Lori A Setton

List of Publications by Year
in descending order

160 papers	13,746 citations	15504 65 h-index	23533 111 g-index
166 all docs	166 docs citations	166 times ranked	10116 citing authors

#	Article	IF	Citations
1	Progress in intra-articular therapy. Nature Reviews Rheumatology, 2014, 10, 11-22.	8.0	375
2	Compressive and shear properties of alginate gel: Effects of sodium ions and alginate concentration. , 1999, 47, 46-53.		336
3	Proinflammatory cytokine expression profile in degenerated and herniated human intervertebral disc tissues. Arthritis and Rheumatism, 2010, 62, 1974-1982.	6.7	329
4	Altered mechanics of cartilage with osteoarthritis: human osteoarthritis and an experimental model of joint degeneration. Osteoarthritis and Cartilage, 1999, 7, 2-14.	1.3	320
5	Applications of elastin-like polypeptides in tissue engineering. Advanced Drug Delivery Reviews, 2010, 62, 1479-1485.	13.7	298
6	Is the Nucleus Pulposus a Solid or a Fluid? Mechanical Behaviors of the Nucleus Pulposus of the Human Intervertebral Disc. Spine, 1996, 21, 1174-1184.	2.0	293
7	Chondrocytic differentiation of human adipose-derived adult stem cells in elastin-like polypeptide. Biomaterials, 2006, 27, 91-99.	11.4	290
8	Degeneration affects the anisotropic and nonlinear behaviors of human anulus fibrosus in compression. Journal of Biomechanics, 1998, 31, 535-544.	2.1	284
9	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.	3.8	280
10	The Role of Biomechanics and Inflammation in Cartilage Injury and Repair. Clinical Orthopaedics and Related Research, 2004, 423, 17-26.	1.5	272
11	Synthesis and in Vitro Evaluation of Enzymatically Cross-Linked Elastin-Like Polypeptide Gels for Cartilaginous Tissue Repair. Tissue Engineering, 2005, 11, 1768-1779.	4.6	267
12	Characterization of a Genetically Engineered Elastin-like Polypeptide for Cartilaginous Tissue Repair. Biomacromolecules, 2002, 3, 910-916.	5.4	262
13	The biphasic poroviscoelastic behavior of articular cartilage: Role of the surface zone in governing the compressive behavior. Journal of Biomechanics, 1993, 26, 581-592.	2.1	257
14	Degeneration and Aging Affect the Tensile Behavior of Human Lumbar Anulus Fibrosus. Spine, 1995, 20, 2690-2701.	2.0	252
15	Swelling and Mechanical Behaviors of Chemically Cross-Linked Hydrogels of Elastin-like Polypeptides. Biomacromolecules, 2003, 4, 572-580.	5.4	250
16	Anisotropic and Inhomogeneous Tensile Behavior of the Human Anulus Fibrosus: Experimental Measurement and Material Model Predictions. Journal of Biomechanical Engineering, 2001, 123, 256-263.	1.3	248
17	Biomaterials for intervertebral disc regeneration and repair. Biomaterials, 2017, 129, 54-67.	11.4	248
18	Tensile Properties of Nondegenerate Human Lumbar Anulus Fibrosus. Spine, 1996, 21, 452-461.	2.0	242

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19	Alterations in the mechanical behavior of the human lumbar nucleus pulposus with degeneration and aging. Journal of Orthopaedic Research, 1997, 15, 318-322.	2.3	230
20	Mechanobiology of the Intervertebral Disc and Relevance to Disc Degeneration. Journal of Bone and Joint Surgery - Series A, 2006, 88, 52-57.	3.0	213
21	Biodendrimer-Based Hydrogel Scaffolds for Cartilage Tissue Repair. Biomacromolecules, 2006, 7, 310-316.	5.4	206
22	Photocrosslinkable Hyaluronan as a Scaffold for Articular Cartilage Repair. Annals of Biomedical Engineering, 2004, 32, 391-397.	2.5	204
23	Compressive Mechanical Properties of the Human Anulus Fibrosus and Their Relationship to Biochemical Composition. Spine, 1994, 19, 212-221.	2.0	192
24	Rapid Cross-Linking of Elastin-like Polypeptides with (Hydroxymethyl)phosphines in Aqueous Solution. Biomacromolecules, 2007, 8, 1463-1470.	5.4	191
25	The viscoelastic behavior of the non-degenerate human lumbar nucleus pulposus in shear. Journal of Biomechanics, 1997, 30, 1005-1013.	2.1	170
26	A thermally responsive biopolymer for intra-articular drug delivery. Journal of Controlled Release, 2006, 115, 175-182.	9.9	169
27	The biomechanical role of the chondrocyte pericellular matrix in articular cartilage. Acta Biomaterialia, 2005, 1, 317-325.	8.3	167
28	Osteoarthritic changes in the biphasic mechanical properties of the chondrocyte pericellular matrix in articular cartilage. Journal of Biomechanics, 2005, 38, 509-517.	2.1	153
29	Diet-induced obesity differentially regulates behavioral, biomechanical, and molecular risk factors for osteoarthritis in mice. Arthritis Research and Therapy, 2010, 12, R130.	3.5	152
30	In Situ Cross-Linking of Elastin-like Polypeptide Block Copolymers for Tissue Repair. Biomacromolecules, 2008, 9, 222-230.	5.4	151
31	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.	2.1	150
32	Introduction. Spine, 2004, 29, 2677-2678.	2.0	140
33	Development and characterization of a fusion protein between thermally responsive elastinâ€like polypeptide and interleukinâ€1 receptor antagonist: Sustained release of a local antiinflammatory therapeutic. Arthritis and Rheumatism, 2007, 56, 3650-3661.	6.7	140
34	Cell Mechanics and Mechanobiology in the Intervertebral Disc. Spine, 2004, 29, 2710-2723.	2.0	134
35	Collagen gene expression and mechanical properties of intervertebral disc cellâ€"alginate cultures. Journal of Orthopaedic Research, 2001, 19, 2-10.	2.3	133
36	Diffusion tensor microscopy of the intervertebral disc anulus fibrosus. Magnetic Resonance in Medicine, 1999, 41, 992-999.	3.0	123

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37	Experimental and Biphasic FEM Determinations of the Material Properties and Hydraulic Permeability of the Meniscus in Tension1. Journal of Biomechanical Engineering, 2002, 124, 315-321.	1.3	120
38	Biomechanical Factors in Tissue Engineered Meniscal Repair. Clinical Orthopaedics and Related Research, 1999, 367, S254-S272.	1.5	119
39	Intervertebral Disc Cells Exhibit Differences in Gene Expression in Alginate and Monolayer Culture. Spine, 2001, 26, 1747-1751.	2.0	116
40	Molecular phenotypes of notochordal cells purified from immature nucleus pulposus. European Spine Journal, 2006, 15, 303-311.	2.2	115
41	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.	2.3	114
42	Fund Black scientists. Cell, 2021, 184, 561-565.	28.9	107
43	Tensile properties of articular cartilage are altered by meniscectomy in a canine model of osteoarthritis. Journal of Orthopaedic Research, 1999, 17, 503-508.	2.3	106
44	Direct Measurement of the Poissonâ€™s Ratio of Human Patella Cartilage in Tension. Journal of Biomechanical Engineering, 2002, 124, 223-228.	1.3	102
45	Interleukinâ€17 synergizes with IFNÎ³ or TNFÎ± to promote inflammatory mediator release and intercellular adhesion moleculeâ€1 (ICAMâ€1) expression in human intervertebral disc cells. Journal of Orthopaedic Research, 2011, 29, 1-7.	2.3	100
46	Ascorbic acid increases the severity of spontaneous knee osteoarthritis in a guinea pig model. Arthritis and Rheumatism, 2004, 50, 1822-1831.	6.7	99
47	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.	1.3	97
48	Differential effects of static and dynamic compression on meniscal cell gene expression. Journal of Orthopaedic Research, 2003, 21, 963-969.	2.3	96
49	Injectable laminin-functionalized hydrogel for nucleus pulposus regeneration. Biomaterials, 2013, 34, 7381-7388.	11.4	96
50	Viscoelastic Properties of Intervertebral Disc Cells. Spine, 1999, 24, 2475.	2.0	95
51	Matrix protein gene expression in intervertebral disc cells subjected to altered osmolarity. Biochemical and Biophysical Research Communications, 2002, 293, 932-938.	2.1	95
52	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.	2.5	94
53	<i>In Situ</i> Crosslinking Elastin-Like Polypeptide Gels for Application to Articular Cartilage Repair in a Goat Osteochondral Defect Model. Tissue Engineering - Part A, 2008, 14, 1133-1140.	3.1	91
54	Extracellular Matrix Ligand and Stiffness Modulate Immature Nucleus Pulposus Cell-Cell Interactions. PLoS ONE, 2011, 6, e27170.	2.5	91

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55	Mechanotransduction and cell biomechanics of the intervertebral disc. JOR Spine, 2018, 1, e1026.	3.2	91
56	Mechanical behavior and biochemical composition of canine knee cartilage following periods of joint disuse and disuse with remobilization. Osteoarthritis and Cartilage, 1997, 5, 1-16.	1.3	88
57	Static compression induces zonal-specific changes in gene expression for extracellular matrix and cytoskeletal proteins in intervertebral disc cells in vitro. Matrix Biology, 2004, 22, 573-583.	3.6	78
58	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.	1.3	78
59	Inflammatory Cytokines and Matrix Metalloproteinases in the Synovial Fluid After Intra-articular Ankle Fracture. Foot and Ankle International, 2015, 36, 1264-1271.	2.3	76
60	Photocrosslinkable laminin-functionalized polyethylene glycol hydrogel for intervertebral disc regeneration. Acta Biomaterialia, 2014, 10, 1102-1111.	8.3	75
61	Chondropathy after meniscal tear or partial meniscectomy in a canine model. Journal of Orthopaedic Research, 2002, 20, 996-1002.	2.3	74
62	Integrin expression in cells of the intervertebral disc. Journal of Anatomy, 2004, 204, 515-520.	1.5	74
63	Functional integrin subunits regulating cellâ€“matrix interactions in the intervertebral disc. Journal of Orthopaedic Research, 2007, 25, 829-840.	2.3	73
64	The Role Of Extracellular Matrix Elasticity and Composition In Regulating the Nucleus Pulposus Cell Phenotype in the Intervertebral Disc: A Narrative Review. Journal of Biomechanical Engineering, 2014, 136, 021010.	1.3	72
65	Expression of Laminin Isoforms, Receptors, and Binding Proteins Unique to Nucleus Pulposus Cells of Immature Intervertebral Disc. Connective Tissue Research, 2009, 50, 294-306.	2.3	70
66	Differentiation of human induced pluripotent stem cells into nucleus pulposus-like cells. Stem Cell Research and Therapy, 2018, 9, 61.	5.5	70
67	Compressive properties of the cartilaginous end-plate of the baboon lumbar spine. Journal of Orthopaedic Research, 1993, 11, 228-239.	2.3	69
68	Fusion order controls expression level and activity of elastinâ€like polypeptide fusion proteins. Protein Science, 2009, 18, 1377-1387.	7.6	69
69	<sup />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.	3.1	68
70	Kinematic and dynamic gait compensations resulting from knee instability in a rat model of osteoarthritis. Arthritis Research and Therapy, 2012, 14, R78.	3.5	67
71	Region-specific constitutive gene expression in the adult porcine meniscus. Journal of Orthopaedic Research, 2006, 24, 1562-1570.	2.3	63
72	Decreased physical function and increased pain sensitivity in mice deficient for type IX collagen. Arthritis and Rheumatism, 2009, 60, 2684-2693.	6.7	63

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73	Earlyâ€onset degeneration of the intervertebral disc and vertebral end plate in mice deficient in type IX collagen. Arthritis and Rheumatism, 2008, 58, 164-171.	6.7	60
74	A Linear Material Model for Fiber-Induced Anisotropy of the Anulus Fibrosus. Journal of Biomechanical Engineering, 2000, 122, 173-179.	1.3	56
75	Transfer of Macroscale Tissue Strain to Microscale Cell Regions in the Deformed Meniscus. Biophysical Journal, 2008, 95, 2116-2124.	0.5	56
76	Gait Abnormalities and Inflammatory Cytokines in an Autologous Nucleus Pulposus Model of Radiculopathy. Spine, 2009, 34, 648-654.	2.0	56
77	Mechanosensitive transcriptional coactivators MRTFâ€A and YAP/TAZ regulate nucleus pulposus cell phenotype through cell shape. FASEB Journal, 2019, 33, 14022-14035.	0.5	56
78	Evaluating Intra-Articular Drug Delivery for the Treatment of Osteoarthritis in a Rat Model. Tissue Engineering - Part B: Reviews, 2010, 16, 81-92.	4.8	54
79	Identifying molecular phenotype of nucleus pulposus cells in human intervertebral disc with aging and degeneration. Journal of Orthopaedic Research, 2016, 34, 1316-1326.	2.3	54
80	Synthesis and characterization of a thermally-responsive tumor necrosis factor antagonist. Journal of Controlled Release, 2008, 129, 179-186.	9.9	52
81	Differentiation of Mouse Induced Pluripotent Stem Cells (iPSCs) into Nucleus Pulposus-Like Cells In Vitro. PLoS ONE, 2013, 8, e75548.	2.5	52
82	Expression of laminin isoforms, receptors, and binding proteins unique to nucleus pulposus cells of immature intervertebral disc. Connective Tissue Research, 2009, 50, 294-306.	2.3	52
83	Osmolarity Regulates Gene Expression in Intervertebral Disc Cells Determined by Gene Array and Real-Time Quantitative RT-PCR. Annals of Biomedical Engineering, 2005, 33, 1071-1077.	2.5	51
84	Epitope tagging for tracking elastin-like polypeptides. Biomaterials, 2006, 27, 1930-1935.	11.4	51
85	In Vivo Luminescence Imaging of NFâ€ÎºB Activity and Serum Cytokine Levels Predict Pain Sensitivities in a Rodent Model of Osteoarthritis. Arthritis and Rheumatology, 2014, 66, 637-646.	5.6	51
86	Centrifugal and biochemical comparison of proteoglycan aggregates from articular cartilage in experimental joint disuse and joint instability. Journal of Orthopaedic Research, 1994, 12, 498-508.	2.3	50
87	An Injectable and In Situ-Gelling Biopolymer for Sustained Drug Release Following Perineural Administration. Spine, 2008, 33, 748-754.	2.0	50
88	Measurement of intracellular strain on deformable substrates with texture correlation. Journal of Biomechanics, 2007, 40, 786-794.	2.1	49
89	A Noncontacting Method for Material Property Determination for Articular Cartilage from Osmotic Loading. Biophysical Journal, 2001, 81, 3066-3076.	0.5	48
90	High-Resolution Determination of Soft Tissue Deformations Using MRI and First-Order Texture Correlation. IEEE Transactions on Medical Imaging, 2004, 23, 546-553.	8.9	48

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91	Attenuation of Inflammatory Events in Human Intervertebral Disc Cells With a Tumor Necrosis Factor Antagonist. Spine, 2011, 36, 1190-1196.	2.0	48
92	A genetically engineered thermally responsive sustained release curcumin depot to treat neuroinflammation. Journal of Controlled Release, 2013, 171, 38-47.	9.9	46
93	N-cadherin is Key to Expression of the Nucleus Pulposus Cell Phenotype under Selective Substrate Culture Conditions. Scientific Reports, 2016, 6, 28038.	3.3	46
94	Synthesis and characterization of silk fibroin microparticles for intra-articular drug delivery. International Journal of Pharmaceutics, 2015, 485, 7-14.	5.2	45
95	Altered swelling behavior of femoral cartilage following joint immobilization in a canine model. Journal of Orthopaedic Research, 2002, 20, 83-91.	2.3	43
96	Finite Element Modeling Predictions of Region-specific Cell-matrix Mechanics in the Meniscus. Biomechanics and Modeling in Mechanobiology, 2006, 5, 140-149.	2.8	43
97	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.	1.3	42
98	Sustained release of antibiotics from injectable and thermally responsive polypeptide depots. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 67-74.	3.4	41
99	Neural Network Analysis Identifies Scaffold Properties Necessary for <i>In Vitro</i> Chondrogenesis in Elastin-like Polypeptide Biopolymer Scaffolds. Tissue Engineering - Part A, 2010, 16, 11-20.	3.1	41
100	Screening of hyaluronic acidâ€“poly(ethylene glycol) composite hydrogels to support intervertebral disc cell biosynthesis using artificial neural network analysis. Acta Biomaterialia, 2014, 10, 3421-3430.	8.3	40
101	Inflammatory Microenvironment Persists After Bone Healing in Intra-articular Ankle Fractures. Foot and Ankle International, 2017, 38, 479-484.	2.3	39
102	Intra-articular clearance of labeled dextrans from naive and arthritic rat knee joints. Journal of Controlled Release, 2018, 283, 76-83.	9.9	39
103	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.	4.2	38
104	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.	2.8	38
105	Core Competencies for Undergraduates in Bioengineering and Biomedical Engineering: Findings, Consequences, and Recommendations. Annals of Biomedical Engineering, 2020, 48, 905-912.	2.5	37
106	Biaxial Strain Effects on Cells from the Inner and Outer Regions of the Meniscus. Connective Tissue Research, 2006, 47, 207-214.	2.3	36
107	Regulation of human nucleus pulposus cells by peptide-coupled substrates. Acta Biomaterialia, 2017, 55, 100-108.	8.3	36
108	Conditioned Medium Differentially Regulates Matrix Protein Gene Expression in Cells of the Intervertebral Disc. Spine, 2004, 29, 2217-2222.	2.0	34

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109	Threeâ€dimensional morphology of the pericellular matrix of intervertebral disc cells in the rat. Journal of Anatomy, 2007, 211, 444-452.	1.5	32
110	N-Cadherin-Mediated Signaling Regulates Cell Phenotype for Nucleus Pulposus Cells of the Intervertebral Disc. Cellular and Molecular Bioengineering, 2015, 8, 51-62.	2.1	32
111	Osmotic loading to determine the intrinsic material properties of guinea pig knee cartilage. Journal of Biomechanics, 2002, 35, 1285-1290.	2.1	31
112	Human umbilical cord mesenchymal stromal cells exhibit immature nucleus pulposus cell phenotype in a laminin-rich pseudo-three-dimensional culture system. Stem Cell Research and Therapy, 2013, 4, 120.	5.5	31
113	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.	2.8	29
114	Control of adhesive ligand density for modulation of nucleus pulposus cell phenotype. Biomaterials, 2020, 250, 120057.	11.4	29
115	The Micromechanical Environment of Intervertebral Disc Cells: Effect of Matrix Anisotropy and Cell Geometry Predicted by a Linear Model. Journal of Biomechanical Engineering, 2000, 122, 245-251.	1.3	28
116	Directions for Future Research. Journal of Bone and Joint Surgery - Series A, 2006, 88, 110-114.	3.0	28
117	Behavioral Compensations and Neuronal Remodeling in a Rodent Model of Chronic Intervertebral Disc Degeneration. Scientific Reports, 2019, 9, 3759.	3.3	26
118	Immunoengineering the next generation of arthritis therapies. Acta Biomaterialia, 2021, 133, 74-86.	8.3	25
119	The Role of Metabolomics in Osteoarthritis Research. Journal of the American Academy of Orthopaedic Surgeons, The, 2013, 21, 63-64.	2.5	25
120	Cartilage mechanics in the guinea pig model of osteoarthritis studied with an osmotic loading method. Osteoarthritis and Cartilage, 2004, 12, 383-388.	1.3	24
121	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.	2.1	24
122	Gait and behavior in an IL1Î²â€mediated model of rat knee arthritis and effects of an IL1 antagonist. Journal of Orthopaedic Research, 2011, 29, 694-703.	2.3	24
123	Treatment of neuroinflammation by soluble tumor necrosis factor receptor Type II fused to a thermally responsive carrier. Journal of Neurosurgery: Spine, 2008, 9, 221-228.	1.7	22
124	Integrin and syndecan binding peptide-conjugated alginate hydrogel for modulation of nucleus pulposus cell phenotype. Biomaterials, 2021, 277, 121113.	11.4	22
125	Reservoir drugs. Nature Materials, 2008, 7, 172-174.	27.5	21
126	Bioactive in situ crosslinkable polymer-peptide hydrogel for cell delivery to the intervertebral disc in a rat model. Acta Biomaterialia, 2021, 131, 117-127.	8.3	21

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127	Patterning cells in highly deformable microstructures: Effect of plastic deformation of substrate on cellular phenotype and gene expression. Biomaterials, 2006, 27, 1444-1451.	11.4	20
128	Expression of Laminin Isoforms, Receptors, and Binding Proteins Unique to Nucleus Pulposus Cells of Immature Intervertebral Disc. Connective Tissue Research, 2009, 50, 294-306.	2.3	20
129	Multifunctional Thermally Transitioning Oligopeptides Prepared by Ring-Opening Metathesis Polymerization. Biomacromolecules, 2007, 8, 2618-2621.	5.4	19
130	Release and activity of antiâ€TNFÎ± therapeutics from injectable chitosan preparations for local drug delivery. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 319-326.	3.4	18
131	Locomotor activity and gait in aged mice deficient for type IX collagen. Journal of Applied Physiology, 2010, 109, 211-218.	2.5	18
132	Kinematic and dynamic gait compensations in a rat model of lumbar radiculopathy and the effects of tumor necrosis factor-alpha antagonism. Arthritis Research and Therapy, 2011, 13, R137.	3.5	17
133	Molecular characterization of chordoma xenografts generated from a novel primary chordoma cell source and two chordoma cell lines. Journal of Neurosurgery: Spine, 2014, 21, 386-393.	1.7	17
134	NF-Î°B-mediated effects on behavior and cartilage pathology in a non-invasive loading model of post-traumatic osteoarthritis. Osteoarthritis and Cartilage, 2021, 29, 248-256.	1.3	16
135	Lipid profile of human synovial fluid following intra-articular ankle fracture. Journal of Orthopaedic Research, 2017, 35, 657-666.	2.3	13
136	Early Metabolite Levels Predict Long-Term Matrix Accumulation for Chondrocytes in Elastin-like Polypeptide Biopolymer Scaffolds. Tissue Engineering - Part A, 2009, 15, 2113-2121.	3.1	11
137	Changes in Midbrain Pain Receptor Expression, Gait and Behavioral Sensitivity in a Rat Model of Radiculopathy. The Open Orthopaedics Journal, 2012, 6, 383-391.	0.2	11
138	Regeneration and Replacement of the Intervertebral Disc. , 2007, , 877-896.		9
139	Multiphasic models of cell mechanics. , 2001, , 84-102.		8
140	Intervertebral Disc Herniation: Pathophysiology and Emerging Therapies. , 2014, , 305-326.		8
141	Verteporfin treatment controls morphology, phenotype, and global gene expression for cells of the human nucleus pulposus. JOR Spine, 2020, 3, e1111.	3.2	8
142	Development of a library of laminin-mimetic peptide hydrogels for control of nucleus pulposus cell behaviors. Journal of Tissue Engineering, 2021, 12, 204173142110212.	5.5	8
143	Differential expression of galectinâ€1 and its interactions with cells and laminins in the intervertebral disc. Journal of Orthopaedic Research, 2012, 30, 1923-1931.	2.3	7
144	Dysregulated assembly of elastic fibers in fibulin-5 knockout mice results in a tendon-specific increase in elastic modulus. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 113, 104134.	3.1	7

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145	Size-Dependent Effective Diffusivity in Healthy Human and Porcine Joint Synovium. Annals of Biomedical Engineering, 2021, 49, 1245-1256.	2.5	7
146	A multiphasic model for determination of water and solute transport across the arterial wall: effects of elastic fiber defects. Archive of Applied Mechanics, 2022, 92, 447-459.	2.2	6
147	Diffusion tensor microscopy of the intervertebral disc anulus fibrosus. Magnetic Resonance in Medicine, 1999, 41, 992-999.	3.0	6
148	Hydraulic permeability and compressive properties of porcine and human synovium. Biophysical Journal, 2022, 121, 575-581.	0.5	6
149	Amino Acid Profile of Synovial Fluid Following Intra-articular Ankle Fracture. Foot and Ankle International, 2018, 39, 1169-1177.	2.3	5
150	Discussion: â€œOn the Thermodynamical Admissibility of the Triphasic Theory of Charged Hydrated Tissuesâ€•(Huyghe, J. M., Wilson, W., and Malakpoor, K., ASME J. Biomech. Eng., 2009, 131, p. 044504). Journal of Biomechanical Engineering, 2009, 131, 095501.	1.3	4
151	Combined Experimental Approach and Finite Element Modeling of Small Molecule Transport Through Joint Synovium to Measure Effective Diffusivity. Journal of Biomechanical Engineering, 2020, 142, .	1.3	4
152	MECHANOBIOLOGY OF THE INTERVERTEBRAL DISC AND RELEVANCE TO DISC DEGENERATION. Journal of Bone and Joint Surgery - Series A, 2006, 88, 52-57.	3.0	4
153	Functional Tissue Engineering and the Role of Biomechanical Signaling in Articular Cartilage Repair. , 2003, , 277-290.		3
154	Tissue Engineering for Regeneration and Replacement of the Intervertebral Disc. , 2014, , 1223-1251.		3
155	Intervertebral disc cell mechanics and biological responses to load. Current Opinion in Orthopaedics, 2004, 15, 331-340.	0.3	1
156	<i>In Situ</i>Crosslinking Elastin-Like Polypeptide Gels for Application to Articular Cartilage Repair in a Goat Osteochondral Defect Model[*]. Tissue Engineering - Part A, 2008, .	3.1	1
157	Cell Morphology and Migration of Nucleus Pulposus Cells Depends on Substrate Stiffness and Ligand. , 2012, , .		0
158	Getting Your Research Out There: Open Access & More. Annals of Biomedical Engineering, 2012, 40, 2503-2504.	2.5	0
159	Injectable and Photocrosslinkable Laminin Functionalized Biomaterials for Intervertebral Disc Regeneration. , 2012, , .		0
160	Electric Field Stimulation for the Functional Assessment of Isolated Dorsal Root Ganglion Neuron Excitability. Annals of Biomedical Engineering, 2021, 49, 1110-1118.	2.5	0