Keita Ito

List of Publications by Year
in descending order

257 papers	13,192 citations	34493 54 h-index	34195 103 g-index
268 all docs	268 docs citations	268 times ranked	10960 citing authors

#	Article	IF	Citations
1	A bovine nucleus pulposus explant culture model. Journal of Orthopaedic Research, 2022, 40, 2089-2102.	1.2	7
2	Local variations in mechanical properties of human hamstring tendon autografts for anterior cruciate ligament reconstruction do not translate to a mechanically inferior strand. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 126, 105010.	1.5	3
3	Evaluating Initial Integration of Cell-Based Chondrogenic Constructs in Human Osteochondral Explants. Tissue Engineering - Part C: Methods, 2022, 28, 34-44.	1.1	5
4	Surface texture analysis of different focal knee resurfacing implants after 6 and 12 months in vivo in a goat model. Journal of Orthopaedic Research, 2022, , .	1.2	4
5	Comment on Grivas et al. Morphology, Development and Deformation of the Spine in Mild and Moderate Scoliosis: Are Changes in the Spine Primary or Secondary? J. Clin. Med. 2021, 10, 5901. Journal of Clinical Medicine, 2022, 11, 1160.	1.0	1
6	Injectable Hydrogels for Articular Cartilage and Nucleus Pulposus Repair: Status Quo and Prospects. Tissue Engineering - Part A, 2022, 28, 478-499.	1.6	13
7	Alkaline Phosphatase Activity of Serum Affects Osteogenic Differentiation Cultures. ACS Omega, 2022, 7, 12724-12733.	1.6	37
8	Ultrasound Shear Wave Elastography of the Intervertebral Disc and Idiopathic Scoliosis: A Systematic Review. Ultrasound in Medicine and Biology, 2022, 48, 721-729.	0.7	7
9	Viscoelastic Chondroitin Sulfate and Hyaluronic Acid Double-Network Hydrogels with Reversible Cross-Links. Biomacromolecules, 2022, 23, 1350-1365.	2.6	29
10	Exploration of Contributory Factors to an Unpleasant Bracing Experience of Adolescent Idiopathic Scoliosis Patients a Quantitative and Qualitative Research. Children, 2022, 9, 635.	0.6	2
11	The Spring Distraction System for Growth-Friendly Surgical Treatment of Early Onset Scoliosis: A Preliminary Report on Clinical Results and Safety after Design Iterations in a Prospective Clinical Trial. Journal of Clinical Medicine, 2022, 11, 3747.	1.0	5
12	The Relationship Between Proteoglycan Loss, Overloading-Induced Collagen Damage, and Cyclic Loading in Articular Cartilage. Cartilage, 2021, 13, 1501S-1512S.	1.4	12
13	An ex vivo human osteochondral culture model. Journal of Orthopaedic Research, 2021, 39, 871-879.	1.2	14
14	Misaligned spinal rods can induce high internal forces consistent with those observed to cause screw pullout and disc degeneration. Spine Journal, 2021, 21, 528-537.	0.6	14
15	Can sodium MRI be used as a method for mapping of cartilage stiffness?. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2021, 34, 327-336.	1.1	4
16	Quality of life of adolescent idiopathic scoliosis patients under brace treatment: a brief communication of literature review. Quality of Life Research, 2021, 30, 703-711.	1.5	27
17	Cell Sources for Human In vitro Bone Models. Current Osteoporosis Reports, 2021, 19, 88-100.	1.5	14
18	Hyaluronic acid and chondroitin sulfate (meth)acrylate-based hydrogels for tissue engineering: Synthesis, characteristics and pre-clinical evaluation. Biomaterials, 2021, 268, 120602.	5.7	104

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19	Hydrogel-Based Bioinks for Cell Electrowriting of Well-Organized Living Structures with Micrometer-Scale Resolution. Biomacromolecules, 2021, 22, 855-866.	2.6	54
20	Matrix Vesicles: Role in Bone Mineralization and Potential Use as Therapeutics. Pharmaceuticals, 2021, 14, 289.	1.7	44
21	An Organoid for Woven Bone. Advanced Functional Materials, 2021, 31, 2010524.	7.8	65
22	Validation of a finite element model of the thoracolumbar spine to study instrumentation level variations in early onset scoliosis correction. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 117, 104360.	1.5	6
23	A comprehensive tool box for large animal studies of intervertebral disc degeneration. JOR Spine, 2021, 4, e1162.	1.5	19
24	Proteoglycan 4 reduces friction more than other synovial fluid components for both cartilage-cartilage and cartilage-metal articulation. Osteoarthritis and Cartilage, 2021, 29, 894-904.	0.6	8
25	Spectroscopic photoacoustic imaging of cartilage damage. Osteoarthritis and Cartilage, 2021, 29, 1071-1080.	0.6	12
26	De novo neo-hyaline-cartilage from bovine organoids in viscoelastic hydrogels. Acta Biomaterialia, 2021, 128, 236-249.	4.1	26
27	Porous Geometry Guided Micro-mechanical Environment Within Scaffolds for Cell Mechanobiology Study in Bone Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2021, 9, 736489.	2.0	15
28	Ex vivo Bone Models and Their Potential in Preclinical Evaluation. Current Osteoporosis Reports, 2021, 19, 75-87.	1.5	21
29	Solidâ€phase silicaâ€based extraction leads to underestimation of residual DNA in decellularized tissues. Xenotransplantation, 2021, 28, e12643.	1.6	9
30	Osteoblast-osteoclast co-cultures: A systematic review and map of available literature. PLoS ONE, 2021, 16, e0257724.	1.1	25
31	Patient-Specific Variations in Local Strain Patterns on the Surface of a Trussed Titanium Interbody Cage. Frontiers in Bioengineering and Biotechnology, 2021, 9, 750246.	2.0	3
32	Ultrasound-Based Quantification of Cartilage Damage After <i>In Vivo</i> Articulation With Metal Implants. Cartilage, 2021, 13, 1540S-1550S.	1.4	5
33	Notochordal Cell-Based Treatment Strategies and Their Potential in Intervertebral Disc Regeneration. Frontiers in Cell and Developmental Biology, 2021, 9, 780749.	1.8	21
34	Characterization of biomaterials intended for use in the nucleus pulposus of degenerated intervertebral discs. Acta Biomaterialia, 2020, 114, 1-15.	4.1	35
35	Impact of Culture Medium on Cellular Interactions in in vitro Co-culture Systems. Frontiers in Bioengineering and Biotechnology, 2020, 8, 911.	2.0	91
36	Viscoelastic cervical total disc replacement devices: Design concepts. Spine Journal, 2020, 20, 1911-1924.	0.6	19

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37	Comparison of annulus fibrosus cell collagen remodeling rates in a microtissue system. Journal of Orthopaedic Research, 2020, 39, 1955-1964.	1.2	1
38	T2* mapping in an equine articular groove model: Visualizing changes in collagen orientation. Journal of Orthopaedic Research, 2020, 38, 2383-2389.	1.2	6
39	Serum deprivation limits loss and promotes recovery of tenogenic phenotype in tendon cell culture systems. Journal of Orthopaedic Research, 2020, 39, 1561-1571.	1.2	17
40	The performance of resurfacing implants for focal cartilage defects depends on the degenerative condition of the opposing cartilage. Clinical Biomechanics, 2020, 79, 105052.	0.5	6
41	Accuracy of beam theory for estimating bone tissue modulus and yield stress from 3-point bending tests on rat femora. Journal of Biomechanics, 2020, 101, 109654.	0.9	6
42	Orbital seeding of mesenchymal stromal cells increases osteogenic differentiation and boneâ€like tissue formation. Journal of Orthopaedic Research, 2020, 38, 1228-1237.	1.2	24
43	Changes in scaffold porosity during bone tissue engineering in perfusion bioreactors considerably affect cellular mechanical stimulation for mineralization. Bone Reports, 2020, 12, 100265.	0.2	22
44	Fluid flowâ€induced cell stimulation in bone tissue engineering changes due to interstitial tissue formation in vitro. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3342.	1.0	17
45	A Novel HR-pQCT Image Registration Approach Reveals Sex-Specific Changes in Cortical Bone Retraction With Aging. Journal of Bone and Mineral Research, 2020, 36, 1351-1363.	3.1	5
46	Multitechnology Biofabrication: A New Approach for the Manufacturing of Functional Tissue Structures?. Trends in Biotechnology, 2020, 38, 1316-1328.	4.9	68
47	Identifying potential patient-specific predictors for anterior cruciate ligament reconstruction outcome â€" a diagnostic in vitro tissue remodeling platform. Journal of Experimental Orthopaedics, 2020, 7, 48.	0.8	2
48	Usefulness of lead delivery catheter system for true right ventricular septal pacing. European Heart Journal, 2020, 41, .	1.0	0
49	Notochordal Cell Matrix As a Therapeutic Agent for Intervertebral Disc Regeneration. Tissue Engineering - Part A, 2019, 25, 830-841.	1.6	22
50	Development of a novel murine delayed secondary fracture healing in vivo model using periosteal cauterization. Archives of Orthopaedic and Trauma Surgery, 2019, 139, 1743-1753.	1.3	5
51	Resorption of the calcium phosphate layer on S53P4 bioactive glass by osteoclasts. Journal of Materials Science: Materials in Medicine, 2019, 30, 94.	1.7	11
52	Uncompromised MRI of knee cartilage while incorporating sensitive sodium MRI. NMR in Biomedicine, 2019, 32, e4173.	1.6	8
53	The Implantation of Bioactive Glass Granules Can Contribute the Load-Bearing Capacity of Bones Weakened by Large Cortical Defects. Materials, 2019, 12, 3481.	1.3	2
54	Bi-layered micro-fibre reinforced hydrogels for articular cartilage regeneration. Acta Biomaterialia, 2019, 95, 297-306.	4.1	89

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55	From bone regeneration to three-dimensional inÂvitro models: tissue engineering of organized bone extracellular matrix. Current Opinion in Biomedical Engineering, 2019, 10, 107-115.	1.8	50
56	A multiscale computational fluid dynamics approach to simulate the micro-fluidic environment within a tissue engineering scaffold with highly irregular pore geometry. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1965-1977.	1.4	33
57	Validation of distal radius failure load predictions by homogenized- and micro-finite element analyses based on second-generation high-resolution peripheral quantitative CT images. Osteoporosis International, 2019, 30, 1433-1443.	1.3	27
58	Hypotonicity differentially affects inflammatory marker production by nucleus pulposus tissue in simulated disc degeneration versus herniation. Journal of Orthopaedic Research, 2019, 37, 1110-1116.	1.2	4
59	P463Engineering myocardial tissue in vitro using stretchable microfiber scaffolds and human iPSC-derived cardiomyocytes. Cardiovascular Research, 2018, 114, S112-S112.	1.8	1
60	Mechanical behavior of a soft hydrogel reinforced with three-dimensional printed microfibre scaffolds. Scientific Reports, 2018, 8, 1245.	1.6	116
61	Collagen Damage Location in Articular Cartilage Differs if Damage is Caused by Excessive Loading Magnitude or Rate. Annals of Biomedical Engineering, 2018, 46, 605-615.	1.3	26
62	Biologic canine and human intervertebral disc repair by notochordal cell-derived matrix: from bench towards bedside. Oncotarget, 2018, 9, 26507-26526.	0.8	36
63	Localisation of mineralised tissue in a complex spinner flask environment correlates with predicted wall shear stress level localisation. , 2018, 36, 57-68.		44
64	Quantifying joint stiffness in clubfoot patients. Clinical Biomechanics, 2018, 60, 185-190.	0.5	5
65	Comparison of patient-specific computational models vs. clinical follow-up, for adjacent segment disc degeneration and bone remodelling after spinal fusion. PLoS ONE, 2018, 13, e0200899.	1.1	32
66	Comparison between in vitro and in vivo cartilage overloading studies based on a systematic literature review. Journal of Orthopaedic Research, 2018, 36, 2076-2086.	1.2	17
67	Osteochondral resurfacing implantation angle is more important than implant material stiffness. Journal of Orthopaedic Research, 2018, 36, 2911-2922.	1.2	12
68	Notochordal cell matrix: An inhibitor of neurite and blood vessel growth?. Journal of Orthopaedic Research, 2018, 36, 3188-3195.	1.2	8
69	Melt Electrowriting Allows Tailored Microstructural and Mechanical Design of Scaffolds to Advance Functional Human Myocardial Tissue Formation. Advanced Functional Materials, 2018, 28, 1803151.	7.8	125
70	Leaping the hurdles in developing regenerative treatments for the intervertebral disc from preclinical to clinical. JOR Spine, 2018, 1, e1027.	1.5	40
71	Flow rates in perfusion bioreactors to maximise mineralisation in bone tissue engineering in vitro. Journal of Biomechanics, 2018, 79, 232-237.	0.9	62
72	Notochordal cell matrix as a bioactive lubricant for the osteoarthritic joint. Scientific Reports, 2018, 8, 8875.	1.6	11

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73	The Regenerative Potential of Notochordal Cells in a Nucleus Pulposus Explant. Global Spine Journal, 2017, 7, 14-20.	1.2	10
74	Osteogenic protein 1 does not stimulate a regenerative effect in cultured human degenerated nucleus pulposus tissue. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 2127-2135.	1.3	11
75	Composition dependent mechanical behaviour of S53P4 bioactive glass putty for bone defect grafting. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 301-306.	1.5	11
76	The effect of loading rate on the development of early damage in articular cartilage. Biomechanics and Modeling in Mechanobiology, 2017, 16, 263-273.	1.4	26
77	The critical size of focal articular cartilage defects is associated with strains in the collagen fibers. Clinical Biomechanics, 2017, 50, 40-46.	0.5	21
78	Tissue Engineering: Melt Electrospinning Writing of Polyâ€Hydroxymethylglycolideâ€<i>co</i>â€Îµâ€Caprolactoneâ€Based Scaffolds for Cardiac Tissue Engineering (Adv. Healthcare Mater. 18/2017). Advanced Healthcare Materials, 2017, 6, .	3.9	1
79	Melt Electrospinning Writing of Polyâ€Hydroxymethylglycolideâ€<i>co</i>â€Îµâ€Caprolactoneâ€Based Scaffolds for Cardiac Tissue Engineering. Advanced Healthcare Materials, 2017, 6, 1700311.	3.9	144
80	Bone Morphogenetic Protein-2, But Not Mesenchymal Stromal Cells, Exert Regenerative Effects on Canine and Human Nucleus Pulposus Cells. Tissue Engineering - Part A, 2017, 23, 233-242.	1.6	16
81	The initial repair response of articular cartilage after mechanically induced damage. Journal of Orthopaedic Research, 2017, 35, 1265-1273.	1.2	12
82	Moderately degenerated lumbar motion segments: Are they truly unstable?. Biomechanics and Modeling in Mechanobiology, 2017, 16, 537-547.	1.4	8
83	Relative contribution of articular cartilageâ€™s constitutive components to load support depending on strain rate. Biomechanics and Modeling in Mechanobiology, 2017, 16, 151-158.	1.4	46
84	Link-N: The missing link towards intervertebral disc repair is species-specific. PLoS ONE, 2017, 12, e0187831.	1.1	15
85	Notochordal-cell derived extracellular vesicles exert regenerative effects on canine and human nucleus pulposus cells. Oncotarget, 2017, 8, 88845-88856.	0.8	27
86	An Inflammatory Nucleus Pulposus Tissue Culture Model to Test Molecular Regenerative Therapies: Validation with Epigallocatechin 3-Gallate. International Journal of Molecular Sciences, 2016, 17, 1640.	1.8	23
87	Pyoderma Gangrenosum Associated with Acute Respiratory Distress Syndrome. American Journal of Medicine, 2016, 129, e17-e18.	0.6	2
88	Micro-Finite Element analysis will overestimate the compressive stiffness of fractured cancellous bone. Journal of Biomechanics, 2016, 49, 2613-2618.	0.9	10
89	Moderately Degenerated Human Intervertebral Disks Exhibit a Less Geometrically Specific Collagen Fiber Orientation Distribution. Global Spine Journal, 2016, 6, 439-446.	1.2	8
90	Simulating the sensitivity of cell nutritive environment to composition changes within the intervertebral disc. Journal of the Mechanics and Physics of Solids, 2016, 90, 108-123.	2.3	11

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91	Increased caveolin-1 in intervertebral disc degeneration facilitates repair. Arthritis Research and Therapy, 2016, 18, 59.	1.6	19
92	Micro-aggregates do not influence bone marrow stromal cell chondrogenesis. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, 1021-1032.	1.3	5
93	The Stimulatory Effect of Notochordal Cell-Conditioned Medium in a Nucleus Pulposus Explant Culture. Tissue Engineering - Part A, 2016, 22, 103-110.	1.6	24
94	A computational spinal motion segment model incorporating a matrix composition-based model of the intervertebral disc. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 54, 194-204.	1.5	30
95	Deficiency of inducible and endothelial nitric oxide synthase results in diminished bone formation and delayed union and nonunion development. Bone, 2016, 83, 111-118.	1.4	27
96	A Well-Controlled Nucleus Pulposus Tissue Culture System with Injection Port for Evaluating Regenerative Therapies. Annals of Biomedical Engineering, 2016, 44, 1798-1807.	1.3	6
97	Silk fibroin as biomaterial for bone tissue engineering. Acta Biomaterialia, 2016, 31, 1-16.	4.1	608
98	Soluble and pelletable factors in porcine, canine and human notochordal cell-conditioned medium: implications for IVD regeneration. , 2016, 32, 163-180.		29
99	Reduced tonicity stimulates an inflammatory response in nucleus pulposus tissue that can be limited by a COXâ€2â€specific inhibitor. Journal of Orthopaedic Research, 2015, 33, 1724-1731.	1.2	20
100	On the Relative Relevance of Subject-Specific Geometries and Degeneration-Specific Mechanical Properties for the Study of Cell Death in Human Intervertebral Disk Models. Frontiers in Bioengineering and Biotechnology, 2015, 3, 5.	2.0	26
101	A tissue adaptation model based on strain-dependent collagen degradation and contact-guided cell traction. Journal of Biomechanics, 2015, 48, 823-831.	0.9	19
102	A survey of micro-finite element analysis for clinical assessment of bone strength: The first decade. Journal of Biomechanics, 2015, 48, 832-841.	0.9	77
103	Meniscus replacement: Influence of geometrical mismatches on chondroprotective capabilities. Journal of Biomechanics, 2015, 48, 1371-1376.	0.9	7
104	A potential mechanism for allometric trabecular bone scaling in terrestrial mammals. Journal of Anatomy, 2015, 226, 236-243.	0.9	10
105	Effect of coculturing canine notochordal, nucleus pulposus and mesenchymal stromal cells for intervertebral disc regeneration. Arthritis Research and Therapy, 2015, 17, 60.	1.6	31
106	Conditioned Medium Derived from Notochordal Cell-Rich Nucleus Pulposus Tissue Stimulates Matrix Production by Canine Nucleus Pulposus Cells and Bone Marrow-Derived Stromal Cells. Tissue Engineering - Part A, 2015, 21, 1077-1084.	1.6	42
107	A novel approach to estimate trabecular bone anisotropy from stress tensors. Biomechanics and Modeling in Mechanobiology, 2015, 14, 39-48.	1.4	23
108	Determination of hip-joint loading patterns of living and extinct mammals using an inverse Wolffâ€™s law approach. Biomechanics and Modeling in Mechanobiology, 2015, 14, 427-432.	1.4	33

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109	The species-specific regenerative effects of notochordal cell-conditioned medium on chondrocyte-like cells derived from degenerated human intervertebral discs. , 2015, 30, 132-147.		45
110	Biomaterials for intervertebral disc regeneration: past performance and possible future strategies. , 2015, 30, 210-231.		25
111	Can Notochordal Cells Promote Bone Marrow Stromal Cell Potential for Nucleus Pulposus Enrichment? A SimplifiedIn VitroSystem. Tissue Engineering - Part A, 2014, 20, 3241-3251.	1.6	8
112	An Analytical Approach to Investigate the Evolution of Bone Volume Fraction in Bone Remodeling Simulation at the Tissue and Cell Level. Journal of Biomechanical Engineering, 2014, 136, 031004.	0.6	6
113	The Effect of a Cyclooxygenase 2 Inhibitor on Early Degenerated Human Nucleus Pulposus Explants. Global Spine Journal, 2014, 4, 33-39.	1.2	8
114	Influence of the Temporal Deposition of Extracellular Matrix on the Mechanical Properties of Tissue-Engineered Cartilage. Tissue Engineering - Part A, 2014, 20, 1476-1485.	1.6	3
115	The Influence of Cell-Matrix Attachment and Matrix Development on the Micromechanical Environment of the Chondrocyte in Tissue-Engineered Cartilage. Tissue Engineering - Part A, 2014, 20, 3112-3121.	1.6	8
116	In situ labelâ€free cell viability assessment of nucleus pulposus tissue. Journal of Orthopaedic Research, 2014, 32, 545-550.	1.2	4
117	Potential regenerative treatment strategies for intervertebral disc degeneration in dogs. BMC Veterinary Research, 2014, 10, 3.	0.7	44
118	Inter-individual variability of bone density and morphology distribution in the proximal femur and T12 vertebra. Bone, 2014, 60, 213-220.	1.4	21
119	Flow-perfusion interferes with chondrogenic and hypertrophic matrix production by mesenchymal stem cells. Journal of Biomechanics, 2014, 47, 2122-2129.	0.9	35
120	The importance of superficial collagen fibrils for the function of articular cartilage. Biomechanics and Modeling in Mechanobiology, 2014, 13, 41-51.	1.4	34
121	Ageing and degenerative changes of the intervertebral disc and their impact on spinal flexibility. European Spine Journal, 2014, 23 Suppl 3, S324-32.	1.0	73
122	Using notochordal cells of developmental origin to stimulate nucleus pulposus cells and bone marrow stromal cells for intervertebral disc regeneration. European Spine Journal, 2014, 23, 679-688.	1.0	20
123	The Effects of Matrix Inhomogeneities on the Cellular Mechanical Environment in Tissue-Engineered Cartilage: An<i>In Silico</i>Investigation. Tissue Engineering - Part C: Methods, 2014, 20, 104-115.	1.1	6
124	Deformation Thresholds for Chondrocyte Death and the Protective Effect of the Pericellular Matrix. Tissue Engineering - Part A, 2014, 20, 1870-1876.	1.6	16
125	A numerical model to study mechanically induced initiation and progression of damage in articular cartilage. Osteoarthritis and Cartilage, 2014, 22, 95-103.	0.6	72
126	Bone remodelling in humans is load-driven but not lazy. Nature Communications, 2014, 5, 4855.	5.8	212

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127	Increased Osmolarity and Cell Clustering Preserve Canine Notochordal Cell Phenotype in Culture. Tissue Engineering - Part C: Methods, 2014, 20, 652-662.	1.1	37
128	Locally measured microstructural parameters are better associated with vertebral strength than whole bone density. Osteoporosis International, 2014, 25, 1285-1296.	1.3	17
129	Advances in the diagnosis of degenerated lumbar discs and their possible clinical application. European Spine Journal, 2014, 23, 315-323.	1.0	53
130	Should a native depth-dependent distribution of human meniscus constitutive components be considered in FEA-models of the knee joint?. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 38, 242-250.	1.5	27
131	Intervertebral disc creep behavior assessment through an open source finite element solver. Journal of Biomechanics, 2014, 47, 297-301.	0.9	21
132	A multiscale analytical approach for bone remodeling simulations: Linking scales from collagen to trabeculae. Bone, 2014, 64, 303-313.	1.4	33
133	The role of endplate poromechanical properties on the nutrient availability in the intervertebral disc. Osteoarthritis and Cartilage, 2014, 22, 1053-1060.	0.6	63
134	Cell therapy for intervertebral disc repair: advancing cell therapy from bench to clinics. , 2014, 27s, 5-11.		61
135	Potential application of notochordal cells for intervertebral disc regeneration: an in vitro assessment. , 2014, 28, 68-81.		25
136	Stimulation of Canine Nucleus Pulposus Cells and Bone Marrow-Derived Stromal Cells with Notochordal Cell-Secreted Factors. Global Spine Journal, 2014, 4, s-0034-1376663-s-0034-1376663.	1.2	0
137	Subsidence of SB CharitÃ© total disc replacement and the role of undersizing. European Spine Journal, 2013, 22, 2264-2270.	1.0	12
138	How preconditioning affects the measurement of poro-viscoelastic mechanical properties in biological tissues. Biomechanics and Modeling in Mechanobiology, 2013, 13, 503-13.	1.4	11
139	Is collagen fiber damage the cause of early softening in articular cartilage?. Osteoarthritis and Cartilage, 2013, 21, 136-143.	0.6	41
140	Alterations to the subchondral bone architecture during osteoarthritis: bone adaptation vs endochondral bone formation. Osteoarthritis and Cartilage, 2013, 21, 331-338.	0.6	38
141	Contribution of collagen fibers to the compressive stiffness of cartilaginous tissues. Biomechanics and Modeling in Mechanobiology, 2013, 12, 1221-1231.	1.4	23
142	Influence of tissue- and cell-scale extracellular matrix distribution on the mechanical properties of tissue-engineered cartilage. Biomechanics and Modeling in Mechanobiology, 2013, 12, 901-913.	1.4	22
143	Low Agarose Concentration and TGF-Î²3 Distribute Extracellular Matrix in Tissue-Engineered Cartilage. Tissue Engineering - Part A, 2013, 19, 1621-1631.	1.6	9
144	The effect of tissue-engineered cartilage biomechanical and biochemical properties on its post-implantation mechanical behavior. Biomechanics and Modeling in Mechanobiology, 2013, 12, 43-54.	1.4	23

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145	Mode I crack propagation in hydrogels is step wise. Engineering Fracture Mechanics, 2013, 97, 72-79.	2.0	37
146	Validation of a bone loading estimation algorithm for patient-specific bone remodelling simulations. Journal of Biomechanics, 2013, 46, 941-948.	0.9	29
147	Long-term culture of bovine nucleus pulposus explants in a native environment. Spine Journal, 2013, 13, 454-463.	0.6	31
148	A novel approach to estimate trabecular bone anisotropy using a database approach. Journal of Biomechanics, 2013, 46, 2356-2362.	0.9	40
149	Subject-specific bone loading estimation in the human distal radius. Journal of Biomechanics, 2013, 46, 759-766.	0.9	43
150	Validation of an Open Source Finite Element Biphasic Poroelastic Model. Application to the Intervertebral Disc Biomechanics. , 2013, , .		3
151	Mechanisms of Intervertebral Disk Degeneration/Injury and Pain: A Review. Global Spine Journal, 2013, 3, 145-151.	1.2	73
152	Disk Degeneration and Pain. Global Spine Journal, 2013, 3, 125-126.	1.2	10
153	Sliding Indentation Enhances Collagen Content and Depth-Dependent Matrix Distribution in Tissue-Engineered Cartilage Constructs. Tissue Engineering - Part A, 2013, 19, 1949-1959.	1.6	15
154	The Effect of Dexamethasone and Triiodothyronine on Terminal Differentiation of Primary Bovine Chondrocytes and Chondrogenically Differentiated Mesenchymal Stem Cells. PLoS ONE, 2013, 8, e72973.	1.1	28
155	Assessment of Cell Viability in Three-Dimensional Scaffolds Using Cellular Auto-Fluorescence. Tissue Engineering - Part C: Methods, 2012, 18, 198-204.	1.1	52
156	Biomechanical Behavior of a Biomimetic Artificial Intervertebral Disc. Spine, 2012, 37, E367-E373.	1.0	18
157	Surgeons and scientists: symbiosis in spinal research?. European Spine Journal, 2012, 21, 1681-1683.	1.0	0
158	A new approach to determine the accuracy of morphologyâ€“elasticity relationships in continuum FE analyses of human proximal femur. Journal of Biomechanics, 2012, 45, 2884-2892.	0.9	32
159	Design of next generation total disk replacements. Journal of Biomechanics, 2012, 45, 134-140.	0.9	30
160	Patient-specific bone modelling and remodelling simulation of hypoparathyroidism based on human iliac crest biopsies. Journal of Biomechanics, 2012, 45, 2411-2416.	0.9	27
161	Determination of vertebral and femoral trabecular morphology and stiffness using a flat-panel C-arm-based CT approach. Bone, 2012, 50, 200-208.	1.4	27
162	Decreased bone tissue mineralization can partly explain subchondral sclerosis observed in osteoarthritis. Bone, 2012, 50, 1152-1161.	1.4	56

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163	Tissue engineering of functional articular cartilage: the current status. Cell and Tissue Research, 2012, 347, 613-627.	1.5	286
164	Bone morphology allows estimation of loading history in a murine model of bone adaptation. Biomechanics and Modeling in Mechanobiology, 2012, 11, 483-492.	1.4	73
165	Mechanical stimulation to stimulate formation of a physiological collagen architecture in tissue-engineered cartilage: a numerical study. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 135-144.	0.9	31
166	Simulations of trabecular remodeling and fatigue: Is remodeling helpful or harmful?. Bone, 2011, 48, 1210-1215.	1.4	26
167	The role of pressurized fluid in subchondral bone cyst growth. Bone, 2011, 49, 762-768.	1.4	39
168	Bone structural changes in osteoarthritis as a result of mechanoregulated bone adaptation: a modeling approach. Osteoarthritis and Cartilage, 2011, 19, 676-682.	0.6	31
169	A sclerostin-based theory for strain-induced bone formation. Biomechanics and Modeling in Mechanobiology, 2011, 10, 663-670.	1.4	22
170	Analysis of bone architecture sensitivity for changes in mechanical loading, cellular activity, mechanotransduction, and tissue properties. Biomechanics and Modeling in Mechanobiology, 2011, 10, 701-712.	1.4	25
171	Intracellular tension in periosteum/perichondrium cells regulates long bone growth. Journal of Orthopaedic Research, 2011, 29, 84-91.	1.2	13
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