

Robert L Mauck

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6958942/publications.pdf>

Version: 2024-02-01

293
papers

18,449
citations

13087

68
h-index

16636

123
g-index

306
all docs

306
docs citations

306
times ranked

15014
citing authors

#	ARTICLE	IF	CITATIONS
1	Functional Tissue Engineering of Articular Cartilage Through Dynamic Loading of Chondrocyte-Seeded Agarose Gels. <i>Journal of Biomechanical Engineering</i> , 2000, 122, 252-260.	0.6	836
2	The potential to improve cell infiltration in composite fiber-aligned electrospun scaffolds by the selective removal of sacrificial fibers. <i>Biomaterials</i> , 2008, 29, 2348-2358.	5.7	557
3	Fabrication and characterization of six electrospun poly(β -hydroxy ester)-based fibrous scaffolds for tissue engineering applications. <i>Acta Biomaterialia</i> , 2006, 2, 377-385.	4.1	472
4	Hydrogel design for cartilage tissue engineering: A case study with hyaluronic acid. <i>Biomaterials</i> , 2011, 32, 8771-8782.	5.7	443
5	Engineering controllable anisotropy in electrospun biodegradable nanofibrous scaffolds for musculoskeletal tissue engineering. <i>Journal of Biomechanics</i> , 2007, 40, 1686-1693.	0.9	355
6	Hydrogels that mimic developmentally relevant matrix and N-cadherin interactions enhance MSC chondrogenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 10117-10122.	3.3	344
7	The effect of nanofiber alignment on the maturation of engineered meniscus constructs. <i>Biomaterials</i> , 2007, 28, 1967-1977.	5.7	333
8	Enhanced MSC chondrogenesis following delivery of TGF- β 3 from alginate microspheres within hyaluronic acid hydrogels in vitro and in vivo. <i>Biomaterials</i> , 2011, 32, 6425-6434.	5.7	327
9	Synergistic Action of Growth Factors and Dynamic Loading for Articular Cartilage Tissue Engineering. <i>Tissue Engineering</i> , 2003, 9, 597-611.	4.9	309
10	Tissue engineering for articular cartilage repair – the state of the art. , 2013, 25, 248-267.		305
11	Nanofibrous biologic laminates replicate the form and function of the annulus fibrosus. <i>Nature Materials</i> , 2009, 8, 986-992.	13.3	300
12	Local nascent protein deposition and remodelling guide mesenchymal stromal cell mechanosensing and fate in three-dimensional hydrogels. <i>Nature Materials</i> , 2019, 18, 883-891.	13.3	273
13	Influence of Seeding Density and Dynamic Deformational Loading on the Developing Structure/Function Relationships of Chondrocyte-Seeded Agarose Hydrogels. <i>Annals of Biomedical Engineering</i> , 2002, 30, 1046-1056.	1.3	270
14	The influence of hyaluronic acid hydrogel crosslinking density and macromolecular diffusivity on human MSC chondrogenesis and hypertrophy. <i>Biomaterials</i> , 2013, 34, 413-421.	5.7	265
15	N-cadherin adhesive interactions modulate matrix mechanosensing and fate commitment of mesenchymal stem cells. <i>Nature Materials</i> , 2016, 15, 1297-1306.	13.3	262
16	Cartilage tissue engineering: its potential and uses. <i>Current Opinion in Rheumatology</i> , 2006, 18, 64-73.	2.0	255
17	Cytoskeletal to Nuclear Strain Transfer Regulates YAP Signaling in Mesenchymal Stem Cells. <i>Biophysical Journal</i> , 2015, 108, 2783-2793.	0.2	242
18	Material properties in unconfined compression of human nucleus pulposus, injectable hyaluronic acid-based hydrogels and tissue engineering scaffolds. <i>European Spine Journal</i> , 2007, 16, 1892-1898.	1.0	237

#	ARTICLE	IF	CITATIONS
19	Coculture of Human Mesenchymal Stem Cells and Articular Chondrocytes Reduces Hypertrophy and Enhances Functional Properties of Engineered Cartilage. <i>Tissue Engineering - Part A</i> , 2011, 17, 1137-1145.	1.6	235
20	A Paradigm for Functional Tissue Engineering of Articular Cartilage via Applied Physiologic Deformational Loading. <i>Annals of Biomedical Engineering</i> , 2004, 32, 35-49.	1.3	225
21	Mechanical design criteria for intervertebral disc tissue engineering. <i>Journal of Biomechanics</i> , 2010, 43, 1017-1030.	0.9	216
22	Tissue Engineering and Regenerative Medicine: Recent Innovations and the Transition to Translation. <i>Tissue Engineering - Part B: Reviews</i> , 2013, 19, 1-13.	2.5	216
23	Mechanics of oriented electrospun nanofibrous scaffolds for annulus fibrosus tissue engineering. <i>Journal of Orthopaedic Research</i> , 2007, 25, 1018-1028.	1.2	215
24	The influence of degradation characteristics of hyaluronic acid hydrogels on in vitro neocartilage formation by mesenchymal stem cells. <i>Biomaterials</i> , 2009, 30, 4287-4296.	5.7	205
25	Differential Maturation and Structure-Function Relationships in Mesenchymal Stem Cell- and Chondrocyte-Seeded Hydrogels. <i>Tissue Engineering - Part A</i> , 2009, 15, 1041-1052.	1.6	196
26	Anatomically shaped osteochondral constructs for articular cartilage repair. <i>Journal of Biomechanics</i> , 2003, 36, 1853-1864.	0.9	195
27	Modeling of Neutral Solute Transport in a Dynamically Loaded Porous Permeable Gel: Implications for Articular Cartilage Biosynthesis and Tissue Engineering. <i>Journal of Biomechanical Engineering</i> , 2003, 125, 602-614.	0.6	193
28	Engineering on the Straight and Narrow: The Mechanics of Nanofibrous Assemblies for Fiber-Reinforced Tissue Regeneration. <i>Tissue Engineering - Part B: Reviews</i> , 2009, 15, 171-193.	2.5	188
29	Matching material and cellular timescales maximizes cell spreading on viscoelastic substrates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E2686-E2695.	3.3	183
30	Long-term dynamic loading improves the mechanical properties of chondrogenic mesenchymal stem cell-laden hydrogel. , 2010, 19, 72-85.		182
31	Stiffening hydrogels for investigating the dynamics of hepatic stellate cell mechanotransduction during myofibroblast activation. <i>Scientific Reports</i> , 2016, 6, 21387.	1.6	176
32	High mesenchymal stem cell seeding densities in hyaluronic acid hydrogels produce engineered cartilage with native tissue properties. <i>Acta Biomaterialia</i> , 2012, 8, 3027-3034.	4.1	173
33	Transient Exposure to Transforming Growth Factor Beta 3 Under Serum-Free Conditions Enhances the Biomechanical and Biochemical Maturation of Tissue-Engineered Cartilage. <i>Tissue Engineering - Part A</i> , 2008, 14, 1821-1834.	1.6	168
34	To Serve and Protect: Hydrogels to Improve Stem Cell-Based Therapies. <i>Cell Stem Cell</i> , 2016, 18, 13-15.	5.2	158
35	Mechanics and mechanobiology of mesenchymal stem cell-based engineered cartilage. <i>Journal of Biomechanics</i> , 2010, 43, 128-136.	0.9	154
36	Combinatorial hydrogels with biochemical gradients for screening 3D cellular microenvironments. <i>Nature Communications</i> , 2018, 9, 614.	5.8	150

#	ARTICLE	IF	CITATIONS
37	Biophysical Regulation of Chromatin Architecture Instills a Mechanical Memory in Mesenchymal Stem Cells. <i>Scientific Reports</i> , 2015, 5, 16895.	1.6	148
38	Sacrificial nanofibrous composites provide instruction without impediment and enable functional tissue formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14176-14181.	3.3	145
39	Differentiation alters stem cell nuclear architecture, mechanics, and mechano-sensitivity. <i>ELife</i> , 2016, 5, .	2.8	138
40	Transient Exposure to Transforming Growth Factor Beta 3 Improves the Mechanical Properties of Mesenchymal Stem Cell-Laden Cartilage Constructs in a Density-Dependent Manner. <i>Tissue Engineering - Part A</i> , 2009, 15, 3461-3472.	1.6	133
41	A layered agarose approach to fabricate depth-dependent inhomogeneity in chondrocyte-seeded constructs. <i>Journal of Orthopaedic Research</i> , 2005, 23, 134-141.	1.2	132
42	Engineered Disc-Like Angle-Ply Structures for Intervertebral Disc Replacement. <i>Spine</i> , 2010, 35, 867-873.	1.0	127
43	Dynamic Compressive Loading Enhances Cartilage Matrix Synthesis and Distribution and Suppresses Hypertrophy in hMSC-Laden Hyaluronic Acid Hydrogels. <i>Tissue Engineering - Part A</i> , 2012, 18, 715-724.	1.6	121
44	An anisotropic nanofiber/microsphere composite with controlled release of biomolecules for fibrous tissue engineering. <i>Biomaterials</i> , 2010, 31, 4113-4120.	5.7	114
45	Acellular Biomaterials: An Evolving Alternative to Cell-Based Therapies. <i>Science Translational Medicine</i> , 2013, 5, 176ps4.	5.8	113
46	Dynamic Tensile Loading Improves the Functional Properties of Mesenchymal Stem Cell-Laden Nanofiber-Based Fibrocartilage. <i>Tissue Engineering - Part A</i> , 2011, 17, 1445-1455.	1.6	109
47	Differential Behavior of Auricular and Articular Chondrocytes in Hyaluronic Acid Hydrogels. <i>Tissue Engineering - Part A</i> , 2008, 14, 1121-1131.	1.6	108
48	Mitogen-activated protein kinase signaling in bovine articular chondrocytes in response to fluid flow does not require calcium mobilization. <i>Journal of Biomechanics</i> , 2000, 33, 73-80.	0.9	107
49	Dynamic culture enhances stem cell infiltration and modulates extracellular matrix production on aligned electrospun nanofibrous scaffolds. <i>Acta Biomaterialia</i> , 2011, 7, 485-491.	4.1	102
50	Pathogenesis and Prevention of Posttraumatic Osteoarthritis After Intra-articular Fracture. <i>Journal of the American Academy of Orthopaedic Surgeons</i> , The, 2014, 22, 20-28.	1.1	102
51	New directions in nanofibrous scaffolds for soft tissue engineering and regeneration. <i>Expert Review of Medical Devices</i> , 2009, 6, 515-532.	1.4	101
52	Bioactive factors for cartilage repair and regeneration: Improving delivery, retention, and activity. <i>Acta Biomaterialia</i> , 2019, 93, 222-238.	4.1	101
53	Electrospun Nanofibrous Scaffolds: Production, Characterization, and Applications for Tissue Engineering and Drug Delivery. <i>Journal of Biomedical Nanotechnology</i> , 2005, 1, 259-275.	0.5	100
54	Translation of an engineered nanofibrous disc-like angle-ply structure for intervertebral disc replacement in a small animal model. <i>Acta Biomaterialia</i> , 2014, 10, 2473-2481.	4.1	100

#	ARTICLE	IF	CITATIONS
55	The influence of an aligned nanofibrous topography on human mesenchymal stem cell fibrochondrogenesis. <i>Biomaterials</i> , 2010, 31, 6190-6200.	5.7	97
56	Programmed biomolecule delivery to enable and direct cell migration for connective tissue repair. <i>Nature Communications</i> , 2017, 8, 1780.	5.8	96
57	Cell migration: implications for repair and regeneration in joint disease. <i>Nature Reviews Rheumatology</i> , 2019, 15, 167-179.	3.5	94
58	Regional multilineage differentiation potential of meniscal fibrochondrocytes: Implications for meniscus repair. <i>Anatomical Record</i> , 2007, 290, 48-58.	0.8	93
59	Mechano-topographic modulation of stem cell nuclear shape on nanofibrous scaffolds. <i>Acta Biomaterialia</i> , 2011, 7, 57-66.	4.1	88
60	Emerging therapies for cartilage regeneration in currently excluded "red knee"™ populations. <i>Npj Regenerative Medicine</i> , 2019, 4, 12.	2.5	88
61	Microstructural heterogeneity directs micromechanics and mechanobiology in native and engineered fibrocartilage. <i>Nature Materials</i> , 2016, 15, 477-484.	13.3	84
62	Long-term mechanical function and integration of an implanted tissue-engineered intervertebral disc. <i>Science Translational Medicine</i> , 2018, 10, .	5.8	82
63	Transient exposure to TGF-3 improves the functional chondrogenesis of MSC-laden hyaluronic acid hydrogels. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 11, 92-101.	1.5	80
64	Fabrication and Modeling of Dynamic Multipolymer Nanofibrous Scaffolds. <i>Journal of Biomechanical Engineering</i> , 2009, 131, 101012.	0.6	78
65	Osteocyte Viability and Regulation of Osteoblast Function in a 3D Trabecular Bone Explant Under Dynamic Hydrostatic Pressure. <i>Journal of Bone and Mineral Research</i> , 2004, 19, 1403-1410.	3.1	77
66	Micromechanical anisotropy and heterogeneity of the meniscus extracellular matrix. <i>Acta Biomaterialia</i> , 2017, 54, 356-366.	4.1	76
67	Advancing cell therapies for intervertebral disc regeneration from the lab to the clinic: Recommendations of the ORS spine section. <i>JOR Spine</i> , 2018, 1, e1036.	1.5	74
68	A Systematic Review and Guide to Mechanical Testing for Articular Cartilage Tissue Engineering. <i>Tissue Engineering - Part C: Methods</i> , 2019, 25, 593-608.	1.1	74
69	Homologous structure-function relationships between native fibrocartilage and tissue engineered from MSC-seeded nanofibrous scaffolds. <i>Biomaterials</i> , 2011, 32, 461-468.	5.7	73
70	Growth factor supplementation improves native and engineered meniscus repair in vitro. <i>Acta Biomaterialia</i> , 2012, 8, 3687-3694.	4.1	73
71	Fiber-aligned polymer scaffolds for rotator cuff repair in a rat model. <i>Journal of Shoulder and Elbow Surgery</i> , 2012, 21, 245-250.	1.2	73
72	Organized nanofibrous scaffolds that mimic the macroscopic and microscopic architecture of the knee meniscus. <i>Acta Biomaterialia</i> , 2013, 9, 4496-4504.	4.1	73

#	ARTICLE	IF	CITATIONS
73	High-Throughput Screening for Modulators of Mesenchymal Stem Cell Chondrogenesis. <i>Annals of Biomedical Engineering</i> , 2008, 36, 1909-1921.	1.3	72
74	Cartilage Repair and Subchondral Bone Remodeling in Response to Focal Lesions in a Mini-Pig Model: Implications for Tissue Engineering. <i>Tissue Engineering - Part A</i> , 2015, 21, 850-860.	1.6	72
75	Chondrocyte Translocation Response to Direct Current Electric Fields. <i>Journal of Biomechanical Engineering</i> , 2000, 122, 261-267.	0.6	71
76	The Detrimental Effects of Systemic Ibuprofen Delivery on Tendon Healing Are Time-Dependent. <i>Clinical Orthopaedics and Related Research</i> , 2014, 472, 2433-2439.	0.7	70
77	IL-1ra delivered from poly(lactic-co-glycolic acid) microspheres attenuates IL-1beta mediated degradation of nucleus pulposus in vitro. <i>Arthritis Research and Therapy</i> , 2012, 14, R179.	1.6	69
78	Repair of dense connective tissues via biomaterial-mediated matrix reprogramming of the wound interface. <i>Biomaterials</i> , 2015, 39, 85-94.	5.7	67
79	Cell therapy for the degenerating intervertebral disc. <i>Translational Research</i> , 2017, 181, 49-58.	2.2	67
80	Decorin Regulates the Aggrecan Network Integrity and Biomechanical Functions of Cartilage Extracellular Matrix. <i>ACS Nano</i> , 2019, 13, 11320-11333.	7.3	67
81	Macro- to Microscale Strain Transfer in Fibrous Tissues is Heterogeneous and Tissue-Specific. <i>Biophysical Journal</i> , 2013, 105, 807-817.	0.2	66
82	Evaluation of the Complex Transcriptional Topography of Mesenchymal Stem Cell Chondrogenesis for Cartilage Tissue Engineering. <i>Tissue Engineering - Part A</i> , 2010, 16, 2699-2708.	1.6	65
83	Translation of an injectable triple-interpenetrating-network hydrogel for intervertebral disc regeneration in a goat model. <i>Acta Biomaterialia</i> , 2017, 60, 201-209.	4.1	65
84	Early changes in cartilage pericellular matrix micromechanobiology portend the onset of post-traumatic osteoarthritis. <i>Acta Biomaterialia</i> , 2020, 111, 267-278.	4.1	65
85	Functional tissue engineering of chondral and osteochondral constructs. <i>Biorheology</i> , 2004, 41, 577-90.	1.2	65
86	ISSLS Prize Winner: Integrating Theoretical and Experimental Methods for Functional Tissue Engineering of the Annulus Fibrosus. <i>Spine</i> , 2008, 33, 2691-2701.	1.0	64
87	Cartilage Interstitial Fluid Load Support in Unconfined Compression Following Enzymatic Digestion. <i>Journal of Biomechanical Engineering</i> , 2004, 126, 779-786.	0.6	62
88	Title is missing!. <i>Transport in Porous Media</i> , 2003, 50, 5-33.	1.2	59
89	Fiber angle and aspect ratio influence the shear mechanics of oriented electrospun nanofibrous scaffolds. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 1627-1636.	1.5	59
90	Electrospinning of photocrosslinked and degradable fibrous scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , 2008, 87A, 1034-1043.	2.1	58

#	ARTICLE	IF	CITATIONS
91	Biomaterials in the repair of sports injuries. <i>Nature Materials</i> , 2012, 11, 652-654.	13.3	58
92	Dynamic Loading and Tendon Healing Affect Multiscale Tendon Properties and ECM Stress Transmission. <i>Scientific Reports</i> , 2018, 8, 10854.	1.6	58
93	Aberrant mechanosensing in injured intervertebral discs as a result of boundary-constraint disruption and residual-strain loss. <i>Nature Biomedical Engineering</i> , 2019, 3, 998-1008.	11.6	58
94	Improved cartilage repair via <i>in vitro</i> pre-maturation of MSC-seeded hyaluronic acid hydrogels. <i>Biomedical Materials (Bristol)</i> , 2012, 7, 024110.	1.7	57
95	The Nuclear Option: Evidence Implicating the Cell Nucleus in Mechanotransduction. <i>Journal of Biomechanical Engineering</i> , 2017, 139, .	0.6	57
96	Mechanically Activated Microcapsules for "On-Demand" Drug Delivery in Dynamically Loaded Musculoskeletal Tissues. <i>Advanced Functional Materials</i> , 2019, 29, 1807909.	7.8	57
97	Maturation State-Dependent Alterations in Meniscus Integration: Implications for Scaffold Design and Tissue Engineering. <i>Tissue Engineering - Part A</i> , 2011, 17, 193-204.	1.6	56
98	Biomaterial-mediated delivery of degradative enzymes to improve meniscus integration and repair. <i>Acta Biomaterialia</i> , 2013, 9, 6393-6402.	4.1	56
99	Mechanically Induced Chromatin Condensation Requires Cellular Contractility in Mesenchymal Stem Cells. <i>Biophysical Journal</i> , 2016, 111, 864-874.	0.2	56
100	Nucleus pulposus cells synthesize a functional extracellular matrix and respond to inflammatory cytokine challenge following long-term agarose culture. , 2011, 22, 291-301.		56
101	Functional properties of bone marrow-derived MSC-based engineered cartilage are unstable with very long-term <i>in vitro</i> culture. <i>Journal of Biomechanics</i> , 2014, 47, 2173-2182.	0.9	55
102	Multi-scale Structural and Tensile Mechanical Response of Annulus Fibrosus to Osmotic Loading. <i>Annals of Biomedical Engineering</i> , 2012, 40, 1610-1621.	1.3	54
103	Porosity and Cell Preseeding Influence Electrospun Scaffold Maturation and Meniscus Integration <i>In Vitro</i> . <i>Tissue Engineering - Part A</i> , 2013, 19, 538-547.	1.6	54
104	Phenotypic stability, matrix elaboration and functional maturation of nucleus pulposus cells encapsulated in photocrosslinkable hyaluronic acid hydrogels. <i>Acta Biomaterialia</i> , 2015, 12, 21-29.	4.1	53
105	Cartilage Matrix Formation by Bovine Mesenchymal Stem Cells in Three-dimensional Culture Is Age-dependent. <i>Clinical Orthopaedics and Related Research</i> , 2011, 469, 2744-2753.	0.7	52
106	Thermosensitive Poly(N-vinylcaprolactam) Injectable Hydrogels for Cartilage Tissue Engineering. <i>Tissue Engineering - Part A</i> , 2017, 23, 935-945.	1.6	51
107	Dose and Timing of "Cadherin Mimetic Peptides Regulate MSC Chondrogenesis within Hydrogels. <i>Advanced Healthcare Materials</i> , 2018, 7, e1701199.	3.9	51
108	Intervertebral Disc Degeneration Is Associated With Aberrant Endplate Remodeling and Reduced Small Molecule Transport. <i>Journal of Bone and Mineral Research</i> , 2020, 35, 1572-1581.	3.1	51

#	ARTICLE	IF	CITATIONS
109	Modeling interlamellar interactions in angle-ply biologic laminates for annulus fibrosus tissue engineering. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 973-984.	1.4	50
110	High-throughput screening of a small molecule library for promoters and inhibitors of mesenchymal stem cell osteogenic differentiation. <i>Biotechnology and Bioengineering</i> , 2011, 108, 163-174.	1.7	50
111	Engineering meniscus structure and function via multi-layered mesenchymal stem cell-seeded nanofibrous scaffolds. <i>Journal of Biomechanics</i> , 2015, 48, 1412-1419.	0.9	49
112	A Chemomechanical Model of Matrix and Nuclear Rigidity Regulation of Focal Adhesion Size. <i>Biophysical Journal</i> , 2015, 109, 1807-1817.	0.2	49
113	Cross-Linking Chemistry of Tyramine-Modified Hyaluronan Hydrogels Alters Mesenchymal Stem Cell Early Attachment and Behavior. <i>Biomacromolecules</i> , 2017, 18, 855-864.	2.6	48
114	Metabolic Labeling to Probe the Spatiotemporal Accumulation of Matrix at the Chondrocyte-Hydrogel Interface. <i>Advanced Functional Materials</i> , 2020, 30, 1909802.	7.8	48
115	In Vitro Characterization of a Stem-Cell-Seeded Triple-Interpenetrating-Network Hydrogel for Functional Regeneration of the Nucleus Pulposus. <i>Tissue Engineering - Part A</i> , 2014, 20, 1841-1849.	1.6	47
116	Extracellular vesicles mediate improved functional outcomes in engineered cartilage produced from MSC/chondrocyte cocultures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1569-1578.	3.3	47
117	Fibrous Scaffolds with Varied Fiber Chemistry and Growth Factor Delivery Promote Repair in a Porcine Cartilage Defect Model. <i>Tissue Engineering - Part A</i> , 2015, 21, 2680-2690.	1.6	46
118	Correlations between quantitative T_2 and $T_1\rho$ MRI, mechanical properties and biochemical composition in a rabbit lumbar intervertebral disc degeneration model. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1382-1388.	1.2	46
119	Fiber Stretch and Reorientation Modulates Mesenchymal Stem Cell Morphology and Fibrous Gene Expression on Oriented Nanofibrous Microenvironments. <i>Annals of Biomedical Engineering</i> , 2011, 39, 2780-2790.	1.3	45
120	A radiopaque electrospun scaffold for engineering fibrous musculoskeletal tissues: Scaffold characterization and in vivo applications. <i>Acta Biomaterialia</i> , 2015, 26, 97-104.	4.1	45
121	From Repair to Regeneration: Biomaterials to Reprogram the Meniscus Wound Microenvironment. <i>Annals of Biomedical Engineering</i> , 2015, 43, 529-542.	1.3	44
122	Single-cell differences in matrix gene expression do not predict matrix deposition. <i>Nature Communications</i> , 2016, 7, 10865.	5.8	43
123	Crimped Nanofibrous Biomaterials Mimic Microstructure and Mechanics of Native Tissue and Alter Strain Transfer to Cells. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 2869-2876.	2.6	41
124	Functional consequences of glucose and oxygen deprivation on engineered mesenchymal stem cell-based cartilage constructs. <i>Osteoarthritis and Cartilage</i> , 2015, 23, 134-142.	0.6	40
125	Nanofibrous hyaluronic acid scaffolds delivering TGF- β 3 and SDF-1 α for articular cartilage repair in a large animal model. <i>Acta Biomaterialia</i> , 2021, 126, 170-182.	4.1	40
126	Duty Cycle of Deformational Loading Influences the Growth of Engineered Articular Cartilage. <i>Cellular and Molecular Bioengineering</i> , 2009, 2, 386-394.	1.0	39

#	ARTICLE	IF	CITATIONS
127	Donor Variation and Optimization of Human Mesenchymal Stem Cell Chondrogenesis in Hyaluronic Acid. <i>Tissue Engineering - Part A</i> , 2018, 24, 1693-1703.	1.6	39
128	Maximizing cartilage formation and integration via a trajectory-based tissue engineering approach. <i>Biomaterials</i> , 2014, 35, 2140-2148.	5.7	38
129	Physiology and Engineering of the Graded Interfaces of Musculoskeletal Junctions. <i>Annual Review of Biomedical Engineering</i> , 2018, 20, 403-429.	5.7	38
130	Cartilage Mechanical Response under Dynamic Compression at Physiological Stress Levels Following Collagenase Digestion. <i>Annals of Biomedical Engineering</i> , 2008, 36, 425-434.	1.3	37
131	Biaxial mechanics and interlamellar shearing of stem cell seeded electrospun angle-ply laminates for annulus fibrosus tissue engineering. <i>Journal of Orthopaedic Research</i> , 2013, 31, 864-870.	1.2	37
132	Mediation of Cartilage Matrix Degeneration and Fibrillation by Decorin in Post-traumatic Osteoarthritis. <i>Arthritis and Rheumatology</i> , 2020, 72, 1266-1277.	2.9	37
133	Decorin regulates cartilage pericellular matrix micromechanobiology. <i>Matrix Biology</i> , 2021, 96, 1-17.	1.5	37
134	Sliding contact loading enhances the tensile properties of mesenchymal stem cell-seeded hydrogels. , 2012, 24, 29-45.		37
135	Nuclear softening expedites interstitial cell migration in fibrous networks and dense connective tissues. <i>Science Advances</i> , 2020, 6, eaax5083.	4.7	36
136	Effects of Mesenchymal Stem Cell and Growth Factor Delivery on Cartilage Repair in a Mini-Pig Model. <i>Cartilage</i> , 2016, 7, 174-184.	1.4	35
137	Intervertebral Disc Degeneration in a Percutaneous Mouse Tail Injury Model. <i>American Journal of Physical Medicine and Rehabilitation</i> , 2018, 97, 170-177.	0.7	35
138	Hypoxic Preconditioning Enhances Bone Marrow-Derived Mesenchymal Stem Cell Survival in a Low Oxygen and Nutrient-Limited 3D Microenvironment. <i>Cartilage</i> , 2021, 12, 512-525.	1.4	35
139	High fidelity visualization of cell-to-cell variation and temporal dynamics in nascent extracellular matrix formation. <i>Scientific Reports</i> , 2016, 6, 38852.	1.6	34
140	Fabrication of MSC-laden composites of hyaluronic acid hydrogels reinforced with MEW scaffolds for cartilage repair. <i>Biofabrication</i> , 2022, 14, 014106.	3.7	34
141	Role of cell-associated matrix in the development of free-swelling and dynamically loaded chondrocyte-seeded agarose gels. <i>Biorheology</i> , 2004, 41, 223-37.	1.2	34
142	Biphasic Finite Element Modeling Reconciles Mechanical Properties of Tissue-Engineered Cartilage Constructs Across Testing Platforms. <i>Tissue Engineering - Part A</i> , 2017, 23, 663-674.	1.6	33
143	Fatigue loading of tendon results in collagen kinking and denaturation but does not change local tissue mechanics. <i>Journal of Biomechanics</i> , 2018, 71, 251-256.	0.9	33
144	Influence of Fiber Stiffness on Meniscal Cell Migration into Dense Fibrous Networks. <i>Advanced Healthcare Materials</i> , 2020, 9, e1901228.	3.9	33

#	ARTICLE	IF	CITATIONS
145	Nuclear envelope wrinkling predicts mesenchymal progenitor cell mechano-response in 2D and 3D microenvironments. <i>Biomaterials</i> , 2021, 270, 120662.	5.7	33
146	Dynamic deformational loading results in selective application of mechanical stimulation in a layered, tissue-engineered cartilage construct. <i>Biorheology</i> , 2006, 43, 497-507.	1.2	33
147	Maturation State and Matrix Microstructure Regulate Interstitial Cell Migration in Dense Connective Tissues. <i>Scientific Reports</i> , 2018, 8, 3295.	1.6	31
148	Mechano-adaptation of the stem cell nucleus. <i>Nucleus</i> , 2018, 9, 9-19.	0.6	31
149	Combined Hydrogel and Mesenchymal Stem Cell Therapy for Moderate-Severity Disc Degeneration in Goats. <i>Tissue Engineering - Part A</i> , 2021, 27, 117-128.	1.6	31
150	Age-Dependent Subchondral Bone Remodeling and Cartilage Repair in a Minipig Defect Model. <i>Tissue Engineering - Part C: Methods</i> , 2017, 23, 745-753.	1.1	30
151	ACVR1 ^{R206H} FOP mutation alters mechanosensing and tissue stiffness during heterotopic ossification. <i>Molecular Biology of the Cell</i> , 2019, 30, 17-29.	0.9	30
152	In vivo performance of an acellular disc-like angle ply structure (DAPS) for total disc replacement in a small animal model. <i>Journal of Orthopaedic Research</i> , 2017, 35, 23-31.	1.2	29
153	Electrospun PLGA Nanofiber Scaffolds Release Ibuprofen Faster and Degrade Slower After In Vivo Implantation. <i>Annals of Biomedical Engineering</i> , 2017, 45, 2348-2359.	1.3	29
154	Elevated BMP and Mechanical Signaling Through YAP1/RhoA Poises FOP Mesenchymal Progenitors for Osteogenesis. <i>Journal of Bone and Mineral Research</i> , 2019, 34, 1894-1909.	3.1	29
155	Inflammatory cytokine and catabolic enzyme expression in a goat model of intervertebral disc degeneration. <i>Journal of Orthopaedic Research</i> , 2020, 38, 2521-2531.	1.2	28
156	Meniscus Tissue Engineering on the Nanoscale – From Basic Principles to Clinical Application. <i>Journal of Knee Surgery</i> , 2009, 22, 45-59.	0.9	27
157	The Influence of Fibrous Elastomer Structure and Porosity on Matrix Organization. <i>PLoS ONE</i> , 2010, 5, e15717.	1.1	27
158	Expansion of mesenchymal stem cells on electrospun scaffolds maintains stemness, mechano-responsivity, and differentiation potential. <i>Journal of Orthopaedic Research</i> , 2018, 36, 808-815.	1.2	27
159	Low-Serum Media and Dynamic Deformational Loading in Tissue Engineering of Articular Cartilage. <i>Annals of Biomedical Engineering</i> , 2008, 36, 769-779.	1.3	26
160	Population average T2 MRI maps reveal quantitative regional transformations in the degenerating rabbit intervertebral disc that vary by lumbar level. <i>Journal of Orthopaedic Research</i> , 2015, 33, 140-148.	1.2	26
161	Mechanical function near defects in an aligned nanofiber composite is preserved by inclusion of disorganized layers: Insight into meniscus structure and function. <i>Acta Biomaterialia</i> , 2017, 56, 102-109.	4.1	26
162	Towards the scale up of tissue engineered intervertebral discs for clinical application. <i>Acta Biomaterialia</i> , 2018, 70, 154-164.	4.1	26

#	ARTICLE	IF	CITATIONS
163	Sprifermin treatment enhances cartilage integration in an in vitro repair model. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2648-2656.	1.2	26
164	Biodegradable fibrous scaffolds with diverse properties by electrospinning candidates from a combinatorial macromer library. <i>Acta Biomaterialia</i> , 2010, 6, 1219-1226.	4.1	24
165	Fabrication and evaluation of biomimetic-synthetic nanofibrous composites for soft tissue regeneration. <i>Cell and Tissue Research</i> , 2012, 347, 803-813.	1.5	24
166	Enhanced nutrient transport improves the depth-dependent properties of tri-layered engineered cartilage constructs with zonal co-culture of chondrocytes and MSCs. <i>Acta Biomaterialia</i> , 2017, 58, 1-11.	4.1	24
167	Time-dependent functional maturation of scaffold-free cartilage tissue analogs. <i>Journal of Biomechanics</i> , 2014, 47, 2137-2142.	0.9	23
168	Anatomic Mesenchymal Stem Cell-Based Engineered Cartilage Constructs for Biologic Total Joint Replacement. <i>Tissue Engineering - Part A</i> , 2016, 22, 386-395.	1.6	23
169	Large Animal Models of Meniscus Repair and Regeneration: A Systematic Review of the State of the Field. <i>Tissue Engineering - Part C: Methods</i> , 2017, 23, 661-672.	1.1	23
170	Autologous tendon-derived cell-seeded nanofibrous scaffolds improve rotator cuff repair in an age-dependent fashion. <i>Journal of Orthopaedic Research</i> , 2017, 35, 1250-1257.	1.2	23
171	Sacrificial Fibers Improve Matrix Distribution and Micromechanical Properties in a Tissue-Engineered Intervertebral Disc. <i>Acta Biomaterialia</i> , 2020, 111, 232-241.	4.1	22
172	Single Cell Imaging to Probe Mesenchymal Stem Cell N-Cadherin Mediated Signaling within Hydrogels. <i>Annals of Biomedical Engineering</i> , 2016, 44, 1921-1930.	1.3	21
173	Effect of overuse-induced tendinopathy on tendon healing in a rat supraspinatus repair model. <i>Journal of Orthopaedic Research</i> , 2016, 34, 161-166.	1.2	21
174	Promise, progress, and problems in whole disc tissue engineering. <i>JOR Spine</i> , 2018, 1, e1015.	1.5	21
175	Development of a decellularized meniscus matrix-based nanofibrous scaffold for meniscus tissue engineering. <i>Acta Biomaterialia</i> , 2021, 128, 175-185.	4.1	20
176	Starting with form, emerging with function: nanofibrous scaffolds for tissue engineering of orthopedic tissues. <i>Nanomedicine</i> , 2013, 8, 505-508.	1.7	19
177	Impact of guidance documents on translational large animal studies of cartilage repair. <i>Science Translational Medicine</i> , 2015, 7, 310re9.	5.8	19
178	Comparison of Fixation Techniques of 3D-Woven Poly(μ -Caprolactone) Scaffolds for Cartilage Repair in a Weightbearing Porcine Large Animal Model. <i>Cartilage</i> , 2018, 9, 428-437.	1.4	19
179	Magneto-Driven Gradients of Diamagnetic Objects for Engineering Complex Tissues. <i>Advanced Materials</i> , 2020, 32, e2005030.	11.1	19
180	Putting the Pieces in Place: Mobilizing Cellular Players to Improve Annulus Fibrosus Repair. <i>Tissue Engineering - Part B: Reviews</i> , 2021, 27, 295-312.	2.5	19

#	ARTICLE	IF	CITATIONS
181	Transection of the medial meniscus anterior horn results in cartilage degeneration and meniscus remodeling in a large animal model. <i>Journal of Orthopaedic Research</i> , 2020, 38, 2696-2708.	1.2	19
182	The Effect of Applied Compressive Loading on Tissue-Engineered Cartilage Constructs Cultured with TGF- β 3. , 2006, 2006, 779-82.		18
183	A high throughput mechanical screening device for cartilage tissue engineering. <i>Journal of Biomechanics</i> , 2014, 47, 2130-2136.	0.9	18
184	Intervertebral disc development and disease-related genetic polymorphisms. <i>Genes and Diseases</i> , 2016, 3, 171-177.	1.5	18
185	Chondrocyte and mesenchymal stem cell derived engineered cartilage exhibits differential sensitivity to pro-inflammatory cytokines. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2901-2910.	1.2	18
186	Pediatric laryngotracheal reconstruction with tissue-engineered cartilage in a rabbit model. <i>Laryngoscope</i> , 2016, 126, S5-21.	1.1	17
187	Fabrication, maturation, and implantation of composite tissue-engineered total discs formed from native and mesenchymal stem cell combinations. <i>Acta Biomaterialia</i> , 2020, 114, 53-62.	4.1	17
188	Stabilization of Damaged Articular Cartilage with Hydrogel-Mediated Reinforcement and Sealing. <i>Advanced Healthcare Materials</i> , 2021, 10, 2100315.	3.9	17
189	Biocompatibility and bioactivity of an FGF-loaded microsphere-based bilayer delivery system. <i>Acta Biomaterialia</i> , 2020, 111, 341-348.	4.1	16
190	Looping In-Mechanics: Mechanobiologic Regulation of the Nucleus and the Epigenome. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000030.	3.9	16
191	Delayed Fracture Healing in Growth Differentiation Factor 5-deficient Mice: A Pilot Study. <i>Clinical Orthopaedics and Related Research</i> , 2011, 469, 2915-2924.	0.7	15
192	Near-Infrared Spectroscopy Predicts Compositional and Mechanical Properties of Hyaluronic Acid-Based Engineered Cartilage Constructs. <i>Tissue Engineering - Part A</i> , 2018, 24, 106-116.	1.6	15
193	Mechano-activated biomolecule release in regenerating load-bearing tissue microenvironments. <i>Biomaterials</i> , 2021, 265, 120255.	5.7	15
194	Impacts of maturation on the micromechanics of the meniscus extracellular matrix. <i>Journal of Biomechanics</i> , 2018, 72, 252-257.	0.9	14
195	Metabolic labeling of secreted matrix to investigate cell-material interactions in tissue engineering and mechanobiology. <i>Nature Protocols</i> , 2022, 17, 618-648.	5.5	14
196	In vivo retention and bioactivity of IL-1ra microspheres in the rat intervertebral disc: a preliminary investigation. <i>Journal of Experimental Orthopaedics</i> , 2014, 1, 15.	0.8	13
197	Optimization of Preculture Conditions to Maximize the In Vivo Performance of Cell-Seeded Engineered Intervertebral Discs. <i>Tissue Engineering - Part A</i> , 2017, 23, 923-934.	1.6	13
198	Stretch-responsive adhesive microcapsules for strain-regulated antibiotic release from fabric wound dressings. <i>Biomaterials Science</i> , 2021, 9, 5136-5143.	2.6	13

#	ARTICLE	IF	CITATIONS
199	Cell morphology and mechanosensing can be decoupled in fibrous microenvironments and identified using artificial neural networks. <i>Scientific Reports</i> , 2021, 11, 5950.	1.6	13
200	Hypoxic regulation of functional extracellular matrix elaboration by nucleus pulposus cells in long-term agarose culture. <i>Journal of Orthopaedic Research</i> , 2015, 33, 747-754.	1.2	12
201	Structure, function, and defect tolerance with maturation of the radial tie fiber network in the knee meniscus. <i>Journal of Orthopaedic Research</i> , 2020, 38, 2709-2720.	1.2	12
202	Engineering of Fiber-Reinforced Tissues with Anisotropic Biodegradable Nanofibrous Scaffolds. , 2006, 2006, 787-90.		11
203	A retinaculum-sparing surgical approach preserves porcine stifle joint cartilage in an experimental animal model of cartilage repair. <i>Journal of Experimental Orthopaedics</i> , 2017, 4, 11.	0.8	11
204	Intrinsic and growth-mediated cell and matrix specialization during murine meniscus tissue assembly. <i>FASEB Journal</i> , 2021, 35, e21779.	0.2	11
205	Spatial distribution of type II collagen gene expression in the mouse intervertebral disc. <i>JOR Spine</i> , 2019, 2, e1070.	1.5	10
206	A challenging playing field: Identifying the endogenous impediments to annulus fibrosus repair. <i>JOR Spine</i> , 2021, 4, e1133.	1.5	10
207	Type V collagen regulates the structure and biomechanics of TMJ condylar cartilage: A fibrous-hyaline hybrid. <i>Matrix Biology</i> , 2021, 102, 1-19.	1.5	10
208	A Wearable Magnet-Based System to Assess Activity and Joint Flexion in Humans and Large Animals. <i>Annals of Biomedical Engineering</i> , 2018, 46, 2069-2078.	1.3	9
209	Degeneration alters structure-function relationships at multiple length-scales and across interfaces in human intervertebral discs. <i>Journal of Anatomy</i> , 2021, 238, 986-998.	0.9	9
210	Mesenchymal Stem Cells. , 2007, , 823-843.		8
211	Development of a Large Animal Model of Osteochondritis Dissecans of the Knee. <i>Orthopaedic Journal of Sports Medicine</i> , 2015, 3, 232596711557001.	0.8	8
212	Localized delivery of ibuprofen via a bilayer delivery system (BiLDS) for supraspinatus tendon healing in a rat model. <i>Journal of Orthopaedic Research</i> , 2020, 38, 2339-2349.	1.2	8
213	Gravity-based patterning of osteogenic factors to preserve bone structure after osteochondral injury in a large animal model. <i>Biofabrication</i> , 2022, 14, 044101.	3.7	8
214	Fabrication and maturation of integrated biphasic anatomic mesenchymal stromal cell-laden composite scaffolds for osteochondral repair and joint resurfacing. <i>Journal of Orthopaedic Research</i> , 2021, 39, 2323-2332.	1.2	7
215	Engineering Cartilage Tissue. , 2011, , 493-520.		7
216	Role of dexamethasone in the long-term functional maturation of MSC-laden hyaluronic acid hydrogels for cartilage tissue engineering. <i>Journal of Orthopaedic Research</i> , 2018, 36, 1717-1727.	1.2	6

#	ARTICLE	IF	CITATIONS
217	Resorbable Pins to Enhance Scaffold Retention in a Porcine Chondral Defect Model. <i>Cartilage</i> , 2021, 13, 1676S-1687S.	1.4	6
218	T1rho Magnetic Resonance Imaging at 3T Detects Knee Cartilage Changes After Viscosupplementation. <i>Orthopedics</i> , 2015, 38, e604-10.	0.5	6
219	A common language for evaluating disc degeneration and regeneration: A <i>JOR Spine</i> / <i>ORS Spine</i> Section initiative. <i>JOR Spine</i> , 2019, 2, e1056.	1.5	4
220	Six-Month Outcomes of Clinically Relevant Meniscal Injury in a Large-Animal Model. <i>Orthopaedic Journal of Sports Medicine</i> , 2021, 9, 232596712110354.	0.8	4
221	Optimized Media Volumes Enable Homogeneous Growth of Mesenchymal Stem Cell-Based Engineered Cartilage Constructs. <i>Tissue Engineering - Part A</i> , 2021, 27, 214-222.	1.6	3
222	The Inner Annulus Fibrosus Encroaches on the Nucleus Pulposus in the Injured Mouse Tail Intervertebral Disc. <i>American Journal of Physical Medicine and Rehabilitation</i> , 2021, 100, 450-457.	0.7	3
223	Mechanics and Cytocompatibility of Genipin Crosslinked Type I Collagen Nanofibrous Scaffolds. , 2008, , .		2
224	Influence of Chondrocyte Zone on Co-Cultures With Mesenchymal Stem Cells in HA Hydrogels for Cartilage Tissue Engineering. , 2012, , .		2
225	Restoration of physiologic loading modulates engineered intervertebral disc structure and function in an in vivo model. <i>JOR Spine</i> , 2020, 3, e1086.	1.5	2
226	Meniscal Anatomy. , 2014, , 1-7.		2
227	In Vitro Meniscus Integration Potential is Inversely Correlated With Tissue Maturation State. , 2010, , .		2
228	Modeling Inter-Lamellar Interactions in Angle-Ply Nanofibrous Biologic Laminates for Annulus Fibrosus Tissue Engineering. , 2010, , .		2
229	Differential Behavior of Auricular and Articular Chondrocytes in Hyaluronic Acid Hydrogels. <i>Tissue Engineering - Part A</i> , 2008, , .	1.6	2
230	Hyaluronic Acid Macromer Concentration Influences Functional MSC Chondrogenesis in Photocrosslinked MSC-Laden Hydrogels. , 2008, , .		1
231	Fabrication and Modeling of an Electrospun Tri-Polymer Composite for the Engineering of Fibrous Tissues. , 2008, , .		1
232	Dynamic Tensile Loading Improves the Mechanical Properties of MSC-Laden Aligned Nanofibrous Scaffolds. , 2010, , .		1
233	Dynamic Culture Improves Mechanical Functionality of MSC-Laden Tissue Engineered Constructs in a Depth-Dependent Manner. , 2011, , .		1
234	Cationic gadolinium chelate for magnetic resonance imaging of cartilaginous defects. <i>Contrast Media and Molecular Imaging</i> , 2016, 11, 229-235.	0.4	1

#	ARTICLE	IF	CITATIONS
235	In memory of Peter Roughly and John Mort: Time for a "biochemical" reflection. JOR Spine, 2019, 2, e1062.	1.5	1
236	The porcine accessory carpal bone as a model for biologic joint replacement for trapeziometacarpal osteoarthritis. Acta Biomaterialia, 2021, 129, 159-168.	4.1	1
237	Delivery of Active FGF-2 From Mechanically-Stable Biological Nanofibers Accelerates Cell Ingress Into Multifiber Composites. , 2011, , .		1
238	Extended Long-Term Culture of MSC-Laden Agarose Constructs Does Not Produce Functional Tissue Comparable to Primary Chondrocytes. , 2010, , .		1
239	Near infrared spectroscopic assessment of engineered cartilage for implantation in a pre-clinical model. Journal of Cartilage & Joint Preservation, 2022, 2, 100038.	0.2	1
240	Level dependent alterations in human facet cartilage mechanics and bone morphometry with spine degeneration. Journal of Orthopaedic Research, 2023, 41, 674-683.	1.2	1
241	Removal of Sacrificial Fibers Enhances Long Term Cell and Matrix Distribution in Aligned Nanofibrous Scaffolds. , 2009, , .		0
242	Repeated Dynamic Loading Modulates Cartilage Gene Expression but Does Not Improve Mechanical Properties of MSC-Laden Hydrogels. , 2009, , .		0
243	Microenvironmental Determinants of Stem Cell Fate. , 2009, , 647-663.		0
244	Differential Chondrogenic Potential of Human and Bovine Mesenchymal Stem Cells in Agarose and Photocrosslinked Hyaluronic Acid Hydrogels. , 2010, , .		0
245	Differentiation and Dynamic Tensile Loading Alter Nuclear Mechanics and Mechanoreception in Mesenchymal Stem Cells. , 2011, , .		0
246	Dynamic Tensile Loading and Altered Cell Contractility Modulate Nuclear Deformation and Cytoskeletal Connectivity. , 2012, , .		0
247	Dynamic loading and altered contractility modulate nuclear deformation and nesprin expression. , 2012, , .		0
248	Dynamic Compressive Loading and Crosslinking Density Influence the Chondrogenic and Hypertrophic Differentiation of Human Mesenchymal Stem Cells Seeded in Hyaluronic Acid Hydrogels. , 2012, , .		0
249	Multi-Scale Structural and Tensile Mechanical Response of Annulus Fibrosus to Osmotic Loading. , 2012, , .		0
250	Dynamic Tensile Loading Activates TGF and BMP Signaling in Mesenchymal Stem Cells on Aligned Nanofibrous Scaffolds. , 2012, , .		0
251	Erratum to "Fiber-aligned polymer scaffolds for rotator cuff repair in a rat model" [J Shoulder Elbow Surg 2012 Feb;21(2):245-50]. Journal of Shoulder and Elbow Surgery, 2013, 22, 581.	1.2	0
252	Advancing articular cartilage repair through tissue engineering: from materials and cells to clinical translation. , 0, , 488-513.		0

#	ARTICLE	IF	CITATIONS
253	Editorial. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 38, 173.	1.5	0
254	Hypoxia and Tension Maintain Human Tenocyte Tissue Constructs in the 3D Microenvironment. Journal of Hand Surgery, 2017, 42, S47.	0.7	0
255	Welcome to <i>JOR Spine</i>!. JOR Spine, 2018, 1, e1009.	1.5	0
256	JOR Spine : A (first) year in review. JOR Spine, 2018, 1, e1041.	1.5	0
257	Future of spine research: “The Asian perspectives” JOR Spine, 2018, 1, e1019.	1.5	0
258	New year, new initiatives!. JOR Spine, 2019, 2, e1048.	1.5	0
259	Another leap forward: PubMed Central indexing and Global Review Series. JOR Spine, 2019, 2, e1075.	1.5	0
260	Protocols, new <sc>ARB</sc> members, and Awards!. JOR Spine, 2020, 3, e1128.	1.5	0
261	Difficult times!. JOR Spine, 2020, 3, e1101.	1.5	0
262	An impactful year for <sc><i>JOR Spine</i></sc>. JOR Spine, 2021, 4, e1144.	1.5	0
263	A major achievement and a very good news in this first half of 2021!. JOR Spine, 2021, 4, e1163.	1.5	0
264	@<sc>JORSpine</sc>. JOR Spine, 2021, 4, e1172.	1.5	0
265	Intermittent Hydrostatic Pressurization Modulates Gene Expression in Human Dermal Fibroblasts Seeded in Three-Dimensional Polymer Scaffolds. , 2002, , .		0
266	Biological Assays. Handbook Series for Mechanical Engineering, 2003, , .	0.0	0
267	Cytoskeletal Control of Mesenchymal Stem Cell Nuclear Deformation on Nanofibrous Scaffolds. , 2009, , .		0
268	A Composite Microsphere/Nanofiber Controlled Release System for Fibrous Tissue Engineering. , 2009, , .		0
269	Tailoring the Crosslinking and Degradation of Hyaluronic Acid Hydrogels to Enhance Neocartilage Formation by Mesenchymal Stem Cells. , 2009, , .		0
270	Mesenchymal Stem Cell Seeded Nanofibrous Laminates Mimic the Multi-Scale Form and Function of the Annulus Fibrosus. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
271	Engineering the Functional Maturation of Nanofiber-Based Human Meniscus Tissue. , 2010, , .		0
272	Sliding Contact Loading Improves the Tensile Properties of MSC-Based Engineered Cartilage. , 2010, , .		0
273	Micromechanical Deformation of Chondrogenic Mesenchymal Stem Cells in 3D Hydrogels is Modulated by Time in Culture and Matrix Connectivity. , 2010, , .		0
274	Effects of Aging and TGF-Beta 3 on Chondrocyte and Mesenchymal Stem Cell Matrix Formation. , 2010, , .		0
275	Dynamic Compression Promotes Cartilage-Like Functional Properties in MSC-Seeded Hyaluronic Acid Hydrogels. , 2011, , .		0
276	Fiber Angle and Aspect Ratio Influence the Shear Mechanics of Electrospun Nanofibrous Scaffolds. , 2011, , .		0
277	Transient Exposure to TGF- β 3 Improves the Functional Properties of MSC-Seeded Photocrosslinked Hyaluronic Acid Hydrogels. , 2011, , .		0
278	Functional Cartilage Tissue Engineering with Adult Stem Cells: Current Status and Future Directions. , 2012, , 40-64.		0
279	Mesenchymal Stem Cell Morphology in a Fibrous Microenvironment With Length Scales Matching the Native Meniscus. , 2012, , .		0
280	Micro-Scale Strain Transfer in Fiber-Reinforced Native Tissue Is Distinct From Cell-Seeded Aligned Nanofibrous Scaffolds. , 2012, , .		0
281	Fabrication of Organized Nanofibrous Scaffolds to Mimic the Macroscopic Curvature of the Meniscus: Structure and Mechanics. , 2012, , .		0
282	In Vivo Delivery of IL-1ra From PLGA Microspheres Prevents IL-1 β Induced Glycosaminoglycan Loss in the Rat Caudal Intervertebral Disc. , 2013, , .		0
283	Engineering Meniscus Form and Function via Multi-Layer Cell-Seeded Nanofibrous Scaffolds With Circumferentially Aligned Fibers. , 2013, , .		0
284	Trajectory-Based Tissue Engineering for Cartilage Repair: Correlation Between Maturation Rate and Integration Capacity. , 2013, , .		0
285	Functional Consequences of Glucose and Oxygen Deprivation in Engineered MSC-Based Cartilage Constructs. , 2013, , .		0
286	Biological Assays. Handbook Series for Mechanical Engineering, 2013, , 293-338.	0.0	0
287	Basic Science of Meniscus Repair: Limitations and Emerging Strategies. , 2014, , 89-103.		0
288	Meniscal Scaffolds: Options Post Meniscectomy. , 2014, , 45-58.		0

#	ARTICLE	IF	CITATIONS
289	2020, A weird year!. JOR Spine, 2020, 3, e1136.	1.5	0
290	Welcome to Volume 5!. JOR Spine, 2022, 5, e1200.	1.5	0
291	Another year over, and a new one is up for highest impact!. JOR Spine, 2021, 4, e1190.	1.5	0
292	Another milestone, accomplished!. JOR Spine, 2022, 5, .	1.5	0
293	Identifying small molecules for protecting chondrocyte function and matrix integrity after controlled compressive injury. Osteoarthritis and Cartilage Open, 2022, 4, 100289.	0.9	0