Ozan Akkus

List of Publications by Year in Descending Order

146 papers	4,367 citations	35 h-index	61 g-index
181 ext. papers	4,952 ext. citations	4.3 avg, IF	5.76 L-index

#	Paper	IF	Citations
146	and sp. inhibit osseointegration of orthopaedic implants.. *Infection and Immunity*, **2022**, iai0066921	3.7	0
145	Comparison of Morphological and Histological Characteristics of Human and Sheep: Sheep as a Potential Model for Testing Midurethral Slings in vivo.. *Urologia Internationalis*, **2022**, 1-7	1.9	
144	Raman spectroscopy-based water measurements identify the origin of MRI T2 signal in human articular cartilage zones and predict histopathologic score. *Journal of Biophotonics*, **2021**, e202100212	3.1	1
143	Volumetric MicroCT Intensity Histograms of Fatty Infiltration Correlate with the Mechanical Strength of Rotator Cuff Repairs: An Ex Vivo Rabbit Model. *Clinical Orthopaedics and Related Research*, **2021**, 479, 406-418	2.2	1
142	Comparison of diffuse versus inverse spatially-offset Raman spectroscopy modalities for analyte detection through barriers. *Vibrational Spectroscopy*, **2021**, 113, 103228	2.1	0
141	Chondrogenesis of Mesenchymal Stem Cells through Local Release of TGF-β from Heparinized Collagen Biofabric. *Tissue Engineering - Part A*, **2021**, 27, 1434-1445	3.9	0
140	Heparin-mediated antibiotic delivery from an electrochemically-aligned collagen sheet. *Bio-Medical Materials and Engineering*, **2021**, 32, 159-170	1	0
139	A hybrid vascular graft harnessing the superior mechanical properties of synthetic fibers and the biological performance of collagen filaments. *Materials Science and Engineering C*, **2021**, 118, 111418	8.3	8
138	Scalable in-hospital decontamination of N95 filtering face-piece respirator with a peracetic acid room disinfection system. *Infection Control and Hospital Epidemiology*, **2021**, 42, 678-687	2	15
137	Evaluation of an electrochemically aligned collagen yarn for textile scaffold fabrication. *Biomedical Materials (Bristol)*, **2021**, 16, 025001	3.5	3
136	Genipin guides and sustains the polarization of macrophages to the pro-regenerative M2 subtype via activation of the pSTAT6-PPAR-gamma pathway. *Acta Biomaterialia*, **2021**, 131, 198-210	10.8	5
135	Characterization of a reproducible model of fracture healing in mice using an open femoral osteotomy. *Bone Reports*, **2020**, 12, 100250	2.6	9
134	An Raman study on compositional correlations of lipids and protein with animal tissue hydration. *Vibrational Spectroscopy*, **2020**, 107, 103022-103022	2.1	0
133	Diffuse microdamage in bone activates anabolic response by osteoblasts via involvement of voltage-gated calcium channels. *Journal of Bone and Mineral Metabolism*, **2020**, 38, 151-160	2.9	1
132	Assessing matrix quality by Raman spectroscopy helps predict fracture toughness of human cortical bone. *Scientific Reports*, **2019**, 9, 7195	4.9	20
131	Engineering small-caliber vascular grafts from collagen filaments and nanofibers with comparable mechanical properties to native vessels. *Biofabrication*, **2019**, 11, 035020	10.5	21
130	Microbially-derived nanofibrous cellulose polymer for connective tissue regeneration. *Materials Science and Engineering C*, **2019**, 99, 96-102	8.3	6

129	In vivo biocompatibility and time-dependent changes in mechanical properties of woven collagen meshes: A comparison to xenograft and synthetic mid-urethral sling materials. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2019**, 107, 479-489	3.5	9
128	Raman Biomarkers Are Associated with Cyclic Fatigue Life of Human Allograft Cortical Bone. *Journal of Bone and Joint Surgery - Series A*, **2019**, 101, e85	5.6	5
127	Effect of storage and aging conditions on the flexural strength and flexural modulus of CAD/CAM materials. *Dental Materials Journal*, **2019**, 38, 264-270	2.5	6
126	Woven collagen biotextiles enable mechanically functional rotator cuff tendon regeneration during repair of segmental tendon defects in vivo. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2019**, 107, 1864-1876	3.5	26
125	Controlled mercerization of bacterial cellulose provides tunability of modulus and ductility over two orders of magnitude. *Journal of the Mechanical Behavior of Biomedical Materials*, **2019**, 90, 530-537	4.1	4
124	Caract□isation chimique des particules bir□ringentes en croix de Malte d□ect□s dans des □hantillons de liquide synovial provenant d□rticulations symptomatiques. *Revue Du Rhumatisme (Edition Francaise)*, **2019**, 86, 108-111	0.1	
123	Computational homogenization of the elastic and thermal properties of superconducting composite MgB2 wire. *Composite Structures*, **2018**, 188, 313-329	5.3	20
122	Effect of laser activated bleaching on the chemical stability and morphology of intracoronal dentin. *Archives of Oral Biology*, **2018**, 86, 40-45	2.8	6
121	Repetitive short-span application of extracellular calcium is osteopromotive to osteoprogenitor cells. *Journal of Tissue Engineering and Regenerative Medicine*, **2018**, 12, e1349-e1359	4.4	3
120	Chemical characterization of Maltese-cross birefringent particles in synovial fluid samples collected from symptomatic joints. *Joint Bone Spine*, **2018**, 85, 501-503	2.9	2
119	Kinesin and Dynein Mechanics: Measurement Methods and Research Applications. *Journal of Biomechanical Engineering*, **2018**, 140,	2.1	11
118	Interrelationships between electrical, mechanical and hydration properties of cortical bone. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 77, 12-23	4.1	15
117	Elevated solute transport at sites of diffuse matrix damage in cortical bone: Implications on bone repair. *Journal of Orthopaedic Research*, **2018**, 36, 692-698	3.8	2
116	Shortwave-infrared Raman spectroscopic classification of water fractions in articular cartilage ex vivo. *Journal of Biomedical Optics*, **2018**, 23, 1-11	3.5	10
115	Direct, Transfer-Free Growth of Large-Area Hexagonal Boron Nitride Films by Plasma-Enhanced Chemical Film Conversion (PECFC) of Printable, Solution-Processed Ammonia Borane. *ACS Applied Materials & Interfaces*, **2018**, 10, 43936-43945	9.5	6
114	Effect of thermal cycling on fracture toughness of CAD/CAM materials. *American Journal of Dentistry*, **2018**, 31, 205-210	1.3	5
113	Mechanical Properties, Cytocompatibility and Manufacturability of Chitosan:PEGDA Hybrid-Gel Scaffolds by Stereolithography. *Annals of Biomedical Engineering*, **2017**, 45, 286-296	4.7	113
112	Effects of losartan treatment on the physicochemical properties of diabetic rat bone. *Journal of Bone and Mineral Metabolism*, **2017**, 35, 161-170	2.9	12

111	Mechanical Analysis of MgB2 Based Full Body MRI Coils Under Different Winding Conditions. *IEEE Transactions on Applied Superconductivity*, **2017**, 27, 1-5	1.8	5
110	Conceptual designs of conduction cooled MgB2 magnets for 1.5 and 3.0T full body MRI systems. *Superconductor Science and Technology*, **2017**, 30,	3.1	27
109	Synthesis and Fabrication of Nanocomposite Fibers of Collagen-Cellulose Nanocrystals by Coelectrocompaction. *Biomacromolecules*, **2017**, 18, 1259-1267	6.9	13
108	Effects of PDGF-BB delivery from heparinized collagen sutures on the healing of lacerated chicken flexor tendon in vivo. *Acta Biomaterialia*, **2017**, 63, 200-209	10.8	18
107	Raman spectral markers of collagen denaturation and hydration in human cortical bone tissue are affected by radiation sterilization and high cycle fatigue damage. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 75, 314-321	4.1	18
106	Organismal Engineering: Towards a Robotic Taxonomic Key for Devices Using Organic Materials. *Science Robotics*, **2017**, 2,	18.6	37
105	Femoral Iatrogenic Subtrochanteric Fatigue Fracture Risk is not Increased by Placing Drill Holes Below the Level of the Lesser Trochanter. *Iowa orthopaedic journal, The*, **2017**, 37, 23-28	1.1	4
104	3D-Printed Biohybrid Robots Powered by Neuromuscular Tissue Circuits from Aplysia californica. *Lecture Notes in Computer Science*, **2017**, 475-486	0.9	8
103	Effects of substrate stiffness on the tenoinduction of human mesenchymal stem cells. *Acta Biomaterialia*, **2017**, 58, 244-253	10.8	38
102	A portable fiber-optic raman spectrometer concept for evaluation of mineral content within enamel tissue. *Journal of Clinical and Experimental Dentistry*, **2017**, 9, e238-e241	1.4	3
101	Surface strain distribution of orthodontic miniscrews under load. *American Journal of Orthodontics and Dentofacial Orthopedics*, **2016**, 150, 444-50	2.1	3
100	Simulating muscular thin films using thermal contraction capabilities in finite element analysis tools. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 63, 326-336	4.1	3
99	Collagen Substrate Stiffness Anisotropy Affects Cellular Elongation, Nuclear Shape, and Stem Cell Fate toward Anisotropic Tissue Lineage. *Advanced Healthcare Materials*, **2016**, 5, 2237-47	10.1	39
98	Measurement of J-integral in CAD/CAM dental ceramics and composite resin by digital image correlation. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 62, 240-246	4.1	10
97	Heparinized collagen sutures for sustained delivery of PDGF-BB: Delivery profile and effects on tendon-derived cells In-Vitro. *Acta Biomaterialia*, **2016**, 41, 100-9	10.8	14
96	Anisotropically Stiff 3D Micropillar Niche Induces Extraordinary Cell Alignment and Elongation. *Advanced Healthcare Materials*, **2016**, 5, 1884-92	10.1	22
95	Effects of different lasers on organic/inorganic ratio of radicular dentin. *Lasers in Medical Science*, **2016**, 31, 415-20	3.1	10
94	A micro-architecturally biomimetic collagen template for mesenchymal condensation based cartilage regeneration. *Acta Biomaterialia*, **2016**, 30, 212-221	10.8	25

93	Gamma Radiation Sterilization Reduces the High-cycle Fatigue Life of Allograft Bone. *Clinical Orthopaedics and Related Research*, **2016**, 474, 827-35	2.2	22
92	Effect of different adhesive strategies on microtensile bond strength of computer aided design/computer aided manufacturing blocks bonded to dentin. *Dental Research Journal*, **2016**, 13, 117-23	0.8	7
91	Aplysia Californica as a Novel Source of Material for Biohybrid Robots and Organic Machines. *Lecture Notes in Computer Science*, **2016**, 365-374	0.9	10
90	Activation of intracellular calcium signaling in osteoblasts colocalizes with the formation of post-yield diffuse microdamage in bone matrix. *BoneKEy Reports*, **2016**, 5, 778		8
89	Mechanical properties and DIC analyses of CAD/CAM materials. *Journal of Clinical and Experimental Dentistry*, **2016**, 8, e512-e516	1.4	2
88	Evaluation of mineral content in healthy permanent human enamel by Raman spectroscopy. *Journal of Clinical and Experimental Dentistry*, **2016**, 8, e546-e549	1.4	7
87	Fundamentals of Musculoskeletal Biomechanics **2016**, 15-36		2
86	Novel Raman Spectroscopic Biomarkers Indicate That Postyield Damage Denatures Bone's Collagen. *Journal of Bone and Mineral Research*, **2016**, 31, 1015-25	6.3	38
85	A Point-of-Care Raman Spectroscopy-Based Device for the Diagnosis of Gout and Pseudogout: Comparison With the Clinical Standard Microscopy. *Arthritis and Rheumatology*, **2016**, 68, 1751-7	9.5	26
84	Biologic and Synthetic Grafts in the Reconstruction of Large to Massive Rotator Cuff Tears. *Journal of the American Academy of Orthopaedic Surgeons, The*, **2016**, 24, 823-828	4.5	33
83	Effect of actuating cell source on locomotion of organic living machines with electrocompacted collagen skeleton. *Bioinspiration and Biomimetics*, **2016**, 11, 036012	2.6	18
82	A multiscale and multiphysics model of strain development in a 1.5 T MRI magnet designed with 36 filament composite MgB2superconducting wire. *Superconductor Science and Technology*, **2016**, 29, 055008	3.1	15
81	Microdamage induced calcium efflux from bone matrix activates intracellular calcium signaling in osteoblasts via L-type and T-type voltage-gated calcium channels. *Bone*, **2015**, 76, 88-96	4.7	15
80	Raman spectral classification of mineral- and collagen-bound water's associations to elastic and post-yield mechanical properties of cortical bone. *Bone*, **2015**, 81, 315-326	4.7	57
79	Computer aided biomanufacturing of mechanically robust pure collagen meshes with controlled macroporosity. *Biofabrication*, **2015**, 7, 035005	10.5	13
78	Fabrication of compositionally and topographically complex robust tissue forms by 3D-electrochemical compaction of collagen. *Biofabrication*, **2015**, 7, 035001	10.5	34
77	Biomechanical evaluation of a novel suturing scheme for grafting load-bearing collagen scaffolds for rotator cuff repair. *Clinical Biomechanics*, **2015**, 30, 669-75	2.2	19
76	Fabrication of Electrocompacted Aligned Collagen Morphs for Cardiomyocyte Powered Living Machines. *Lecture Notes in Computer Science*, **2015**, 429-440	0.9	4

75	A customized Raman system for point-of-care detection of arthropathic crystals in the synovial fluid. *Analyst, The*, **2014**, 139, 823-30	5	17
74	Wide-field Raman imaging of dental lesions. *Analyst, The*, **2014**, 139, 3107-14	5	22
73	Molecular spectroscopic identification of the water compartments in bone. *Bone*, **2014**, 67, 228-36	4.7	46
72	Tenogenic Induction of Human MSCs by Anisotropically Aligned Collagen Biotextiles. *Advanced Functional Materials*, **2014**, 24, 5762-5770	15.6	111
71	Genipin as a sporicidal agent for the treatment of cortical bone allografts. *Journal of Biomaterials Applications*, **2014**, 28, 1336-42	2.9	4
70	Bone Morphology and Organization **2014**, 3-25		27
69	Depth-dependent shear behavior of bovine articular cartilage: relationship to structure. *Journal of Anatomy*, **2014**, 225, 519-26	2.9	13
68	Optical Properties and van der Waals-London Dispersion Interactions in Inorganic and Biomolecular Assemblies. *Materials Research Society Symposia Proceedings*, **2014**, 1619, 1		
67	Laser Wavelength Dependence of Background Fluorescence in Raman Spectroscopic Analysis of Synovial Fluid from Symptomatic Joints. *Journal of Raman Spectroscopy*, **2013**, 44, 1089-1095	2.3	19
66	A fatigue loading model for investigation of iatrogenic subtrochanteric fractures of the femur. *Clinical Biomechanics*, **2013**, 28, 981-7	2.2	12
65	Sporicidal efficacy of genipin: a potential theoretical alternative for biomaterial and tissue graft sterilization. *Cell and Tissue Banking*, **2013**, 14, 381-93	2.2	14
64	Acoustic emission based monitoring of the microdamage evolution during fatigue of human cortical bone. *Journal of Biomechanical Engineering*, **2013**, 135, 81005	2.1	20
63	Back-directional Gated Spectroscopic Imaging for Nanoscale Deformation Analysis in Bone. *Conference Proceedings of the Society for Experimental Mechanics*, **2013**, 151-155	0.3	
62	Tenogenic differentiation of human MSCs induced by the topography of electrochemically aligned collagen threads. *Biomaterials*, **2012**, 33, 2137-44	15.6	162
61	In vivo response to electrochemically aligned collagen bioscaffolds. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2012**, 100, 400-8	3.5	46
60	Novel mechanical bioreactor for concomitant fluid shear stress and substrate strain. *Journal of Biomechanics*, **2012**, 45, 1323-7	2.9	11
59	Mechanical stretch induced calcium efflux from bone matrix stimulates osteoblasts. *Bone*, **2012**, 50, 581-91	4.7	30
58	Changes in Cortical Bone Mineral and Microstructure with Aging and Osteoporosis. *Studies in Mechanobiology, Tissue Engineering and Biomaterials*, **2012**, 105-131	0.5	8

57	Mechanical loading, damping, and load-driven bone formation in mouse tibiae. *Bone*, **2012**, 51, 810-8	4.7	26
56	Osteoblasts detect pericellular calcium concentration increase via neomycin-sensitive voltage gated calcium channels. *Bone*, **2012**, 51, 860-7	4.7	15
55	Genipin crosslinking elevates the strength of electrochemically aligned collagen to the level of tendons. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 15, 176-89	4.1	53
54	Immune and inflammatory pathways are involved in inherent bone marrow ossification. *Clinical Orthopaedics and Related Research*, **2012**, 470, 2528-40	2.2	3
53	Physically crosslinked nanocomposites from silicate-crosslinked PEO: mechanical properties and osteogenic differentiation of human mesenchymal stem cells. *Macromolecular Bioscience*, **2012**, 12, 779-93	5.5	96
52	Modeling the electromobility of type-I collagen molecules in the electrochemical fabrication of dense and aligned tissue constructs. *Annals of Biomedical Engineering*, **2012**, 40, 1641-53	4.7	52
51	The morphological, material-level, and ash properties of turkey femurs from 3 different genetic strains during production. *Poultry Science*, **2012**, 91, 2736-46	3.9	9
50	Ossifying bone marrow explant culture as a three-dimensional mechanoresponsive in vitro model of osteogenesis. *Tissue Engineering - Part A*, **2011**, 17, 417-28	3.9	14
49	Effects of age and shear rate on the rheological properties of human yellow bone marrow. *Biorheology*, **2011**, 48, 89-97	1.7	21
48	Effects of phosphate-buffered saline concentration and incubation time on the mechanical and structural properties of electrochemically aligned collagen threads. *Biomedical Materials (Bristol)*, **2011**, 6, 035008	3.5	29
47	A scaffold-free multicellular three-dimensional in vitro model of osteogenesis. *Calcified Tissue International*, **2011**, 88, 388-401	3.9	16
46	Incorporation of a decorin biomimetic enhances the mechanical properties of electrochemically aligned collagen threads. *Acta Biomaterialia*, **2011**, 7, 2428-36	10.8	33
45	Probing Pre-failure Molecular Deformation in Cortical Bone with Fluorescent Dyes. *Conference Proceedings of the Society for Experimental Mechanics*, **2011**, 333-337	0.3	
44	High Local Deformation Correlates with Optical Property Change in Cortical Bone. *Conference Proceedings of the Society for Experimental Mechanics*, **2011**, 327-331	0.3	
43	The sequential production profiles of growth factors and their relations to bone volume in ossifying bone marrow explants. *Tissue Engineering - Part A*, **2010**, 16, 2295-306	3.9	25
42	Spectroscopic visualization of nanoscale deformation in bone: interaction of light with partially disordered nanostructure. *Journal of Biomedical Optics*, **2010**, 15, 060503	3.5	14
41	Random lasing in bone tissue: potential as novel spectroscopy for dynamical analysis of nanostructures **2010**,		2
40	Detection of nanoscale structural changes in bone using random lasers. *Biomedical Optics Express*, **2010**, 1, 1401-1407	3.5	38

39	Random lasing in bone tissue. *Optics Letters*, **2010**, 35, 1425-7	3	123
38	Comparison of morphology, orientation, and migration of tendon derived fibroblasts and bone marrow stromal cells on electrochemically aligned collagen constructs. *Journal of Biomedical Materials Research - Part A*, **2010**, 94, 1070-9	5.4	26
37	Highly Extensible Bio-Nanocomposite Films with Direction-Dependent Properties. *Advanced Functional Materials*, **2010**, 20, 429-436	15.6	76
36	An experimental model to investigate initial tracheal anastomosis strength. *Laryngoscope*, **2010**, 120, 1125-8	3.6	5
35	Visualization of a phantom post-yield deformation process in cortical bone. *Journal of Biomechanics* , **2010**, 43, 1989-96	2.9	38
34	Analysis of crystals leading to joint arthropathies by Raman spectroscopy: comparison with compensated polarized imaging. *Applied Spectroscopy*, **2009**, 63, 381-6	3.1	19
33	Raman spectroscopic investigation of peptide-glycosaminoglycan interactions. *Applied Spectroscopy*, **2009**, 63, 636-41	3.1	9
32	Modulation of Hydroxyapatite Nanocrystal Size and Shape by Polyelectrolytic Peptides. *Crystal Growth and Design*, **2009**, 9, 5220-5226	3.5	19
31	The associations between mineral crystallinity and the mechanical properties of human cortical bone. *Bone*, **2008**, 42, 476-82	4.7	166
30	In vivo linear microcracks of human femoral cortical bone remain parallel to osteons during aging. *Bone*, **2008**, 43, 856-61	4.7	41
29	Radioprotectant and radiosensitizer effects on sterility of gamma-irradiated bone. *Clinical Orthopaedics and Related Research*, **2008**, 466, 1796-803	2.2	14
28	Effects of polyelectrolytic peptides on the quality of mineral crystals grown in vitro. *Journal of Bone and Mineral Metabolism*, **2008**, 26, 569-75	2.9	7
27	The mechanical environment of bone marrow: a review. *Annals of Biomedical Engineering*, **2008**, 36, 1978-91	4.7	212
26	An electrochemical fabrication process for the assembly of anisotropically oriented collagen bundles. *Biomaterials*, **2008**, 29, 3278-88	15.6	194
25	Raman imaging for quantification of the volume fraction of biodegradable polymers in histological preparations. *Journal of Biomedical Materials Research - Part A*, **2007**, 82, 611-7	5.4	6
24	Local variations in the micromechanical properties of mouse femur: the involvement of collagen fiber orientation and mineralization. *Journal of Biomechanics*, **2007**, 40, 910-8	2.9	63
23	Improving the Anisotropy of Collagen by Electric Field Increases Its Toughness by Two-Fold **2007**, 1043		
22	The compositional and physicochemical homogeneity of male femoral cortex increases after the sixth decade. *Bone*, **2006**, 39, 1236-43	4.7	120

21	Effect of fixation and embedding on Raman spectroscopic analysis of bone tissue. *Calcified Tissue International*, **2006**, 78, 363-71	3.9	60
20	Elastic deformation of mineralized collagen fibrils: an equivalent inclusion based composite model. *Journal of Biomechanical Engineering*, **2005**, 127, 383-90	2.1	40
19	Free radical scavenging alleviates the biomechanical impairment of gamma radiation sterilized bone tissue. *Journal of Orthopaedic Research*, **2005**, 23, 838-45	3.8	85
18	Sterilization by gamma radiation impairs the tensile fatigue life of cortical bone by two orders of magnitude. *Journal of Orthopaedic Research*, **2005**, 23, 1054-8	3.8	46
17	Optimization of the mineral content in polymeric gels: The effect of calcium to phosphate molar ratio. *Journal of Crystal Growth*, **2005**, 280, 587-593	1.6	5
16	Microcracks colocalize within highly mineralized regions of cortical bone tissue. *European Journal of Morphology*, **2005**, 42, 43-51		56
15	Age-related changes in physicochemical properties of mineral crystals are related to impaired mechanical function of cortical bone. *Bone*, **2004**, 34, 443-53	4.7	323
14	Fracture mechanics of cortical bone tissue: a hierarchical perspective. *Critical Reviews in Biomedical Engineering*, **2004**, 32, 379-426	1.1	16
13	Aging of microstructural compartments in human compact bone. *Journal of Bone and Mineral Research*, **2003**, 18, 1012-9	6.3	195
12	Hierarchical relationship between bone traits and mechanical properties in inbred mice. *Mammalian Genome*, **2003**, 14, 97-104	3.2	91
11	Relationship between damage accumulation and mechanical property degradation in cortical bone: microcrack orientation is important. *Journal of Biomedical Materials Research Part B*, **2003**, 65, 482-8		20
10	Comments on acoustic emission visualization of bone cement fatigue locations. *Journal of Biomedical Materials Research Part B*, **2002**, 59, 398-401		2
9	Increased Collagen Mineralization Affects the Yield Stress But Not the Yield Strain in Cortical Bone of Rats: Implications for Age-Related Tissue Embrittlement **2002**, 307		
8	Fracture resistance of gamma radiation sterilized cortical bone allografts. *Journal of Orthopaedic Research*, **2001**, 19, 927-34	3.8	86
7	Cortical bone tissue resists fatigue fracture by deceleration and arrest of microcrack growth. *Journal of Biomechanics*, **2001**, 34, 757-64	2.9	78
6	Assessment of mineral density and atomic content of fracture callus by quantitative computerized tomography. *Journal of Orthopaedic Science*, **2000**, 5, 248-55	1.6	11
5	Synthesis and mechanical properties of interpenetrating networks of polyhydroxybutyrate-co-hydroxyvalerate and polyhydroxyethyl methacrylate. *Biomaterials*, **1998**, 19, 1137-43	15.6	51
4	Reduction of restrictive adhesions by local aprotinin application and primary sheath repair in surgically traumatized flexor tendons of the rabbit. *Journal of Hand Surgery*, **1997**, 22, 826-32	2.6	31

3	Biomechanical analysis of the effects of single high-dose vitamin D3 on fracture healing in a healthy rabbit model. *Archives of Orthopaedic and Trauma Surgery*, **1997**, 116, 271-4	3.6	42
2	Piece-By-Piece Shape-Morphing: Engineering Compatible Auxetic and Non-Auxetic Lattices to Improve Soft Robot Performance in Confined Spaces. *Advanced Engineering Materials*,2101620	3.5	0
1	Mesenchymal Stem Cell Delivery via Topographically Tenoinductive Collagen Biotextile Enhances Regeneration of Segmental Tendon Defects. *American Journal of Sports Medicine*,036354652210979	6.8	0