Dominique P Pioletti

List of Publications by Year in Descending Order

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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.

4,650 61 175 37 h-index g-index citations papers 194 5,219 4.5 5.39 avg, IF L-index ext. papers ext. citations

#	Paper	IF	Citations
175	A Matlab toolbox for scaled-generic modeling of shoulder and elbow. <i>Scientific Reports</i> , 2021 , 11, 2080	64.9	
174	An Intrinsically-Adhesive Family of Injectable and Photo-Curable Hydrogels with Functional Physicochemical Performance for Regenerative Medicine. <i>Macromolecular Rapid Communications</i> , 2021 , 42, e2000660	4.8	5
173	Thoughts on cartilage tissue engineering: A 21st century perspective. <i>Current Research in Translational Medicine</i> , 2021 , 69, 103299	3.7	8
172	An Off-the-Shelf Tissue Engineered Cartilage Composed of Optimally Sized Pellets of Cartilage Progenitor/Stem Cells. <i>ACS Biomaterials Science and Engineering</i> , 2021 , 7, 881-892	5.5	1
171	Muscle co-contraction in an upper limb musculoskeletal model: EMG-assisted vs. standard load-sharing. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2021 , 24, 137-150	2.1	2
170	Feasibility of an alternative method to estimate glenohumeral joint center from videogrammetry measurements and CT/MRI of patients. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2021 , 24, 33-42	2.1	2
169	Silk granular hydrogels self-reinforced with regenerated silk fibroin fibers. Soft Matter, 2021, 17, 7038-	79,466	1
168	Development of Standardized Fetal Progenitor Cell Therapy for Cartilage Regenerative Medicine: Industrial Transposition and Preliminary Safety in Xenogeneic Transplantation. <i>Biomolecules</i> , 2021 , 11,	5.9	1
167	Hybrid granular hydrogels: combining composites and microgels for extended ranges of material properties. <i>Soft Matter</i> , 2020 , 16, 3769-3778	3.6	9
166	Efficient decellularization of equine tendon with preserved biomechanical properties and cytocompatibility for human tendon surgery indications. <i>Artificial Organs</i> , 2020 , 44, E161-E171	2.6	10
165	Glenoid bone strain after anatomical total shoulder arthroplasty: In vitro measurements with micro-CT and digital volume correlation. <i>Medical Engineering and Physics</i> , 2020 , 85, 48-54	2.4	5
164	Light-Activated, Bioadhesive, Poly(2-hydroxyethyl methacrylate) Brush Coatings. <i>Biomacromolecules</i> , 2020 , 21, 240-249	6.9	5
163	Implementation of Photopolymerizable Hydrogels as a Potential Treatment of Intracranial Aneurysms. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 261	5.8	5
162	Pulsatile Flow-Induced Fatigue-Resistant Photopolymerizable Hydrogels for the Treatment of Intracranial Aneurysms. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 619858	5.8	2
161	Knitted Silk-Collagen Scaffold Incorporated with Ligament Stem/Progenitor Cells Sheet for Anterior Cruciate Ligament Reconstruction and Osteoarthritis Prevention. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 5412-5421	5.5	10
160	Patellar bone strain after total knee arthroplasty is correlated with bone mineral density and body mass index. <i>Medical Engineering and Physics</i> , 2019 , 68, 17-24	2.4	О
159	Control of Dissipation Sources: A Central Aspect for Enhancing the Mechanical and Mechanobiological Performances of Hydrogels. <i>ACS Applied Materials & Discourt Americal States</i> , 2019, 11, 39662	2-3 9 67	1 ⁴

158	Fatigue as the missing link between bone fragility and fracture. <i>Nature Biomedical Engineering</i> , 2018 , 2, 62-71	19	37
157	Activation of AKT-mTOR Signaling Directs Tenogenesis of Mesenchymal Stem Cells. <i>Stem Cells</i> , 2018 , 36, 527-539	5.8	23
156	Effect of temporal onsets of mechanical loading on bone formation inside a tissue engineering scaffold combined with cell therapy. <i>Bone Reports</i> , 2018 , 8, 173-179	2.6	5
155	Zone-dependent mechanical properties of human articular cartilage obtained by indentation measurements. <i>Journal of Materials Science: Materials in Medicine</i> , 2018 , 29, 57	4.5	44
154	Effect of a collar on subsidence and local micromotion of cementless femoral stems: in vitro comparative study based on micro-computerised tomography. <i>International Orthopaedics</i> , 2018 , 42, 49-	5 ³ 7 ⁸	14
153	Non-setting, injectable biomaterials containing particulate hydroxyapatite can increase primary stability of bone screws in cancellous bone. <i>Clinical Biomechanics</i> , 2018 , 59, 174-180	2.2	3
152	Composite Double-Network Hydrogels To Improve Adhesion on Biological Surfaces. <i>ACS Applied Materials & ACS Applied & ACS Applie</i>	9.5	47
151	Cyclic loading of a cellulose/hydrogel composite increases its fracture strength. <i>Extreme Mechanics Letters</i> , 2018 , 24, 66-74	3.9	12
150	Decellularised tissues obtained by a CO-philic detergent and supercritical CO. <i>European Cells and Materials</i> , 2018 , 36, 81-95	4.3	15
149	Tailoring swelling to control softening mechanisms during cyclic loading of PEG/cellulose hydrogel composites. <i>Composites Science and Technology</i> , 2018 , 168, 88-95	8.6	9
148	In vitro and in vivo investigation of bisphosphonate-loaded hydroxyapatite particles for peri-implant bone augmentation. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017 , 11, 197	[,] 4 . 1 985	526
147	Ectopic tissue engineered ligament with silk collagen scaffold for ACL regeneration: A preliminary study. <i>Acta Biomaterialia</i> , 2017 , 53, 307-317	10.8	11
146	Alignment of collagen fiber in knitted silk scaffold for functional massive rotator cuff repair. <i>Acta Biomaterialia</i> , 2017 , 51, 317-329	10.8	67
145	Development of an Effective Cell Seeding Technique: Simulation, Implementation, and Analysis of Contributing Factors. <i>Tissue Engineering - Part C: Methods</i> , 2017 , 23, 485-496	2.9	8
144	Micromotion-induced peri-prosthetic fluid flow around a cementless femoral stem. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017 , 20, 730-736	2.1	3
143	Importance of trabecular anisotropy in finite element predictions of patellar strain after Total Knee Arthroplasty. <i>Medical Engineering and Physics</i> , 2017 , 39, 102-105	2.4	2
142	3D Printing of Polymers with Hierarchical Continuous Porosity. <i>Advanced Materials Technologies</i> , 2017 , 2, 1700145	6.8	27
141	Viscohyperelastic Strain Energy Function 2017 , 59-78		3

140	A simulation framework for humeral head translations. <i>Medical Engineering and Physics</i> , 2017 , 49, 140-1	43 7.4	5
139	Human Bone Progenitor Cells for Clinical Application: What Kind of Immune Reaction Does Fetal Xenograft Tissue Trigger in Immunocompetent Rats?. <i>Cell Transplantation</i> , 2017 , 26, 879-890	4	5
138	Effects of glenoid inclination and acromion index on humeral head translation and glenoid articular cartilage strain. <i>Journal of Shoulder and Elbow Surgery</i> , 2017 , 26, 157-164	4.3	25
137	Effect of partial-thickness tear on loading capacities of the supraspinatus tendon: a finite element analysis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016 , 19, 875-82	2.1	9
136	Anti-Microbial Dendrimers against Multidrug-Resistant P. aeruginosa Enhance the Angiogenic Effect of Biological Burn-wound Bandages. <i>Scientific Reports</i> , 2016 , 6, 22020	4.9	40
135	Full-field measurement of micromotion around a cementless femoral stem using micro-CT imaging and radiopaque markers. <i>Journal of Biomechanics</i> , 2016 , 49, 4002-4008	2.9	11
134	Stability Enhancement Using Hyaluronic Acid Gels for Delivery of Human Fetal Progenitor Tenocytes. <i>Cell Medicine</i> , 2016 , 8, 87-97	4.9	7
133	Biodegradable HEMA-based hydrogels with enhanced mechanical properties. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2016 , 104, 1161-9	3.5	13
132	A patient-specific model of total knee arthroplasty to estimate patellar strain: A case study. <i>Clinical Biomechanics</i> , 2016 , 32, 212-9	2.2	10
131	A photopolymerized composite hydrogel and surgical implanting tool for a nucleus pulposus replacement. <i>Biomaterials</i> , 2016 , 88, 110-9	15.6	38
130	Osteogenesis imperfecta: from diagnosis and multidisciplinary treatment to future perspectives. Swiss Medical Weekly, 2016 , 146, w14322	3.1	21
129	Experimental method to characterize the strain dependent permeability of tissue engineering scaffolds. <i>Journal of Biomechanics</i> , 2016 , 49, 3749-3752	2.9	5
128	Identification of elastic properties of human patellae using micro-finite element analysis. <i>Journal of Biomechanics</i> , 2016 , 49, 3111-3115	2.9	8
127	Comparison of an EMG-based and a stress-based method to predict shoulder muscle forces. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015 , 18, 1272-9	2.1	11
126	Variability of the pullout strength of cancellous bone screws with cement augmentation. <i>Clinical Biomechanics</i> , 2015 , 30, 500-6	2.2	13
125	Mechanical evaluation of a tissue-engineered zone of calcification in a bone-hydrogel osteochondral construct. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015 , 18, 332-	7 ^{2.1}	8
124	Novel micropatterns mechanically control fibrotic reactions at the surface of silicone implants. <i>Biomaterials</i> , 2015 , 54, 136-47	15.6	23
123	Distribution of gap and micromotion during compressive loading around a cementless femoral stem. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015 , 18 Suppl 1, 1896-7	2.1	1

(2013-2015)

122	Photopolymerization device for minimally invasive implants: application to nucleus pulposus replacement. <i>IFMBE Proceedings</i> , 2015 , 1333-1337	0.2		
121	Strategies for improving the repair of focal cartilage defects. <i>Nanomedicine</i> , 2015 , 10, 2893-905	5.6	16	
120	Impact of synovial fluid flow on temperature regulation in knee cartilage. <i>Journal of Biomechanics</i> , 2015 , 48, 370-4	2.9	20	
119	Improving hydrogelsStoughness by increasing the dissipative properties of their network. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 41, 161-7	4.1	19	
118	Miniature probe for the delivery and monitoring of a photopolymerizable material. <i>Journal of Biomedical Optics</i> , 2015 , 20, 127001	3.5	7	
117	Photo-polymerization, swelling and mechanical properties of cellulose fibre reinforced poly(ethylene glycol) hydrogels. <i>Composites Science and Technology</i> , 2015 , 119, 93-99	8.6	41	
116	Time course of bone screw fixation following a local delivery of Zoledronate in a rat femoral model - a micro-finite element analysis. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 45, 22-31	4.1	15	
115	A model for micromotion-induced fluid flow at the bone-implant interface. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014 , 17 Suppl 1, 52-3	2.1		
114	Impact of partial-thickness tears on supraspinatus tendon strain based on a finite element analysis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014 , 17 Suppl 1, 118-9	2.1	4	
113	Does locally delivered Zoledronate influence peri-implant bone formation? - Spatio-temporal monitoring of bone remodeling in vivo. <i>Biomaterials</i> , 2014 , 35, 9995-10006	15.6	18	
112	Intrinsic viscoelasticity increases temperature in knee cartilage under physiological loading. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 30, 123-30	4.1	16	
111	Controlled release from a mechanically-stimulated thermosensitive self-heating composite hydrogel. <i>Biomaterials</i> , 2014 , 35, 450-5	15.6	38	
110	Photopolymerizable hydrogels for implants: Monte-Carlo modeling and experimental in vitro validation. <i>Journal of Biomedical Optics</i> , 2014 , 19, 35004	3.5	8	
109	Translation of biomechanical concepts in bone tissue engineering: from animal study to revision knee arthroplasty. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014 , 17, 845-52	2.1	1	
108	The role of energy dissipation of polymeric scaffolds in the mechanobiological modulation of chondrogenic expression. <i>Biomaterials</i> , 2014 , 35, 1890-7	15.6	27	
107	Capillary-valve-based platform towards cell-on-chip mechanotransduction assays. <i>Sensors and Actuators B: Chemical</i> , 2013 , 188, 1019-1025	8.5	3	
106	Importance of the subscapularis muscle after total shoulder arthroplasty. <i>Clinical Biomechanics</i> , 2013 , 28, 146-50	2.2	37	
105	Activities of daily living with reverse prostheses: importance of scapular compensation for functional mobility of the shoulder. <i>Journal of Shoulder and Elbow Surgery</i> , 2013 , 22, 948-53	4.3	12	

104	A flow sensing model for mesenchymal stromal cells using morphogen dynamics. <i>Biophysical Journal</i> , 2013 , 104, 2132-6	2.9	3
103	Response to letter to the editor: comment on "injectable calcium phosphate cement for augmentation around cancellous bone screws. In vivo biomechanical studies" (volume 45, issue 7, pages 1156-1160). <i>Journal of Biomechanics</i> , 2013 , 46, 634-5	2.9	
102	Multi-scale modeling of photopolymerization for medical hydrogel-implant design 2013,		2
101	Integration of mechanotransduction concepts in bone tissue engineering. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013 , 16, 1050-5	2.1	12
100	Effect of a pathological scapular tilt after total shoulder arthroplasty. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013 , 16, 1196-201	2.1	
99	Damping properties of the nucleus pulposus. <i>Clinical Biomechanics</i> , 2012 , 27, 861-5	2.2	4
98	Simultaneous and multisite measure of micromotion, subsidence and gap to evaluate femoral stem stability. <i>Journal of Biomechanics</i> , 2012 , 45, 1232-8	2.9	23
97	Injectable calcium phosphate cement for augmentation around cancellous bone screws. In vivo biomechanical studies. <i>Journal of Biomechanics</i> , 2012 , 45, 1156-60	2.9	24
96	Importance of polyethylene thickness in total shoulder arthroplasty: a finite element analysis. <i>Clinical Biomechanics</i> , 2012 , 27, 443-8	2.2	11
95	Synthesis and Photopolymerization of Tween 20 Methacrylate/N-vinyl-2-Pyrrolidone Blends. <i>Materials Science and Engineering C</i> , 2012 , 32, 2235-2241	8.3	9
94	A method to measure glenoid wear in 3D. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012 , 15 Suppl 1, 343-4	2.1	
93	Epiphyseal Chondroprogenitors Provide a Stable Cell Source for Cartilage Cell Therapy. <i>Cell Medicine</i> , 2012 , 4, 23-32	4.9	21
92	Combined effects of zoledronate and mechanical stimulation on bone adaptation in an axially loaded mouse tibia. <i>Clinical Biomechanics</i> , 2011 , 26, 101-5	2.2	23
91	In vivo assessment of local effects after application of bone screws delivering bisphosphonates into a compromised cancellous bone site. <i>Clinical Biomechanics</i> , 2011 , 26, 1039-43	2.2	16
90	In vivo loading increases mechanical properties of scaffold by affecting bone formation and bone resorption rates. <i>Bone</i> , 2011 , 49, 1357-64	4.7	30
89	Bone regeneration and stem cells. <i>Journal of Cellular and Molecular Medicine</i> , 2011 , 15, 718-46	5.6	254
88	Prediction of spatio-temporal bone formation in scaffold by diffusion equation. <i>Biomaterials</i> , 2011 , 32, 7006-12	15.6	9
87	Biomechanics and tissue engineering. <i>Osteoporosis International</i> , 2011 , 22, 2027-31	5.3	6

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86	Nanofibrillated cellulose composite hydrogel for the replacement of the nucleus pulposus. <i>Acta Biomaterialia</i> , 2011 , 7, 3412-21	10.8	78
85	Human fetal bone cells in delivery systems for bone engineering. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2011 , 5, 806-14	4.4	9
84	Surgical preparation of bone-scaffold interface is critical for bone regeneration inside tissue engineering scaffold. <i>Journal of Orthopaedic Research</i> , 2011 , 29, 767-72	3.8	1
83	A new technique to measure micromotion distribution around a cementless femoral stem. <i>Journal of Biomechanics</i> , 2011 , 44, 557-60	2.9	13
82	Shoulder muscle forces during abduction with subscapularis deficiency after total shoulder arthroplasty. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011 , 14, 19-20	2.1	2
81	Viscoelastic assessment of skin quality for clinical applications. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011 , 14, 235-236	2.1	
80	Biologicals and fetal cell therapy for wound and scar management. ISRN Dermatology, 2011 , 2011, 5498	370	18
79	Regulation of proliferation and differentiation of human fetal bone cells. <i>European Cells and Materials</i> , 2011 , 21, 46-58	4.3	16
78	Biomechanics in bone tissue engineering. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2010 , 13, 837-46	2.1	17
77	Biomechanical consequences of humeral component malpositioning after anatomical total shoulder arthroplasty. <i>Journal of Shoulder and Elbow Surgery</i> , 2010 , 19, 1184-90	4.3	27
76	Tightening force and torque of nonlocking screws in a reverse shoulder prosthesis. <i>Clinical Biomechanics</i> , 2010 , 25, 517-22	2.2	12
75	Prediction of polyethylene wear after total knee replacement. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2010 , 13, 139-140	2.1	
74	Plasticity of fetal cartilaginous cells. <i>Cell Transplantation</i> , 2010 , 19, 1349-57	4	23
73	Augmentation of bone defect healing using a new biocomposite scaffold: an in vivo study in sheep. <i>Acta Biomaterialia</i> , 2010 , 6, 3755-62	10.8	55
72	Mechanical interaction between cells and fluid for bone tissue engineering scaffold: modulation of the interfacial shear stress. <i>Journal of Biomechanics</i> , 2010 , 43, 933-7	2.9	13
71	Calcium phosphate cement augmentation of cancellous bone screws can compensate for the absence of cortical fixation. <i>Journal of Biomechanics</i> , 2010 , 43, 2869-74	2.9	41
70	A musculoskeletal shoulder model based on pseudo-inverse and null-space optimization. <i>Medical Engineering and Physics</i> , 2010 , 32, 1050-6	2.4	30
69	Curing kinetics and mechanical properties of a composite hydrogel for the replacement of the nucleus pulposus. <i>Composites Science and Technology</i> , 2010 , 70, 1847-1853	8.6	35

68	In vivo cyclic loading as a potent stimulatory signal for bone formation inside tissue engineering scaffold. <i>European Cells and Materials</i> , 2010 , 19, 41-9	4.3	27
67	In vitro characterization of immune-related properties of human fetal bone cells for potential tissue engineering applications. <i>Tissue Engineering - Part A</i> , 2009 , 15, 1523-32	3.9	29
66	Reverse shoulder arthroplasty: polyethylene wear. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 247-248	2.1	1
65	Reverse shoulder arthroplasty: compression screw force. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 243-244	2.1	
64	Biomechanical considerations can serve as design rules in the development of bone tissue engineering scaffold. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 17-18	2.1	1
63	Model to optimise the amount of drug on an implant used as drug delivery system. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 233-234	2.1	
62	Whole-cell bioprocessing of human fetal cells for tissue engineering of skin. <i>Skin Pharmacology and Physiology</i> , 2009 , 22, 63-73	3	32
61	Biomechanical evaluation of porous biodegradable scaffolds for revision knee arthroplasty. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 333-9	2.1	8
60	3D strain map of axially loaded mouse tibia: a numerical analysis validated by experimental measurements. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 95-100	2.1	27
59	Comparison of polyethylene wear in anatomical and reversed shoulder prostheses. <i>Journal of Bone and Joint Surgery: British Volume</i> , 2009 , 91, 977-82		37
58	Isolation and in vitro chondrogenic potential of human foetal spine cells. <i>Journal of Cellular and Molecular Medicine</i> , 2009 , 13, 2559-2569	5.6	18
57	Chronic wound healing by fetal cell therapy may be explained by differential gene profiling observed in fetal versus old skin cells. <i>Experimental Gerontology</i> , 2009 , 44, 208-18	4.5	53
56	Targeted mechanical properties for optimal fluid motion inside artificial bone substitutes. <i>Journal of Orthopaedic Research</i> , 2009 , 27, 1082-7	3.8	8
55	Osteoclastogenesis can be mechanically-induced in the peri-implant bone. <i>Irbm</i> , 2009 , 30, 10-13	4.8	1
54	Prediction of bone density around orthopedic implants delivering bisphosphonate. <i>Journal of Biomechanics</i> , 2009 , 42, 1206-11	2.9	22
53	3D strain map of axially loaded mouse tibia: a numerical analysis validated by experimental measurements. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 95-100	2.1	15
52	Total knee arthroplasty: posterior tilt of tibial tray. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 245-246	2.1	
51	Total shoulder arthroplasty: downward inclination of the glenoid component to balance supraspinatus deficiency. <i>Journal of Shoulder and Elbow Surgery</i> , 2009 , 18, 360-5	4.3	30

(2006-2009)

50	overactuated system. 2009 ,		1
49	Measuring micromotion around a loaded hip stem using I T imaging. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009 , 12, 129-130	2.1	
48	Wound-healing gene family expression differences between fetal and foreskin cells used for bioengineered skin substitutes. <i>Artificial Organs</i> , 2008 , 32, 509-18	2.6	27
47	Microstimulation at the bone-implant interface upregulates osteoclast activation pathways. <i>Bone</i> , 2008 , 42, 358-64	4.7	39
46	Human fetal bone cells associated with ceramic reinforced PLA scaffolds for tissue engineering. <i>Bone</i> , 2008 , 42, 554-64	4.7	69
45	Orthopedic implant used as drug delivery system: clinical situation and state of the research. <i>Current Drug Delivery</i> , 2008 , 5, 59-63	3.2	20
44	Using drug delivery systems to enhance joint replacement 2008 , 397-406		
43	Tissue Engineering of Tendons 2008 , 2871-2875		
42	Human muscular fetal cells: a potential cell source for muscular therapies. <i>Pediatric Surgery International</i> , 2008 , 24, 37-47	2.1	12
41	Implants delivering bisphosphonate locally increase periprosthetic bone density in an osteoporotic sheep model. A pilot study. <i>European Cells and Materials</i> , 2008 , 16, 10-6	4.3	78
40	Repair of critical size defects in the rat cranium using ceramic-reinforced PLA scaffolds obtained by supercritical gas foaming. <i>Journal of Biomedical Materials Research - Part A</i> , 2007 , 83, 41-51	5.4	69
39	Polylactic acid-phosphate glass composite foams as scaffolds for bone tissue engineering. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 80, 322-31	3.5	54
38	Activation pathways of osteoclasts are up-regulated by micromotions at the boneImplant interface. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 93-94	2.1	
37	Strain distribution in mice tibia under axial loading. Numerical and experimental models. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2007 , 10, 89-90	2.1	2
36	Consistency and safety of cell banks for research and clinical use: preliminary analysis of fetal skin banks. <i>Cell Transplantation</i> , 2007 , 16, 675-84	4	34
35	Biomechanical evaluation of intra-articular and extra-articular procedures in anterior cruciate ligament reconstruction: a finite element analysis. <i>Clinical Biomechanics</i> , 2007 , 22, 336-43	2.2	39
34	Bone tissue engineering using foetal cell therapy. Swiss Medical Weekly, 2007, 137 Suppl 155, 86S-89S	3.1	1
33	Architecture and properties of anisotropic polymer composite scaffolds for bone tissue engineering. <i>Biomaterials</i> , 2006 , 27, 905-16	15.6	278

32	Local delivery of bisphosphonate from coated orthopedic implants increases implants mechanical stability in osteoporotic rats. <i>Journal of Biomedical Materials Research - Part A</i> , 2006 , 76, 133-43	5.4	134
31	Viscoelastic Constitutive Law Based on the Time Scale of the Mechanical Phenomena 2006 , 399-404		1
30	Bone tissue engineering using foetal cell therapy. Swiss Medical Weekly, 2006, 136, 557-60	3.1	23
29	Calcium phosphate drug delivery system: influence of local zoledronate release on bone implant osteointegration. <i>Bone</i> , 2005 , 36, 52-60	4.7	226
28	Biocompatibility of bioresorbable poly(L-lactic acid) composite scaffolds obtained by supercritical gas foaming with human fetal bone cells. <i>Tissue Engineering</i> , 2005 , 11, 1640-9		99
27	Bioresorbable composites prepared by supercritical fluid foaming. <i>Journal of Biomedical Materials Research - Part A</i> , 2005 , 75, 89-97	5.4	81
26	How plate positioning impacts the biomechanics of the open wedge tibial osteotomy; a finite element analysis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2005 , 8, 307-13	2.1	38
25	The effect of bisphosphonates and titanium particles on osteoblasts: an in vitro study. <i>Journal of Bone and Joint Surgery: British Volume</i> , 2005 , 87, 1157-63		10
24	Peri-implant bone remodeling after total hip replacement combined with systemic alendronate treatment: a finite element analysis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2004 , 7, 73-8	2.1	15
23	The influence of wear particles in the expression of osteoclastogenesis factors by osteoblasts. <i>Biomaterials</i> , 2004 , 25, 5803-8	15.6	64
22	Can the increase of bone mineral density following bisphosphonates treatments be explained by biomechanical considerations?. <i>Clinical Biomechanics</i> , 2004 , 19, 170-4	2.2	14
21	Fetal bone cells for tissue engineering. <i>Bone</i> , 2004 , 35, 1323-33	4.7	66
20	Biphasic constitutive laws for biological interface evolution. <i>Biomechanics and Modeling in Mechanobiology</i> , 2003 , 1, 239-49	3.8	21
19	Effect of micromechanical stimulations on osteoblasts: development of a device simulating the mechanical situation at the bone-implant interface. <i>Journal of Biomechanics</i> , 2003 , 36, 131-5	2.9	22
18	Gene expression analysis of osteoblastic cells contacted by orthopedic implant particles. <i>Journal of Biomedical Materials Research Part B</i> , 2002 , 61, 408-20		47
17	Effect of different Ti-6Al-4V surface treatments on osteoblasts behaviour. <i>Biomaterials</i> , 2002 , 23, 1447	'-54 .6	113
16	Large-scale gene expression analysis of osteoblasts cultured on three different Ti-6Al-4V surface treatments. <i>Biomaterials</i> , 2002 , 23, 4193-202	15.6	23
15	Orthopaedic Implant as Drug Delivery System: a Numerical Approach. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2001 , 4, 505-513	2.1	7

LIST OF PUBLICATIONS

14	Combined effect of titanium particles and TNF-alpha on the production of IL-6 by osteoblast-like cells. <i>Journal of Biomedical Materials Research Part B</i> , 2000 , 52, 382-7		32
13	Titanium particles inhibit osteoblast adhesion to fibronectin-coated substrates. <i>Journal of Orthopaedic Research</i> , 2000 , 18, 203-11	3.8	22
12	On the independence of time and strain effects in the stress relaxation of ligaments and tendons. Journal of Biomechanics, 2000 , 33, 1729-32	2.9	58
11	The effects of calcium phosphate cement particles on osteoblast functions. <i>Biomaterials</i> , 2000 , 21,	1103-1546	110
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