

# Lori A Setton

## List of Publications by Year in descending order

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160  
papers

13,746  
citations

15466

65  
h-index

23472

111  
g-index

166  
all docs

166  
docs citations

166  
times ranked

10116  
citing authors

#	ARTICLE	IF	CITATIONS
1	Progress in intra-articular therapy. <i>Nature Reviews Rheumatology</i> , 2014, 10, 11-22.	3.5	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. <i>Arthritis and Rheumatism</i> , 2010, 62, 1974-1982.	6.7	329
4	Altered mechanics of cartilage with osteoarthritis: human osteoarthritis and an experimental model of joint degeneration. <i>Osteoarthritis and Cartilage</i> , 1999, 7, 2-14.	0.6	320
5	Applications of elastin-like polypeptides in tissue engineering. <i>Advanced Drug Delivery Reviews</i> , 2010, 62, 1479-1485.	6.6	298
6	Is the Nucleus Pulposus a Solid or a Fluid? Mechanical Behaviors of the Nucleus Pulposus of the Human Intervertebral Disc. <i>Spine</i> , 1996, 21, 1174-1184.	1.0	293
7	Chondrocytic differentiation of human adipose-derived adult stem cells in elastin-like polypeptide. <i>Biomaterials</i> , 2006, 27, 91-99.	5.7	290
8	Degeneration affects the anisotropic and nonlinear behaviors of human annulus fibrosus in compression. <i>Journal of Biomechanics</i> , 1998, 31, 535-544.	0.9	284
9	The Pericellular Matrix as a Transducer of Biomechanical and Biochemical Signals in Articular Cartilage. <i>Annals of the New York Academy of Sciences</i> , 2006, 1068, 498-512.	1.8	280
10	The Role of Biomechanics and Inflammation in Cartilage Injury and Repair. <i>Clinical Orthopaedics and Related Research</i> , 2004, 423, 17-26.	0.7	272
11	Synthesis and in Vitro Evaluation of Enzymatically Cross-Linked Elastin-Like Polypeptide Gels for Cartilaginous Tissue Repair. <i>Tissue Engineering</i> , 2005, 11, 1768-1779.	4.9	267
12	Characterization of a Genetically Engineered Elastin-like Polypeptide for Cartilaginous Tissue Repair. <i>Biomacromolecules</i> , 2002, 3, 910-916.	2.6	262
13	The biphasic poroviscoelastic behavior of articular cartilage: Role of the surface zone in governing the compressive behavior. <i>Journal of Biomechanics</i> , 1993, 26, 581-592.	0.9	257
14	Degeneration and Aging Affect the Tensile Behavior of Human Lumbar Annulus Fibrosus. <i>Spine</i> , 1995, 20, 2690-2701.	1.0	252
15	Swelling and Mechanical Behaviors of Chemically Cross-Linked Hydrogels of Elastin-like Polypeptides. <i>Biomacromolecules</i> , 2003, 4, 572-580.	2.6	250
16	Anisotropic and Inhomogeneous Tensile Behavior of the Human Annulus Fibrosus: Experimental Measurement and Material Model Predictions. <i>Journal of Biomechanical Engineering</i> , 2001, 123, 256-263.	0.6	248
17	Biomaterials for intervertebral disc regeneration and repair. <i>Biomaterials</i> , 2017, 129, 54-67.	5.7	248
18	Tensile Properties of Nondegenerate Human Lumbar Annulus Fibrosus. <i>Spine</i> , 1996, 21, 452-461.	1.0	242

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19	Alterations in the mechanical behavior of the human lumbar nucleus pulposus with degeneration and aging. <i>Journal of Orthopaedic Research</i> , 1997, 15, 318-322.	1.2	230
20	Mechanobiology of the Intervertebral Disc and Relevance to Disc Degeneration. <i>Journal of Bone and Joint Surgery - Series A</i> , 2006, 88, 52-57.	1.4	213
21	Biodendrimer-Based Hydrogel Scaffolds for Cartilage Tissue Repair. <i>Biomacromolecules</i> , 2006, 7, 310-316.	2.6	206
22	Photocrosslinkable Hyaluronan as a Scaffold for Articular Cartilage Repair. <i>Annals of Biomedical Engineering</i> , 2004, 32, 391-397.	1.3	204
23	Compressive Mechanical Properties of the Human Anulus Fibrosus and Their Relationship to Biochemical Composition. <i>Spine</i> , 1994, 19, 212-221.	1.0	192
24	Rapid Cross-Linking of Elastin-like Polypeptides with (Hydroxymethyl)phosphines in Aqueous Solution. <i>Biomacromolecules</i> , 2007, 8, 1463-1470.	2.6	191
25	The viscoelastic behavior of the non-degenerate human lumbar nucleus pulposus in shear. <i>Journal of Biomechanics</i> , 1997, 30, 1005-1013.	0.9	170
26	A thermally responsive biopolymer for intra-articular drug delivery. <i>Journal of Controlled Release</i> , 2006, 115, 175-182.	4.8	169
27	The biomechanical role of the chondrocyte pericellular matrix in articular cartilage. <i>Acta Biomaterialia</i> , 2005, 1, 317-325.	4.1	167
28	Osteoarthritic changes in the biphasic mechanical properties of the chondrocyte pericellular matrix in articular cartilage. <i>Journal of Biomechanics</i> , 2005, 38, 509-517.	0.9	153
29	Diet-induced obesity differentially regulates behavioral, biomechanical, and molecular risk factors for osteoarthritis in mice. <i>Arthritis Research and Therapy</i> , 2010, 12, R130.	1.6	152
30	In Situ Cross-Linking of Elastin-like Polypeptide Block Copolymers for Tissue Repair. <i>Biomacromolecules</i> , 2008, 9, 222-230.	2.6	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. <i>Journal of Biomechanics</i> , 2007, 40, 2596-2603.	0.9	150
32	Introduction. <i>Spine</i> , 2004, 29, 2677-2678.	1.0	140
33	Development and characterization of a fusion protein between thermally responsive elastin-like polypeptide and interleukin-1 receptor antagonist: Sustained release of a local antiinflammatory therapeutic. <i>Arthritis and Rheumatism</i> , 2007, 56, 3650-3661.	6.7	140
34	Cell Mechanics and Mechanobiology in the Intervertebral Disc. <i>Spine</i> , 2004, 29, 2710-2723.	1.0	134
35	Collagen gene expression and mechanical properties of intervertebral disc cell alginate cultures. <i>Journal of Orthopaedic Research</i> , 2001, 19, 2-10.	1.2	133
36	Diffusion tensor microscopy of the intervertebral disc anulus fibrosus. <i>Magnetic Resonance in Medicine</i> , 1999, 41, 992-999.	1.9	123

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37	Experimental and Biphasic FEM Determinations of the Material Properties and Hydraulic Permeability of the Meniscus in Tension. <i>Journal of Biomechanical Engineering</i> , 2002, 124, 315-321.	0.6	120
38	Biomechanical Factors in Tissue Engineered Meniscal Repair. <i>Clinical Orthopaedics and Related Research</i> , 1999, 367, S254-S272.	0.7	119
39	Intervertebral Disc Cells Exhibit Differences in Gene Expression in Alginate and Monolayer Culture. <i>Spine</i> , 2001, 26, 1747-1751.	1.0	116
40	Molecular phenotypes of notochordal cells purified from immature nucleus pulposus. <i>European Spine Journal</i> , 2006, 15, 303-311.	1.0	115
41	Simultaneous changes in the mechanical properties, quantitative collagen organization, and proteoglycan concentration of articular cartilage following canine meniscectomy. <i>Journal of Orthopaedic Research</i> , 2000, 18, 383-392.	1.2	114
42	Fund Black scientists. <i>Cell</i> , 2021, 184, 561-565.	13.5	107
43	Tensile properties of articular cartilage are altered by meniscectomy in a canine model of osteoarthritis. <i>Journal of Orthopaedic Research</i> , 1999, 17, 503-508.	1.2	106
44	Direct Measurement of the Poisson's Ratio of Human Patella Cartilage in Tension. <i>Journal of Biomechanical Engineering</i> , 2002, 124, 223-228.	0.6	102
45	Interleukin-17 synergizes with IFN $\gamma$ or TNF $\alpha$ to promote inflammatory mediator release and intercellular adhesion molecule-1 (ICAM-1) expression in human intervertebral disc cells. <i>Journal of Orthopaedic Research</i> , 2011, 29, 1-7.	1.2	100
46	Ascorbic acid increases the severity of spontaneous knee osteoarthritis in a guinea pig model. <i>Arthritis and Rheumatism</i> , 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. <i>Journal of Biomechanical Engineering</i> , 2003, 125, 1-11.	0.6	97
48	Differential effects of static and dynamic compression on meniscal cell gene expression. <i>Journal of Orthopaedic Research</i> , 2003, 21, 963-969.	1.2	96
49	Injectable laminin-functionalized hydrogel for nucleus pulposus regeneration. <i>Biomaterials</i> , 2013, 34, 7381-7388.	5.7	96
50	Viscoelastic Properties of Intervertebral Disc Cells. <i>Spine</i> , 1999, 24, 2475.	1.0	95
51	Matrix protein gene expression in intervertebral disc cells subjected to altered osmolarity. <i>Biochemical and Biophysical Research Communications</i> , 2002, 293, 932-938.	1.0	95
52	Zonal Uniformity in Mechanical Properties of the Chondrocyte Pericellular Matrix: Micropipette Aspiration of Canine Chondrons Isolated by Cartilage Homogenization. <i>Annals of Biomedical Engineering</i> , 2005, 33, 1312-1318.	1.3	94
53	<i>In Situ</i> Crosslinking Elastin-Like Polypeptide Gels for Application to Articular Cartilage Repair in a Goat Osteochondral Defect Model. <i>Tissue Engineering - Part A</i> , 2008, 14, 1133-1140.	1.6	91
54	Extracellular Matrix Ligand and Stiffness Modulate Immature Nucleus Pulposus Cell-Cell Interactions. <i>PLoS ONE</i> , 2011, 6, e27170.	1.1	91

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55	Mechanotransduction and cell biomechanics of the intervertebral disc. <i>JOR Spine</i> , 2018, 1, e1026.	1.5	91
56	Mechanical behavior and biochemical composition of canine knee cartilage following periods of joint disuse and disuse with remobilization. <i>Osteoarthritis and Cartilage</i> , 1997, 5, 1-16.	0.6	88
57	Static compression induces zonal-specific changes in gene expression for extracellular matrix and cytoskeletal proteins in intervertebral disc cells in vitro. <i>Matrix Biology</i> , 2004, 22, 573-583.	1.5	78
58	Compressive Properties of Mouse Articular Cartilage Determined in a Novel Micro-Indentation Test Method and Biphasic Finite Element Model. <i>Journal of Biomechanical Engineering</i> , 2006, 128, 766-771.	0.6	78
59	Inflammatory Cytokines and Matrix Metalloproteinases in the Synovial Fluid After Intra-articular Ankle Fracture. <i>Foot and Ankle International</i> , 2015, 36, 1264-1271.	1.1	76
60	Photocrosslinkable laminin-functionalized polyethylene glycol hydrogel for intervertebral disc regeneration. <i>Acta Biomaterialia</i> , 2014, 10, 1102-1111.	4.1	75
61	Chondropathy after meniscal tear or partial meniscectomy in a canine model. <i>Journal of Orthopaedic Research</i> , 2002, 20, 996-1002.	1.2	74
62	Integrin expression in cells of the intervertebral disc. <i>Journal of Anatomy</i> , 2004, 204, 515-520.	0.9	74
63	Functional integrin subunits regulating cell-matrix interactions in the intervertebral disc. <i>Journal of Orthopaedic Research</i> , 2007, 25, 829-840.	1.2	73
64	The Role Of Extracellular Matrix Elasticity and Composition In Regulating the Nucleus Pulposus Cell Phenotype in the Intervertebral Disc: A Narrative Review. <i>Journal of Biomechanical Engineering</i> , 2014, 136, 021010.	0.6	72
65	Expression of Laminin Isoforms, Receptors, and Binding Proteins Unique to Nucleus Pulposus Cells of Immature Intervertebral Disc. <i>Connective Tissue Research</i> , 2009, 50, 294-306.	1.1	70
66	Differentiation of human induced pluripotent stem cells into nucleus pulposus-like cells. <i>Stem Cell Research and Therapy</i> , 2018, 9, 61.	2.4	70
67	Compressive properties of the cartilaginous end-plate of the baboon lumbar spine. <i>Journal of Orthopaedic Research</i> , 1993, 11, 228-239.	1.2	69
68	Fusion order controls expression level and activity of elastin-like polypeptide fusion proteins. <i>Protein Science</i> , 2009, 18, 1377-1387.	3.1	69
69	<sup />CRISPR-Based Epigenome Editing of Cytokine Receptors for the Promotion of Cell Survival and Tissue Deposition in Inflammatory Environments. <i>Tissue Engineering - Part A</i> , 2017, 23, 738-749.	1.6	68
70	Kinematic and dynamic gait compensations resulting from knee instability in a rat model of osteoarthritis. <i>Arthritis Research and Therapy</i> , 2012, 14, R78.	1.6	67
71	Region-specific constitutive gene expression in the adult porcine meniscus. <i>Journal of Orthopaedic Research</i> , 2006, 24, 1562-1570.	1.2	63
72	Decreased physical function and increased pain sensitivity in mice deficient for type IX collagen. <i>Arthritis and Rheumatism</i> , 2009, 60, 2684-2693.	6.7	63

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73	Early-onset degeneration of the intervertebral disc and vertebral end plate in mice deficient in type IX collagen. <i>Arthritis and Rheumatism</i> , 2008, 58, 164-171.	6.7	60
74	A Linear Material Model for Fiber-Induced Anisotropy of the Anulus Fibrosus. <i>Journal of Biomechanical Engineering</i> , 2000, 122, 173-179.	0.6	56
75	Transfer of Macroscale Tissue Strain to Microscale Cell Regions in the Deformed Meniscus. <i>Biophysical Journal</i> , 2008, 95, 2116-2124.	0.2	56
76	Gait Abnormalities and Inflammatory Cytokines in an Autologous Nucleus Pulposus Model of Radiculopathy. <i>Spine</i> , 2009, 34, 648-654.	1.0	56
77	Mechanosensitive transcriptional coactivators MRTF and YAP/TAZ regulate nucleus pulposus cell phenotype through cell shape. <i>FASEB Journal</i> , 2019, 33, 14022-14035.	0.2	56
78	Evaluating Intra-Articular Drug Delivery for the Treatment of Osteoarthritis in a Rat Model. <i>Tissue Engineering - Part B: Reviews</i> , 2010, 16, 81-92.	2.5	54
79	Identifying molecular phenotype of nucleus pulposus cells in human intervertebral disc with aging and degeneration. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1316-1326.	1.2	54
80	Synthesis and characterization of a thermally-responsive tumor necrosis factor antagonist. <i>Journal of Controlled Release</i> , 2008, 129, 179-186.	4.8	52
81	Differentiation of Mouse Induced Pluripotent Stem Cells (iPSCs) into Nucleus Pulposus-Like Cells In Vitro. <i>PLoS ONE</i> , 2013, 8, e75548.	1.1	52
82	Expression of laminin isoforms, receptors, and binding proteins unique to nucleus pulposus cells of immature intervertebral disc. <i>Connective Tissue Research</i> , 2009, 50, 294-306.	1.1	52
83	Osmolarity Regulates Gene Expression in Intervertebral Disc Cells Determined by Gene Array and Real-Time Quantitative RT-PCR. <i>Annals of Biomedical Engineering</i> , 2005, 33, 1071-1077.	1.3	51
84	Epitope tagging for tracking elastin-like polypeptides. <i>Biomaterials</i> , 2006, 27, 1930-1935.	5.7	51
85	In Vivo Luminescence Imaging of NF- $\kappa$ B Activity and Serum Cytokine Levels Predict Pain Sensitivities in a Rodent Model of Osteoarthritis. <i>Arthritis and Rheumatology</i> , 2014, 66, 637-646.	2.9	51
86	Centrifugal and biochemical comparison of proteoglycan aggregates from articular cartilage in experimental joint disuse and joint instability. <i>Journal of Orthopaedic Research</i> , 1994, 12, 498-508.	1.2	50
87	An Injectable and In Situ-Gelling Biopolymer for Sustained Drug Release Following Perineural Administration. <i>Spine</i> , 2008, 33, 748-754.	1.0	50
88	Measurement of intracellular strain on deformable substrates with texture correlation. <i>Journal of Biomechanics</i> , 2007, 40, 786-794.	0.9	49
89	A Noncontacting Method for Material Property Determination for Articular Cartilage from Osmotic Loading. <i>Biophysical Journal</i> , 2001, 81, 3066-3076.	0.2	48
90	High-Resolution Determination of Soft Tissue Deformations Using MRI and First-Order Texture Correlation. <i>IEEE Transactions on Medical Imaging</i> , 2004, 23, 546-553.	5.4	48

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91	Attenuation of Inflammatory Events in Human Intervertebral Disc Cells With a Tumor Necrosis Factor Antagonist. <i>Spine</i> , 2011, 36, 1190-1196.	1.0	48
92	A genetically engineered thermally responsive sustained release curcumin depot to treat neuroinflammation. <i>Journal of Controlled Release</i> , 2013, 171, 38-47.	4.8	46
93	N-cadherin is Key to Expression of the Nucleus Pulposus Cell Phenotype under Selective Substrate Culture Conditions. <i>Scientific Reports</i> , 2016, 6, 28038.	1.6	46
94	Synthesis and characterization of silk fibroin microparticles for intra-articular drug delivery. <i>International Journal of Pharmaceutics</i> , 2015, 485, 7-14.	2.6	45
95	Altered swelling behavior of femoral cartilage following joint immobilization in a canine model. <i>Journal of Orthopaedic Research</i> , 2002, 20, 83-91.	1.2	43
96	Finite Element Modeling Predictions of Region-specific Cell-matrix Mechanics in the Meniscus. <i>Biomechanics and Modeling in Mechanobiology</i> , 2006, 5, 140-149.	1.4	43
97	Advances in combining gene therapy with cell and tissue engineering-based approaches to enhance healing of the meniscus. <i>Osteoarthritis and Cartilage</i> , 2016, 24, 1330-1339.	0.6	42
98	Sustained release of antibiotics from injectable and thermally responsive polypeptide depots. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 90B, 67-74.	1.6	41
99	Neural Network Analysis Identifies Scaffold Properties Necessary for <i>In Vitro</i> Chondrogenesis in Elastin-like Polypeptide Biopolymer Scaffolds. <i>Tissue Engineering - Part A</i> , 2010, 16, 11-20.	1.6	41
100	Screening of hyaluronic acid-poly(ethylene glycol) composite hydrogels to support intervertebral disc cell biosynthesis using artificial neural network analysis. <i>Acta Biomaterialia</i> , 2014, 10, 3421-3430.	4.1	40
101	Inflammatory Microenvironment Persists After Bone Healing in Intra-articular Ankle Fractures. <i>Foot and Ankle International</i> , 2017, 38, 479-484.	1.1	39
102	Intra-articular clearance of labeled dextrans from naive and arthritic rat knee joints. <i>Journal of Controlled Release</i> , 2018, 283, 76-83.	4.8	39
103	Joint degeneration following meniscal allograft transplantation in a canine model: mechanical properties and semiquantitative histology of articular cartilage. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2002, 10, 109-118.	2.3	38
104	A Mechano-chemical Model for the Passive Swelling Response of an Isolated Chondron under Osmotic Loading. <i>Biomechanics and Modeling in Mechanobiology</i> , 2006, 5, 160-171.	1.4	38
105	Core Competencies for Undergraduates in Bioengineering and Biomedical Engineering: Findings, Consequences, and Recommendations. <i>Annals of Biomedical Engineering</i> , 2020, 48, 905-912.	1.3	37
106	Biaxial Strain Effects on Cells from the Inner and Outer Regions of the Meniscus. <i>Connective Tissue Research</i> , 2006, 47, 207-214.	1.1	36
107	Regulation of human nucleus pulposus cells by peptide-coupled substrates. <i>Acta Biomaterialia</i> , 2017, 55, 100-108.	4.1	36
108	Conditioned Medium Differentially Regulates Matrix Protein Gene Expression in Cells of the Intervertebral Disc. <i>Spine</i> , 2004, 29, 2217-2222.	1.0	34

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109	Three-dimensional morphology of the pericellular matrix of intervertebral disc cells in the rat. <i>Journal of Anatomy</i> , 2007, 211, 444-452.	0.9	32
110	N-Cadherin-Mediated Signaling Regulates Cell Phenotype for Nucleus Pulposus Cells of the Intervertebral Disc. <i>Cellular and Molecular Bioengineering</i> , 2015, 8, 51-62.	1.0	32
111	Osmotic loading to determine the intrinsic material properties of guinea pig knee cartilage. <i>Journal of Biomechanics</i> , 2002, 35, 1285-1290.	0.9	31
112	Human umbilical cord mesenchymal stromal cells exhibit immature nucleus pulposus cell phenotype in a laminin-rich pseudo-three-dimensional culture system. <i>Stem Cell Research and Therapy</i> , 2013, 4, 120.	2.4	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. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 1-10.	1.4	29
114	Control of adhesive ligand density for modulation of nucleus pulposus cell phenotype. <i>Biomaterials</i> , 2020, 250, 120057.	5.7	29
115	The Micromechanical Environment of Intervertebral Disc Cells: Effect of Matrix Anisotropy and Cell Geometry Predicted by a Linear Model. <i>Journal of Biomechanical Engineering</i> , 2000, 122, 245-251.	0.6	28
116	Directions for Future Research. <i>Journal of Bone and Joint Surgery - Series A</i> , 2006, 88, 110-114.	1.4	28
117	Behavioral Compensations and Neuronal Remodeling in a Rodent Model of Chronic Intervertebral Disc Degeneration. <i>Scientific Reports</i> , 2019, 9, 3759.	1.6	26
118	Immunoengineering the next generation of arthritis therapies. <i>Acta Biomaterialia</i> , 2021, 133, 74-86.	4.1	25
119	The Role of Metabolomics in Osteoarthritis Research. <i>Journal of the American Academy of Orthopaedic Surgeons</i> , The, 2013, 21, 63-64.	1.1	25
120	Cartilage mechanics in the guinea pig model of osteoarthritis studied with an osmotic loading method. <i>Osteoarthritis and Cartilage</i> , 2004, 12, 383-388.	0.6	24
121	Pericellular Matrix Mechanics in the Anulus Fibrosus Predicted by a Three-Dimensional Finite Element Model and In Situ Morphology. <i>Cellular and Molecular Bioengineering</i> , 2009, 2, 306-319.	1.0	24
122	Gait and behavior in an IL1 $\alpha$ -mediated model of rat knee arthritis and effects of an IL1 antagonist. <i>Journal of Orthopaedic Research</i> , 2011, 29, 694-703.	1.2	24
123	Treatment of neuroinflammation by soluble tumor necrosis factor receptor Type II fused to a thermally responsive carrier. <i>Journal of Neurosurgery: Spine</i> , 2008, 9, 221-228.	0.9	22
124	Integrin and syndecan binding peptide-conjugated alginate hydrogel for modulation of nucleus pulposus cell phenotype. <i>Biomaterials</i> , 2021, 277, 121113.	5.7	22
125	Reservoir drugs. <i>Nature Materials</i> , 2008, 7, 172-174.	13.3	21
126	Bioactive in situ crosslinkable polymer-peptide hydrogel for cell delivery to the intervertebral disc in a rat model. <i>Acta Biomaterialia</i> , 2021, 131, 117-127.	4.1	21



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127	Patterning cells in highly deformable microstructures: Effect of plastic deformation of substrate on cellular phenotype and gene expression. <i>Biomaterials</i> , 2006, 27, 1444-1451.	5.7	20
128	Expression of Laminin Isoforms, Receptors, and Binding Proteins Unique to Nucleus Pulposus Cells of Immature Intervertebral Disc. <i>Connective Tissue Research</i> , 2009, 50, 294-306.	1.1	20
129	Multifunctional Thermally Transitioning Oligopeptides Prepared by Ring-Opening Metathesis Polymerization. <i>Biomacromolecules</i> , 2007, 8, 2618-2621.	2.6	19
130	Release and activity of anti- $\text{TNF}\alpha$ therapeutics from injectable chitosan preparations for local drug delivery. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 90B, 319-326.	1.6	18
131	Locomotor activity and gait in aged mice deficient for type IX collagen. <i>Journal of Applied Physiology</i> , 2010, 109, 211-218.	1.2	18
132	Kinematic and dynamic gait compensations in a rat model of lumbar radiculopathy and the effects of tumor necrosis factor-alpha antagonism. <i>Arthritis Research and Therapy</i> , 2011, 13, R137.	1.6	17
133	Molecular characterization of chordoma xenografts generated from a novel primary chordoma cell source and two chordoma cell lines. <i>Journal of Neurosurgery: Spine</i> , 2014, 21, 386-393.	0.9	17
134	NF- $\kappa$ B-mediated effects on behavior and cartilage pathology in a non-invasive loading model of post-traumatic osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2021, 29, 248-256.	0.6	16
135	Lipid profile of human synovial fluid following intra-articular ankle fracture. <i>Journal of Orthopaedic Research</i> , 2017, 35, 657-666.	1.2	13
136	Early Metabolite Levels Predict Long-Term Matrix Accumulation for Chondrocytes in Elastin-like Polypeptide Biopolymer Scaffolds. <i>Tissue Engineering - Part A</i> , 2009, 15, 2113-2121.	1.6	11
137	Changes in Midbrain Pain Receptor Expression, Gait and Behavioral Sensitivity in a Rat Model of Radiculopathy. <i>The Open Orthopaedics Journal</i> , 2012, 6, 383-391.	0.1	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. <i>JOR Spine</i> , 2020, 3, e1111.	1.5	8
142	Development of a library of laminin-mimetic peptide hydrogels for control of nucleus pulposus cell behaviors. <i>Journal of Tissue Engineering</i> , 2021, 12, 204173142110212.	2.3	8
143	Differential expression of galectin-1 and its interactions with cells and laminins in the intervertebral disc. <i>Journal of Orthopaedic Research</i> , 2012, 30, 1923-1931.	1.2	7
144	Dysregulated assembly of elastic fibers in fibulin-5 knockout mice results in a tendon-specific increase in elastic modulus. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 113, 104134.	1.5	7

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145	Size-Dependent Effective Diffusivity in Healthy Human and Porcine Joint Synovium. <i>Annals of Biomedical Engineering</i> , 2021, 49, 1245-1256.	1.3	7
146	A multiphasic model for determination of water and solute transport across the arterial wall: effects of elastic fiber defects. <i>Archive of Applied Mechanics</i> , 2022, 92, 447-459.	1.2	6
147	Diffusion tensor microscopy of the intervertebral disc anulus fibrosus. , 1999, 41, 992.		6
148	Hydraulic permeability and compressive properties of porcine and human synovium. <i>Biophysical Journal</i> , 2022, 121, 575-581.	0.2	6
149	Amino Acid Profile of Synovial Fluid Following Intra-articular Ankle Fracture. <i>Foot and Ankle International</i> , 2018, 39, 1169-1177.	1.1	5
150	Discussion: "On the Thermodynamical Admissibility of the Triphasic Theory of Charged Hydrated Tissues" (Huyghe, J. M., Wilson, W., and Malakpoor, K., <i>ASME J. Biomech. Eng.</i> , 2009, 131, p. 044504). <i>Journal of Biomechanical Engineering</i> , 2009, 131, 095501.	0.6	4
151	Combined Experimental Approach and Finite Element Modeling of Small Molecule Transport Through Joint Synovium to Measure Effective Diffusivity. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	0.6	4
152	MECHANOBIOLOGY OF THE INTERVERTEBRAL DISC AND RELEVANCE TO DISC DEGENERATION. <i>Journal of Bone and Joint Surgery - Series A</i> , 2006, 88, 52-57.	1.4	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. <i>Current Opinion in Orthopaedics</i> , 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 <sup>*</sup> . <i>Tissue Engineering - Part A</i> , 2008, .	1.6	1
157	Cell Morphology and Migration of Nucleus Pulposus Cells Depends on Substrate Stiffness and Ligand. , 2012, , .		0
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160	Electric Field Stimulation for the Functional Assessment of Isolated Dorsal Root Ganglion Neuron Excitability. <i>Annals of Biomedical Engineering</i> , 2021, 49, 1110-1118.	1.3	0