Rocky S Tuan

List of Publications by Year
in descending order

223 papers	17,689 citations	15503 65 h-index	15730 125 g-index
229 all docs	229 docs citations	229 times ranked	19480 citing authors

#	Article	IF	Citations
1	Adult mesenchymal stem cells: characterization, differentiation, and application in cell and gene therapy. Journal of Cellular and Molecular Medicine, 2004, 8, 301-316.	3.6	928
2	A three-dimensional nanofibrous scaffold for cartilage tissue engineering using human mesenchymal stem cells. Biomaterials, 2005, 26, 599-609.	11.4	880
3	Concise Review: The Surface Markers and Identity of Human Mesenchymal Stem Cells. Stem Cells, 2014, 32, 1408-1419.	3.2	833
4	Adult mesenchymal stem cells and cell-based tissue engineering. Arthritis Research, 2003, 5, 32.	2.0	656
5	Chondrogenic differentiation and functional maturation of bovine mesenchymal stem cells in long-term agarose culture. Osteoarthritis and Cartilage, 2006, 14, 179-189.	1.3	478
6	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.	3.4	427
7	Functional characterization of hypertrophy in chondrogenesis of human mesenchymal stem cells. Arthritis and Rheumatism, 2008, 58, 1377-1388.	6.7	412
8	Engineering controllable anisotropy in electrospun biodegradable nanofibrous scaffolds for musculoskeletal tissue engineering. Journal of Biomechanics, 2007, 40, 1686-1693.	2.1	355
9	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
10	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
11	Application of visible light-based projection stereolithography for live cell-scaffold fabrication with designed architecture. Biomaterials, 2013, 34, 331-339.	11.4	311
12	Origin and function of cartilage stem/progenitor cells in osteoarthritis. Nature Reviews Rheumatology, 2015, 11, 206-212.	8.0	307
13	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.	3.0	275
14	Technology Insight: adult stem cells in cartilage regeneration and tissue engineering. Nature Clinical Practice Rheumatology, 2006, 2, 373-382.	3.2	270
15	Mechanoactive Tenogenic Differentiation of Human Mesenchymal Stem Cells. Tissue Engineering - Part A, 2008, 14, 1615-1627.	3.1	266
16	Secreted trophic factors of mesenchymal stem cells support neurovascular and musculoskeletal therapies. Stem Cell Research and Therapy, 2016, 7, 131.	5.5	259
17	Regulation of MMP-13 expression by RUNX2 and FGF2 in osteoarthritic cartilage. Osteoarthritis and Cartilage, 2004, 12, 963-973.	1.3	257
18	Comparative evaluation of MSCs from bone marrow and adipose tissue seeded in PRP-derived scaffold for cartilage regeneration. Biomaterials, 2012, 33, 7008-7018.	11.4	257

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19	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.	1.9	237
20	Bone marrow mesenchymal stem cells: Aging and tissue engineering applications to enhance bone healing. Biomaterials, 2019, 203, 96-110.	11.4	234
21	Characterization of bone marrow-derived mesenchymal stem cells in aging. Bone, 2015, 70, 37-47.	2.9	227
22	Concise Review: Clinical Translation of Wound Healing Therapies Based on Mesenchymal Stem Cells. Stem Cells Translational Medicine, 2012, 1, 44-50.	3.3	223
23	Biology of platelet-rich plasma and its clinical application in cartilage repair. Arthritis Research and Therapy, 2014, 16, 204.	3.5	222
24	Human Marrow-Derived Mesenchymal Progenitor Cells. Molecular Biotechnology, 2002, 20, 245-256.	2.4	190
25	Intervertebral Disc Tissue Engineering Using a Novel Hyaluronic Acidâ€“Nanofibrous Scaffold (HANFS) Amalgam. Tissue Engineering - Part A, 2008, 14, 1527-1537.	3.1	177
26	Hypertrophy in Mesenchymal Stem Cell Chondrogenesis: Effect of TGF-Î² Isoforms and Chondrogenic Conditioning. Cells Tissues Organs, 2010, 192, 158-166.	2.3	174
27	Aging of the skeletal muscle extracellular matrix drives a stem cell fibrogenic conversion. Aging Cell, 2017, 16, 518-528.	6.7	172
28	Analysis of N-cadherin function in limb mesenchymal chondrogenesis in vitro. Developmental Dynamics, 2002, 225, 195-204.	1.8	164
29	Multilayered polycaprolactone/gelatin fiber-hydrogel composite for tendon tissue engineering. Acta Biomaterialia, 2016, 35, 68-76.	8.3	164
30	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
31	Cartilage Regeneration. Journal of the American Academy of Orthopaedic Surgeons, The, 2013, 21, 303-311.	2.5	156
32	Enhancement of tenogenic differentiation of human adipose stem cells by tendon-derived extracellular matrix. Biomaterials, 2013, 34, 9295-9306.	11.4	155
33	Human Cartilage-Derived Progenitor Cells From Committed Chondrocytes for Efficient Cartilage Repair and Regeneration. Stem Cells Translational Medicine, 2016, 5, 733-744.	3.3	145
34	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.	2.1	144
35	Anabolic/Catabolic Balance in Pathogenesis of Osteoarthritis: Identifying Molecular Targets. PM and R, 2011, 3, S3-11.	1.6	138
36	Mesenchymal stem cells inhibit both endogenous and exogenous MMPs via secreted TIMPs. Journal of Cellular Physiology, 2011, 226, 385-396.	4.1	135

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37	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.	1.5	123
38	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
39	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.	2.5	122
40	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.	2.5	118
41	Novel strategies in tendon and ligament tissue engineering: Advanced biomaterials and regeneration motifs. BMC Sports Science, Medicine and Rehabilitation, 2010, 2, 20.	1.7	116
42	Notochordal cell conditioned medium stimulates mesenchymal stem cell differentiation toward a young nucleus pulposus phenotype. Stem Cell Research and Therapy, 2010, 1, 18.	5.5	116
43	Stem Cell-Based Microphysiological Osteochondral System to Model Tissue Response to Interleukin-1Î². Molecular Pharmaceutics, 2014, 11, 2203-2212.	4.6	114
44	Pathogenesis of Osteoarthritis: Risk Factors, Regulatory Pathways in Chondrocytes, and Experimental Models. Biology, 2020, 9, 194.	2.8	111
45	Human Mesenchymal Progenitor Cell-Based Tissue Engineering of a Single-Unit Osteochondral Construct. Tissue Engineering, 2004, 10, 1169-1179.	4.6	108
46	Cell delivery therapeutics for musculoskeletal regenerationâ˜†. Advanced Drug Delivery Reviews, 2010, 62, 765-783.	13.7	107
47	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
48	Mechanism of BMP-2 stimulated adhesion of osteoblastic cells to titanium alloy. Biology of the Cell, 1999, 91, 131-142.	2.0	100
49	Biology of Developmental and Regenerative Skeletogenesis. Clinical Orthopaedics and Related Research, 2004, 427, S105-S117.	1.5	99
50	CELLULAR SIGNALING IN DEVELOPMENTAL CHONDROGENESIS. Journal of Bone and Joint Surgery - Series A, 2003, 85, 137-141.	3.0	95
51	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.	5.5	91
52	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.	5.5	90
53	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.	5.6	87
54	Spatiotemporal protein distribution of TGFâ€Î²s, their receptors, and extracellular matrix molecules during embryonic tendon development. Developmental Dynamics, 2008, 237, 1477-1489.	1.8	85

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55	Cellular therapy in bone-tendon interface regeneration. Organogenesis, 2014, 10, 13-28.	1.2	85
56	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
57	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.	3.6	84
58	Putative heterotopic ossification progenitor cells derived from traumatized muscle. Journal of Orthopaedic Research, 2009, 27, 1645-1651.	2.3	83
59	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.	11.4	78
60	Endothelial cells support osteogenesis in an in vitro vascularized bone model developed by 3D bioprinting. Biofabrication, 2020, 12, 025013.	7.1	78
61	Wnt regulation of limb mesenchymal chondrogenesis is accompanied by altered Nâ€cadherinâ€related functions. FASEB Journal, 2001, 15, 1436-1438.	0.5	77
62	Mesenchymal progenitor cells derived from traumatized human muscle. Journal of Tissue Engineering and Regenerative Medicine, 2009, 3, 129-138.	2.7	76
63	Antibiotic-tolerant Staphylococcus aureus Biofilm Persists on Arthroplasty Materials. Clinical Orthopaedics and Related Research, 2016, 474, 1649-1656.	1.5	76
64	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
65	Osteochondral Tissue Chip Derived From iPSCs: Modeling OA Pathologies and Testing Drugs. Frontiers in Bioengineering and Biotechnology, 2019, 7, 411.	4.1	71
66	A second-generation autologous chondrocyte implantation approach to the treatment of focal articular cartilage defects. Arthritis Research and Therapy, 2007, 9, 109.	3.5	67
67	Embryonic Limb Mesenchyme Micromass Culture as an In Vitro Model for Chondrogenesis and Cartilage Maturation. , 2000, 137, 359-375.		65
68	Subchondral Bone Remodeling: A Therapeutic Target for Osteoarthritis. Frontiers in Cell and Developmental Biology, 2020, 8, 607764.	3.7	64
69	Lizard tail regeneration: regulation of two distinct cartilage regions by Indian hedgehog. Developmental Biology, 2015, 399, 249-262.	2.0	63
70	Three-dimensional osteochondral microtissue to model pathogenesis of osteoarthritis. Stem Cell Research and Therapy, 2013, 4, S6.	5.5	62
71	Engineering in-vitro stem cell-based vascularized bone models for drug screening and predictive toxicology. Stem Cell Research and Therapy, 2018, 9, 112.	5.5	62
72	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

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73	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.	4.2	61
74	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
75	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.	8.3	60
76	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
77	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
78	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
79	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
80	Expression of Angiogenic Growth Factors in Paragangliomas. Laryngoscope, 2000, 110, 161-167.	2.0	55
81	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
82	Lizard tail regeneration as an instructive model of enhanced healing capabilities in an adult amniote. Connective Tissue Research, 2017, 58, 145-154.	2.3	54
83	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.	2.4	53
84	Lizard tail skeletal regeneration combines aspects of fracture healing and blastema-based regeneration. Development (Cambridge), 2016, 143, 2946-57.	2.5	53
85	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.	11.4	53
86	Regulation of chondrocyte differentiation and maturation. , 1998, 43, 174-190.		51
87	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
88	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.	2.7	50
89	3D uniaxial mechanical stimulation induces tenogenic differentiation of tendonâ€derived stem cells through a PI3K/AKT signaling pathway. FASEB Journal, 2018, 32, 4804-4814.	0.5	50
90	Cytokine expression in muscle following traumatic injury. Journal of Orthopaedic Research, 2011, 29, 1613-1620.	2.3	49

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91	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.	2.3	49
92	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.	5.5	48
93	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.	2.6	46
94	N-Cadherin expression and signaling in limb mesenchymal chondrogenesis: Stimulation by Poly-l-Lysine. , 1999, 24, 178-187.		44
95	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.	3.0	42
96	Caveolinâ€1 regulates proliferation and osteogenic differentiation of human mesenchymal stem cells. Journal of Cellular Biochemistry, 2012, 113, 3773-3787.	2.6	42
97	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
98	Cartilage stem/progenitor cells are activated in osteoarthritis via interleukin-1Î²/nerve growth factor signaling. Arthritis Research and Therapy, 2015, 17, 327.	3.5	40
99	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
100	Robust bone regeneration through endochondral ossification of human mesenchymal stem cells within their own extracellular matrix. Biomaterials, 2019, 218, 119336.	11.4	40
101	Valproic acid-induced somite teratogenesis in the chick embryo: Relationship withpax-1 gene expression. , 1996, 54, 93-102.		38
102	Fibronectin mRNA alternative splicing is temporally and spatially regulated during chondrogenesis in vivo and in vitro. Developmental Dynamics, 1996, 206, 219-230.	1.8	38
103	Expression of the paired-box genesPax-1 andPax-9 in limb skeleton development. , 1999, 214, 101-115.		38
104	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
105	Tissue Repair and Epimorphic Regeneration: an Overview. Current Pathobiology Reports, 2018, 6, 61-69.	3.4	38
106	Chondrogenic potential of chick embryonic calvaria: I. Low calcium permits cartilage differentiation. Developmental Dynamics, 1995, 202, 13-26.	1.8	37
107	Functional cartilage repair capacity of de-differentiated, chondrocyte- and mesenchymal stem cell-laden hydrogels inÂvitro. Osteoarthritis and Cartilage, 2014, 22, 1148-1157.	1.3	36
108	In Vitro Repair of Meniscal Radial Tear Using Aligned Electrospun Nanofibrous Scaffold. Tissue Engineering - Part A, 2015, 21, 2066-2075.	3.1	36

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109	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.	3.1	36
110	Antimicrobial activity of mesenchymal stem cells against Staphylococcus aureus. Stem Cell Research and Therapy, 2020, 11, 293.	5.5	36
111	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.	0.5	36
112	Conduits harnessing spatially controlled cell-secreted neurotrophic factors improve peripheral nerve regeneration. Biomaterials, 2019, 203, 86-95.	11.4	35
113	The promise and challenges of stem cellâ€based therapies for skeletal diseases. BioEssays, 2013, 35, 220-230.	2.5	34
114	In Vitro Adipose Tissue Engineering Using an Electrospun Nanofibrous Scaffold. Annals of Plastic Surgery, 2008, 61, 566-571.	0.9	33
115	ERK1/2 Activation Induced by Inflammatory Cytokines Compromises Effective Host Tissue Integration of Engineered Cartilage. Tissue Engineering - Part A, 2009, 15, 2825-2835.	3.1	33
116	Current Models for Development of Disease-Modifying Osteoarthritis Drugs. Tissue Engineering - Part C: Methods, 2021, 27, 124-138.	2.1	33
117	Enhanced extracellular matrix production and mineralization by osteoblasts cultured on titanium surfaces in vitro. Journal of Cell Science, 1992, 101 (Pt 1), 209-17.	2.0	33
118	Functional involvement ofPax-1 in somite development: Somite dysmorphogenesis in chick embryos treated withPax-1 paired-box antisense oligodeoxynucleotide. Teratology, 1995, 52, 333-345.	1.6	32
119	Engineering multi-tissue units for regenerative Medicine: Bone-tendon-muscle units of the rotator cuff. Biomaterials, 2021, 272, 120789.	11.4	32
120	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.	2.3	31
121	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.	4.2	31
122	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
123	Cell-laden injectable microgels: Current status and future prospects for cartilage regeneration. Biomaterials, 2021, 279, 121214.	11.4	30
124	Decellularized bone extracellular matrix in skeletal tissue engineering. Biochemical Society Transactions, 2020, 48, 755-764.	3.4	29
125	Cartilage and Muscle Cell Fate and Origins during Lizard Tail Regeneration. Frontiers in Bioengineering and Biotechnology, 2017, 5, 70.	4.1	28
126	Pattern of expression of transforming growth factor-Î²4 mRNA and protein in the developing chicken embryo. Developmental Dynamics, 1992, 195, 276-289.	1.8	27

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127	The coming of age of musculoskeletal tissue engineering. Nature Reviews Rheumatology, 2013, 9, 74-76.	8.0	27
128	Characterization of Tissue Response to Impact Loads Delivered Using a Hand-Held Instrument for Studying Articular Cartilage Injury. Cartilage, 2015, 6, 226-232.	2.7	27
129	Projection Stereolithographic Fabrication of BMP-2 Gene-activated Matrix for Bone Tissue Engineering. Scientific Reports, 2017, 7, 11327.	3.3	27
130	An in vitro chondro-osteo-vascular triphasic model of the osteochondral complex. Biomaterials, 2021, 272, 120773.	11.4	27
131	Developmental regulation of creatine kinase activity in cells of the epiphyseal growth cartilage. Journal of Bone and Mineral Research, 1992, 7, 493-500.	2.8	26
132	Polymeric Scaffolds for Cartilage Tissue Engineering. Macromolecular Symposia, 2005, 227, 65-76.	0.7	25
133	Development of a Spring-Loaded Impact Device to Deliver Injurious Mechanical Impacts to the Articular Cartilage Surface. Cartilage, 2013, 4, 52-62.	2.7	25
134	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.	4.8	25
135	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.	7.1	25
136	Load-induced regulation of tendon homeostasis by SPARC, a genetic predisposition factor for tendon and ligament injuries. Science Translational Medicine, 2021, 13, .	12.4	25
137	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
138	Prenatal exposure to environmental factors and congenital limb defects. Birth Defects Research Part C: Embryo Today Reviews, 2016, 108, 243-273.	3.6	24
139	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.	3.3	24
140	Muscle injury promotes heterotopic ossification by stimulating local bone morphogenetic protein-7 production. Journal of Orthopaedic Translation, 2019, 18, 142-153.	3.9	24
141	Adipose Tissue-Derived Stem Cells Retain Their Adipocyte Differentiation Potential in Three-Dimensional Hydrogels and Bioreactors. Biomolecules, 2020, 10, 1070.	4.0	24
142	Role of NGFâ€TrkA signaling in calcification of articular chondrocytes. FASEB Journal, 2019, 33, 10231-10239.	0.5	23
143	Chondrogenic potential of chick embryonic calvaria: II. Matrix calcium may repress cartilage differentiation. Developmental Dynamics, 1995, 202, 27-41.	1.8	22
144	Platelet-Rich Plasma Inhibits Mechanically Induced Injury in Chondrocytes. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2015, 31, 1142-1150.	2.7	22

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145	Human Mesenchymal Stem Cellâ€Derived Miniature Joint System for Disease Modeling and Drug Testing. Advanced Science, 2022, 9, e2105909.	11.2	22
146	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.	4.1	21
147	Mechanism of traumatic heterotopic ossification: In search of injuryâ€induced osteogenic factors. Journal of Cellular and Molecular Medicine, 2020, 24, 11046-11055.	3.6	21
148	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
149	An <i>In Vivo</i> Lapine Model for Impact-Induced Injury and Osteoarthritic Degeneration of Articular Cartilage. Cartilage, 2012, 3, 323-333.	2.7	18
150	Mesenchymal progenitor cells derived from traumatized muscle enhance neurite growth. Journal of Tissue Engineering and Regenerative Medicine, 2013, 7, 443-451.	2.7	18
151	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
152	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.	3.7	17
153	Distributed and Lumped Parameter Models for the Characterization of High Throughput Bioreactors. PLoS ONE, 2016, 11, e0162774.	2.5	16
154	Augmented repair of radial meniscus tear with biomimetic electrospun scaffold: an in vitro mechanical analysis. Journal of Experimental Orthopaedics, 2016, 3, 23.	1.8	16
155	Porous Poly(vinyl alcohol)-Based Hydrogel for Knee Meniscus Functional Repair. ACS Biomaterials Science and Engineering, 2018, 4, 1518-1527.	5.2	16
156	Nascent osteoblast matrix inhibits osteogenesis of human mesenchymal stem cells in vitro. Stem Cell Research and Therapy, 2015, 6, 258.	5.5	15
157	Tendon tissue engineering: Current progress towards an optimized tenogenic differentiation protocol for human stem cells. Acta Biomaterialia, 2022, 145, 25-42.	8.3	15
158	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.	2.3	14
159	Infrapatellar fat pad aggravates degeneration of acute traumatized cartilage: a possible role for interleukin-6. Osteoarthritis and Cartilage, 2017, 25, 138-145.	1.3	14
160	Clinical Applications of Bone Tissue Engineering in Orthopedic Trauma. Current Pathobiology Reports, 2018, 6, 99-108.	3.4	14
161	Dextran sulfate-amplified extracellular matrix deposition promotes osteogenic differentiation of mesenchymal stem cells. Acta Biomaterialia, 2022, 140, 163-177.	8.3	14
162	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

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163	Developmental Expression and Vitamin D Regulation of Calbindin-D28K in Chick Embryonic Yolk Sac Endoderm. Journal of Nutrition, 1996, 126, 1308S-1316S.	2.9	12
164	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.	5.5	12
165	Hyaluronic acid drives mesenchymal stromal cell-derived extracellular matrix assembly by promoting fibronectin fibrillogenesis. Journal of Materials Chemistry B, 2021, 9, 7205-7215.	5.8	12
166	Polymerase Chain Reaction molecular diagnostic technology for monitoring chronic osteomyelitis. Journal of Experimental Orthopaedics, 2014, 1, 9.	1.8	11
167	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
168	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.	2.8	11
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