engineering â€“ Comparison of Various Mesenchymal Tissues. Frontiers in Cell and Developmental Biology, 2020, 8, 581972.	1.8	17

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37	Endothelial cells support osteogenesis in an in vitro vascularized bone model developed by 3D bioprinting. Biofabrication, 2020, 12, 025013.	3.7	78
38	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.	4.1	58
39	Mesenchymal stem cells in musculoskeletal tissue engineering. , 2020, , 883-915.		2
40	TGF-Î²1 plays a protective role in glucocorticoid-induced dystrophic calcification. Bone, 2020, 136, 115355.	1.4	7
41	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.	1.6	31
42	Tendonâ€derived extracellular matrix induces mesenchymal stem cell tenogenesis via an integrin/transforming growth factorâ€Î² crosstalkâ€mediated mechanism. FASEB Journal, 2020, 34, 8172-8186.	0.2	36
43	Subchondral Bone Remodeling: A Therapeutic Target for Osteoarthritis. Frontiers in Cell and Developmental Biology, 2020, 8, 607764.	1.8	64
44	American Society for Bone and Mineral Researchâ€Orthopaedic Research Society Joint Task Force Report on Cellâ€Based Therapies â€“ Secondary Publication. Journal of Orthopaedic Research, 2020, 38, 485-502.	1.2	7
45	Tissue Engineering for Musculoskeletal Regeneration and Disease Modeling. Handbook of Experimental Pharmacology, 2020, 265, 235-268.	0.9	9
46	Decellularized bone extracellular matrix in skeletal tissue engineering. Biochemical Society Transactions, 2020, 48, 755-764.	1.6	29
47	Bone marrow mesenchymal stem cells: Aging and tissue engineering applications to enhance bone healing. Biomaterials, 2019, 203, 96-110.	5.7	234
48	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.	2.4	55
49	Dynamic Compressive Loading Improves Cartilage Repair in an In Vitro Model of Microfracture: Comparison of 2 Mechanical Loading Regimens on Simulated Microfracture Based on Fibrin Gel Scaffolds Encapsulating Connective Tissue Progenitor Cells. American Journal of Sports Medicine, 2019, 47, 2188-2199.	1.9	31
50	Robust bone regeneration through endochondral ossification of human mesenchymal stem cells within their own extracellular matrix. Biomaterials, 2019, 218, 119336.	5.7	40
51	Role of NGFâ€TrkA signaling in calcification of articular chondrocytes. FASEB Journal, 2019, 33, 10231-10239.	0.2	23
52	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.	1.8	11
53	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
54	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.	1.9	18

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55	Muscle injury promotes heterotopic ossification by stimulating local bone morphogenetic protein-7 production. Journal of Orthopaedic Translation, 2019, 18, 142-153.	1.9	24
56	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.	1.3	59
57	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.	1.2	5
58	Conduits harnessing spatially controlled cell-secreted neurotrophic factors improve peripheral nerve regeneration. Biomaterials, 2019, 203, 86-95.	5.7	35
59	Osteochondral Tissue Chip Derived From iPSCs: Modeling OA Pathologies and Testing Drugs. Frontiers in Bioengineering and Biotechnology, 2019, 7, 411.	2.0	71
60	Biomaterials and Advanced Biofabrication Techniques in hiPSCs Based Neuromyopathic Disease Modeling. Frontiers in Bioengineering and Biotechnology, 2019, 7, 373.	2.0	6
61	Modeling appendicular skeletal cartilage development with modified high-density micromass cultures of adult human bone marrow-derived mesenchymal progenitor cells. Stem Cell Research and Therapy, 2019, 10, 388.	2.4	6
62	Enhanced repair of meniscal hoop structure injuries using an aligned electrospun nanofibrous scaffold combined with a mesenchymal stem cell-derived tissue engineered construct. Biomaterials, 2019, 192, 346-354.	5.7	53
63	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.	4.1	57
64	Optimizing Clinical Use of Biologics in Orthopaedic Surgery: Consensus Recommendations From the 2018 AAOS/NIH U-13 Conference. Journal of the American Academy of Orthopaedic Surgeons, The, 2019, 27, e50-e63.	1.1	122
65	The effect of adipose-derived stem cells on enthesis healing after repair of acute and chronic massive rotator cuff tears in rats. Journal of Shoulder and Elbow Surgery, 2019, 28, 654-664.	1.2	46
66	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.	5.7	58
67	Clinical Applications of Bone Tissue Engineering in Orthopedic Trauma. Current Pathobiology Reports, 2018, 6, 99-108.	1.6	14
68	Chondroinductive factor-free chondrogenic differentiation of human mesenchymal stem cells in graphene oxide-incorporated hydrogels. Journal of Materials Chemistry B, 2018, 6, 908-917.	2.9	38
69	Tissue Repair and Epimorphic Regeneration: an Overview. Current Pathobiology Reports, 2018, 6, 61-69.	1.6	38
70	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.	4.1	102
71	Engineering in-vitro stem cell-based vascularized bone models for drug screening and predictive toxicology. Stem Cell Research and Therapy, 2018, 9, 112.	2.4	62
72	Porous Poly(vinyl alcohol)-Based Hydrogel for Knee Meniscus Functional Repair. ACS Biomaterials Science and Engineering, 2018, 4, 1518-1527.	2.6	16

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73	Efficacy of thermoresponsive, photocrosslinkable hydrogels derived from decellularized tendon and cartilage extracellular matrix for cartilage tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e159-e170.	1.3	50
74	Neurotrophically Induced Mesenchymal Progenitor Cells Derived from Induced Pluripotent Stem Cells Enhance Neuritogenesis via Neurotrophin and Cytokine Production. Stem Cells Translational Medicine, 2018, 7, 45-58.	1.6	24
75	3D uniaxial mechanical stimulation induces tenogenic differentiation of tendonâ€derived stem cells through a PI3K/AKT signaling pathway. FASEB Journal, 2018, 32, 4804-4814.	0.2	50
76	Effect of Platelet-Rich Plasma on Chondrogenic Differentiation of Adipose- and Bone Marrow-Derived Mesenchymal Stem Cells. Tissue Engineering - Part A, 2018, 24, 1432-1443.	1.6	36
77	Conservative Management and Biological Treatment Strategies: Proceedings of the International Consensus Meeting on Cartilage Repair of the Ankle. Foot and Ankle International, 2018, 39, 9S-15S.	1.1	49
78	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.	2.4	40
79	Differences in neural stem cell identity and differentiation capacity drive divergent regenerative outcomes in lizards and salamanders. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8256-E8265.	3.3	25
80	Traumatized muscle-derived multipotent progenitor cells recruit endothelial cells through vascular endothelial growth factor-A action. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 3038-3047.	1.3	2
81	The Rotator Cuff Organ: Integrating Developmental Biology, Tissue Engineering, and Surgical Considerations to Treat Chronic Massive Rotator Cuff Tears. Tissue Engineering - Part B: Reviews, 2017, 23, 318-335.	2.5	25
82	A unified birth defects research. Birth Defects Research, 2017, 109, 7-7.	0.8	0
83	Region-Specific Effect of the Decellularized Meniscus Extracellular Matrix on Mesenchymal Stem Cellâ€“Based Meniscus Tissue Engineering. American Journal of Sports Medicine, 2017, 45, 604-611.	1.9	61
84	Tissue-specific bioactivity of soluble tendon-derived and cartilage-derived extracellular matrices on adult mesenchymal stem cells. Stem Cell Research and Therapy, 2017, 8, 133.	2.4	91
85	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.	4.1	85
86	Birth Defects: Etiology, screening, and detection. Birth Defects Research, 2017, 109, 723-724.	0.8	3
87	Aging of the skeletal muscle extracellular matrix drives a stem cell fibrogenic conversion. Aging Cell, 2017, 16, 518-528.	3.0	172
88	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.	1.8	13
89	Projection Stereolithographic Fabrication of BMP-2 Gene-activated Matrix for Bone Tissue Engineering. Scientific Reports, 2017, 7, 11327.	1.6	27
90	Osteoblast Differentiation and Bone Matrix Formation<i>In Vivo</i>and<i>In Vitro</i>. Tissue Engineering - Part B: Reviews, 2017, 23, 268-280.	2.5	329

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91	Anatomical region-dependent enhancement of 3-dimensional chondrogenic differentiation of human mesenchymal stem cells by soluble meniscus extracellular matrix. Acta Biomaterialia, 2017, 49, 140-151.	4.1	60
92	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.	1.6	50
93	Lizard tail regeneration as an instructive model of enhanced healing capabilities in an adult amniote. Connective Tissue Research, 2017, 58, 145-154.	1.1	54
94	Infrapatellar fat pad aggravates degeneration of acute traumatized cartilage: a possible role for interleukin-6. Osteoarthritis and Cartilage, 2017, 25, 138-145.	0.6	14
95	Rapidly dissociated autologous meniscus tissue enhances meniscus healing: An<i>in vitro</i>study. Connective Tissue Research, 2017, 58, 355-365.	1.1	9
96	Cartilage and Muscle Cell Fate and Origins during Lizard Tail Regeneration. Frontiers in Bioengineering and Biotechnology, 2017, 5, 70.	2.0	28
97	Neurotrophic support by traumatized muscle-derived multipotent progenitor cells: Role of endothelial cells and Vascular Endothelial Growth Factor-A. Stem Cell Research and Therapy, 2017, 8, 226.	2.4	12
98	Distributed and Lumped Parameter Models for the Characterization of High Throughput Bioreactors. PLoS ONE, 2016, 11, e0162774.	1.1	16
99	Lizard tail skeletal regeneration combines aspects of fracture healing and blastema-based regeneration. Development (Cambridge), 2016, 143, 2946-57.	1.2	53
100	Catabolic effects of endothelial cellâ€derived microparticles on disc cells: Implications in intervertebral disc neovascularization and degeneration. Journal of Orthopaedic Research, 2016, 34, 1466-1474.	1.2	14
101	Human Cartilage-Derived Progenitor Cells From Committed Chondrocytes for Efficient Cartilage Repair and Regeneration. Stem Cells Translational Medicine, 2016, 5, 733-744.	1.6	145
102	Secreted trophic factors of mesenchymal stem cells support neurovascular and musculoskeletal therapies. Stem Cell Research and Therapy, 2016, 7, 131.	2.4	259
103	From embryonic development to human diseases: The functional role of caveolae/caveolin. Birth Defects Research Part C: Embryo Today Reviews, 2016, 108, 45-64.	3.6	24
104	Effect of adiposeâ€derived stromal cells and BMP12 on intrasynovial tendon repair: A biomechanical, biochemical, and proteomics study. Journal of Orthopaedic Research, 2016, 34, 630-640.	1.2	31
105	Augmented repair of radial meniscus tear with biomimetic electrospun scaffold: an in vitro mechanical analysis. Journal of Experimental Orthopaedics, 2016, 3, 23.	0.8	16
106	Prenatal substance use and developmental disorders: Overview and highlights. Birth Defects Research Part C: Embryo Today Reviews, 2016, 108, 106-107.	3.6	0
107	Prenatal exposure to environmental factors and congenital limb defects. Birth Defects Research Part C: Embryo Today Reviews, 2016, 108, 243-273.	3.6	24
108	The function and interrelationship between GDF5 and ERG-010 during chondrogenesis in vitro. In Vitro Cellular and Developmental Biology - Animal, 2016, 52, 182-192.	0.7	2

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109	Antibiotic-tolerant Staphylococcus aureus Biofilm Persists on Arthroplasty Materials. Clinical Orthopaedics and Related Research, 2016, 474, 1649-1656.	0.7	76
110	Multilayered polycaprolactone/gelatin fiber-hydrogel composite for tendon tissue engineering. Acta Biomaterialia, 2016, 35, 68-76.	4.1	164
111	Stem Cells in Skeletal Tissue Engineering: Technologies and Models. Current Stem Cell Research and Therapy, 2016, 11, 453-474.	0.6	11
112	Musculoskeletal regeneration research network: A global initiative. Journal of Orthopaedic Translation, 2015, 3, 160-165.	1.9	1
113	Cartilage stem/progenitor cells are activated in osteoarthritis via interleukin-1Î²/nerve growth factor signaling. Arthritis Research and Therapy, 2015, 17, 327.	1.6	40
114	Nascent osteoblast matrix inhibits osteogenesis of human mesenchymal stem cells in vitro. Stem Cell Research and Therapy, 2015, 6, 258.	2.4	15
115	Promotion of human mesenchymal stem cell osteogenesis by PI3-kinase/Akt signaling, and the influence of caveolin-1/cholesterol homeostasis. Stem Cell Research and Therapy, 2015, 6, 238.	2.4	90
116	Expression of Concern: Human amniotic epithelial cells can differentiate into granulosa cells and restore folliculogenesis in a mouse model of chemotherapy-induced premature ovarian failure. Stem Cell Research and Therapy, 2015, 6, 240.	2.4	2
117	Projection Stereolithographic Fabrication of Human Adipose Stem Cell-Incorporated Biodegradable Scaffolds for Cartilage Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2015, 3, 115.	2.0	61
118	Platelet-Rich Plasma Inhibits Mechanically Induced Injury in Chondrocytes. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2015, 31, 1142-1150.	1.3	22
119	Lizard tail regeneration: regulation of two distinct cartilage regions by Indian hedgehog. Developmental Biology, 2015, 399, 249-262.	0.9	63
120	Characterization of Tissue Response to Impact Loads Delivered Using a Hand-Held Instrument for Studying Articular Cartilage Injury. Cartilage, 2015, 6, 226-232.	1.4	27
121	In Vitro Repair of Meniscal Radial Tear Using Aligned Electrospun Nanofibrous Scaffold. Tissue Engineering - Part A, 2015, 21, 2066-2075.	1.6	36
122	Origin and function of cartilage stem/progenitor cells in osteoarthritis. Nature Reviews Rheumatology, 2015, 11, 206-212.	3.5	307
123	Characterization of bone marrow-derived mesenchymal stem cells in aging. Bone, 2015, 70, 37-47.	1.4	227
124	High efficiency transfection of embryonic limb mesenchyme with plasmid DNA using square wave pulse electroporation and sucrose buffer. BioTechniques, 2014, 56, 85-89.	0.8	10
125	Cellular therapy in bone-tendon interface regeneration. Organogenesis, 2014, 10, 13-28.	0.4	85
126	Functional Comparison of Human-Induced Pluripotent Stem Cell-Derived Mesenchymal Cells and Bone Marrow-Derived Mesenchymal Stromal Cells from the Same Donor. Stem Cells and Development, 2014, 23, 1594-1610.	1.1	144

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127	Concise Review: The Surface Markers and Identity of Human Mesenchymal Stem Cells. Stem Cells, 2014, 32, 1408-1419.	1.4	833
128	Biology of platelet-rich plasma and its clinical application in cartilage repair. Arthritis Research and Therapy, 2014, 16, 204.	1.6	222
129	Polymerase Chain Reaction molecular diagnostic technology for monitoring chronic osteomyelitis. Journal of Experimental Orthopaedics, 2014, 1, 9.	0.8	11
130	Three-dimensional osteogenic and chondrogenic systems to model osteochondral physiology and degenerative joint diseases. Experimental Biology and Medicine, 2014, 239, 1080-1095.	1.1	60
131	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.	1.6	122
132	Stem Cell-Based Microphysiological Osteochondral System to Model Tissue Response to Interleukin-1Î². Molecular Pharmaceutics, 2014, 11, 2203-2212.	2.3	114
133	Human mesenchymal stem cells generate a distinct pericellular zone of MMP activities via binding of MMPs and secretion of high levels of TIMPs. Matrix Biology, 2014, 34, 132-143.	1.5	84
134	A comparison of bone regeneration with human mesenchymal stem cells and muscle-derived stem cells and the critical role of BMP. Biomaterials, 2014, 35, 6859-6870.	5.7	78
135	Functional cartilage repair capacity of de-differentiated, chondrocyte- and mesenchymal stem cell-laden hydrogels inÂvitro. Osteoarthritis and Cartilage, 2014, 22, 1148-1157.	0.6	36
136	Mesenchymal progenitor cells derived from traumatized muscle enhance neurite growth. Journal of Tissue Engineering and Regenerative Medicine, 2013, 7, 443-451.	1.3	18
137	Cartilage Regeneration. Journal of the American Academy of Orthopaedic Surgeons, The, 2013, 21, 303-311.	1.1	156
138	Tendon and ligament regeneration and repair: Clinical relevance and developmental paradigm. Birth Defects Research Part C: Embryo Today Reviews, 2013, 99, 203-222.	3.6	331
139	Three-dimensional osteochondral microtissue to model pathogenesis of osteoarthritis. Stem Cell Research and Therapy, 2013, 4, S6.	2.4	62
140	Enhancement of tenogenic differentiation of human adipose stem cells by tendon-derived extracellular matrix. Biomaterials, 2013, 34, 9295-9306.	5.7	155
141	The coming of age of musculoskeletal tissue engineering. Nature Reviews Rheumatology, 2013, 9, 74-76.	3.5	27
142	Application of visible light-based projection stereolithography for live cell-scaffold fabrication with designed architecture. Biomaterials, 2013, 34, 331-339.	5.7	311
143	The promise and challenges of stem cellâ€based therapies for skeletal diseases. BioEssays, 2013, 35, 220-230.	1.2	34
144	Wdpcp, a PCP Protein Required for Ciliogenesis, Regulates Directional Cell Migration and Cell Polarity by Direct Modulation of the Actin Cytoskeleton. PLoS Biology, 2013, 11, e1001720.	2.6	87

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145	Development of a Spring-Loaded Impact Device to Deliver Injurious Mechanical Impacts to the Articular Cartilage Surface. Cartilage, 2013, 4, 52-62.	1.4	25
146	The less-often-traveled surface of stem cells: caveolin-1 and caveolae in stem cells, tissue repair and regeneration. Stem Cell Research and Therapy, 2013, 4, 90.	2.4	48
147	An <i>In Vivo</i> Lapine Model for Impact-Induced Injury and Osteoarthritic Degeneration of Articular Cartilage. Cartilage, 2012, 3, 323-333.	1.4	18
148	Caveolinâ€1 regulates proliferation and osteogenic differentiation of human mesenchymal stem cells. Journal of Cellular Biochemistry, 2012, 113, 3773-3787.	1.2	42
149	Concise Review: Clinical Translation of Wound Healing Therapies Based on Mesenchymal Stem Cells. Stem Cells Translational Medicine, 2012, 1, 44-50.	1.6	223
150	Comparative evaluation of MSCs from bone marrow and adipose tissue seeded in PRP-derived scaffold for cartilage regeneration. Biomaterials, 2012, 33, 7008-7018.	5.7	257
151	Influence of decellularized matrix derived from human mesenchymal stem cells on their proliferation, migration and multi-lineage differentiation potential. Biomaterials, 2012, 33, 4480-4489.	5.7	162
152	Polyphenols suppress oxidative stress in bovine articular chondrocytes. FASEB Journal, 2012, 26, 823.19.	0.2	1
153	Anabolic/Catabolic Balance in Pathogenesis of Osteoarthritis: Identifying Molecular Targets. PM and R, 2011, 3, S3-11.	0.9	138
154	Cytokine expression in muscle following traumatic injury. Journal of Orthopaedic Research, 2011, 29, 1613-1620.	1.2	49
155	Mesenchymal stem cells inhibit both endogenous and exogenous MMPs via secreted TIMPs. Journal of Cellular Physiology, 2011, 226, 385-396.	2.0	135
156	Comparison of Minimally Invasive Direct Anterior Versus Posterior Total Hip Arthroplasty Based on Inflammation and Muscle Damage Markers. Journal of Bone and Joint Surgery - Series A, 2011, 93, 1392-1398.	1.4	275
157	Role of adult stem/progenitor cells in osseointegration and implant loosening. International Journal of Oral and Maxillofacial Implants, 2011, 26 Suppl, 50-62; discussion 63-9.	0.6	8
158	Cell delivery therapeutics for musculoskeletal regenerationâ˜†. Advanced Drug Delivery Reviews, 2010, 62, 765-783.	6.6	107
159	Therapeutic potential of the immunomodulatory activities of adult mesenchymal stem cells. Birth Defects Research Part C: Embryo Today Reviews, 2010, 90, 67-74.	3.6	71
160	The ERK5 and ERK1/2 signaling pathways play opposing regulatory roles during chondrogenesis of adult human bone marrowâ€derived multipotent progenitor cells. Journal of Cellular Physiology, 2010, 224, 178-186.	2.0	21
161	Novel strategies in tendon and ligament tissue engineering: Advanced biomaterials and regeneration motifs. BMC Sports Science, Medicine and Rehabilitation, 2010, 2, 20.	0.7	116
162	Hypertrophy in Mesenchymal Stem Cell Chondrogenesis: Effect of TGF-Î² Isoforms and Chondrogenic Conditioning. Cells Tissues Organs, 2010, 192, 158-166.	1.3	174

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163	Notochordal cell conditioned medium stimulates mesenchymal stem cell differentiation toward a young nucleus pulposus phenotype. Stem Cell Research and Therapy, 2010, 1, 18.	2.4	116
164	ERK1/2 Activation Induced by Inflammatory Cytokines Compromises Effective Host Tissue Integration of Engineered Cartilage. Tissue Engineering - Part A, 2009, 15, 2825-2835.	1.6	33
165	Putative heterotopic ossification progenitor cells derived from traumatized muscle. Journal of Orthopaedic Research, 2009, 27, 1645-1651.	1.2	83
166	Mesenchymal progenitor cells derived from traumatized human muscle. Journal of Tissue Engineering and Regenerative Medicine, 2009, 3, 129-138.	1.3	76
167	Adult Stem Cells and Nanomaterials for Skeletal Tissue Engineering and Regeneration. FASEB Journal, 2009, 23, .	0.2	0
168	Spatiotemporal protein distribution of TGFâ€î²s, their receptors, and extracellular matrix molecules during embryonic tendon development. Developmental Dynamics, 2008, 237, 1477-1489.	0.8	85
169	Functional characterization of hypertrophy in chondrogenesis of human mesenchymal stem cells. Arthritis and Rheumatism, 2008, 58, 1377-1388.	6.7	412
170	Mechanoactive Tenogenic Differentiation of Human Mesenchymal Stem Cells. Tissue Engineering - Part A, 2008, 14, 1615-1627.	1.6	266
171	Intervertebral Disc Tissue Engineering Using a Novel Hyaluronic Acidâ€"Nanofibrous Scaffold (HANFS) Amalgam. Tissue Engineering - Part A, 2008, 14, 1527-1537.	1.6	177
172	Simulated Joint Infection Assessment by Rapid Detection of Live Bacteria with Real-Time Reverse Transcription Polymerase Chain Reaction. Journal of Bone and Joint Surgery - Series A, 2008, 90, 602-608.	1.4	42
173	In Vitro Adipose Tissue Engineering Using an Electrospun Nanofibrous Scaffold. Annals of Plastic Surgery, 2008, 61, 566-571.	0.5	33
174	What are the local and systemic biologic reactions and mediators to wear debris, and what host factors determine or modulate the biologic response to wear particles?. Journal of the American Academy of Orthopaedic Surgeons, The, 2008, 16, S42-S48.	1.1	118
175	A second-generation autologous chondrocyte implantation approach to the treatment of focal articular cartilage defects. Arthritis Research and Therapy, 2007, 9, 109.	1.6	67
176	Engineering controllable anisotropy in electrospun biodegradable nanofibrous scaffolds for musculoskeletal tissue engineering. Journal of Biomechanics, 2007, 40, 1686-1693.	0.9	355
177	Technology Insight: adult stem cells in cartilage regeneration and tissue engineering. Nature Clinical Practice Rheumatology, 2006, 2, 373-382.	3.2	270
178	Chondrogenic differentiation and functional maturation of bovine mesenchymal stem cells in long-term agarose culture. Osteoarthritis and Cartilage, 2006, 14, 179-189.	0.6	478
179	The Effect of Applied Compressive Loading on Tissue-Engineered Cartilage Constructs Cultured with TGF-ÃŸ3. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
180	A three-dimensional nanofibrous scaffold for cartilage tissue engineering using human mesenchymal stem cells. Biomaterials, 2005, 26, 599-609.	5.7	880

#	Article	IF	Citations
181	Polymeric Scaffolds for Cartilage Tissue Engineering. Macromolecular Symposia, 2005, 227, 65-76.	0.4	25
182	Human Mesenchymal Progenitor Cell-Based Tissue Engineering of a Single-Unit Osteochondral Construct. Tissue Engineering, 2004, 10, 1169-1179.	4.9	108
183	Adult mesenchymal stem cells: characterization, differentiation, and application in cell and gene therapy. Journal of Cellular and Molecular Medicine, 2004, 8, 301-316.	1.6	928
184	Regulation of MMP-13 expression by RUNX2 and FGF2 in osteoarthritic cartilage. Osteoarthritis and Cartilage, 2004, 12, 963-973.	0.6	257
185	Biology of Developmental and Regenerative Skeletogenesis. Clinical Orthopaedics and Related Research, 2004, 427, S105-S117.	0.7	99
186	Adult mesenchymal stem cells and cell-based tissue engineering. Arthritis Research, 2003, 5, 32.	2.0	656
187	Transforming Growth Factor-Î²-mediated Chondrogenesis of Human Mesenchymal Progenitor Cells Involves N-cadherin and Mitogen-activated Protein Kinase and Wnt Signaling Cross-talk. Journal of Biological Chemistry, 2003, 278, 41227-41236.	1.6	427
188	CELLULAR SIGNALING IN DEVELOPMENTAL CHONDROGENESIS. Journal of Bone and Joint Surgery - Series A, 2003, 85, 137-141.	1.4	95
189	Analysis of N-cadherin function in limb mesenchymal chondrogenesis in vitro. Developmental Dynamics, 2002, 225, 195-204.	0.8	164
190	Human Marrow-Derived Mesenchymal Progenitor Cells. Molecular Biotechnology, 2002, 20, 245-256.	1.3	190
191	N-Cadherin andÎ²-Catenin involvement in BMP-2 induction of mesenchymal chondrogenesis. Signal Transduction, 2001, 1, 66-78.	0.7	5
192	Wnt regulation of limb mesenchymal chondrogenesis is accompanied by altered Nâ€cadherinâ€related functions. FASEB Journal, 2001, 15, 1436-1438.	0.2	77
193	Alternative splicing during chondrogenesis: cis and trans factors involved in splicing of fibronectin exon EIIIA. Journal of Cellular Biochemistry, 2000, 76, 341-351.	1.2	8
194	Expression of Angiogenic Growth Factors in Paragangliomas. Laryngoscope, 2000, 110, 161-167.	1.1	55
195	Embryonic Limb Mesenchyme Micromass Culture as an In Vitro Model for Chondrogenesis and Cartilage Maturation. , 2000, 137, 359-375.		65
196	Developmental biology protocols. Overview I. Methods in Molecular Biology, 2000, 135, 3-5.	0.4	2
197	MOLECULAR DETECTION OF INFECTION IN TOTAL KNEE ARTHROPLASTY: A CLINICAL CORRELATION. Journal of Musculoskeletal Research, 1999, 03, 93-107.	0.1	3
198	Developmental Expression of Creatine Kinase Isoenzymes in Chicken Growth Cartilage. Journal of Bone and Mineral Research, 1999, 14, 747-756.	3.1	8

#	Article	IF	Citations
199	High density micromass cultures of embryonic limb bud mesenchymal cells: An in vitro model of endochondral skeletal development. In Vitro Cellular and Developmental Biology - Animal, 1999, 35, 262-269.	0.7	123
200	Mechanism of BMP-2 stimulated adhesion of osteoblastic cells to titanium alloy. Biology of the Cell, 1999, 91, 131-142.	0.7	100
201	Chondrogenic differentiation of murine C3H10T1/2 multipotential mesenchymal cells: I. Stimulation by bone morphogenetic protein-2 in high-density micromass cultures. Differentiation, 1999, 64, 67-76.	1.0	237
202	Expression of the paired-box genesPax-1 andPax-9 in limb skeleton development. , 1999, 214, 101-115.		38
203	N-Cadherin expression and signaling in limb mesenchymal chondrogenesis: Stimulation by Poly-l-Lysine. , 1999, 24, 178-187.		44
204	Regulation of chondrocyte differentiation and maturation. , 1998, 43, 174-190.		51
205	High sensitivity analysis of gene expression in single embryonic somites using coupled reverse transcription-polymerase chain reaction. Molecular Biotechnology, 1998, 9, 7-15.	1.3	4
206	Developmental Expression and Vitamin D Regulation of Calbindin-D28K in Chick Embryonic Yolk Sac Endoderm. Journal of Nutrition, 1996, 126, 1308S-1316S.	1.3	12
207	Hybridization of biotinylated oligo(dT) for Eukaryotic mRNA quantitation. Molecular Biotechnology, 1996, 6, 225-230.	1.3	5
208	Valproic acid-induced somite teratogenesis in the chick embryo: Relationship withpax-1 gene expression. , 1996, 54, 93-102.		38
209	Fibronectin mRNA alternative splicing is temporally and spatially regulated during chondrogenesis in vivo and in vitro. Developmental Dynamics, 1996, 206, 219-230.	0.8	38
210	Developmental expression and vitamin D regulation of calbindin-D28K in chick embryonic yolk sac endoderm. Journal of Nutrition, 1996, 126, 1308S-16S.	1.3	4
211	Chondrogenic potential of chick embryonic calvaria: I. Low calcium permits cartilage differentiation. Developmental Dynamics, 1995, 202, 13-26.	0.8	37
212	Chondrogenic potential of chick embryonic calvaria: II. Matrix calcium may repress cartilage differentiation. Developmental Dynamics, 1995, 202, 27-41.	0.8	22
213	Functional involvement ofPax-1 in somite development: Somite dysmorphogenesis in chick embryos treated withPax-1 paired-box antisense oligodeoxynucleotide. Teratology, 1995, 52, 333-345.	1.8	32
214	Development of a novel, rapid processing protocol for polymerase chain reaction-based detection of bacterial infections in synovial fluids. Molecular Biotechnology, 1995, 4, 227-237.	1.3	53
215	Seperation of proteins using cetyltrimethylammonium bromide discontinuous gel electrophoresis. Molecular Biotechnology, 1994, 1, 211-228.	1.3	9
216	Alterations in cellular calcium handling as a result of systemic calcium deficiency in the developing chick embryo: I. Erythrocytes. Journal of Cellular Physiology, 1992, 153, 626-635.	2.0	3

#	Article	IF	Citations
217	Alterations in cellular calcium handling as a result of systemic calcium deficiency in the developing chick embryo: II. Ventricular myocytes. Journal of Cellular Physiology, 1992, 153, 636-644.	2.0	4
218	Pattern of expression of transforming growth factor-Î²4 mRNA and protein in the developing chicken embryo. Developmental Dynamics, 1992, 195, 276-289.	0.8	27
219	Developmental regulation of creatine kinase activity in cells of the epiphyseal growth cartilage. Journal of Bone and Mineral Research, 1992, 7, 493-500.	3.1	26
220	Pattern of expression of transforming growth factor-Î²4 mRNA and protein in the developing chicken embryo. Developmental Dynamics, 1992, 195, 276-289.	0.8	1
221	Enhanced extracellular matrix production and mineralization by osteoblasts cultured on titanium surfaces in vitro. Journal of Cell Science, 1992, 101 (Pt 1), 209-17.	1.2	33
222	In vitro study of placental trophoblast calcium uptake using JEG-3 human choriocarcinoma cells. Journal of Cell Science, 1991, 98 (Pt 3), 333-42.	1.2	11
223	Ca(2+)-activated ATPase of the mouse chorioallantoic placenta: developmental expression, characterization and cytohistochemical localization. Development (Cambridge), 1990, 110, 505-13.	1.2	3