Dominique P Pioletti

List of Publications by Year
in descending order

188 papers	5,822 citations	81743 39 h-index	102304 66 g-index
194 all docs	194 docs citations	194 times ranked	6728 citing authors

#	Article	IF	Citations
1	Bone regeneration and stem cells. Journal of Cellular and Molecular Medicine, 2011, 15, 718-746.	1.6	308
2	Architecture and properties of anisotropic polymer composite scaffolds for bone tissue engineering. Biomaterials, 2006, 27, 905-916.	5.7	305
3	Calcium phosphate drug delivery system: influence of local zoledronate release on bone implant osteointegration. Bone, 2005, 36, 52-60.	1.4	250
4	Viscoelastic constitutive law in large deformations. Journal of Biomechanics, 1998, 31, 753-757.	0.9	236
5	Local delivery of bisphosphonate from coated orthopedic implants increases implants mechanical stability in osteoporotic rats. Journal of Biomedical Materials Research - Part A, 2006, 76A, 133-143.	2.1	153
6	The cytotoxic effect of titanium particles phagocytosed by osteoblasts. , 1999, 46, 399-407.		143
7	Non-linear viscoelastic laws for soft biological tissues. European Journal of Mechanics, A/Solids, 2000, 19, 749-759.	2.1	141
8	Effect of different Tiâ€“6Alâ€“4V surface treatments on osteoblasts behaviour. Biomaterials, 2002, 23, 1447-1454.	5.7	125
9	The effects of calcium phosphate cement particles on osteoblast functions. Biomaterials, 2000, 21, 1103-1114.	5.7	120
10	Strain rate effect on the mechanical behavior of the anterior cruciate ligamentâ€“bone complex. Medical Engineering and Physics, 1999, 21, 95-100.	0.8	115
11	Biocompatibility of Bioresorbable Poly(L-lactic acid) Composite Scaffolds Obtained by Supercritical Gas Foaming with Human Fetal Bone Cells. Tissue Engineering, 2005, 11, 1640-1649.	4.9	114
12	Bioresorbable composites prepared by supercritical fluid foaming. Journal of Biomedical Materials Research - Part A, 2005, 75A, 89-97.	2.1	91
13	Alignment of collagen fiber in knitted silk scaffold for functional massive rotator cuff repair. Acta Biomaterialia, 2017, 51, 317-329.	4.1	91
14	Nanofibrillated cellulose composite hydrogel for the replacement of the nucleus pulposus. Acta Biomaterialia, 2011, 7, 3412-3421.	4.1	88
15	Implants delivering bisphosphonate locally increase periprosthetic bone density in an osteoporotic sheep model. A pilot study. , 2008, 16, 10-16.		88
16	Zone-dependent mechanical properties of human articular cartilage obtained by indentation measurements. Journal of Materials Science: Materials in Medicine, 2018, 29, 57.	1.7	83
17	Composite Double-Network Hydrogels To Improve Adhesion on Biological Surfaces. ACS Applied Materials & Interfaces, 2018, 10, 38692-38699.	4.0	81
18	Fetal bone cells for tissue engineering. Bone, 2004, 35, 1323-1333.	1.4	77

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19	Repair of critical size defects in the rat cranium using ceramic-reinforced PLA scaffolds obtained by supercritical gas foaming. Journal of Biomedical Materials Research - Part A, 2007, 83A, 41-51.	2.1	77
20	Human fetal bone cells associated with ceramic reinforced PLA scaffolds for tissue engineering. Bone, 2008, 42, 554-564.	1.4	76
21	The influence of wear particles in the expression of osteoclastogenesis factors by osteoblasts. Biomaterials, 2004, 25, 5803-5808.	5.7	72
22	On the independence of time and strain effects in the stress relaxation of ligaments and tendons. Journal of Biomechanics, 2000, 33, 1729-1732.	0.9	67
23	Chronic wound healing by fetal cell therapy may be explained by differential gene profiling observed in fetal versus old skin cells. Experimental Gerontology, 2009, 44, 208-218.	1.2	65
24	Polylactic acidâ€“phosphate glass composite foams as scaffolds for bone tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 80B, 322-331.	1.6	63
25	Augmentation of bone defect healing using a new biocomposite scaffold: An in vivo study in sheep. Acta Biomaterialia, 2010, 6, 3755-3762.	4.1	63
26	Fatigue as the missing link between bone fragility and fracture. Nature Biomedical Engineering, 2018, 2, 62-71.	11.6	57
27	Gene expression analysis of osteoblastic cells contacted by orthopedic implant particles. Journal of Biomedical Materials Research Part B, 2002, 61, 408-420.	3.0	54
28	A photopolymerized composite hydrogel and surgical implanting tool for a nucleus pulposus replacement. Biomaterials, 2016, 88, 110-119.	5.7	51
29	Importance of the subscapularis muscle after total shoulder arthroplasty. Clinical Biomechanics, 2013, 28, 146-150.	0.5	50
30	Tibial component positioning in total knee arthroplasty: bone coverage and extensor apparatus alignment. Knee Surgery, Sports Traumatology, Arthroscopy, 1997, 5, 251-257.	2.3	48
31	Biomechanical evaluation of intra-articular and extra-articular procedures in anterior cruciate ligament reconstruction: A finite element analysis. Clinical Biomechanics, 2007, 22, 336-343.	0.5	48
32	Photo-polymerization, swelling and mechanical properties of cellulose fibre reinforced poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.8	48
33	3D Printing of Polymers with Hierarchical Continuous Porosity. Advanced Materials Technologies, 2017, 2, 1700145.	3.0	48
34	Calcium phosphate cement augmentation of cancellous bone screws can compensate for the absence of cortical fixation. Journal of Biomechanics, 2010, 43, 2869-2874.	0.9	46
35	Biomechanical consequences of humeral component malpositioning after anatomical total shoulder arthroplasty. Journal of Shoulder and Elbow Surgery, 2010, 19, 1184-1190.	1.2	46
36	How plate positioning impacts the biomechanics of the open wedge tibial osteotomy; A finite element analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 307-313.	0.9	45

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37	Anti-Microbial Dendrimers against Multidrug-Resistant P. aeruginosa Enhance the Angiogenic Effect of Biological Burn-wound Bandages. Scientific Reports, 2016, 6, 22020.	1.6	45
38	Microstimulation at the boneâ€“implant interface upregulates osteoclast activation pathways. Bone, 2008, 42, 358-364.	1.4	44
39	Comparison of polyethylene wear in anatomical and reversed shoulder prostheses. Journal of Bone and Joint Surgery: British Volume, 2009, 91-B, 977-982.	3.4	44
40	Controlled release from a mechanically-stimulated thermosensitive self-heating composite hydrogel. Biomaterials, 2014, 35, 450-455.	5.7	43
41	Consistency and Safety of Cell Banks for Research and Clinical Use: Preliminary Analysis of Fetal Skin Banks. Cell Transplantation, 2007, 16, 675-684.	1.2	41
42	Whole-Cell Bioprocessing of Human Fetal Cells for Tissue Engineering of Skin. Skin Pharmacology and Physiology, 2009, 22, 63-73.	1.1	41
43	In vivo loading increases mechanical properties of scaffold by affecting bone formation and bone resorption rates. Bone, 2011, 49, 1357-1364.	1.4	39
44	The role of energy dissipation of polymeric scaffolds in the mechanobiological modulation of chondrogenic expression. Biomaterials, 2014, 35, 1890-1897.	5.7	38
45	Combined effect of titanium particles and TNF-? on the production of IL-6 by osteoblast-like cells. Journal of Biomedical Materials Research Part B, 2000, 52, 382-387.	3.0	37
46	Curing kinetics and mechanical properties of a composite hydrogel for the replacement of the nucleus pulposus. Composites Science and Technology, 2010, 70, 1847-1853.	3.8	37
47	Woundâ€healing Gene Family Expression Differences Between Fetal and Foreskin Cells Used for Bioengineered Skin Substitutes. Artificial Organs, 2008, 32, 509-518.	1.0	36
48	Epiphyseal Chondroprogenitors Provide a Stable Cell Source for Cartilage Cell Therapy. Cell Medicine, 2012, 4, 23-32.	5.0	36
49	Activation of AKT-mTOR Signaling Directs Tenogenesis of Mesenchymal Stem Cells. Stem Cells, 2018, 36, 527-539.	1.4	36
50	Thoughts on cartilage tissue engineering: A 21st century perspective. Current Research in Translational Medicine, 2021, 69, 103299.	1.2	36
51	Novel micropatterns mechanically control fibrotic reactions at the surface of silicone implants. Biomaterials, 2015, 54, 136-147.	5.7	35
52	<i>In Vitro</i>Characterization of Immune-Related Properties of Human Fetal Bone Cells for Potential Tissue Engineering Applications. Tissue Engineering - Part A, 2009, 15, 1523-1532.	1.6	34
53	<i>In vitro</i> and <i>in vivo</i> investigation of bisphosphonate-loaded hydroxyapatite particles for peri-implant bone augmentation. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1974-1985.	1.3	33
54	3D strain map of axially loaded mouse tibia: a numerical analysis validated by experimental measurements. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 95-100.	0.9	32

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55	A musculoskeletal shoulder model based on pseudo-inverse and null-space optimization. Medical Engineering and Physics, 2010, 32, 1050-1056.	0.8	32
56	In vivo cyclic loading as a potent stimulatory signal for bone formation inside tissue engineering scaffold. , 2010, 19, 41-49.		32
57	Total shoulder arthroplasty: Downward inclination of the glenoid component to balance supraspinatus deficiency. Journal of Shoulder and Elbow Surgery, 2009, 18, 360-365.	1.2	31
58	Plasticity of Fetal Cartilaginous Cells. Cell Transplantation, 2010, 19, 1349-1357.	1.2	30
59	Osteogenesis imperfecta: from diagnosis and multidisciplinary treatment to future perspectives. Swiss Medical Weekly, 2016, 146, w14322.	0.8	30
60	Effects of glenoid inclination and acromion index on humeral head translation and glenoid articular cartilage strain. Journal of Shoulder and Elbow Surgery, 2017, 26, 157-164.	1.2	29
61	Titanium particles inhibit osteoblast adhesion to fibronectin-coated substrates. Journal of Orthopaedic Research, 2000, 18, 203-211.	1.2	28
62	Walk-to-run transition: about the Modela dimensionless number. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 95-96.	0.9	28
63	Efficient decellularization of equine tendon with preserved biomechanical properties and cytocompatibility for human tendon surgery indications. Artificial Organs, 2020, 44, E161-E171.	1.0	28
64	Combined effects of zoledronate and mechanical stimulation on bone adaptation in an axially loaded mouse tibia. Clinical Biomechanics, 2011, 26, 101-105.	0.5	27
65	Simultaneous and multisite measure of micromotion, subsidence and gap to evaluate femoral stem stability. Journal of Biomechanics, 2012, 45, 1232-1238.	0.9	27
66	Injectable calcium phosphate cement for augmentation around cancellous bone screws. In vivo biomechanical studies. Journal of Biomechanics, 2012, 45, 1156-1160.	0.9	26
67	Impact of synovial fluid flow on temperature regulation in knee cartilage. Journal of Biomechanics, 2015, 48, 370-374.	0.9	26
68	Biomechanics in bone tissue engineering. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 837-846.	0.9	25
69	Intrinsic viscoelasticity increases temperature in knee cartilage under physiological loading. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 30, 123-130.	1.5	25
70	Decellularised tissues obtained by a CO2-philic detergent and supercritical CO2. , 2018, 36, 81-95.		25
71	An Intrinsicallyâ€Adhesive Family of Injectable and Photoâ€Curable Hydrogels with Functional Physicochemical Performance for Regenerative Medicine. Macromolecular Rapid Communications, 2021, 42, e2000660.	2.0	25
72	Large-scale gene expression analysis of osteoblasts cultured on three different Tiâ€"6Alâ€"4V surface treatments. Biomaterials, 2002, 23, 4193-4202.	5.7	24

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73	Orthopedic Implant Used as Drug Delivery System: Clinical Situation and State of the Research. Current Drug Delivery, 2008, 5, 59-63.	0.8	24
74	Prediction of bone density around orthopedic implants delivering bisphosphonate. Journal of Biomechanics, 2009, 42, 1206-1211.	0.9	24
75	Does locally delivered Zoledronate influence peri-implant bone formation? â€“ Spatio-temporal monitoring of bone remodeling in vivo. Biomaterials, 2014, 35, 9995-10006.	5.7	24
76	Bone tissue engineering using foetal cell therapy. Swiss Medical Weekly, 2006, 136, 557-60.	0.8	24
77	Biphasic constitutive laws for biological interface evolution. Biomechanics and Modeling in Mechanobiology, 2003, 1, 239-249.	1.4	23
78	Effect of micromechanical stimulations on osteoblasts: development of a device simulating the mechanical situation at the boneâ€“implant interface. Journal of Biomechanics, 2003, 36, 131-135.	0.9	23
79	Isolation and <i>in vitro</i> chondrogenic potential of human foetal spine cells. Journal of Cellular and Molecular Medicine, 2009, 13, 2559-2569.	1.6	22
80	Improving hydrogels×³ toughness by increasing the dissipative properties of their network. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 41, 161-167.	1.5	22
81	Ectopic tissue engineered ligament with silk collagen scaffold for ACL regeneration: A preliminary study. Acta Biomaterialia, 2017, 53, 307-317.	4.1	22
82	Effect of a collar on subsidence and local micromotion of cementless femoral stems: in vitro comparative study based on micro-computerised tomography. International Orthopaedics, 2018, 42, 49-57.	0.9	22
83	Biologicals and Fetal Cell Therapy for Wound and Scar Management. ISRN Dermatology, 2011, 2011, 1-16.	1.9	21
84	Peri-implant Bone Remodeling after Total Hip Replacement Combined with Systemic Alendronate Treatment: A Finite Element Analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2004, 7, 73-78.	0.9	20
85	Regulation of proliferation and differentiation of human fetal bone cells. , 2011, 21, 46-58.		20
86	In vivo assessment of local effects after application of bone screws delivering bisphosphonates into a compromised cancellous bone site. Clinical Biomechanics, 2011, 26, 1039-1043.	0.5	19
87	Activities of daily living with reverse prostheses: importance of scapular compensation for functional mobility of the shoulder. Journal of Shoulder and Elbow Surgery, 2013, 22, 948-953.	1.2	19
88	Strategies for improving the repair of focal cartilage defects. Nanomedicine, 2015, 10, 2893-2905.	1.7	18
89	Knitted Silk-Collagen Scaffold Incorporated with Ligament Stem/Progenitor Cells Sheet for Anterior Cruciate Ligament Reconstruction and Osteoarthritis Prevention. ACS Biomaterials Science and Engineering, 2019, 5, 5412-5421.	2.6	18
90	Variability of the pullout strength of cancellous bone screws with cement augmentation. Clinical Biomechanics, 2015, 30, 500-506.	0.5	17

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91	Human muscular fetal cells: a potential cell source for muscular therapies. Pediatric Surgery International, 2008, 24, 37-47.	0.6	16
92	Mechanical interaction between cells and fluid for bone tissue engineering scaffold: Modulation of the interfacial shear stress. Journal of Biomechanics, 2010, 43, 933-937.	0.9	16
93	Integration of mechanotransduction concepts in bone tissue engineering. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 1050-1055.	0.9	16
94	Time course of bone screw fixation following a local delivery of Zoledronate in a rat femoral model â€“ A micro-finite element analysis. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 45, 22-31.	1.5	16
95	Biodegradable <scp>HEMA</scp>â€based hydrogels with enhanced mechanical properties. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1161-1169.	1.6	16
96	Development of an Effective Cell Seeding Technique: Simulation, Implementation, and Analysis of Contributing Factors. Tissue Engineering - Part C: Methods, 2017, 23, 485-496.	1.1	16
97	Can the increase of bone mineral density following bisphosphonates treatments be explained by biomechanical considerations?. Clinical Biomechanics, 2004, 19, 170-174.	0.5	15
98	Photopolymerizable hydrogels for implants: Monte-Carlo modeling and experimental<i>in vitro</i>validation. Journal of Biomedical Optics, 2014, 19, 035004.	1.4	15
99	Comparison of an EMG-based and a stress-based method to predict shoulder muscle forces. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1272-1279.	0.9	15
100	Cyclic loading of a cellulose/hydrogel composite increases its fracture strength. Extreme Mechanics Letters, 2018, 24, 66-74.	2.0	15
101	Control of Dissipation Sources: A Central Aspect for Enhancing the Mechanical and Mechanobiological Performances of Hydrogels. ACS Applied Materials & Interfaces, 2019, 11, 39662-39671.	4.0	15
102	Hybrid granular hydrogels: combining composites and microgels for extended ranges of material properties. Soft Matter, 2020, 16, 3769-3778.	1.2	15
103	Tightening force and torque of nonlocking screws in a reverse shoulder prosthesis. Clinical Biomechanics, 2010, 25, 517-522.	0.5	14
104	A new technique to measure micromotion distribution around a cementless femoral stem. Journal of Biomechanics, 2011, 44, 557-560.	0.9	14
105	Miniature probe for the delivery and monitoring of a photopolymerizable material. Journal of Biomedical Optics, 2015, 20, 127001.	1.4	14
106	Full-field measurement of micromotion around a cementless femoral stem using micro-CT imaging and radiopaque markers. Journal of Biomechanics, 2016, 49, 4002-4008.	0.9	14
107	Stability Enhancement Using Hyaluronic Acid Gels for Delivery of Human Fetal Progenitor Tenocytes. Cell Medicine, 2016, 8, 87-97.	5.0	14
108	Experimental and mathematical methods for representing relative surface elongation of the ACL. Journal of Biomechanics, 1995, 28, 1123-1126.	0.9	13

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109	Tailoring swelling to control softening mechanisms during cyclic loading of PEG/cellulose hydrogel composites. Composites Science and Technology, 2018, 168, 88-95.	3.8	13
110	Light-Activated, Bioadhesive, Poly(2-hydroxyethyl methacrylate) Brush Coatings. Biomacromolecules, 2020, 21, 240-249.	2.6	13
111	Temperature evolution following joint loading promotes chondrogenesis by synergistic cues via calcium signaling. ELife, 2022, 11, .	2.8	13
112	The effect of bisphosphonates and titanium particles on osteoblasts. Journal of Bone and Joint Surgery: British Volume, 2005, 87-B, 1157-1163.	3.4	12
113	Human fetal bone cells in delivery systems for bone engineering. Journal of Tissue Engineering and Regenerative Medicine, 2011, 5, 806-814.	1.3	12
114	Importance of polyethylene thickness in total shoulder arthroplasty: A finite element analysis. Clinical Biomechanics, 2012, 27, 443-448.	0.5	12
115	A patient-specific model of total knee arthroplasty to estimate patellar strain: A case study. Clinical Biomechanics, 2016, 32, 212-219.	0.5	12
116	Prediction of spatio-temporal bone formation in scaffold by diffusion equation. Biomaterials, 2011, 32, 7006-7012.	5.7	11
117	Experimental method to characterize the strain dependent permeability of tissue engineering scaffolds. Journal of Biomechanics, 2016, 49, 3749-3752.	0.9	11
118	Glenoid bone strain after anatomical total shoulder arthroplasty: In vitro measurements with micro-CT and digital volume correlation. Medical Engineering and Physics, 2020, 85, 48-54.	0.8	11
119	In vitro Implementation of Photopolymerizable Hydrogels as a Potential Treatment of Intracranial Aneurysms. Frontiers in Bioengineering and Biotechnology, 2020, 8, 261.	2.0	11
120	Effect of partial-thickness tear on loading capacities of the supraspinatus tendon: a finite element analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 875-882.	0.9	10
121	Development of Standardized Fetal Progenitor Cell Therapy for Cartilage Regenerative Medicine: Industrial Transposition and Preliminary Safety in Xenogeneic Transplantation. Biomolecules, 2021, 11, 250.	1.8	10
122	Biomechanical evaluation of porous biodegradable scaffolds for revision knee arthroplasty. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 333-339.	0.9	9
123	Targeted mechanical properties for optimal fluid motion inside artificial bone substitutes. Journal of Orthopaedic Research, 2009, 27, 1082-1087.	1.2	9
124	Biomechanics and tissue engineering. Osteoporosis International, 2011, 22, 2027-2031.	1.3	9
125	Synthesis and Photopolymerization of Tween 20 Methacrylate/N-vinyl-2-Pyrrolidone Blends. Materials Science and Engineering C, 2012, 32, 2235-2241.	3.8	9
126	Mechanical evaluation of a tissue-engineered zone of calcification in a boneâ€“hydrogel osteochondral construct. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 332-337.	0.9	9

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127	Damping properties of the nucleus pulposus. Clinical Biomechanics, 2012, 27, 861-865.	0.5	8
128	Identification of elastic properties of human patellae using micro-finite element analysis. Journal of Biomechanics, 2016, 49, 3111-3115.	0.9	8
129	Silk granular hydrogels self-reinforced with regenerated silk fibroin fibers. Soft Matter, 2021, 17, 7038-7046.	1.2	8
130	Cartilage self-heating contributes to chondrogenic expression. , 0, 26, 171-178.		8
131	Orthopaedic Implant as Drug Delivery System: a Numerical Approach. Computer Methods in Biomechanics and Biomedical Engineering, 2001, 4, 505-513.	0.9	7
132	A simulation framework for humeral head translations. Medical Engineering and Physics, 2017, 49, 140-147.	0.8	7
133	Human Bone Progenitor Cells for Clinical Application: What Kind of Immune Reaction Does Fetal Xenograft Tissue Trigger in Immunocompetent Rats?. Cell Transplantation, 2017, 26, 879-890.	1.2	7
134	Effect of temporal onsets of mechanical loading on bone formation inside a tissue engineering scaffold combined with cell therapy. Bone Reports, 2018, 8, 173-179.	0.2	7
135	An Off-the-Shelf Tissue Engineered Cartilage Composed of Optimally Sized Pellets of Cartilage Progenitor/Stem Cells. ACS Biomaterials Science and Engineering, 2021, 7, 881-892.	2.6	7
136	Pulsatile Flow-Induced Fatigue-Resistant Photopolymerizable Hydrogels for the Treatment of Intracranial Aneurysms. Frontiers in Bioengineering and Biotechnology, 2020, 8, 619858.	2.0	7
137	Micromotion-induced peri-prosthetic fluid flow around a cementless femoral stem. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 730-736.	0.9	6
138	Non-setting, injectable biomaterials containing particulate hydroxyapatite can increase primary stability of bone screws in cancellous bone. Clinical Biomechanics, 2018, 59, 174-180.	0.5	6
139	Impact of partial-thickness tears on supraspinatus tendon strain based on a finite element analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 118-119.	0.9	5
140	Patellar bone strain after total knee arthroplasty is correlated with bone mineral density and body mass index. Medical Engineering and Physics, 2019, 68, 17-24.	0.8	4
141	Muscle co-contraction in an upper limb musculoskeletal model: EMG-assisted vs. standard load-sharing. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 137-150.	0.9	4
142	Strain distribution in mice tibia under axial loading. Numerical and experimental models. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 89-90.	0.9	3
143	Dynamical biomechanical model of the shoulder: Null space based optimization of the overactuated system.. , 2009, , .		3
144	Surgical preparation of boneâ€"scaffold interface is critical for bone regeneration inside tissue engineering scaffold. Journal of Orthopaedic Research, 2011, 29, 767-772.	1.2	3

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145	Capillary-valve-based platform towards cell-on-chip mechanotransduction assays. Sensors and Actuators B: Chemical, 2013, 188, 1019-1025.	4.0	3
146	A Flow Sensing Model for Mesenchymal Stromal Cells Using Morphogen Dynamics. Biophysical Journal, 2013, 104, 2132-2136.	0.2	3
147	Multi-scale modeling of photopolymerization for medical hydrogel-implant design. , 2013, , .		3
148	Importance of trabecular anisotropy in finite element predictions of patellar strain after Total Knee Arthroplasty. Medical Engineering and Physics, 2017, 39, 102-105.	0.8	3
149	Viscohyperelastic Strain Energy Function. , 2017, , 59-78.		3
150	Reverse shoulder arthroplasty: polyethylene wear. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 247-248.	0.9	2
151	Biomechanical considerations can serve as design rules in the development of bone tissue engineering scaffold. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 17-18.	0.9	2
152	Osteoclastogenesis can be mechanically-induced in the peri-implant bone. Irbm, 2009, 30, 10-13.	3.7	2
153	Shoulder muscle forces during abduction with subscapularis deficiency after total shoulder arthroplasty. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 19-20.	0.9	2
154	Minimally invasive photopolymerization in intervertebral disc tissue cavities. , 2014, , .		2
155	Translation of biomechanical concepts in bone tissue engineering: from animal study to revision knee arthroplasty. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 845-852.	0.9	2
156	In-situ photopolymerization and monitoring device for controlled shaping of tissue fillers, replacements, or implants. , 2015, , .		2
157	Feasibility of an alternative method to estimate glenohumeral joint center from videogrammetry measurements and CT/MRI of patients. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 33-42.	0.9	2
158	The cytotoxic effect of titanium particles phagocytosed by osteoblasts. Journal of Biomedical Materials Research Part B, 1999, 46, 399.	3.0	2
159	Ageâ€•and sexâ€specific normativevalues of bone mineral densityin theadultglenoid. Journal of Orthopaedic Research, 2022, , .	1.2	2
160	Intrinsic coordinate system for the tibial plateau. Knee, 1998, 5, 95-98.	0.8	1
161	Mechanical Properties of a Photopolymerizable Hydrogel for Intervertebral Disc Replacement. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	1
162	Distribution of gap and micromotion during compressive loading around a cementless femoral stem. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1896-1897.	0.9	1

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163	A Matlab toolbox for scaled-generic modeling of shoulder and elbow. Scientific Reports, 2021, 11, 20806.	1.6	1
164	Bone tissue engineering using foetal cell therapy. Swiss Medical Weekly, 2007, 137 Suppl 155, 86S-89S.	0.8	1
165	DÃ©placements de la TubÃ©rositÃ© Tibiale: Effets Des ParamÃ¨tres Chirurgicaux. Archives of Physiology and Biochemistry, 1995, 103, C56-C57.	1.0	0
166	31st Congress of the SocietÃ© de BiomÃ©canique. Journal of Biomechanics, 2006, 39, xi.	0.9	0
167	Activation pathways of osteoclasts are up-regulated by micromotions at the boneâ€"implant interface. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 93-94.	0.9	0
168	Using drug delivery systems to enhance joint replacement. , 2008, , 397-406.		0
169	Reverse shoulder arthroplasty: compression screw force. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 243-244.	0.9	0
170	Model to optimise the amount of drug on an implant used as drug delivery system. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 233-234.	0.9	0
171	Total knee arthroplasty: posterior tilt of tibial tray. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 245-246.	0.9	0
172	Measuring micromotion around a loaded hip stem using Î¼CT imaging. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 129-130.	0.9	0
173	Corrigendum to â€œCalcium phosphate augmentation of cancellous bone screws in impaired lapine boneâ€•[Injury 40 (S2) (2009) S23]. Injury, 2010, 41, 552.	0.7	0
174	Estimation of Biomechanical Stimulus in Bone Scaffolds in Vivo: Multi-Scale Finite Element Model. , 2010, , .		0
175	Proliferative and Osteogenic Differentiation Potentials of Human Fetal Bone Cells. Bone, 2010, 46, S51.	1.4	0
176	Prediction of polyethylene wear after total knee replacement. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 139-140.	0.9	0
177	Viscoelastic assessment of skin quality for clinical applications. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 235-236.	0.9	0
178	A method to measure glenoid wear in 3D. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 343-344.	0.9	0
179	Response to Letter to the Editor: Comment on â€œinjectable calcium phosphate cement for augmentation around cancellous bone screws. In vivo biomechanical studiesâ€•(volume 45, issue 7, pages 1156â€"1160). Journal of Biomechanics, 2013, 46, 634-635.	0.9	0
180	Effect of a pathological scapular tilt after total shoulder arthroplasty. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 1196-1201.	0.9	0

#	Article	IF	Citations
181	Dissipation Can Act as a Mechanobiological Signal in Cartilage Differentiation. , 2013, , .		0
182	Mechanical Properties of a Photopolymerizable Hydrogel for Intervertebral Disc Replacement. , 2013, , .		0
183	A model for micromotion-induced fluid flow at the bone-implant interface. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 52-53.	0.9	0
184	Development of an in situ controllable polymerization tool and process for hydrogel used to replace nucleus pulposus. Proceedings of SPIE, 2015, , .	0.8	0
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187	Visco-elastic constitutive laws of soft tissues: combination of short and long time memory effects. , 0, , .		0
188	432â€…Functional mouthguard design to enhance the protective capability and athlete comfort. , 2021, , .		0