

Ozan Akkus

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Age-related changes in physicochemical properties of mineral crystals are related to impaired mechanical function of cortical bone. <i>Bone</i> , 2004 , 34, 443-53	4.7	323
145	The mechanical environment of bone marrow: a review. <i>Annals of Biomedical Engineering</i> , 2008 , 36, 1978-91	4.7	212
144	Aging of microstructural compartments in human compact bone. <i>Journal of Bone and Mineral Research</i> , 2003 , 18, 1012-9	6.3	195
143	An electrochemical fabrication process for the assembly of anisotropically oriented collagen bundles. <i>Biomaterials</i> , 2008 , 29, 3278-88	15.6	194
142	The associations between mineral crystallinity and the mechanical properties of human cortical bone. <i>Bone</i> , 2008 , 42, 476-82	4.7	166
141	Tenogenic differentiation of human MSCs induced by the topography of electrochemically aligned collagen threads. <i>Biomaterials</i> , 2012 , 33, 2137-44	15.6	162
140	Random lasing in bone tissue. <i>Optics Letters</i> , 2010 , 35, 1425-7	3	123
139	The compositional and physicochemical homogeneity of male femoral cortex increases after the sixth decade. <i>Bone</i> , 2006 , 39, 1236-43	4.7	120
138	Mechanical Properties, Cytocompatibility and Manufacturability of Chitosan:PEGDA Hybrid-Gel Scaffolds by Stereolithography. <i>Annals of Biomedical Engineering</i> , 2017 , 45, 286-296	4.7	113
137	Tenogenic Induction of Human MSCs by Anisotropically Aligned Collagen Biotextiles. <i>Advanced Functional Materials</i> , 2014 , 24, 5762-5770	15.6	111
136	Physically crosslinked nanocomposites from silicate-crosslinked PEO: mechanical properties and osteogenic differentiation of human mesenchymal stem cells. <i>Macromolecular Bioscience</i> , 2012 , 12, 779-93	5.5	96
135	Hierarchical relationship between bone traits and mechanical properties in inbred mice. <i>Mammalian Genome</i> , 2003 , 14, 97-104	3.2	91
134	Fracture resistance of gamma radiation sterilized cortical bone allografts. <i>Journal of Orthopaedic Research</i> , 2001 , 19, 927-34	3.8	86
133	Free radical scavenging alleviates the biomechanical impairment of gamma radiation sterilized bone tissue. <i>Journal of Orthopaedic Research</i> , 2005 , 23, 838-45	3.8	85
132	Cortical bone tissue resists fatigue fracture by deceleration and arrest of microcrack growth. <i>Journal of Biomechanics</i> , 2001 , 34, 757-64	2.9	78
131	Highly Extensible Bio-Nanocomposite Films with Direction-Dependent Properties. <i>Advanced Functional Materials</i> , 2010 , 20, 429-436	15.6	76
130	Local variations in the micromechanical properties of mouse femur: the involvement of collagen fiber orientation and mineralization. <i>Journal of Biomechanics</i> , 2007 , 40, 910-8	2.9	63

129	Effect of fixation and embedding on Raman spectroscopic analysis of bone tissue. <i>Calcified Tissue International</i> , 2006 , 78, 363-71	3.9	60
128	Raman spectral classification of mineral- and collagen-bound water's associations to elastic and post-yield mechanical properties of cortical bone. <i>Bone</i> , 2015 , 81, 315-326	4.7	57
127	Microcracks colocalize within highly mineralized regions of cortical bone tissue. <i>European Journal of Morphology</i> , 2005 , 42, 43-51		56
126	Genipin crosslinking elevates the strength of electrochemically aligned collagen to the level of tendons. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012 , 15, 176-89	4.1	53
125	Modeling the electromobility of type-I collagen molecules in the electrochemical fabrication of dense and aligned tissue constructs. <i>Annals of Biomedical Engineering</i> , 2012 , 40, 1641-53	4.7	52
124	Synthesis and mechanical properties of interpenetrating networks of polyhydroxybutyrate-co-hydroxyvalerate and polyhydroxyethyl methacrylate. <i>Biomaterials</i> , 1998 , 19, 1137-43	15.6	51
123	Molecular spectroscopic identification of the water compartments in bone. <i>Bone</i> , 2014 , 67, 228-36	4.7	46
122	In vivo response to electrochemically aligned collagen bioscaffolds. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2012 , 100, 400-8	3.5	46
121	Sterilization by gamma radiation impairs the tensile fatigue life of cortical bone by two orders of magnitude. <i>Journal of Orthopaedic Research</i> , 2005 , 23, 1054-8	3.8	46
120	Biomechanical analysis of the effects of single high-dose vitamin D3 on fracture healing in a healthy rabbit model. <i>Archives of Orthopaedic and Trauma Surgery</i> , 1997 , 116, 271-4	3.6	42
119	In vivo linear microcracks of human femoral cortical bone remain parallel to osteons during aging. <i>Bone</i> , 2008 , 43, 856-61	4.7	41
118	Elastic deformation of mineralized collagen fibrils: an equivalent inclusion based composite model. <i>Journal of Biomechanical Engineering</i> , 2005 , 127, 383-90	2.1	40
117	Collagen Substrate Stiffness Anisotropy Affects Cellular Elongation, Nuclear Shape, and Stem Cell Fate toward Anisotropic Tissue Lineage. <i>Advanced Healthcare Materials</i> , 2016 , 5, 2237-47	10.1	39
116	Detection of nanoscale structural changes in bone using random lasers. <i>Biomedical Optics Express</i> , 2010 , 1, 1401-1407	3.5	38
115	Visualization of a phantom post-yield deformation process in cortical bone. <i>Journal of Biomechanics</i> , 2010 , 43, 1989-96	2.9	38
114	Effects of substrate stiffness on the tenoinduction of human mesenchymal stem cells. <i>Acta Biomaterialia</i> , 2017 , 58, 244-253	10.8	38
113	Novel Raman Spectroscopic Biomarkers Indicate That Postyield Damage Denatures Bone's Collagen. <i>Journal of Bone and Mineral Research</i> , 2016 , 31, 1015-25	6.3	38
112	Organismal Engineering: Towards a Robotic Taxonomic Key for Devices Using Organic Materials. <i>Science Robotics</i> , 2017 , 2,	18.6	37

111	Fabrication of compositionally and topographically complex robust tissue forms by 3D-electrochemical compaction of collagen. <i>Biofabrication</i> , 2015 , 7, 035001	10.5	34
110	Incorporation of a decorin biomimetic enhances the mechanical properties of electrochemically aligned collagen threads. <i>Acta Biomaterialia</i> , 2011 , 7, 2428-36	10.8	33
109	Biologic and Synthetic Grafts in the Reconstruction of Large to Massive Rotator Cuff Tears. <i>Journal of the American Academy of Orthopaedic Surgeons, The</i> , 2016 , 24, 823-828	4.5	33
108	Reduction of restrictive adhesions by local aprotinin application and primary sheath repair in surgically traumatized flexor tendons of the rabbit. <i>Journal of Hand Surgery</i> , 1997 , 22, 826-32	2.6	31
107	Mechanical stretch induced calcium efflux from bone matrix stimulates osteoblasts. <i>Bone</i> , 2012 , 50, 581-91	4.7	30
106	Effects of phosphate-buffered saline concentration and incubation time on the mechanical and structural properties of electrochemically aligned collagen threads. <i>Biomedical Materials (Bristol)</i> , 2011 , 6, 035008	3.5	29
105	Conceptual designs of conduction cooled MgB2 magnets for 1.5 and 3.0T full body MRI systems. <i>Superconductor Science and Technology</i> , 2017 , 30,	3.1	27
104	Bone Morphology and Organization 2014 , 3-25		27
103	Mechanical loading, damping, and load-driven bone formation in mouse tibiae. <i>Bone</i> , 2012 , 51, 810-8	4.7	26
102	Comparison of morphology, orientation, and migration of tendon derived fibroblasts and bone marrow stromal cells on electrochemically aligned collagen constructs. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 94, 1070-9	5.4	26
101	A Point-of-Care Raman Spectroscopy-Based Device for the Diagnosis of Gout and Pseudogout: Comparison With the Clinical Standard Microscopy. <i>Arthritis and Rheumatology</i> , 2016 , 68, 1751-7	9.5	26
100	Woven collagen biotextiles enable mechanically functional rotator cuff tendon regeneration during repair of segmental tendon defects in vivo. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2019 , 107, 1864-1876	3.5	26
99	A micro-architecturally biomimetic collagen template for mesenchymal condensation based cartilage regeneration. <i>Acta Biomaterialia</i> , 2016 , 30, 212-221	10.8	25
98	The sequential production profiles of growth factors and their relations to bone volume in ossifying bone marrow explants. <i>Tissue Engineering - Part A</i> , 2010 , 16, 2295-306	3.9	25
97	Anisotropically Stiff 3D Micropillar Niche Induces Extraordinary Cell Alignment and Elongation. <i>Advanced Healthcare Materials</i> , 2016 , 5, 1884-92	10.1	22
96	Gamma Radiation Sterilization Reduces the High-cycle Fatigue Life of Allograft Bone. <i>Clinical Orthopaedics and Related Research</i> , 2016 , 474, 827-35	2.2	22
95	Wide-field Raman imaging of dental lesions. <i>Analyst, The</i> , 2014 , 139, 3107-14	5	22
94	Engineering small-caliber vascular grafts from collagen filaments and nanofibers with comparable mechanical properties to native vessels. <i>Biofabrication</i> , 2019 , 11, 035020	10.5	21

93	Effects of age and shear rate on the rheological properties of human yellow bone marrow. <i>Biorheology</i> , 2011 , 48, 89-97	1.7	21
92	Assessing matrix quality by Raman spectroscopy helps predict fracture toughness of human cortical bone. <i>Scientific Reports</i> , 2019 , 9, 7195	4.9	20
91	Computational homogenization of the elastic and thermal properties of superconducting composite MgB ₂ wire. <i>Composite Structures</i> , 2018 , 188, 313-329	5.3	20
90	Acoustic emission based monitoring of the microdamage evolution during fatigue of human cortical bone. <i>Journal of Biomechanical Engineering</i> , 2013 , 135, 81005	2.1	20
89	Relationship between damage accumulation and mechanical property degradation in cortical bone: microcrack orientation is important. <i>Journal of Biomedical Materials Research Part B</i> , 2003 , 65, 482-8		20
88	Laser Wavelength Dependence of Background Fluorescence in Raman Spectroscopic Analysis of Synovial Fluid from Symptomatic Joints. <i>Journal of Raman Spectroscopy</i> , 2013 , 44, 1089-1095	2.3	19
87	Biomechanical evaluation of a novel suturing scheme for grafting load-bearing collagen scaffolds for rotator cuff repair. <i>Clinical Biomechanics</i> , 2015 , 30, 669-75	2.2	19
86	Analysis of crystals leading to joint arthropathies by Raman spectroscopy: comparison with compensated polarized imaging. <i>Applied Spectroscopy</i> , 2009 , 63, 381-6	3.1	19
85	Modulation of Hydroxyapatite Nanocrystal Size and Shape by Polyelectrolytic Peptides. <i>Crystal Growth and Design</i> , 2009 , 9, 5220-5226	3.5	19
84	Effects of PDGF-BB delivery from heparinized collagen sutures on the healing of lacerated chicken flexor tendon in vivo. <i>Acta Biomaterialia</i> , 2017 , 63, 200-209	10.8	18
83	Raman spectral markers of collagen denaturation and hydration in human cortical bone tissue are affected by radiation sterilization and high cycle fatigue damage. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 75, 314-321	4.1	18
82	Effect of actuating cell source on locomotion of organic living machines with electrocompacted collagen skeleton. <i>Bioinspiration and Biomimetics</i> , 2016 , 11, 036012	2.6	18
81	A customized Raman system for point-of-care detection of arthropathic crystals in the synovial fluid. <i>Analyst, The</i> , 2014 , 139, 823-30	5	17
80	A scaffold-free multicellular three-dimensional in vitro model of osteogenesis. <i>Calcified Tissue International</i> , 2011 , 88, 388-401	3.9	16
79	Fracture mechanics of cortical bone tissue: a hierarchical perspective. <i>Critical Reviews in Biomedical Engineering</i> , 2004 , 32, 379-426	1.1	16
78	Microdamage induced calcium efflux from bone matrix activates intracellular calcium signaling in osteoblasts via L-type and T-type voltage-gated calcium channels. <i>Bone</i> , 2015 , 76, 88-96	4.7	15
77	Interrelationships between electrical, mechanical and hydration properties of cortical bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 77, 12-23	4.1	15
76	Osteoblasts detect pericellular calcium concentration increase via neomycin-sensitive voltage gated calcium channels. <i>Bone</i> , 2012 , 51, 860-7	4.7	15

75	A multiscale and multiphysics model of strain development in a 1.5 T MRI magnet designed with 36 filament composite MgB ₂ superconducting wire. <i>Superconductor Science and Technology</i> , 2016 , 29, 055008	3.1	15
74	Scalable in-hospital decontamination of N95 filtering face-piece respirator with a peracetic acid room disinfection system. <i>Infection Control and Hospital Epidemiology</i> , 2021 , 42, 678-687	2	15
73	Heparinized collagen sutures for sustained delivery of PDGF-BB: Delivery profile and effects on tendon-derived cells In-Vitro. <i>Acta Biomaterialia</i> , 2016 , 41, 100-9	10.8	14
72	Sporicidal efficacy of genipin: a potential theoretical alternative for biomaterial and tissue graft sterilization. <i>Cell and Tissue Banking</i> , 2013 , 14, 381-93	2.2	14
71	Ossifying bone marrow explant culture as a three-dimensional mechanoresponsive in vitro model of osteogenesis. <i>Tissue Engineering - Part A</i> , 2011 , 17, 417-28	3.9	14
70	Spectroscopic visualization of nanoscale deformation in bone: interaction of light with partially disordered nanostructure. <i>Journal of Biomedical Optics</i> , 2010 , 15, 060503	3.5	14
69	Radioprotectant and radiosensitizer effects on sterility of gamma-irradiated bone. <i>Clinical Orthopaedics and Related Research</i> , 2008 , 466, 1796-803	2.2	14
68	Synthesis and Fabrication of Nanocomposite Fibers of Collagen-Cellulose Nanocrystals by Coelectrocompaction. <i>Biomacromolecules</i> , 2017 , 18, 1259-1267	6.9	13
67	Computer aided biomanufacturing of mechanically robust pure collagen meshes with controlled macroporosity. <i>Biofabrication</i> , 2015 , 7, 035005	10.5	13
66	Depth-dependent shear behavior of bovine articular cartilage: relationship to structure. <i>Journal of Anatomy</i> , 2014 , 225, 519-26	2.9	13
65	Effects of losartan treatment on the physicochemical properties of diabetic rat bone. <i>Journal of Bone and Mineral Metabolism</i> , 2017 , 35, 161-170	2.9	12
64	A fatigue loading model for investigation of iatrogenic subtrochanteric fractures of the femur. <i>Clinical Biomechanics</i> , 2013 , 28, 981-7	2.2	12
63	Kinesin and Dynein Mechanics: Measurement Methods and Research Applications. <i>Journal of Biomechanical Engineering</i> , 2018 , 140,	2.1	11
62	Novel mechanical bioreactor for concomitant fluid shear stress and substrate strain. <i>Journal of Biomechanics</i> , 2012 , 45, 1323-7	2.9	11
61	Assessment of mineral density and atomic content of fracture callus by quantitative computerized tomography. <i>Journal of Orthopaedic Science</i> , 2000 , 5, 248-55	1.6	11
60	Measurement of J-integral in CAD/CAM dental ceramics and composite resin by digital image correlation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 62, 240-246	4.1	10
59	Effects of different lasers on organic/inorganic ratio of radicular dentin. <i>Lasers in Medical Science</i> , 2016 , 31, 415-20	3.1	10
58	Shortwave-infrared Raman spectroscopic classification of water fractions in articular cartilage ex vivo. <i>Journal of Biomedical Optics</i> , 2018 , 23, 1-11	3.5	10

57	Aplysia Californica as a Novel Source of Material for Biohybrid Robots and Organic Machines. <i>Lecture Notes in Computer Science</i> , 2016 , 365-374	0.9	10
56	Characterization of a reproducible model of fracture healing in mice using an open femoral osteotomy. <i>Bone Reports</i> , 2020 , 12, 100250	2.6	9
55	In vivo biocompatibility and time-dependent changes in mechanical properties of woven collagen meshes: A comparison to xenograft and synthetic mid-urethral sling materials. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2019 , 107, 479-489	3.5	9
54	The morphological, material-level, and ash properties of turkey femurs from 3 different genetic strains during production. <i>Poultry Science</i> , 2012 , 91, 2736-46	3.9	9
53	Raman spectroscopic investigation of peptide-glycosaminoglycan interactions. <i>Applied Spectroscopy</i> , 2009 , 63, 636-41	3.1	9
52	Changes in Cortical Bone Mineral and Microstructure with Aging and Osteoporosis. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , 2012 , 105-131	0.5	8
51	3D-Printed Biohybrid Robots Powered by Neuromuscular Tissue Circuits from Aplysia californica. <i>Lecture Notes in Computer Science</i> , 2017 , 475-486	0.9	8
50	Activation of intracellular calcium signaling in osteoblasts colocalizes with the formation of post-yield diffuse microdamage in bone matrix. <i>BoneKEy Reports</i> , 2016 , 5, 778		8
49	A hybrid vascular graft harnessing the superior mechanical properties of synthetic fibers and the biological performance of collagen filaments. <i>Materials Science and Engineering C</i> , 2021 , 118, 111418	8.3	8
48	Effects of polyelectrolytic peptides on the quality of mineral crystals grown in vitro. <i>Journal of Bone and Mineral Metabolism</i> , 2008 , 26, 569-75	2.9	7
47	Effect of different adhesive strategies on microtensile bond strength of computer aided design/computer aided manufacturing blocks bonded to dentin. <i>Dental Research Journal</i> , 2016 , 13, 117-23	0.8	7
46	Evaluation of mineral content in healthy permanent human enamel by Raman spectroscopy. <i>Journal of Clinical and Experimental Dentistry</i> , 2016 , 8, e546-e549	1.4	7
45	Microbially-derived nanofibrous cellulose polymer for connective tissue regeneration. <i>Materials Science and Engineering C</i> , 2019 , 99, 96-102	8.3	6
44	Effect of laser activated bleaching on the chemical stability and morphology of intracoronal dentin. <i>Archives of Oral Biology</i> , 2018 , 86, 40-45	2.8	6
43	Raman imaging for quantification of the volume fraction of biodegradable polymers in histological preparations. <i>Journal of Biomedical Materials Research - Part A</i> , 2007 , 82, 611-7	5.4	6
42	Effect of storage and aging conditions on the flexural strength and flexural modulus of CAD/CAM materials. <i>Dental Materials Journal</i> , 2019 , 38, 264-270	2.5	6
41	Direct, Transfer-Free Growth of Large-Area Hexagonal Boron Nitride Films by Plasma-Enhanced Chemical Film Conversion (PECFC) of Printable, Solution-Processed Ammonia Borane. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 43936-43945	9.5	6
40	Mechanical Analysis of MgB ₂ Based Full Body MRI Coils Under Different Winding Conditions. <i>IEEE Transactions on Applied Superconductivity</i> , 2017 , 27, 1-5	1.8	5

39	An experimental model to investigate initial tracheal anastomosis strength. <i>Laryngoscope</i> , 2010 , 120, 1125-8	3.6	5
38	Optimization of the mineral content in polymeric gels: The effect of calcium to phosphate molar ratio. <i>Journal of Crystal Growth</i> , 2005 , 280, 587-593	1.6	5
37	Raman Biomarkers Are Associated with Cyclic Fatigue Life of Human Allograft Cortical Bone. <i>Journal of Bone and Joint Surgery - Series A</i> , 2019 , 101, e85	5.6	5
36	Genipin guides and sustains the polarization of macrophages to the pro-regenerative M2 subtype via activation of the pSTAT6-PPAR-gamma pathway. <i>Acta Biomaterialia</i> , 2021 , 131, 198-210	10.8	5
35	Effect of thermal cycling on fracture toughness of CAD/CAM materials. <i>American Journal of Dentistry</i> , 2018 , 31, 205-210	1.3	5
34	Genipin as a sporicidal agent for the treatment of cortical bone allografts. <i>Journal of Biomaterials Applications</i> , 2014 , 28, 1336-42	2.9	4
33	Femoral Iatrogenic Subtrochanteric Fatigue Fracture Risk is not Increased by Placing Drill Holes Below the Level of the Lesser Trochanter. <i>Iowa orthopaedic journal, The</i> , 2017 , 37, 23-28	1.1	4
32	Fabrication of Electrocompacted Aligned Collagen Morphs for Cardiomyocyte Powered Living Machines. <i>Lecture Notes in Computer Science</i> , 2015 , 429-440	0.9	4
31	Controlled mercerization of bacterial cellulose provides tunability of modulus and ductility over two orders of magnitude. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019 , 90, 530-537	4.1	4
30	Repetitive short-span application of extracellular calcium is osteopromotive to osteoprogenitor cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018 , 12, e1349-e1359	4.4	3
29	Surface strain distribution of orthodontic miniscrews under load. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2016 , 150, 444-50	2.1	3
28	Simulating muscular thin films using thermal contraction capabilities in finite element analysis tools. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 63, 326-336	4.1	3
27	Immune and inflammatory pathways are involved in inherent bone marrow ossification. <i>Clinical Orthopaedics and Related Research</i> , 2012 , 470, 2528-40	2.2	3
26	A portable fiber-optic raman spectrometer concept for evaluation of mineral content within enamel tissue. <i>Journal of Clinical and Experimental Dentistry</i> , 2017 , 9, e238-e241	1.4	3
25	Evaluation of an electrochemically aligned collagen yarn for textile scaffold fabrication. <i>Biomedical Materials (Bristol)</i> , 2021 , 16, 025001	3.5	3
24	Chemical characterization of Maltese-cross birefringent particles in synovial fluid samples collected from symptomatic joints. <i>Joint Bone Spine</i> , 2018 , 85, 501-503	2.9	2
23	Elevated solute transport at sites of diffuse matrix damage in cortical bone: Implications on bone repair. <i>Journal of Orthopaedic Research</i> , 2018 , 36, 692-698	3.8	2
22	Random lasing in bone tissue: potential as novel spectroscopy for dynamical analysis of nanostructures 2010 ,		2

21	Comments on acoustic emission visualization of bone cement fatigue locations. <i>Journal of Biomedical Materials Research Part B</i> , 2002 , 59, 398-401		2
20	Mechanical properties and DIC analyses of CAD/CAM materials. <i>Journal of Clinical and Experimental Dentistry</i> , 2016 , 8, e512-e516	1.4	2
19	Fundamentals of Musculoskeletal Biomechanics 2016 , 15-36		2
18	Raman spectroscopy-based water measurements identify the origin of MRI T2 signal in human articular cartilage zones and predict histopathologic score. <i>Journal of Biophotonics</i> , 2021 , e202100212	3.1	1
17	Volumetric MicroCT Intensity Histograms of Fatty Infiltration Correlate with the Mechanical Strength of Rotator Cuff Repairs: An Ex Vivo Rabbit Model. <i>Clinical Orthopaedics and Related Research</i> , 2021 , 479, 406-418	2.2	1
16	Diffuse microdamage in bone activates anabolic response by osteoblasts via involvement of voltage-gated calcium channels. <i>Journal of Bone and Mineral Metabolism</i> , 2020 , 38, 151-160	2.9	1
15	An Raman study on compositional correlations of lipids and protein with animal tissue hydration. <i>Vibrational Spectroscopy</i> , 2020 , 107, 103022-103022	2.1	0
14	and sp. inhibit osseointegration of orthopaedic implants.. <i>Infection and Immunity</i> , 2022 , iai0066921	3.7	0
13	Comparison of diffuse versus inverse spatially-offset Raman spectroscopy modalities for analyte detection through barriers. <i>Vibrational Spectroscopy</i> , 2021 , 113, 103228	2.1	0
12	Chondrogenesis of Mesenchymal Stem Cells through Local Release of TGF- β from Heparinized Collagen Biofabric. <i>Tissue Engineering - Part A</i> , 2021 , 27, 1434-1445	3.9	0
11	Heparin-mediated antibiotic delivery from an electrochemically-aligned collagen sheet. <i>Bio-Medical Materials and Engineering</i> , 2021 , 32, 159-170	1	0
10	Piece-By-Piece Shape-Morphing: Engineering Compatible Auxetic and Non-Auxetic Lattices to Improve Soft Robot Performance in Confined Spaces. <i>Advanced Engineering Materials</i> , 2101620	3.5	0
9	Mesenchymal Stem Cell Delivery via Topographically Tenoinductive Collagen Biotextile Enhances Regeneration of Segmental Tendon Defects. <i>American Journal of Sports Medicine</i> , 036354652210979	6.8	0
8	Optical Properties and van der Waals-London Dispersion Interactions in Inorganic and Biomolecular Assemblies. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1619, 1		
7	Improving the Anisotropy of Collagen by Electric Field Increases Its Toughness by Two-Fold 2007 , 1043		
6	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		
5	Probing Pre-failure Molecular Deformation in Cortical Bone with Fluorescent Dyes. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2011 , 333-337	0.3	
4	High Local Deformation Correlates with Optical Property Change in Cortical Bone. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2011 , 327-331	0.3	

- 3 Back-directional Gated Spectroscopic Imaging for Nanoscale Deformation Analysis in Bone. *Conference Proceedings of the Society for Experimental Mechanics*, **2013**, 151-155 0.3
- 2 Caract risation chimique des particules birfringentes en croix de Malte d tect es dans des  chantillons de liquide synovial provenant d'articulations symptomatiques. *Revue Du Rhumatisme (Edition Francaise)*, **2019**, 86, 108-111 0.1
- 1 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