Farshid Guilak

List of Publications by Year in descending order

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426 papers

41,949 citations

107 h-index 182 g-index

457 all docs

457 docs citations

457 times ranked

33259 citing authors

#	Article	IF	CITATIONS
1	Fresh Osteochondral and Chondral Allograft Preservation and Storage Media: A Systematic Review of the Literature. American Journal of Sports Medicine, 2022, 50, 1702-1716.	1.9	11
2	Regulation of chondrocyte biosynthetic activity by dynamic hydrostatic pressure: the role of TRP channels. Connective Tissue Research, 2022, 63, 69-81.	1.1	20
3	Mechanogenetics: harnessing mechanobiology for cellular engineering. Current Opinion in Biotechnology, 2022, 73, 374-379.	3.3	13
4	Functional tissue engineering of articular cartilage for biological joint resurfacing—The 2021 Elizabeth Winston Lanier Kappa Delta Award. Journal of Orthopaedic Research, 2022, 40, 1721-1734.	1.2	2
5	The Use of Biomarkers in the Early Diagnosis of Septic Arthritis and Osteomyelitis—A Pilot Study. Journal of Pediatric Orthopaedics, 2022, 42, e526-e532.	0.6	4
6	In vitro analysis of genomeâ€engineered muscleâ€derived stem cells for autoregulated antiâ€inflammatory and antifibrotic activity. Journal of Orthopaedic Research, 2022, , .	1.2	0
7	TRPV4 activation enhances compressive properties and glycosaminoglycan deposition of equine neocartilage sheets. Osteoarthritis and Cartilage Open, 2022, 4, 100263.	0.9	1
8	Cryogel Scaffold-Mediated Delivery of Adipose-Derived Stem Cells Promotes Healing in Murine Model of Atrophic Non-Union. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	2.0	2
9	Synthetic gene circuits for preventing disruption of the circadian clock due to interleukin-1–induced inflammation. Science Advances, 2022, 8, .	4.7	7
10	Leptin mediates the regulation of muscle mass and strength by adipose tissue. Journal of Physiology, 2022, 600, 3795-3817.	1.3	13
11	Optimization of Meniscus Cell Transduction Using Lentivirus and Adeno-Associated Virus for Gene Editing and Tissue Engineering Applications. Cartilage, 2021, 13, 1602S-1607S.	1.4	1
12	Formation of Osteochondral Organoids from Murine Induced Pluripotent Stem Cells. Tissue Engineering - Part A, 2021, 27, 1099-1109.	1.6	26
13	Initial displacement of the intraâ€articular surface after articular fracture correlates with PTA in C57BL/6 mice but not "superhealer―MRL/MpJ mice. Journal of Orthopaedic Research, 2021, 39, 1977-1987.	1.2	1
14	A synthetic mechanogenetic gene circuit for autonomous drug delivery in engineered tissues. Science Advances, 2021, 7, .	4.7	40
15	Single cell transcriptomic analysis of human pluripotent stem cell chondrogenesis. Nature Communications, 2021, 12, 362.	5.8	98
16	Single Cell Omics for Musculoskeletal Research. Current Osteoporosis Reports, 2021, 19, 131-140.	1.5	10
17	Singleâ€cell RNA sequencing reveals the induction of novel myeloid and myeloidâ€associated cell populations in visceral fat with longâ€term obesity. FASEB Journal, 2021, 35, e21417.	0.2	23
18	Mapping the musculoskeletal system one cell at a time. Nature Reviews Rheumatology, 2021, 17, 247-248.	3. 5	10

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19	Perlecan in Pericellular Mechanosensory Cell-Matrix Communication, Extracellular Matrix Stabilisation and Mechanoregulation of Load-Bearing Connective Tissues. International Journal of Molecular Sciences, 2021, 22, 2716.	1.8	40
20	Inflammatory signaling sensitizes Piezo1 mechanotransduction in articular chondrocytes as a pathogenic feed-forward mechanism in osteoarthritis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	99
21	Immunoengineering the next generation of arthritis therapies. Acta Biomaterialia, 2021, 133, 74-86.	4.1	25
22	Exploring translational gaps between basic scientists, clinical researchers, clinicians, and consumers: Proceedings and recommendations arising from the 2020 mine the gap online workshop. Osteoarthritis and Cartilage Open, 2021, 3, 100163.	0.9	1
23	Taxonomic changes in the gut microbiota are associated with cartilage damage independent of adiposity, high fat diet, and joint injury. Scientific Reports, 2021, 11, 14560.	1.6	10
24	Cartilage from human-induced pluripotent stem cells: comparison with neo-cartilage from chondrocytes and bone marrow mesenchymal stromal cells. Cell and Tissue Research, 2021, 386, 309-320.	1.5	17
25	Pilot Study Analysis of Serum Cytokines to Differentiate Pediatric Septic Arthritis and Transient Synovitis. Journal of Pediatric Orthopaedics, 2021, 41, 610-616.	0.6	2
26	Biological resurfacing in a canine model of hip osteoarthritis. Science Advances, 2021, 7, eabi5918.	4.7	15
27	A genome-engineered bioartificial implant for autoregulated anticytokine drug delivery. Science Advances, 2021, 7, eabj1414.	4.7	23
28	Adipose tissue is a critical regulator of osteoarthritis. Proceedings of the National Academy of Sciences of the United States of America, $2021,118,.$	3.3	85
29	High-impact <i>FN1</i> mutation decreases chondrogenic potential and affects cartilage deposition via decreased binding to collagen type II. Science Advances, 2021, 7, eabg8583.	4.7	13
30	Transient Receptor Potential Vanilloid 4 as a Regulator of Induced Pluripotent Stem Cell Chondrogenesis. Stem Cells, 2021, 39, 1447-1456.	1.4	12
31	Intergenerational Transmission of Dietâ€Induced Obesity, Metabolic Imbalance, and Osteoarthritis in Mice. Arthritis and Rheumatology, 2020, 72, 632-644.	2.9	29
32	Stem cellâ€derived extracellular vesicles attenuate the early inflammatory response after tendon injury and repair. Journal of Orthopaedic Research, 2020, 38, 117-127.	1.2	71
33	The role of macrophages in osteoarthritis and cartilage repair. Osteoarthritis and Cartilage, 2020, 28, 544-554.	0.6	143
34	Single cell RNA-sequencing reveals cellular heterogeneity and trajectories of lineage specification during murine embryonic limb development. Matrix Biology, 2020, 89, 1-10.	1.5	53
35	The miRNAâ€mRNA interactome of murine induced pluripotent stem cellâ€derived chondrocytes in response to inflammatory cytokines. FASEB Journal, 2020, 34, 11546-11561.	0.2	12
36	An immortalized human adipose-derived stem cell line with highly enhanced chondrogenic properties. Biochemical and Biophysical Research Communications, 2020, 530, 252-258.	1.0	6

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37	Transcriptomic analysis of bone and fibrous tissue morphogenesis during digit tip regeneration in the adult mouse. FASEB Journal, 2020, 34, 9740-9754.	0.2	11
38	Long non-coding RNA GRASLND enhances chondrogenesis via suppression of the interferon type II signaling pathway. ELife, 2020, 9, .	2.8	28
39	Gene therapy for follistatin mitigates systemic metabolic inflammation and post-traumatic arthritis in high-fat diet–induced obesity. Science Advances, 2020, 6, eaaz7492.	4.7	37
40	Is Obesity a Disease of Stem Cells?. Cell Stem Cell, 2020, 27, 15-18.	5.2	20
41	Prospective isolation of chondroprogenitors from human iPSCs based on cell surface markers identified using a CRISPR-Cas9-generated reporter. Stem Cell Research and Therapy, 2020, 11, 66.	2.4	46
42	Engineering functional tissues: in vitro culture parameters. , 2020, , 157-177.		2
43	Transgenic conversion of i‰-6 to i‰-3 polyunsaturated fatty acids via fat-1 reduces the severity of post-traumatic osteoarthritis. Arthritis Research and Therapy, 2020, 22, 83.	1.6	16
44	Combined Experimental Approach and Finite Element Modeling of Small Molecule Transport Through Joint Synovium to Measure Effective Diffusivity. Journal of Biomechanical Engineering, 2020, 142, .	0.6	4
45	Highâ€depth transcriptomic profiling reveals the temporal gene signature of human mesenchymal stem cells during chondrogenesis. FASEB Journal, 2019, 33, 358-372.	0.2	43
46	miR-892b Inhibits Hypertrophy by Targeting KLF10 in the Chondrogenesis of Mesenchymal Stem Cells. Molecular Therapy - Nucleic Acids, 2019, 17, 310-322.	2.3	8
47	TRPV4-mediated calcium signaling in mesenchymal stem cells regulates aligned collagen matrix formation and vinculin tension. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1992-1997.	3.3	60
48	Meniscus-Derived Matrix Scaffolds Promote the Integrative Repair of Meniscal Defects. Scientific Reports, 2019, 9, 8719.	1.6	29
49	Chondrogenic, hypertrophic, and osteochondral differentiation of human mesenchymal stem cells on threeâ€dimensionally woven scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 1453-1465.	1.3	21
50	<i>Journal of Orthopaedic Research</i> : Special Issue on Stem Cells. Journal of Orthopaedic Research, 2019, 37, 1209-1211.	1.2	3
51	Transgenerational impact of maternal obesogenic diet on offspring bile acid homeostasis and nonalcoholic fatty liver disease. American Journal of Physiology - Endocrinology and Metabolism, 2019, 316, E674-E686.	1.8	23
52	A Synthetic Gene Circuit for Self-Regulating Delivery of Biologic Drugs in Engineered Tissues. Tissue Engineering - Part A, 2019, 25, 809-820.	1.6	28
53	Designer Stem Cells: Genome Engineering and the Next Generation of Cellâ€Based Therapies. Journal of Orthopaedic Research, 2019, 37, 1287-1293.	1.2	24
54	Physiologic and pathologic effects of dietary free fatty acids on cells of the joint. Annals of the New York Academy of Sciences, 2019, 1440, 36-53.	1.8	23

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55	Cell migration: implications for repair and regeneration in joint disease. Nature Reviews Rheumatology, 2019, 15, 167-179.	3.5	94
56	Genome Engineering for Osteoarthritis: From Designer Cells to Disease-Modifying Drugs. Tissue Engineering and Regenerative Medicine, 2019, 16, 335-343.	1.6	18
57	Effects of dietary fatty acid content on humeral cartilage and bone structure in a mouse model of dietâ€nduced obesity. Journal of Orthopaedic Research, 2019, 37, 779-788.	1.2	12
58	Step-Wise Chondrogenesis of Human Induced Pluripotent Stem Cells and Purification Via a Reporter Allele Generated by CRISPR-Cas9 Genome Editing. Stem Cells, 2019, 37, 65-76.	1.4	79
59	Selective Enzymatic Digestion of Proteoglycans and Collagens Alters Cartilage T1rho and T2 Relaxation Times. Annals of Biomedical Engineering, 2019, 47, 190-201.	1.3	24
60	CXCL10 is upregulated in synovium and cartilage following articular fracture. Journal of Orthopaedic Research, 2018, 36, 1220-1227.	1.2	17
61	Publication trends in spine research from 2007 to 2016: Comparison of the Orthopaedic Research Society Spine Section and the International Society for the Study of the Lumbar Spine. JOR Spine, 2018, 1, e1006.	1.5	10
62	Dynamics and mechanisms of intracellular calcium waves elicited by tandem bubble-induced jetting flow. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E353-E362.	3.3	42
63	Perspectives on Sharing Models and Related Resources in Computational Biomechanics Research. Journal of Biomechanical Engineering, 2018, 140, .	0.6	16
64	Chondrogenic Differentiation Processes in Human Bone-Marrow Aspirates Seeded in Three-Dimensional-Woven Poly(É>-Caprolactone) Scaffolds Enhanced by Recombinant Adeno-Associated Virus–MediatedSOX9Gene Transfer. Human Gene Therapy, 2018, 29, 1277-1286.	1.4	12
65	Comparison of Fixation Techniques of 3D-Woven Poly(ϵ-Caprolactone) Scaffolds for Cartilage Repair in a Weightbearing Porcine Large Animal Model. Cartilage, 2018, 9, 428-437.	1.4	19
66	Canine hip dysplasia: A natural animal model for human developmental dysplasia of the hip. Journal of Orthopaedic Research, 2018, 36, 1807-1817.	1.2	38
67	Obesity alters the in vivo mechanical response and biochemical properties of cartilage as measured by MRI. Arthritis Research and Therapy, 2018, 20, 232.	1.6	49
68	Osteoarthritis as a disease of the cartilage pericellular matrix. Matrix Biology, 2018, 71-72, 40-50.	1.5	276
69	Genetic Engineering of Mesenchymal Stem Cells for Differential Matrix Deposition on 3D Woven Scaffolds. Tissue Engineering - Part A, 2018, 24, 1531-1544.	1.6	17
70	Composite Cellularized Structures Created from an Interpenetrating Polymer Network Hydrogel Reinforced by a 3D Woven Scaffold. Macromolecular Bioscience, 2018, 18, e1800140.	2.1	21
71	Differentiation of human induced pluripotent stem cells into nucleus pulposus-like cells. Stem Cell Research and Therapy, 2018, 9, 61.	2.4	70
72	Regulation of decellularized tissue remodeling via scaffold-mediated lentiviral delivery in anatomically-shaped osteochondral constructs. Biomaterials, 2018, 177, 161-175.	5.7	65

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73	Nanotherapy Targeting NF-kB Attenuates Acute Pain After Joint Injury. Precision Nanomedicine, 2018, 2, 245-248.	0.4	4
74	Emerging roles for long noncoding RNAs in skeletal biology and disease. Connective Tissue Research, 2017, 58, 116-141.	1.1	90
75	CRISPR-Based Epigenome Editing of Cytokine Receptors for the Promotion of Cell Survival and Tissue Deposition in Inflammatory Environments. Tissue Engineering - Part A, 2017, 23, 738-749.	1.6	68
76	On the Functional Role of Valve Interstitial Cell Stress Fibers: A Continuum Modeling Approach. Journal of Biomechanical Engineering, 2017, 139, .	0.6	18
77	New tools for Content Innovation and data sharing: Enhancing reproducibility and rigor in biomechanics research. Journal of Biomechanics, 2017, 54, 1-3.	0.9	4
78	Relationship between T1rho magnetic resonance imaging, synovial fluid biomarkers, and the biochemical and biomechanical properties of cartilage. Journal of Biomechanics, 2017, 55, 18-26.	0.9	46
79	Regulation of human nucleus pulposus cells by peptide-coupled substrates. Acta Biomaterialia, 2017, 55, 100-108.	4.1	36
80	Genome Engineering of Stem Cells for Autonomously Regulated, Closed-Loop Delivery of Biologic Drugs. Stem Cell Reports, 2017, 8, 1202-1213.	2.3	71
81	Conditional Macrophage Depletion Increases Inflammation and Does Not Inhibit the Development of Osteoarthritis in Obese Macrophage Fasâ€Induced Apoptosis–Transgenic Mice. Arthritis and Rheumatology, 2017, 69, 1772-1783.	2.9	94
82	Mechanical Signals as Regulators of Cartilage Degeneration and Regeneration. Journal of the American Academy of Orthopaedic Surgeons, The, 2017, 25, e87-e89.	1.1	4
83	Serum and synovial fluid lipidomic profiles predict obesity-associated osteoarthritis, synovitis, and wound repair. Scientific Reports, 2017, 7, 44315.	1.6	48
84	Genome Engineering for Personalized Arthritis Therapeutics. Trends in Molecular Medicine, 2017, 23, 917-931.	3.5	54
85	CRISPR/Cas9 Editing of Murine Induced Pluripotent Stem Cells for Engineering Inflammationâ€Resistant Tissues. Arthritis and Rheumatology, 2017, 69, 1111-1121.	2.9	61
86	Matrix metalloproteinase activity and prostaglandin E2 are elevated in the synovial fluid of meniscus tear patients. Connective Tissue Research, 2017, 58, 305-316.	1.1	39
87	Increased Ca2+ signaling through CaV1.2 promotes bone formation and prevents estrogen deficiency–induced bone loss. JCI Insight, 2017, 2, .	2.3	38
88	Dedifferentiated Human Articular Chondrocytes Redifferentiate to a Cartilage-Like Tissue Phenotype in a Poly ($\hat{l}\mu$ -Caprolactone)/Self-Assembling Peptide Composite Scaffold. Materials, 2016, 9, 472.	1.3	28
89	Universally Conserved Relationships between Nuclear Shape and Cytoplasmic Mechanical Properties in Human Stem Cells. Scientific Reports, 2016, 6, 23047.	1.6	22
90	Fabrication of anatomically-shaped cartilage constructs using decellularized cartilage-derived matrix scaffolds. Biomaterials, 2016, 91, 57-72.	5.7	104

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91	Exploratory secondary analyses of a cognitive-behavioral interventionÂfor knee osteoarthritis demonstrate reduction inÂbiomarkers of adipocyte inflammation. Osteoarthritis and Cartilage, 2016, 24, 1528-1534.	0.6	15
92	Loss of stiffness in collagen-rich uterine fibroids after digestion with purified collagenase Clostridium histolyticum. American Journal of Obstetrics and Gynecology, 2016, 215, 596.e1-596.e8.	0.7	29
93	Advances in combining gene therapy with cell and tissue engineering-based approaches to enhance healing of the meniscus. Osteoarthritis and Cartilage, 2016, 24, 1330-1339.	0.6	42
94	Reply to "Does progranulin account for the opposite effects of etanercept and infliximab/adalimumab in osteoarthritis?―by Wei et al Journal of Orthopaedic Research, 2016, 34, 15-16.	1.2	1
95	Functional outcome measures in a surgical model of hip osteoarthritis in dogs. Journal of Experimental Orthopaedics, 2016, 3, 17.	0.8	22
96	Anatomically shaped tissue-engineered cartilage with tunable and inducible anticytokine delivery for biological joint resurfacing. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4513-22.	3.3	94
97	Cartilage-Specific Knockout of the Mechanosensory Ion Channel TRPV4 Decreases Age-Related Osteoarthritis. Scientific Reports, 2016, 6, 29053.	1.6	101
98	N-cadherin is Key to Expression of the Nucleus Pulposus Cell Phenotype under Selective Substrate Culture Conditions. Scientific Reports, 2016, 6, 28038.	1.6	46
99	Small molecule dual-inhibitors of TRPV4 and TRPA1 for attenuation of inflammation and pain. Scientific Reports, 2016, 6, 26894.	1.6	58
100	3D Printing: 3D Printing of Highly Stretchable and Tough Hydrogels into Complex, Cellularized Structures (Adv. Mater. 27/2015). Advanced Materials, 2015, 27, 4034-4034.	11.1	77
101	504. Targeted Genome Engineering of Induced Pluripotent Stem Cells To Produce Auto-Regulated Inflammation Resistance for Musculoskeletal Regenerative Medicine. Molecular Therapy, 2015, 23, S201-S202.	3.7	0
102	Therapeutic opportunities to prevent postâ€traumatic arthritis: Lessons from the natural history of arthritis after articular fracture. Journal of Orthopaedic Research, 2015, 33, 1266-1277.	1.2	52
103	Morphogenetic Implications of Peristalsis-Driven Fluid Flow in the Embryonic Lung. PLoS ONE, 2015, 10, e0132015.	1.1	18
104	Extracellular Calcium Modulates Chondrogenic and Osteogenic Differentiation of Human Adipose-Derived Stem Cells: A Novel Approach for Osteochondral Tissue Engineering Using a Single Stem Cell Source. Tissue Engineering - Part A, 2015, 21, 2323-2333.	1.6	71
105	Tendon mechanobiology: <i>Current knowledge and future research opportunities</i> . Journal of Orthopaedic Research, 2015, 33, 813-822.	1.2	117
106	Mechanobiology of the meniscus. Journal of Biomechanics, 2015, 48, 1469-1478.	0.9	108
107	Enhanced MyoD-Induced Transdifferentiation to a Myogenic Lineage by Fusion to a Potent Transactivation Domain. ACS Synthetic Biology, 2015, 4, 689-699.	1.9	30
108	Type VI Collagen Regulates Pericellular Matrix Properties, Chondrocyte Swelling, and Mechanotransduction in Mouse Articular Cartilage. Arthritis and Rheumatology, 2015, 67, 1286-1294.	2.9	125

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109	TRPV4 as a therapeutic target for joint diseases. Naunyn-Schmiedeberg's Archives of Pharmacology, 2015, 388, 437-450.	1.4	78
110	3D Printing of Highly Stretchable and Tough Hydrogels into Complex, Cellularized Structures. Advanced Materials, 2015, 27, 4035-4040.	11.1	720
111	Non-invasive mouse models of post-traumatic osteoarthritis. Osteoarthritis and Cartilage, 2015, 23, 1627-1638.	0.6	107
112	Brief Report: Articular Ankle Fracture Results in Increased Synovitis, Synovial Macrophage Infiltration, and Synovial Fluid Concentrations of Inflammatory Cytokines and Chemokines. Arthritis and Rheumatology, 2015, 67, 1234-1239.	2.9	50
113	Aligned multilayered electrospun scaffolds for rotator cuff tendon tissue engineering. Acta Biomaterialia, 2015, 24, 117-126.	4.1	170
114	In vivo cartilage strain increases following medial meniscal tear and correlates with synovial fluid matrix metalloproteinase activity. Journal of Biomechanics, 2015, 48, 1461-1468.	0.9	70
115	Knockdown of the Cell Cycle Inhibitor p21 Enhances Cartilage Formation by Induced Pluripotent Stem Cells. Tissue Engineering - Part A, 2015, 21, 1261-1274.	1.6	14
116	Dietary fatty acid content regulates wound repair and the pathogenesis of osteoarthritis following joint injury. Annals of the Rheumatic Diseases, 2015, 74, 2076-2083.	0.5	115
117	Arthritis That Develops After Joint Injury: Is It Post-Traumatic Arthritis or Post-Traumatic Osteoarthritis?., 2015,, 3-6.		1
118	Lysyl hydroxylase 2 induces a collagen cross-link switch in tumor stroma. Journal of Clinical Investigation, 2015, 125, 1147-1162.	3.9	134
119	Sustained intra-articular delivery of IL-1Ra from a thermally-responsive elastin-like polypeptide as a therapy for post-traumatic arthritis. , 2015, 29, 124-140.		74
120	Anterior Cruciate Transection/Disruption Models of Post-Traumatic Arthritis., 2015,, 63-74.		0
121	Survey of Animal Models in Post-Traumatic Arthritis: Choosing the Right Model to Answer the Right Question., 2015,, 113-118.		1
122	Stem Cell Therapies for Post-Traumatic Arthritis. , 2015, , 343-348.		0
123	Proteomic Differences between Male and Female Anterior Cruciate Ligament and Patellar Tendon. PLoS ONE, 2014, 9, e96526.	1.1	51
124	Follistatin in chondrocytes: the link between TRPV4 channelopathies and skeletal malformations. FASEB Journal, 2014, 28, 2525-2537.	0.2	38
125	Synergy between Piezo1 and Piezo2 channels confers high-strain mechanosensitivity to articular cartilage. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5114-22.	3.3	321

Unraveling the mechanism by which TRPV4 mutations cause skeletal dysplasias. Rare Diseases (Austin,) Tj ETQq0 0 $_{1.8}^{0.7}$ rgBT /Oyerlock 10

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127	Engineering Functional Tissues. , 2014, , 237-259.		4
128	Targeting pro-inflammatory cytokines following joint injury: acute intra-articular inhibition of interleukin-1 following knee injury prevents post-traumatic arthritis. Arthritis Research and Therapy, 2014, 16, R134.	1.6	137
129	Viscoelastic properties of a synthetic meniscus implant. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 29, 42-55.	1.5	39
130	Functional tissue engineering: Ten more years of progress. Journal of Biomechanics, 2014, 47, 1931-1932.	0.9	11
131	Electrospun cartilage-derived matrix scaffolds for cartilage tissue engineering. Journal of Biomedical Materials Research - Part A, 2014, 102, 3998-4008.	2.1	97
132	Scaffold-mediated lentiviral transduction for functional tissue engineering of cartilage. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E798-806.	3.3	113
133	Tissue-engineered cartilage with inducible and tunable immunomodulatory properties. Biomaterials, 2014, 35, 5921-5931.	5.7	96
134	Stem Cell Therapies for Knee Cartilage Repair. American Journal of Sports Medicine, 2014, 42, 2253-2261.	1.9	75
135	TRPV4-mediated mechanotransduction regulates the metabolic response of chondrocytes to dynamic loading. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1316-1321.	3.3	364
136	Use of Cartilage Derived From Murine Induced Pluripotent Stem Cells for Osteoarthritis Drug Screening. Arthritis and Rheumatology, 2014, 66, 3062-3072.	2.9	40
137	The Mechanobiology of Articular Cartilage: Bearing the Burden of Osteoarthritis. Current Rheumatology Reports, 2014, 16, 451.	2.1	226
138	Life-long caloric restriction does not alter the severity of age-related osteoarthritis. Age, 2014, 36, 9669.	3.0	16
139	The structure and function of the pericellular matrix of articular cartilage. Matrix Biology, 2014, 39, 25-32.	1.5	263
140	Micro-scale and meso-scale architectural cues cooperate and compete to direct aligned tissue formation. Biomaterials, 2014, 35, 10015-10024.	5.7	55
141	Energy recovery in individuals with knee osteoarthritis. Osteoarthritis and Cartilage, 2014, 22, 747-755.	0.6	11
142	Interaction of lubricin with type II collagen surfaces: Adsorption, friction, and normal forces. Journal of Biomechanics, 2014, 47, 659-666.	0.9	40
143	The Role of Cytokines in Posttraumatic Arthritis. Journal of the American Academy of Orthopaedic Surgeons, The, 2014, 22, 29-37.	1.1	61
144	Biomechanics and mechanobiology in functional tissue engineering. Journal of Biomechanics, 2014, 47, 1933-1940.	0.9	186

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145	High resistance of the mechanical properties of the chondrocyte pericellular matrix to proteoglycan digestion by chondroitinase, aggrecanase, or hyaluronidase. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 38, 183-197.	1.5	30
146	Injectable laminin-functionalized hydrogel for nucleus pulposus regeneration. Biomaterials, 2013, 34, 7381-7388.	5.7	96
147	Diet-induced obesity alters the differentiation potential of stem cells isolated from bone marrow, adipose tissue and infrapatellar fat pad: the effects of free fatty acids. International Journal of Obesity, 2013, 37, 1079-1087.	1.6	87
148	RNA-guided gene activation by CRISPR-Cas9–based transcription factors. Nature Methods, 2013, 10, 973-976.	9.0	1,105
149	Genipin-Crosslinked Cartilage-Derived Matrix as a Scaffold for Human Adipose-Derived Stem Cell Chondrogenesis. Tissue Engineering - Part A, 2013, 19, 484-496.	1.6	91
150	Composite Threeâ€Dimensional Woven Scaffolds with Interpenetrating Network Hydrogels to Create Functional Synthetic Articular Cartilage. Advanced Functional Materials, 2013, 23, 5833-5839.	7.8	218
151	Synovial fluid concentrations and relative potency of interleukin†alpha and beta in cartilage and meniscus degradation. Journal of Orthopaedic Research, 2013, 31, 1039-1045.	1.2	115
152	Depth-dependent anisotropy of the micromechanical properties of the extracellular and pericellular matrices of articular cartilage evaluated via atomic force microscopy. Journal of Biomechanics, 2013, 46, 586-592.	0.9	85
153	Multilayered Electrospun Scaffolds for Tendon Tissue Engineering. Tissue Engineering - Part A, 2013, 19, 2594-2604.	1.6	97
154	Effects of cartilage impact with and without fracture on chondrocyte viability and the release of inflammatory markers. Journal of Orthopaedic Research, 2013, 31, 1283-1292.	1.2	44
155	Mechanical regulation of chondrogenesis. Stem Cell Research and Therapy, 2013, 4, 61.	2.4	139
156	The Journal of Biomechanics: Evolving with Electronic Publishing. Journal of Biomechanics, 2013, 46, 1.	0.9	9
157	Temporomandibular joint pain: A critical role for Trpv4 in the trigeminal ganglion. Pain, 2013, 154, 1295-1304.	2.0	101
158	The effects of crosslinking of scaffolds engineered from cartilage ECM on the chondrogenic differentiation of MSCs. Biomaterials, 2013, 34, 5802-5812.	5.7	163
159	Micromechanical mapping of early osteoarthritic changes in the pericellular matrix of human articular cartilage. Osteoarthritis and Cartilage, 2013, 21, 1895-1903.	0.6	104
160	Diurnal variations in articular cartilage thickness and strain in the human knee. Journal of Biomechanics, 2013, 46, 541-547.	0.9	110
161	Genetic and cellular evidence of decreased inflammation associated with reduced incidence of posttraumatic arthritis in MRL/MpJ mice. Arthritis and Rheumatism, 2013, 65, 660-670.	6.7	93
162	Nano-Scale and Micro-Scale Substrate Architectures Direct Collagen Alignment in Tendon Neo-Tissue Formation. , $2013, , .$		0

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163	Stem cell-based therapies for osteoarthritis. Current Opinion in Rheumatology, 2013, 25, 119-126.	2.0	118
164	Biomechanical Versus Clinical Considerations in the Development of a Novel Polycarbonate-Urethane Meniscus Implant. , $2013, , .$		0
165	High Body Mass Index Is Associated With Increased Diurnal Strains in the Articular Cartilage of the Knee. Arthritis and Rheumatism, 2013, 65, 2615-2622.	6.7	62
166	Intra-articular Delivery of Purified Mesenchymal Stem Cells from C57BL/6 or MRL/MpJ Superhealer Mice Prevents Posttraumatic Arthritis. Cell Transplantation, 2013, 22, 1395-1408.	1.2	115
167	Increased susceptibility of <i>Trpv4</i> -deficient mice to obesity and obesity-induced osteoarthritis with very high-fat diet. Annals of the Rheumatic Diseases, 2013, 72, 300-304.	0.5	80
168	Atomic force microscopy reveals regional variations in the micromechanical properties of the pericellular and extracellular matrices of the meniscus. Journal of Orthopaedic Research, 2013, 31, 1218-1225.	1.2	67
169	Viscoelastic Properties of a Synthetic Meniscus Implant. , 2013, , .		0
170	Synergistic and tunable human gene activation by combinations of synthetic transcription factors. Nature Methods, 2013, 10, 239-242.	9.0	222
171	Osmotic or Chemical Activation of the TRPV4 Ion Channel Enhances the Development of Chondrocyte-Based Tissue Engineered Cartilage. , 2013, , .		0
172	Tissue engineering for articular cartilage repair – the state of the art. , 2013, 25, 248-267.		305
173	Post-traumatic Arthritis: An Update. The Duke Orthopaedic Journal, 2013, 3, 32-35.	0.0	1
174	Effects of Myocardial Infarction on the Distribution and Transport of Nutrients and Oxygen in Porcine Myocardium. Journal of Biomechanical Engineering, 2012, 134, 101005.	0.6	12
175	Immunofluorescence-guided atomic force microscopy to measure the micromechanical properties of the pericellular matrix of porcine articular cartilage. Journal of the Royal Society Interface, 2012, 9, 2997-3007.	1.5	54
176	Multiscale Mechanics of Articular Cartilage: Potentials and Challenges of Coupling Musculoskeletal, Joint, and Microscale Computational Models. Annals of Biomedical Engineering, 2012, 40, 2456-2474.	1.3	67
177	Cartilage tissue engineering using differentiated and purified induced pluripotent stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19172-19177.	3.3	234
178	Maladaptive matrix remodeling and regional biomechanical dysfunction in a mouse model of aortic valve disease. Matrix Biology, 2012, 31, 197-205.	1.5	26
179	The cytoskeletal regulatory scaffold protein GIT2 modulates mesenchymal stem cell differentiation and osteoblastogenesis. Biochemical and Biophysical Research Communications, 2012, 425, 407-412.	1.0	19
180	Dietâ€induced obesity significantly increases the severity of posttraumatic arthritis in mice. Arthritis and Rheumatism, 2012, 64, 3220-3230.	6.7	87

#	Article	IF	Citations
181	A TRP that makes us feel hyper. Journal of Physiology, 2012, 590, 1779-1780.	1.3	1
182	The inhibition by interleukin 1 of MSC chondrogenesis and the development of biomechanical properties in biomimetic 3D woven PCL scaffolds. Biomaterials, 2012, 33, 8967-8974.	5.7	54
183	A biomechanical role for perlecan in the pericellular matrix of articular cartilage. Matrix Biology, 2012, 31, 320-327.	1.5	76
184	Altered Trabecular Bone Structure and Delayed Cartilage Degeneration in the Knees of Collagen VI Null Mice. PLoS ONE, 2012, 7, e33397.	1.1	52
185	Human adipose-derived cells: an update on the transition to clinical translation. Regenerative Medicine, 2012, 7, 225-235.	0.8	147
186	Mechanical Regulation of Nuclear Structure and Function. Annual Review of Biomedical Engineering, 2012, 14, 431-455.	5.7	136
187	Corrigendum to "Novel synovial fluid recovery method allows for quantification of a marker of arthritis in mice―[Osteoarthritis and Cartilage 2008;16(12): 1532–1538. Osteoarthritis and Cartilage, 2012, 20, 68.	0.6	0
188	Pain coping skills training and lifestyle behavioral weight management in patients with knee osteoarthritis: A randomized controlled study. Pain, 2012, 153, 1199-1209.	2.0	136
189	Induction of osteoarthritis and metabolic inflammation by a very highâ€fat diet in mice: Effects of shortâ€term exercise. Arthritis and Rheumatism, 2012, 64, 443-453.	6.7	191
190	Joint Injury and Post-Traumatic Arthritis. HSS Journal, 2012, 8, 23-25.	0.7	9
191	Factors Influencing the Long-Term Behavior of Extracellular Matrix-Derived Scaffolds for Musculoskeletal Soft Tissue Repair. Journal of Long-Term Effects of Medical Implants, 2012, 22, 181-193.	0.2	16
192	The Effects of Adipokines on Cartilage and Meniscus Catabolism. Connective Tissue Research, 2011, 52, 523-533.	1,1	62
193	Osmotic stress alters chromatin condensation and nucleocytoplasmic transport. Biochemical and Biophysical Research Communications, 2011, 408, 230-235.	1.0	45
194	Adipose tissue as a stem cell source for musculoskeletal regeneration. Frontiers in Bioscience - Scholar, 2011, S3, 69-81.	0.8	47
195	Acute joint pathology and synovial inflammation is associated with increased intra-articular fracture severity in the mouse knee. Osteoarthritis and Cartilage, 2011, 19, 864-873.	0.6	164
196	Biomechanical factors in osteoarthritis. Best Practice and Research in Clinical Rheumatology, 2011, 25, 815-823.	1.4	423
197	Regulation of hepatic stem/progenitor phenotype by microenvironment stiffness in hydrogel models of the human liver stem cell niche. Biomaterials, 2011, 32, 7389-7402.	5.7	94
198	Three-dimensional finite element modeling of pericellular matrix and cell mechanics in the nucleus pulposus of the intervertebral disk based on in situ morphology. Biomechanics and Modeling in Mechanobiology, 2011, 10, 1-10.	1.4	29

#	Article	IF	Citations
199	Chondroprotective effects of a polycarbonate-urethane meniscal implant: histopathological results in a sheep model. Knee Surgery, Sports Traumatology, Arthroscopy, 2011, 19, 255-263.	2.3	93
200	Interleukin-1, tumor necrosis factor-alpha, and transforming growth factor-beta 1 and integrative meniscal repair: influences on meniscal cell proliferation and migration. Arthritis Research and Therapy, 2011, 13, R187.	1.6	55
201	Concise Review: Adipose-Derived Stromal Vascular Fraction Cells and Stem Cells: Let's Not Get Lost in Translation. Stem Cells, 2011, 29, 749-754.	1.4	212
202	Cartilage viability and catabolism in the intact porcine knee following transarticular impact loading with and without articular fracture. Journal of Orthopaedic Research, 2011, 29, 501-510.	1,2	41
203	Postâ€traumatic osteoarthritis: Improved understanding and opportunities for early intervention. Journal of Orthopaedic Research, 2011, 29, 802-809.	1.2	511
204	Regional structure–function relationships in mouse aortic valve tissue. Journal of Biomechanics, 2011, 44, 77-83.	0.9	40
205	The H-index: Use and overuse. Journal of Biomechanics, 2011, 44, 208-209.	0.9	20
206	Engineered cartilage using primary chondrocytes cultured in a porous cartilage-derived matrix. Regenerative Medicine, 2011, 6, 81-93.	0.8	76
207	Taking Stem Cells Beyond Discovery: A Milestone in the Reporting of Regulatory Requirements for Cell Therapy. Stem Cells and Development, 2011, 20, 1295-1296.	1.1	16
208	Three-Dimensional Culture Systems to Induce Chondrogenesis of Adipose-Derived Stem Cells. Methods in Molecular Biology, 2011, 702, 201-217.	0.4	40
209	Isolation and Growth of Stem Cells. , 2011, , 93-111.		4
210	The effects of BMP6 overexpression on adipose stem cell chondrogenesis: Interactions with dexamethasone and exogenous growth factors. Journal of Biomedical Materials Research - Part A, 2010, 93A, 994-1003.	2.1	45
211	The effects of osmotic stress on the structure and function of the cell nucleus. Journal of Cellular Biochemistry, 2010, 109, 460-467.	1.2	148
212	Use of an insulating mask for controlling anisotropy in multilayer electrospun scaffolds for tissue engineering. Journal of Materials Chemistry, 2010, 20, 8962.	6.7	15
213	Clinical and preclinical translation of cell-based therapies using adipose tissue-derived cells. Stem Cell Research and Therapy, 2010, 1, 19.	2.4	224
214	2010 Nicolas Andry Award: Multipotent Adult Stem Cells from Adipose Tissue for Musculoskeletal Tissue Engineering. Clinical Orthopaedics and Related Research, 2010, 468, 2530-2540.	0.7	136
215	Dynamic loading enhances integrative meniscal repair in the presence ofÂinterleukin-1. Osteoarthritis and Cartilage, 2010, 18, 830-838.	0.6	55
216	Loss of cartilage structure, stiffness, and frictional properties in mice lacking PRG4. Arthritis and Rheumatism, 2010, 62, 1666-1674.	6.7	125

#	Article	IF	CITATIONS
217	Chondroprotective role of the osmotically sensitive ion channel transient receptor potential vanilloid 4: Age―and sexâ€dependent progression of osteoarthritis in ⟨i⟩Trpv4⟨ i⟩â€deficient mice. Arthritis and Rheumatism, 2010, 62, 2973-2983.	6.7	163
218	Ageâ€associated increases in the size of the infrapatellar fat pad in knee osteoarthritis as measured by 3T MRI. Journal of Orthopaedic Research, 2010, 28, 1149-1154.	1.2	71
219	Multifunctional Hybrid Threeâ €d imensionally Woven Scaffolds for Cartilage Tissue Engineering. Macromolecular Bioscience, 2010, 10, 1355-1364.	2.1	91
220	Macromol. Biosci. 11/2010. Macromolecular Bioscience, 2010, 10, n/a-n/a.	2.1	0
221	Nanotopography-induced changes in focal adhesions, cytoskeletal organization, and mechanical properties of human mesenchymal stem cells. Biomaterials, 2010, 31, 1299-1306.	5.7	618
222	In vitro generation of mechanically functional cartilage grafts based on adult human stem cells and 3D-woven poly(É)-caprolactone) scaffolds. Biomaterials, 2010, 31, 2193-2200.	5.7	107
223	Isolation of adipose-derived stem cells and their induction to a chondrogenic phenotype. Nature Protocols, 2010, 5, 1294-1311.	5.5	383
224	Transient receptor potential vanilloid 4. Annals of the New York Academy of Sciences, 2010, 1192, 404-409.	1.8	94
225	MRI-Based Characterization of Bone Anatomy in the Human Knee for Size Matching of a Medial Meniscal Implant. Journal of Biomechanical Engineering, 2010, 132, 101008.	0.6	31
226	Chondrogenesis and Mineralization During <i>In Vitro </i> Culture of Human Mesenchymal Stem Cells on Three-Dimensional Woven Scaffolds. Tissue Engineering - Part A, 2010, 16, 3709-3718.	1.6	79
227	Chondrogenesis of Adult Stem Cells from Adipose Tissue and Bone Marrow: Induction by Growth Factors and Cartilage-Derived Matrix. Tissue Engineering - Part A, 2010, 16, 523-533.	1.6	223
228	Ligament-Derived Matrix Stimulates a Ligamentous Phenotype in Human Adipose-Derived Stem Cells. Tissue Engineering - Part A, 2010, 16, 2307-2319.	1.6	39
229	A Novel Quantitative Approach for Evaluating Contact Mechanics of Meniscal Replacements. Journal of Biomechanical Engineering, 2010, 132, 024501.	0.6	31
230	Design of a Free-Floating Polycarbonate-Urethane Meniscal Implant Using Finite Element Modeling and Experimental Validation. Journal of Biomechanical Engineering, 2010, 132, 095001.	0.6	66
231	Determination of In Situ Articular Cartilage Pericellular Matrix Properties via Inverse BEM Analysis of Chondron Deformation. , 2010, , .		0
232	An Axisymmetric Boundary Element Model for Determination of Articular Cartilage Pericellular Matrix Properties In Situ via Inverse Analysis of Chondron Deformation. Journal of Biomechanical Engineering, 2010, 132, 031011.	0.6	33
233	Design Optimization of a Polycarbonate-Urethane Meniscal Implant in the Sheep Knee: In-Vitro Study. , 2010, , .		1
234	Chondroprotective Effects of a Polycarbonate-Urethane Meniscal Implant: Semi-Quantitative Results in a Sheep Model. , $2010, \ldots$		0

#	Article	IF	Citations
235	Quantitative phase microscopy of articular chondrocyte dynamics by wide-field digital interferometry. Journal of Biomedical Optics, 2010, 15, 1.	1.4	50
236	Locomotor activity and gait in aged mice deficient for type IX collagen. Journal of Applied Physiology, 2010, 109, 211-218.	1.2	18
237	Spatial Mapping of the Biomechanical Properties of the Pericellular Matrix of Articular Cartilage Measured In Situ via Atomic Force Microscopy. Biophysical Journal, 2010, 98, 2848-2856.	0.2	130
238	Functional Properties of Cell-Seeded Three-Dimensionally Woven Poly($\hat{l}\mu$ -Caprolactone) Scaffolds for Cartilage Tissue Engineering. Tissue Engineering - Part A, 2010, 16, 1291-1301.	1.6	122
239	Diet-induced obesity differentially regulates behavioral, biomechanical, and molecular risk factors for osteoarthritis in mice. Arthritis Research and Therapy, 2010, 12, R130.	1.6	152
240	Homing in on a biological joint replacement. Stem Cell Research and Therapy, 2010, 1, 40.	2.4	7
241	Computational Modeling of Cell Mechanics in Articular Cartilage. , 2010, , 329-352.		1
242	Viscoelastic Properties of the Aortic Valve Interstitial Cell. Journal of Biomechanical Engineering, 2009, 131, 041005.	0.6	32
243	Osmotic Stress Affects Nuclear Morphology and Genome Architecture. , 2009, , .		0
244	Advanced Material Strategies for Tissue Engineering Scaffolds. Advanced Materials, 2009, 21, 3410-3418.	11.1	187
245	Tissue Engineering: Advanced Material Strategies for Tissue Engineering Scaffolds (Adv. Mater.) Tj ETQq1 1 0.78	43]4.fgBT	/Qverlock 10
246	Developmental and osteoarthritic changes in <i>Col6a1</i> à€knockout mice: Biomechanics of type VI collagen in the cartilage pericellular matrix. Arthritis and Rheumatism, 2009, 60, 771-779.	6.7	165
247	Functional characterization of TRPV4 as an osmotically sensitive ion channel in porcine articular chondrocytes. Arthritis and Rheumatism, 2009, 60, 3028-3037.	6.7	265
248	Extreme obesity due to impaired leptin signaling in mice does not cause knee osteoarthritis. Arthritis and Rheumatism, 2009, 60, 2935-2944.	6.7	180
249	Nonlinear Osmotic Properties of the Cell Nucleus. Annals of Biomedical Engineering, 2009, 37, 477-491.	1.3	65
250	Biomechanics: Cell Research and Applications for the Next Decade. Annals of Biomedical Engineering, 2009, 37, 847-859.	1.3	169
251	Inhibition of Matrix Metalloproteinases Enhances In Vitro Repair of the Meniscus. Clinical Orthopaedics and Related Research, 2009, 467, 1557-1567.	0.7	66
252	Mechanical Properties and Gene Expression of Chondrocytes on Micropatterned Substrates Following Dedifferentiation in Monolayer. Cellular and Molecular Bioengineering, 2009, 2, 395-404.	1.0	47

#	Article	IF	CITATIONS
253	Pericellular Matrix Mechanics in the Anulus Fibrosus Predicted by a Three-Dimensional Finite Element Model and In Situ Morphology. Cellular and Molecular Bioengineering, 2009, 2, 306-319.	1.0	24
254	Sex Differences in Biomechanics Associated with Knee Osteoarthritis. Journal of Women and Aging, 2009, 21, 159-170.	0.5	30
255	Chondrogenic Differentiation of Adipose-Derived Adult Stem Cells by a Porous Scaffold Derived from Native Articular Cartilage Extracellular Matrix. Tissue Engineering - Part A, 2009, 15, 231-241.	1.6	259
256	Control of Stem Cell Fate by Physical Interactions with the Extracellular Matrix. Cell Stem Cell, 2009, 5, 17-26.	5.2	1,669
257	The Relationship of Self-Reported Pain and Functional Impairment to Gait Mechanics in Overweight and Obese Persons With Knee Osteoarthritis. Archives of Physical Medicine and Rehabilitation, 2009, 90, 1874-1879.	0.5	50
258	Racial differences in gait mechanics associated with knee osteoarthritis. Aging Clinical and Experimental Research, 2009, 21, 463-469.	1.4	17
259	Friction force microscopy of lubricin and hyaluronic acid between hydrophobic and hydrophilic surfaces. Soft Matter, 2009, 5, 3438.	1.2	108
260	Design of a Polycarbonate-Urethane Meniscal Implant: Finite Element Approach., 2009, , .		2
261	Nonlinear Osmotic Properties of the Cell Nucleus. , 2009, , .		1
262	Meniscal Implant Biomechanical Performance: A Novel Quantitative Approach., 2009,,.		1
263	The Inhomogeneous Mechanical Properties of the Pericellular Matrix of Articular Cartilage Measured In Situ by Atomic Force Microscopy. , 2009, , .		1
263		1,2	1 75
	In Situ by Atomic Force Microscopy. , 2009, , . Inhibition of integrative repair of the meniscus following acute exposure to interleukin†in vitro.	1.2	
264	In Situ by Atomic Force Microscopy., 2009, , . Inhibition of integrative repair of the meniscus following acute exposure to interleukin†in vitro. Journal of Orthopaedic Research, 2008, 26, 504-512. Absence of posttraumatic arthritis following intraarticular fracture in the MRL/MpJ mouse. Arthritis		75
264 265	In Situ by Atomic Force Microscopy., 2009, , . Inhibition of integrative repair of the meniscus following acute exposure to interleukin†in vitro. Journal of Orthopaedic Research, 2008, 26, 504-512. Absence of posttraumatic arthritis following intraarticular fracture in the MRL/MpJ mouse. Arthritis and Rheumatism, 2008, 58, 744-753. Monolayer cell expansion conditions affect the chondrogenic potential of adiposeâ€derived stem cells.	6.7	75 109
264 265 266	In Situ by Atomic Force Microscopy., 2009, , . Inhibition of integrative repair of the meniscus following acute exposure to interleukin†in vitro. Journal of Orthopaedic Research, 2008, 26, 504-512. Absence of posttraumatic arthritis following intraarticular fracture in the MRL/MpJ mouse. Arthritis and Rheumatism, 2008, 58, 744-753. Monolayer cell expansion conditions affect the chondrogenic potential of adiposeâ€derived stem cells. Biotechnology and Bioengineering, 2008, 99, 986-995. Viscoelastic properties of human mesenchymally-derived stem cells and primary osteoblasts,	6.7	75 109 70
264 265 266 267	In Situ by Atomic Force Microscopy., 2009, , . Inhibition of integrative repair of the meniscus following acute exposure to interleukin†in vitro. Journal of Orthopaedic Research, 2008, 26, 504-512. Absence of posttraumatic arthritis following intraarticular fracture in the MRL/MpJ mouse. Arthritis and Rheumatism, 2008, 58, 744-753. Monolayer cell expansion conditions affect the chondrogenic potential of adiposeâ€derived stem cells. Biotechnology and Bioengineering, 2008, 99, 986-995. Viscoelastic properties of human mesenchymally-derived stem cells and primary osteoblasts, chondrocytes, and adipocytes. Journal of Biomechanics, 2008, 41, 454-464. In situ friction measurement on murine cartilage by atomic force microscopy. Journal of	6.7 1.7 0.9	75 109 70 299

#	Article	IF	Citations
271	Interleukin-1 inhibits osmotically induced calcium signaling and volume regulation in articular chondrocytes. Osteoarthritis and Cartilage, 2008, 16, 1466-1473.	0.6	23
272	Novel synovial fluid recovery method allows for quantification of a marker of arthritis in mice. Osteoarthritis and Cartilage, 2008, 16, 1532-1538.	0.6	64
273	Label-Free, High-Throughput Measurements of Dynamic Changes in Cell Nuclei Using Angle-Resolved Low Coherence Interferometry. Biophysical Journal, 2008, 94, 4948-4956.	0.2	37
274	Transfer of Macroscale Tissue Strain to Microscale Cell Regions in the Deformed Meniscus. Biophysical Journal, 2008, 95, 2116-2124.	0.2	56
275	Site-Specific Effects of Compression on Macromolecular Diffusion in Articular Cartilage. Biophysical Journal, 2008, 95, 4890-4895.	0.2	41
276	A Neural Network Model for Cell Classification Based on Single-Cell Biomechanical Properties. Tissue Engineering - Part A, 2008, 14, 1507-1515.	1.6	22
277	In vitro Differentiation Potential of Mesenchymal Stem Cells. Transfusion Medicine and Hemotherapy, 2008, 35, 228-238.	0.7	110
278	Conformational Mechanics, Adsorption, and Normal Force Interactions of Lubricin and Hyaluronic Acid on Model Surfaces. Langmuir, 2008, 24, 1183-1193.	1.6	115
279	The Dynamic Mechanical Environment of the Chondrocyte: A Biphasic Finite Element Model of Cell-Matrix Interactions Under Cyclic Compressive Loading. Journal of Biomechanical Engineering, 2008, 130, 061009.	0.6	58
280	Microscale Diffusion Properties of the Cartilage Pericellular Matrix Measured Using 3D Scanning Microphotolysis. Journal of Biomechanical Engineering, 2008, 130, 061002.	0.6	22
281	Composite scaffolds for cartilage tissue engineering. Biorheology, 2008, 45, 501-512.	1.2	113
282	Why is obesity associated with osteoarthritis? Insights from mouse models of obesity. Biorheology, 2008, 45, 387-398.	1.2	75
283	Integrative repair of the meniscus: Lessons from in vitro studies. Biorheology, 2008, 45, 487-500.	1.2	44
284	On the Horizon From the ORS. Journal of the American Academy of Orthopaedic Surgeons, The, 2008, 16, 57-60.	1.1	0
285	Fat Stem Cells. , 2008, , 143-174.		0
286	Composite scaffolds for cartilage tissue engineering. Biorheology, 2008, 45, 501-12.	1.2	56
287	Integrative repair of the meniscus: lessons from in vitro studies. Biorheology, 2008, 45, 487-500.	1.2	32
288	Why is obesity associated with osteoarthritis? Insights from mouse models of obesity. Biorheology, 2008, 45, 387-98.	1.2	47

#	Article	IF	Citations
289	Nitric Oxide Synthase and Cyclooxygenase Interactions in Cartilage and Meniscus. , 2007, 42, 31-62.		35
290	Repair Response of the Inner and Outer Regions of the Porcine Meniscus in Vitro. American Journal of Sports Medicine, 2007, 35, 754-762.	1.9	71
291	Viability and apoptosis of human chondrocytes in osteochondral fragments following joint trauma. Journal of Bone and Joint Surgery: British Volume, 2007, 89-B, 1388-1395.	3.4	54
292	Engineering Functional Tissues. , 2007, , 137-153.		10
293	Regional differences in prostaglandin E2 and nitric oxide production in the knee meniscus in response to dynamic compression. Biochemical and Biophysical Research Communications, 2007, 358, 1047-1053.	1.0	25
294	A Thin-Layer Model for Viscoelastic, Stress-Relaxation Testing of Cells Using Atomic Force Microscopy: Do Cell Properties Reflect Metastatic Potential?. Biophysical Journal, 2007, 92, 1784-1791.	0.2	277
295	Enhanced integrative repair of the porcine meniscus in vitro by inhibition of interleukinâ€1 or tumor necrosis factor α. Arthritis and Rheumatism, 2007, 56, 3033-3043.	6.7	80
296	Joint degeneration following closed intraarticular fracture in the mouse knee: A model of posttraumatic arthritis. Journal of Orthopaedic Research, 2007, 25, 578-592.	1.2	153
297	Application of a three-dimensional poroelastic BEM to modeling the biphasic mechanics of cell–matrix interactions in articular cartilage. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2999-3010.	3.4	18
298	Special Issue on Computational Bioengineering. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2963-2964.	3.4	0
299	Zonal changes in the three-dimensional morphology of the chondron under compression: The relationship among cellular, pericellular, and extracellular deformation in articular cartilage. Journal of Biomechanics, 2007, 40, 2596-2603.	0.9	150
300	A biomimetic three-dimensional woven composite scaffold for functional tissue engineering of cartilage. Nature Materials, 2007, 6, 162-167.	13.3	672
301	Threeâ€dimensional morphology of the pericellular matrix of intervertebral disc cells in the rat. Journal of Anatomy, 2007, 211, 444-452.	0.9	32
302	Interleukin-1 and tumor necrosis factor alpha inhibit repair of the porcine meniscus in vitro. Osteoarthritis and Cartilage, 2007, 15, 1053-1060.	0.6	65
303	Circadian Oscillation of Gene Expression in Murine Calvarial Bone. Journal of Bone and Mineral Research, 2007, 22, 357-365.	3.1	91
304	An In Vitro System to Evaluate the Effects of Ischemia on Survival of Cells Used for Cell Therapy. Annals of Biomedical Engineering, 2007, 35, 1414-1424.	1.3	23
305	Measurement of intracellular strain on deformable substrates with texture correlation. Journal of Biomechanics, 2007, 40, 786-794.	0.9	49
306	Aortic Valve Interstitial Cell Viscoelasticity., 2007,,.		2

#	Article	IF	CITATIONS
307	Adipose-Derived Adult Stem Cells for Cartilage Repair. Medicine and Science in Sports and Exercise, 2007, 39, 44.	0.2	15
308	Influence of oxygen tension on interleukin 1-induced peroxynitrite formation and matrix turnover in articular cartilage. Journal of Rheumatology, 2007, 34, 401-7.	1.0	18
309	Biaxial Strain Effects on Cells from the Inner and Outer Regions of the Meniscus. Connective Tissue Research, 2006, 47, 207-214.	1.1	36
310	Diffusional Anisotropy in Collagenous Tissues: Fluorescence Imaging of Continuous Point Photobleaching. Biophysical Journal, 2006, 91, 311-316.	0.2	83
311	Advanced Tools for Tissue Engineering: Scaffolds, Bioreactors, and Signaling. Tissue Engineering, 2006, 12, 3285-3305.	4.9	255
312	IL- $1\hat{l}^2$ decreases the elastic modulus of human tenocytes. Journal of Applied Physiology, 2006, 101, 189-195.	1.2	37
313	From Articular Fracture to Posttraumatic Arthritis: A Black Box That Needs to Be Opened. Journal of Orthopaedic Trauma, 2006, 20, 661-662.	0.7	25
314	The Development of Posttraumatic Arthritis After Articular Fracture. Journal of Orthopaedic Trauma, 2006, 20, 719-725.	0.7	121
315	Chondrocytic differentiation of human adipose-derived adult stem cells in elastin-like polypeptide. Biomaterials, 2006, 27, 91-99.	5.7	290
316	Determination of the Poisson's ratio of the cell: recovery properties of chondrocytes after release from complete micropipette aspiration. Journal of Biomechanics, 2006, 39, 78-87.	0.9	207
317	Response to Dr. Schachar. Journal of Biomechanics, 2006, 39, 2344-2345.	0.9	3
318	The Pericellular Matrix as a Transducer of Biomechanical and Biochemical Signals in Articular Cartilage. Annals of the New York Academy of Sciences, 2006, 1068, 498-512.	1.8	280
319	A Mechano-chemical Model for the Passive Swelling Response of an Isolated Chondron under Osmotic Loading. Biomechanics and Modeling in Mechanobiology, 2006, 5, 160-171.	1.4	38
320	Finite Element Modeling Predictions of Region-specific Cell-matrix Mechanics in the Meniscus. Biomechanics and Modeling in Mechanobiology, 2006, 5, 140-149.	1.4	43
321	Viscoelastic properties of zonal articular chondrocytes measured by atomic force microscopy. Osteoarthritis and Cartilage, 2006, 14, 571-579.	0.6	277
322	Zonal variations in the three-dimensional morphology of the chondron measured in situ using confocal microscopy. Osteoarthritis and Cartilage, 2006, 14, 889-897.	0.6	111
323	Potent induction of chondrocytic differentiation of human adipose-derived adult stem cells by bone morphogenetic protein 6. Arthritis and Rheumatism, 2006, 54, 1222-1232.	6.7	279
324	Effects of interleukin-1 on calcium signaling and the increase of filamentous actin in isolated and in situ articular chondrocytes. Arthritis and Rheumatism, 2006, 54, 2164-2174.	6.7	61

#	Article	IF	CITATIONS
325	Pathogenesis of osteoarthritis-like changes in the joints of mice deficient in type IX collagen. Arthritis and Rheumatism, 2006, 54, 2891-2900.	6.7	129
326	Clonal analysis of the differentiation potential of human adipose-derived adult stem cells. Journal of Cellular Physiology, 2006, 206, 229-237.	2.0	434
327	Extended passaging, but not aldehyde dehydrogenase activity, increases the chondrogenic potential of human adipose-derived adult stem cells. Journal of Cellular Physiology, 2006, 209, 987-995.	2.0	107
328	Composition and transport properties of human ankle and knee cartilage. Journal of Orthopaedic Research, 2006, 24, 211-219.	1.2	45
329	Compressive Properties of Mouse Articular Cartilage Determined in a Novel Micro-Indentation Test Method and Biphasic Finite Element Model. Journal of Biomechanical Engineering, 2006, 128, 766-771.	0.6	78
330	Correlation between heart valve interstitial cell stiffness and transvalvular pressure: implications for collagen biosynthesis. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H224-H231.	1.5	183
331	The Role of Mechanical Loading in the Onset and Progression of Osteoarthritis. Exercise and Sport Sciences Reviews, 2005, 33, 195-200.	1.6	360
332	The Effect of Intermittent Pneumatic Compression on Fracture Healing. Journal of Orthopaedic Trauma, 2005, 19, 371-376.	0.7	24
333	Cartilage degeneration in post-collapse cases of osteonecrosis of the human femoral head: Altered mechanical properties in tension, compression, and shear. Journal of Orthopaedic Research, 2005, 23, 576-583.	1.2	46
334	Osteoarthritic changes in the biphasic mechanical properties of the chondrocyte pericellular matrix in articular cartilage. Journal of Biomechanics, 2005, 38, 509-517.	0.9	153
335	The biomechanical role of the chondrocyte pericellular matrix in articular cartilage. Acta Biomaterialia, 2005, 1, 317-325.	4.1	167
336	Adjacent tissues (cartilage, bone) affect the functional integration of engineered calf cartilage in vitro. Osteoarthritis and Cartilage, 2005, 13, 129-138.	0.6	72
337	The influence of oxygen tension on the induction of nitric oxide and prostaglandin E2 by mechanical stress in articular cartilage. Osteoarthritis and Cartilage, 2005, 13, 935-941.	0.6	31
338	The influence of mechanical compression on the induction of osteoarthritis-related biomarkers in articular cartilage explants. Osteoarthritis and Cartilage, 2005, 13, 1092-1099.	0.6	69
339	Influence of oxygen on the proliferation and metabolism of adipose derived adult stem cells. Journal of Cellular Physiology, 2005, 204, 184-191.	2.0	200
340	The slippery slope of arthritis. Arthritis and Rheumatism, 2005, 52, 1632-1633.	6.7	17
341	Large Deformation Finite Element Analysis of Micropipette Aspiration to Determine the Mechanical Properties of the Chondrocyte. Annals of Biomedical Engineering, 2005, 33, 494-501.	1.3	96
342	Zonal Uniformity in Mechanical Properties of the Chondrocyte Pericellular Matrix: Micropipette Aspiration of Canine Chondrons Isolated by Cartilage Homogenization. Annals of Biomedical Engineering, 2005, 33, 1312-1318.	1.3	94

#	Article	IF	Citations
343	Articular Cartilage Degeneration in Post-Collapse Osteonecrosis of the Femoral Head <sbt aid="1012366">Radiographic Staging, Macroscopic Grading, and Histologic Changes</sbt> . Journal of Bone and Joint Surgery - Series A, 2005, 87, 1272.	1.4	25
344	Role of Matrix Extracellular Phosphoglycoprotein in the Pathogenesis of X-Linked Hypophosphatemia. Journal of the American Society of Nephrology: JASN, 2005, 16, 1645-1653.	3.0	81
345	Selective Runx2-II deficiency leads to low-turnover osteopenia in adult mice. Developmental Biology, 2005, 283, 345-356.	0.9	71
346	ARTICULAR CARTILAGE DEGENERATION IN POST-COLLAPSE OSTEONECROSIS OF THE FEMORAL HEAD. Journal of Bone and Joint Surgery - Series A, 2005, 87, 1272-1277.	1.4	2
347	The role of the cytoskeleton in the viscoelastic properties of human articular chondrocytes. Journal of Orthopaedic Research, 2004, 22, 131-139.	1.2	187
348	The effects of cyclic mechanical strain and tumor necrosis factor alpha on the response of cells of the meniscus. Osteoarthritis and Cartilage, 2004, 12, 956-962.	0.6	51
349	The Role of F-Actin in Hypo-Osmotically Induced Cell Volume Change and Calcium Signaling in Anulus Fibrosus Cells. Annals of Biomedical Engineering, 2004, 32, 103-111.	1.3	54
350	Molecular diffusion in tissue-engineered cartilage constructs: Effects of scaffold material, time, and culture conditions. Journal of Biomedical Materials Research Part B, 2004, 70B, 397-406.	3.0	130
351	Chondrogenic differentiation of adipose-derived adult stem cells in agarose, alginate, and gelatin scaffolds. Biomaterials, 2004, 25, 3211-3222.	5.7	728
352	Mechanical Signals as Regulators of Stem Cell Fate. Current Topics in Developmental Biology, 2004, 60, 91-126.	1.0	111
353	The Role of Biomechanics and Inflammation in Cartilage Injury and Repair. Clinical Orthopaedics and Related Research, 2004, 423, 17-26.	0.7	272
354	The role of the cytoskeleton in the viscoelastic properties of human articular chondrocytes. Journal of Orthopaedic Research, 2004, 22, 131-139.	1.2	101
355	Adipose-derived adult stem cells for cartilage tissue engineering. Biorheology, 2004, 41, 389-99.	1.2	143
356	Site-Specific Molecular Diffusion in Articular Cartilage Measured using Fluorescence Recovery after Photobleaching. Annals of Biomedical Engineering, 2003, 31, 753-760.	1.3	150
357	Hypo-osmotic stress induces calcium-dependent actin reorganization in articular chondrocytes. Osteoarthritis and Cartilage, 2003, 11, 187-197.	0.6	87
358	Differential effects of static and dynamic compression on meniscal cell gene expression. Journal of Orthopaedic Research, 2003, 21, 963-969.	1.2	96
359	Adipose-derived adult stem cells: isolation, characterization, and differentiation potential. Cytotherapy, 2003, 5, 362-369.	0.3	964
360	Differentiation Potential of Adipose Derived Adult Stem (ADAS) Cells. Current Topics in Developmental Biology, 2003, 58, 137-160.	1.0	234

#	Article	IF	CITATIONS
361	Effects of Transforming Growth Factor \hat{I}^21 and Dexamethasone on the Growth and Chondrogenic Differentiation of Adipose-Derived Stromal Cells. Tissue Engineering, 2003, 9, 1301-1312.	4.9	187
362	Functional Tissue Engineering and the Role of Biomechanical Signaling in Articular Cartilage Repair., 2003,, 277-290.		3
363	Multipotent Stromal Cells Derived From the Infrapatellar Fat Pad of the Knee. Clinical Orthopaedics and Related Research, 2003, 412, 196-212.	0.7	371
364	Alterations in the Mechanical Properties of the Human Chondrocyte Pericellular Matrix With Osteoarthritis. Journal of Biomechanical Engineering, 2003, 125, 323-333.	0.6	178
365	Regulation of matrix turnover in meniscal explants: role of mechanical stress, interleukin-1, and nitric oxide. Journal of Applied Physiology, 2003, 95, 308-313.	1.2	77
366	The Micromechanical Environment of Intervertebral Disc Cells Determined by a Finite Deformation, Anisotropic, and Biphasic Finite Element Model. Journal of Biomechanical Engineering, 2003, 125, 1-11.	0.6	97
367	An Axisymmetric Boundary Integral Model for Assessing Elastic Cell Properties in the Micropipette Aspiration Contact Problem. Journal of Biomechanical Engineering, 2002, 124, 586-595.	0.6	56
368	Chondrogenic Potential of Adipose Tissue-Derived Stromal Cells in Vitro and in Vivo. Biochemical and Biophysical Research Communications, 2002, 290, 763-769.	1.0	626
369	Hyperosmotically Induced Volume Change and Calcium Signaling in Intervertebral Disk Cells: The Role of the Actin Cytoskeleton. Biophysical Journal, 2002, 83, 2502-2510.	0.2	73
370	The Effects of Osmotic Stress on the Viscoelastic and Physical Properties of Articular Chondrocytes. Biophysical Journal, 2002, 82, 720-727.	0.2	219
371	Observations on the growth of loose bodies in joints. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2002, 18, 930-934.	1.3	9
372	The mechanical properties of the human hip capsule ligaments. Journal of Arthroplasty, 2002, 17, 82-89.	1.5	176
373	Induction of cyclooxygenase-2 by mechanical stress through a nitric oxide-regulated pathway. Osteoarthritis and Cartilage, 2002, 10, 792-798.	0.6	91
374	Urea as a passive transport marker for arthritis biomarker studies. Arthritis and Rheumatism, 2002, 46, 420-427.	6.7	72
375	Influence of hypoxia and reoxygenation on cytokine-induced production of proinflammatory mediators in articular cartilage. Arthritis and Rheumatism, 2002, 46, 968-975.	6.7	58
376	Precision and Accuracy of a Transportable Dual-Energy X-ray Absorptiometry Unit for Bone Mineral Measurements in Guinea Pigs. Calcified Tissue International, 2002, 70, 164-169.	1.5	15
377	Joint degeneration following meniscal allograft transplantation in a canine model: mechanical properties and semiquantitative histology of articular cartilage. Knee Surgery, Sports Traumatology, Arthroscopy, 2002, 10, 109-118.	2.3	38
378	A method for quantifying cell size from differential interference contrast images: validation and application to osmotically stressed chondrocytes. Journal of Microscopy, 2002, 205, 125-135.	0.8	45

#	Article	IF	Citations
379	Synovial fluid biomarker levels predict articular cartilage damage following complete medial meniscectomy in the canine knee. Journal of Orthopaedic Research, 2002, 20, 92-100.	1.2	65
380	Chondropathy after meniscal tear or partial meniscectomy in a canine model. Journal of Orthopaedic Research, 2002, 20, 996-1002.	1.2	74
381	Functional Tissue Engineering. Annals of the New York Academy of Sciences, 2002, 961, 193-195.	1.8	51
382	Osmotic loading to determine the intrinsic material properties of guinea pig knee cartilage. Journal of Biomechanics, 2002, 35, 1285-1290.	0.9	31
383	Anabolic effects of a G protein–coupled receptor kinase inhibitor expressed in osteoblasts. Journal of Clinical Investigation, 2002, 109, 1361-1371.	3.9	18
384	Mechanical Stress and Nitric Oxide Influence Leukotriene Production in Cartilage. Biochemical and Biophysical Research Communications, 2001, 285, 806-810.	1.0	20
385	The effect of dynamic mechanical compression on nitric oxide production in the meniscus. Osteoarthritis and Cartilage, 2001, 9, 481-487.	0.6	65
386	Functional Tissue Engineering. Clinical Orthopaedics and Related Research, 2001, 391, S295-S305.	0.7	158
387	Multiphasic models of cell mechanics. , 2001, , 84-102.		8
388	Regional material properties of the human hip joint capsule ligaments. Journal of Orthopaedic Research, 2001, 19, 359-364.	1.2	164
389	The effects of static and intermittent compression on nitric oxide production in articular cartilage explants. Journal of Orthopaedic Research, 2001, 19, 729-737.	1.2	138
390	Interleukin-1, tumor necrosis factor?, and interleukin-17 synergistically up-regulate nitric oxide and prostaglandin E2 production in explants of human osteoarthritic knee menisci. Arthritis and Rheumatism, 2001, 44, 2078-2083.	6.7	197
391	Hyper-osmotic stress induces volume change and calcium transients in chondrocytes by transmembrane, phospholipid, and G-protein pathways. Journal of Biomechanics, 2001, 34, 1527-1535.	0.9	118
392	An Axisymmetric Elastic Layered Half-Space Model for Micropipette Aspiration of the Chondrocyte Pericellular Matrix. , 2001, , .		1
393	Comparison of Soccer Shin Guards in Preventing Tibia Fracture. American Journal of Sports Medicine, 2000, 28, 227-233.	1.9	47
394	Longitudinal characterization of synovial fluid biomarkers in the canine meniscectomy model of osteoarthritis. Journal of Orthopaedic Research, 2000, 18, 269-280.	1.2	77
395	Simultaneous changes in the mechanical properties, quantitative collagen organization, and proteoglycan concentration of articular cartilage following canine meniscectomy. Journal of Orthopaedic Research, 2000, 18, 383-392.	1.2	114
396	Viscoelastic properties of chondrocytes from normal and osteoarthritic human cartilage. Journal of Orthopaedic Research, 2000, 18, 891-898.	1.2	211

#	Article	IF	CITATIONS
397	The mechanical environment of the chondrocyte: a biphasic finite element model of cell–matrix interactions in articular cartilage. Journal of Biomechanics, 2000, 33, 1663-1673.	0.9	408
398	An Axisymmetric Boundary Integral Model for Incompressible Linear Viscoelasticity: Application to the Micropipette Aspiration Contact Problem. Journal of Biomechanical Engineering, 2000, 122, 236-244.	0.6	51
399	Functional Tissue Engineering: The Role of Biomechanics. Journal of Biomechanical Engineering, 2000, 122, 570-575.	0.6	538
400	Viscoelastic Properties of the Cell Nucleus. Biochemical and Biophysical Research Communications, 2000, 269, 781-786.	1.0	506
401	Adipose Tissue-Derived Stromal Cells Grown in Three-Dimensional Aliginate Constructs Display a Chondrogenic Phenotype. , 2000, , .		0
402	The mechanical environment of the chondrocyte: a biphasic finite element model of cell-matrix interactions in articular cartilage. Journal of Biomechanics, 2000, 33, 1663-73.	0.9	127
403	Alterations in the Young's modulus and volumetric properties of chondrocytes isolated from normal and osteoarthritic human cartilage. Journal of Biomechanics, 1999, 32, 119-127.	0.9	250
404	The deformation behavior and mechanical properties of chondrocytes in articular cartilage. Osteoarthritis and Cartilage, 1999, 7, 59-70.	0.6	218
405	Mechanically induced calcium waves in articular chondrocytes are inhibited by gadolinium and amiloride. Journal of Orthopaedic Research, 1999, 17, 421-429.	1.2	139
406	Tensile properties of articular cartilage are altered by meniscectomy in a canine model of osteoarthritis. Journal of Orthopaedic Research, 1999, 17, 503-508.	1.2	106
407	Compressive and shear properties of alginate gel: Effects of sodium ions and alginate concentration., 1999, 47, 46-53.		336
408	Comparison of several digital and stereological methods for estimating surface area and volume of cells studied by confocal microscopy., 1999, 36, 85-95.		35
409	Viscoelastic Properties of Intervertebral Disc Cells. Spine, 1999, 24, 2475.	1.0	95
410	Biomechanical Factors in Tissue Engineered Meniscal Repair. Clinical Orthopaedics and Related Research, 1999, 367, S254-S272.	0.7	119
411	Osmotic Stress Initiates Intracellular Calcium Waves in Chondrocytes Through Extracellular Influx and the Inositol Phosphate Pathway. , 1999, , .		0
412	The Effects of Osmotic Pressure on the Viscoelastic and Physical Properties of Articular Chondrocytes., 1999,,.		2
413	Incompressibility of the solid matrix of articular cartilage under high hydrostatic pressures. Journal of Biomechanics, 1998, 31, 445-451.	0.9	110
414	The effect of hip stem material modulus on surface strain in human femora. Journal of Biomechanics, 1998, 31, 619-628.	0.9	39

#	Article	IF	CITATIONS
415	Effects of coronally slotted femoral prostheses on cortical bone strain. Journal of Arthroplasty, 1997, 12, 657-669.	1.5	10
416	Collagenase in the treatment of Dupuytren's disease: An in vitro study. Journal of Hand Surgery, 1996, 21, 490-495.	0.7	108
417	Correlation of bony ingrowth to the distribution of stress and strain parameters surrounding a porous-coated implant. Journal of Orthopaedic Research, 1996, 14, 862-870.	1.2	39
418	Differentiation of the Bone-Tissue Remodeling Response to Axial and Torsional Loading in the Turkey Ulna*â€. Journal of Bone and Joint Surgery - Series A, 1996, 78, 1523-33.	1.4	111
419	Chondrocyte deformation and local tissue strain in articular cartilage: A confocal microscopy study. Journal of Orthopaedic Research, 1995, 13, 410-421.	1.2	420
420	Compression-induced changes in the shape and volume of the chondrocyte nucleus. Journal of Biomechanics, 1995, 28, 1529-1541.	0.9	354
421	Chondrocytes isolated from mature articular cartilage retain the capacity to form functional gap junctions. Journal of Bone and Mineral Research, 1995, 10, 1359-1364.	3.1	66
422	Mechanical and biochemical changes in the superficial zone of articular cartilage in canine experimental osteoarthritis. Journal of Orthopaedic Research, 1994, 12, 474-484.	1.2	276
423	The effects of matrix compression on proteoglycan metabolism in articular cartilage explants. Osteoarthritis and Cartilage, 1994, 2, 91-101.	0.6	207
424	Volume and surface area measurement of viable chondrocytes <i>in situ</i> using geometric modelling of serial confocal sections. Journal of Microscopy, 1994, 173, 245-256.	0.8	131
425	Compressive Mechanical Properties of the Human Anulus Fibrosus and Their Relationship to Biochemical Composition. Spine, 1994, 19, 212-221.	1.0	192
426	The Relationship Between Gait Mechanics and Radiographic Disease Severity in Knee Osteoarthritis., 0,		0