

Marco Viceconti

List of Publications by Year in descending order

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Version: 2024-02-01

314
papers

13,151
citations

27035

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38517

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327
all docs

327
docs citations

327
times ranked

8584
citing authors

#	ARTICLE	IF	CITATIONS
1	Personalised 3D Assessment of Trochanteric Soft Tissues Improves HIP Fracture Classification Accuracy. <i>Annals of Biomedical Engineering</i> , 2022, 50, 303-313.	1.3	5
2	A theoretical analysis of the scale separation in a model to predict solid tumour growth. <i>Journal of Theoretical Biology</i> , 2022, 547, 111173.	0.8	8
3	In silico trials: Verification, validation and uncertainty quantification of predictive models used in the regulatory evaluation of biomedical products. <i>Methods</i> , 2021, 185, 120-127.	1.9	138
4	Possible Contexts of Use for <i>In Silico</i> Trials Methodologies: A Consensus-Based Review. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 3977-3982.	3.9	21
5	Femoral neck strain prediction during level walking using a combined musculoskeletal and finite element model approach. <i>PLoS ONE</i> , 2021, 16, e0245121.	1.1	11
6	Does total hip arthroplasty have a higher risk of failure in patients who undergo lumbar spinal fusion?. <i>Bone and Joint Journal</i> , 2021, 103-B, 486-491.	1.9	9
7	Verification of an agent-based disease model of human <i>Mycobacterium tuberculosis</i> infection. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2021, 37, e3470.	1.0	8
8	A systematic approach to the scale separation problem in the development of multiscale models. <i>PLoS ONE</i> , 2021, 16, e0251297.	1.1	5
9	Submodeling in wear predictive finite element models with multipoint contacts. <i>International Journal for Numerical Methods in Engineering</i> , 2021, 122, 3812-3823.	1.5	4
10	Computational modelling of the scoliotic spine: A literature review. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2021, 37, e3503.	1.0	9
11	Effect of Suboptimal Neuromuscular Control on the Risk of Massive Wear in Total Knee Replacement. <i>Annals of Biomedical Engineering</i> , 2021, 49, 3349-3355.	1.3	4
12	Finite element analysis informed variable selection for femoral fracture risk prediction. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 118, 104434.	1.5	8
13	How can we accelerate COVID-19 vaccine discovery?. <i>Expert Opinion on Drug Discovery</i> , 2021, 16, 1081-1084.	2.5	2
14	Using Musculoskeletal Models to Estimate in vivo Total Knee Replacement Kinematics and Loads: Effect of Differences Between Models. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 703508.	2.0	9
15	A Roadmap to Inform Development, Validation and Approval of Digital Mobility Outcomes: The Mobilise-D Approach. <i>Digital Biomarkers</i> , 2021, 4, 13-27.	2.2	73
16	Computational biomedicine. Part II: organs and systems. <i>Interface Focus</i> , 2021, 11, 20200082.	1.5	3
17	Credibility of <i>In Silico</i> Trial Technologies – A Theoretical Framing. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 4-13.	3.9	41
18	The Uncontrolled Manifold Theory Could Explain Part of the Inter-Trial Variability of Knee Contact Force During Level Walking. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2020, 28, 1800-1807.	2.7	7

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19	Toward a Regulatory Qualification of Real-World Mobility Performance Biomarkers in Parkinson's Patients Using Digital Mobility Outcomes. <i>Sensors</i> , 2020, 20, 5920.	2.1	42
20	Moving forward through the in silico modeling of tuberculosis: a further step with UISS-TB. <i>BMC Bioinformatics</i> , 2020, 21, 458.	1.2	11
21	Generation of digital patients for the simulation of tuberculosis with UISS-TB. <i>BMC Bioinformatics</i> , 2020, 21, 449.	1.2	11
22	In silico trial to test COVID-19 candidate vaccines: a case study with UISS platform. <i>BMC Bioinformatics</i> , 2020, 21, 527.	1.2	40
23	PRIMAGE project: predictive in silico multiscale analytics to support childhood cancer personalised evaluation empowered by imaging biomarkers. <i>European Radiology Experimental</i> , 2020, 4, 22.	1.7	41
24	An extended discrete element method for the estimation of contact pressure at the ankle joint during stance phase. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2020, 234, 507-516.	1.0	12
25	CT-Scan Data Acquisition to Generate Biomechanical Models of Bone Structures. , 2020, , 279-287.		3
26	Verify: a toolbox for deterministic verification of computational models. , 2020, , .		2
27	Torsional Stability of Total HIP Arthroplasty: In-Vitro and FEM Analysis with New Trends for the Future. , 2020, , 77-86.		0
28	In silico clinical trials: concepts and early adoptions. <i>Briefings in Bioinformatics</i> , 2019, 20, 1699-1708.	3.2	156
29	A new method to monitor bone geometry changes at different spatial scales in the longitudinal in vivo μ CT studies of mice bones. <i>PLoS ONE</i> , 2019, 14, e0219404.	1.1	3
30	Biomechanical assessment of vertebrae with lytic metastases with subject-specific finite element models. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 98, 268-290.	1.5	29
31	Muscle recruitment strategies can reduce joint loading during level walking. <i>Journal of Biomechanics</i> , 2019, 97, 109368.	0.9	23
32	An image-based kinematic model of the tibiotalar and subtalar joints and its application to gait analysis in children with Juvenile Idiopathic Arthritis. <i>Journal of Biomechanics</i> , 2019, 85, 27-36.	0.9	27
33	Linking Joint Impairment and Gait Biomechanics in Patients with Juvenile Idiopathic Arthritis. <i>Annals of Biomedical Engineering</i> , 2019, 47, 2155-2167.	1.3	15
34	The effect of boundary and loading conditions on patient classification using finite element predicted risk of fracture. <i>Clinical Biomechanics</i> , 2019, 68, 137-143.	0.5	26
35	Pre-operative prediction of soft tissue balancing in knee arthroplasty part 1: Effect of surgical parameters during level walking. <i>Journal of Orthopaedic Research</i> , 2019, 37, 1537-1545.	1.2	11
36	Evaluation of the efficacy of RUTI and ID93/GLA-SE vaccines in tuberculosis treatment: in silico trial through UISS-TB simulator. , 2019, , .		6

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37	Generation of digital patients for the simulation of tuberculosis with UISS-TB. , 2019, , .		2
38	Predicting the artificial immunity induced by RUTIÂ® vaccine against tuberculosis using universal immune system simulator (UISS). BMC Bioinformatics, 2019, 20, 504.	1.2	27
39	A multiscale model to predict current absolute risk of femoral fracture in a postmenopausal population. Biomechanics and Modeling in Mechanobiology, 2019, 18, 301-318.	1.4	25
40	From bed to bench: How in silico medicine can help ageing research. Mechanisms of Ageing and Development, 2019, 177, 103-108.	2.2	25
41	Are CT-Based Finite Element Model Predictions of Femoral Bone Strengthening Clinically Useful?. Current Osteoporosis Reports, 2018, 16, 216-223.	1.5	39
42	Investigation of the dependence of joint contact forces on musculotendon parameters using a codified workflow for image-based modelling. Journal of Biomechanics, 2018, 73, 108-118.	0.9	70
43	VPH-HF: A software framework for the execution of complex subject-specific physiology modelling workflows. Journal of Computational Science, 2018, 25, 101-114.	1.5	2
44	Investigating the mechanical response of paediatric bone under bending and torsion using finite element analysis. Biomechanics and Modeling in Mechanobiology, 2018, 17, 1001-1009.	1.4	17
45	Multiscale modeling methods in biomechanics. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2017, 9, e1375.	6.6	19
46	Sensitivity of a juvenile subject-specific musculoskeletal model of the ankle joint to the variability of operator-dependent input. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 415-422.	1.0	14
47	In silico assessment of biomedical products: The conundrum of rare but not so rare events in two case studies. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 455-466.	1.0	45
48	Longitudinal effects of Parathyroid Hormone treatment on morphological, densitometric and mechanical properties of mouse tibia. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 75, 244-251.	1.5	33
49	Local displacement and strain uncertainties in different bone types by digital volume correlation of synchrotron microtomograms. Journal of Biomechanics, 2017, 58, 27-36.	0.9	43
50	Micro-CT based finite element models of cancellous bone predict accurately displacement once the boundary condition is well replicated: A validation study. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 644-651.	1.5	81
51	Effect of integration time on the morphometric, densitometric and mechanical properties of the mouse tibia. Journal of Biomechanics, 2017, 65, 203-211.	0.9	26
52	Special Issue on "Computational Modelling in Medicine": Guest editor introduction. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 353-354.	1.0	0
53	Micro Finite Element models of the vertebral body: Validation of local displacement predictions. PLoS ONE, 2017, 12, e0180151.	1.1	55
54	A PRELIMINARY IN VITRO BIOMECHANICAL EVALUATION OF PROPHYLACTIC CEMENT AUGMENTATION OF THE THORACOLUMBAR VERTEBRAE. Journal of Mechanics in Medicine and Biology, 2016, 16, 1650074.	0.3	5

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55	The Virtual Physiological Human: Ten Years After. Annual Review of Biomedical Engineering, 2016, 18, 103-123.	5.7	73
56	Patient-specific finite element estimated femur strength as a predictor of the risk of hip fracture: the effect of methodological determinants. Osteoporosis International, 2016, 27, 2815-2822.	1.3	80
57	Development of a protocol to quantify local bone adaptation over space and time: Quantification of reproducibility. Journal of Biomechanics, 2016, 49, 2095-2099.	0.9	33
58	Experimental validation of DXA-based finite element models for prediction of femoral strength. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 63, 17-25.	1.5	61
59	A Patient-Specific Foot Model for the Estimate of Ankle Joint Forces in Patients with Juvenile Idiopathic Arthritis. Annals of Biomedical Engineering, 2016, 44, 247-257.	1.3	41
60	In silico clinical trials: how computer simulation will transform the biomedical industry. International Journal of Clinical Trials, 2016, 3, 37.	0.0	155
61	Evaluation of in-vivo measurement errors associated with micro-computed tomography scans by means of the bone surface distance approach. Medical Engineering and Physics, 2015, 37, 1091-1097.	0.8	20
62	Estimation of local anisotropy of plexiform bone: Comparison between depth sensing micro-indentation and Reference Point Indentation. Journal of Biomechanics, 2015, 48, 4073-4080.	0.9	8
63	Sensitivity of a subject-specific musculoskeletal model to the uncertainties on the joint axes location. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1555-1563.	0.9	58
64	Three-Dimensional Local Measurements of Bone Strain and Displacement: Comparison of Three Digital Volume Correlation Approaches. Journal of Biomechanical Engineering, 2015, 137, .	0.6	68
65	A procedure to estimate the origins and the insertions of the knee ligaments from computed tomography images. Journal of Biomechanics, 2015, 48, 233-237.	0.9	17
66	Biomechanics-based in silico medicine: The manifesto of a new science. Journal of Biomechanics, 2015, 48, 193-194.	0.9	16
67	Big Data, Big Knowledge: Big Data for Personalized Healthcare. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1209-1215.	3.9	244
68	Developing CT based computational models of pediatric femurs. Journal of Biomechanics, 2015, 48, 2034-2040.	0.9	26
69	Multiscale modelling in biomechanics. Interface Focus, 2015, 5, 20150003.	1.5	5
70	Stochastic modelling of muscle recruitment during activity. Interface Focus, 2015, 5, 20140094.	1.5	47
71	Are Subject-Specific Musculoskeletal Models Robust to the Uncertainties in Parameter Identification?. PLoS ONE, 2014, 9, e112625.	1.1	146
72	A NEW PARADIGM FOR THE <i>IN VITRO</i> SIMULATION OF SIDEWAYS FALL LOADING OF THE PROXIMAL HUMAN FEMUR. Journal of Mechanics in Medicine and Biology, 2014, 14, 1450005.	0.3	8

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73	Large-Scale Finite Element Analysis of Human Cancellous Bone Tissue Micro Computer Tomography Data: A Convergence Study. <i>Journal of Biomechanical Engineering</i> , 2014, 136, 101013.	0.6	15
74	The VPH Hypermodelling framework for cancer multiscale models in the clinical practice. , 2014, , .		3
75	Computational horizons in cancer (CHIC): Developing meta- and hyper-multiscale models and repositories for in Silico Oncology - A brief technical outline of the project. , 2014, 2014, .		4
76	EXPERIMENTAL METHODS FOR THE BIOMECHANICAL INVESTIGATION OF THE HUMAN SPINE: A REVIEW. <i>Journal of Mechanics in Medicine and Biology</i> , 2014, 14, 1430002.	0.3	11
77	DIFFERENCES BETWEEN CONTRALATERAL BONES OF THE HUMAN LOWER LIMBS: A MULTISCALE INVESTIGATION. <i>Journal of Mechanics in Medicine and Biology</i> , 2014, 14, 1450032.	0.3	3
78	Comprehensive evaluation of PCA-based finite element modelling of the human femur. <i>Medical Engineering and Physics</i> , 2014, 36, 1246-1252.	0.8	22
79	About the inevitable compromise between spatial resolution and accuracy of strain measurement for bone tissue: A 3D zero-strain study. <i>Journal of Biomechanics</i> , 2014, 47, 2956-2963.	0.9	83
80	Multiple loading conditions analysis can improve the association between finite element bone strength estimates and proximal femur fractures: A preliminary study in elderly women. <i>Bone</i> , 2014, 67, 71-80.	1.4	135
81	Strain distribution in the lumbar vertebrae under different loading configurations. <i>Spine Journal</i> , 2013, 13, 1281-1292.	0.6	29
82	Computational tools for calculating alternative muscle force patterns during motion: A comparison of possible solutions. <i>Journal of Biomechanics</i> , 2013, 46, 2097-2100.	0.9	20
83	A vision and strategy for the virtual physiological human: 2012 update. <i>Interface Focus</i> , 2013, 3, 20130004.	1.5	74
84	Integrative approaches to computational biomedicine. <i>Interface Focus</i> , 2013, 3, 20130003.	1.5	10
85	Accurate in vitro identification of fracture onset in bones: Failure mechanism of the proximal human femur. <i>Journal of Biomechanics</i> , 2013, 46, 158-164.	0.9	20
86	Human bone hardness seems to depend on tissue type but not on anatomical site in the long bones of an old subject. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2013, 227, 200-206.	1.0	22
87	Comments on "Experimental versus computational analysis of micromotions at the implant - bone interface". <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2012, 226, 417-419.	1.0	0
88	MECHANICAL PROPERTIES OF THE HUMAN METATARSAL BONES. <i>Journal of Mechanics in Medicine and Biology</i> , 2012, 12, 1250062.	0.3	7
89	Multilevel Computational Modeling and Quantitative Analysis of Bone Remodeling. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2012, 9, 1366-1378.	1.9	16
90	Biomechanical robustness of a new proximal epiphyseal hip replacement to patient variability and surgical uncertainties: A FE study. <i>Medical Engineering and Physics</i> , 2012, 34, 161-171.	0.8	22

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91	Muscle discretization affects the loading transferred to bones in lower-limb musculoskeletal models. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2012, 226, 161-169.	1.0	19
92	Accuracy of finite element predictions in sideways load configurations for the proximal human femur. Journal of Biomechanics, 2012, 45, 394-399.	0.9	158
93	Are spontaneous fractures possible? An example of clinical application for personalised, multiscale neuro-musculo-skeletal modelling. Journal of Biomechanics, 2012, 45, 421-426.	0.9	109
94	Femoral loads during gait in a patient with massive skeletal reconstruction. Clinical Biomechanics, 2012, 27, 273-280.	0.5	36
95	METHOD TO ANALYZE THE FATIGUE CRACKS IN ACRYLIC BONE CEMENT. Journal of Mechanics in Medicine and Biology, 2012, 12, 1250017.	0.3	0
96	Modelling osteomyelitis. BMC Bioinformatics, 2012, 13, S12.	1.2	31
97	A comparison between micro-CT and histology for the evaluation of cortical bone: effect of polymethylmethacrylate embedding on structural parameters. Journal of Microscopy, 2012, 245, 302-310.	0.8	54
98	SOA-based digital library services and composition in biomedical applications. Computer Methods and Programs in Biomedicine, 2012, 106, 219-233.	2.6	6
99	Collaborative Modeling and Simulation: The Virtual Physiological Human Vision (Full Paper)., 2011, , .		0
100	Collaborative Modeling and Simulation: The Virtual Physiological Human Vision (Keynote)., 2011, , .		1
101	A tentative taxonomy for predictive models in relation to their falsifiability. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 4149-4161.	1.6	13
102	The Virtual Physiological Human. Interface Focus, 2011, 1, 281-285.	1.5	13
103	Assessment of femoral neck fracture risk for a novel proximal epiphyseal hip prosthesis. Clinical Biomechanics, 2011, 26, 585-591.	0.5	9
104	Dependence of trabecular structure on bone quantity: A comparison between osteoarthritic and non-pathological bone. Clinical Biomechanics, 2011, 26, 632-639.	0.5	11
105	Compressive behaviour of child and adult cortical bone. Bone, 2011, 49, 769-776.	1.4	129
106	The human proximal femur behaves linearly elastic up to failure under physiological loading conditions. Journal of Biomechanics, 2011, 44, 2259-2266.	0.9	66
107	The effect of adding 10% of barium sulphate radiopacifier on the mechanical behaviour of acrylic bone cement. Fatigue and Fracture of Engineering Materials and Structures, 2011, 34, 374-382.	1.7	8
108	A new hip epiphyseal prosthesis: Design revision driven by a validated numerical procedure. Medical Engineering and Physics, 2011, 33, 1203-1211.	0.8	17

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109	Re-use of explanted osteosynthesis devices: A reliable and inexpensive reprocessing protocol. <i>Injury</i> , 2011, 42, 1101-1106.	0.7	10
110	Multimodal fusion of biomedical data at different temporal and dimensional scales. <i>Computer Methods and Programs in Biomedicine</i> , 2011, 102, 227-237.	2.6	21
111	A Combined Process Algebraic and Stochastic Approach to Bone Remodeling. <i>Electronic Notes in Theoretical Computer Science</i> , 2011, 277, 41-52.	0.9	5
112	A pictographic atlas for classifying damage modes on polyethylene bearings. <i>Journal of Materials Science: Materials in Medicine</i> , 2011, 22, 1137-1146.	1.7	12
113	Subject-specific knee joint model: Design of an experiment to validate a multi-body finite element model. <i>Visual Computer</i> , 2011, 27, 153-159.	2.5	12
114	Repeatable procedure for evaluating taper damage on femoral stems with modular necks. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011, 99B, 431-439.	1.6	6
115	Evaluation of the generality and accuracy of a new mesh morphing procedure for the human femur. <i>Medical Engineering and Physics</i> , 2011, 33, 112-120.	0.8	69
116	Volume to density relation in adult human bone tissue. <i>Journal of Biomechanics</i> , 2011, 44, 103-108.	0.9	45
117	Reduced tissue hardness of trabecular bone is associated with severe osteoarthritis. <i>Journal of Biomechanics</i> , 2011, 44, 1593-1598.	0.9	33
118	Effect of sub-optimal neuromotor control on the hip joint load during level walking. <i>Journal of Biomechanics</i> , 2011, 44, 1716-1721.	0.9	42
119	Extensive Risk Analysis of Mechanical Failure for an Epiphyseal Hip Prosthesis: A Combined Numerical-Experimental Approach. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2011, 225, 126-140.	1.0	23
120	Femoral head diameter and carbon composition effect on wear of metal-on-metal hip replacements. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 31-32.	0.9	1
121	Carbon composition effects on wear behaviour and wear mechanisms of metal-on-metal hip prosthesis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 33-34.	0.9	7
122	Policy needs and options for a common approach towards modelling and simulation of human physiology and diseases with a focus on the virtual physiological human. <i>Studies in Health Technology and Informatics</i> , 2011, 170, 49-82.	0.2	3
123	A Method to Improve Experimental Validation of Finite Element Models of Long Bones. <i>Strain</i> , 2010, 46, 242-251.	1.4	1
124	Combined Wear Behavior and Long Term Implant Bone Fixation of Total Knee Replacement: A Novel In Vitro Setup. <i>Artificial Organs</i> , 2010, 34, E177-83.	1.0	6
125	The virtual physiological human: computer simulation for integrative biomedicine I. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 2591-2594.	1.6	17
126	The virtual physiological human: computer simulation for integrative biomedicine II. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 2837-2839.	1.6	11

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127	A vision and strategy for the virtual physiological human in 2010 and beyond. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2595-2614.	1.6	136
128	PhysiomeSpace: digital library service for biomedical data. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2853-2861.	1.6	25
129	Structural behaviour and strain distribution of the long bones of the human lower limbs. Journal of Biomechanics, 2010, 43, 826-835.	0.9	48
130	Anisotropy and inhomogeneity of the trabecular structure can describe the mechanical strength of osteoarthritic cancellous bone. Journal of Biomechanics, 2010, 43, 1160-1166.	0.9	43
131	Enabling the interactive display of large medical volume datasets by multiresolution bricking. Journal of Supercomputing, 2010, 51, 3-19.	2.4	13
132	Effect of a virtual reality interface on the learning curve and on the accuracy of a surgical planner for total hip replacement. Computer Methods and Programs in Biomedicine, 2010, 97, 86-91.	2.6	10
133	Long-term in-vitro wear performance of an innovative thermo-compressed cross-linked polyethylene. Tribology International, 2010, 43, 22-28.	3.0	12
134	Quality control protocol for <i>in vitro</i> micro-computed tomography. Journal of Microscopy, 2010, 238, 162-172.	0.8	7
135	Osteon Classification in Human Fibular Shaft by Circularly Polarized Light. Cells Tissues Organs, 2010, 191, 260-268.	1.3	25
136	A Novel Method for Determining the Time and Location of Abrupt Fracture Initiation in Bones. Journal of Strain Analysis for Engineering Design, 2010, 45, 481-493.	1.0	8
137	Integrated friction measurements in hip wear simulations: Short-term results. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2010, 224, 865-876.	1.0	6
138	Effect of long-term physiological activity on the long-term stem stability of cemented hip arthroplasty: <i>in vitro</i> comparison of three commercial bone cements. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2010, 224, 53-65.	1.0	4
139	Mechanical testing of bones: the positive synergy of finite element models and <i>in vitro</i> experiments. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2725-2763.	1.6	63
140	The effect of vacuum mixing and pre-heating the femoral component on the mechanical properties of the cement mantle. Journal of Bone and Joint Surgery: British Volume, 2010, 92-B, 454-460.	3.4	6
141	Finite Element Modeling of Resurfacing Hip Prosthesis: Estimation of Accuracy Through Experimental Validation. Journal of Biomechanical Engineering, 2010, 132, 021002.	0.6	18
142	Polyethylene damage and deformation on fixed-bearing, non-conforming unicondylar knee replacements corresponding to progressive changes in alignment and fixation. Clinical Biomechanics, 2010, 25, 570-575.	0.5	15
143	Effect of undersizing on the long-term stability of the Exeter hip stem: A comparative <i>in vitro</i> study. Clinical Biomechanics, 2010, 25, 899-908.	0.5	17
144	Stress shielding and stress concentration of contemporary epiphyseal hip prostheses. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2009, 223, 27-44.	1.0	24

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145	Microindentation on cortical human bone: Effects of tissue condition and indentation location on hardness values. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2009, 223, 913-918.	1.0	25
146	The VPH-Physiome Project: Standards and Tools for Multiscale Modeling in Clinical Applications. IEEE Reviews in Biomedical Engineering, 2009, 2, 40-53.	13.1	28
147	Strain distribution in the proximal human femoral metaphysis. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2009, 223, 273-288.	1.0	62
148	Relationship between obesity and early failure of total knee prostheses. BMC Musculoskeletal Disorders, 2009, 10, 29.	0.8	79
149	Comments on "In Vitro Analysis of Exeter Stem Torsional Stability" by Bell CG, Weinrauch P, Pearcy M, Crawford R, Published on J Arthroplasty. 2007 Oct;22(7):1024-30. Journal of Arthroplasty, 2009, 24, 657-659.	1.5	0
150	Effect of head surface roughness and sterilization on wear of UHMWPE acetabular cups. Journal of Biomedical Materials Research - Part A, 2009, 90A, 1032-1042.	2.1	14
151	Is ceramic-ceramic squeaking phenomenon reproducible <i>in vitro</i> ? A long-term simulator study under severe conditions. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 264-271.	1.6	22
152	Ceramic-ceramic vs. metal-metal in total hip arthroplasty (THA): do 36mm diameters exhibit comparable wear performance? Keramik vs. Metall in Totalprothesen-Hüftgelenkspfanne. Arthroplastik: zeigen 36mm Durchmesser Ähnliche Verschleißverhalten?. Materialwissenschaft Und Werkstofftechnik, 2009, 40, 94-97.	0.5	5
153	Letter to the Editor commenting on "Multilevel finite element modeling for the prediction of local cellular deformation in bone," Deligianni DD and Apostolopoulos CA (2008) Biomech Model Mechanobiol 7(2):151-159. Biomechanics and Modeling in Mechanobiology, 2009, 8, 427-428.	1.4	1
154	Pre-clinical validation of joint prostheses: A systematic approach. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 120-127.	1.5	31
155	Tibia Adaptation after Fibula Harvesting: An in Vivo Quantitative Study. Clinical Orthopaedics and Related Research, 2009, 467, 2149-2158.	0.7	16
156	CMM-based procedure for polyethylene non-congruous unicompartamental knee prosthesis wear assessment. Wear, 2009, 267, 753-756.	1.5	27
157	Risk of failure during gait for direct skeletal attachment of a femoral prosthesis: A finite element study. Medical Engineering and Physics, 2009, 31, 595-600.	0.8	49
158	Wear behaviour in total ankle replacement: A comparison between an in vitro simulation and retrieved prostheses. Clinical Biomechanics, 2009, 24, 661-669.	0.5	25
159	Implant fixation in knee replacement: Preliminary in vitro comparison of ceramic and metal cemented femoral components. Knee, 2009, 16, 101-108.	0.8	27
160	Effect of stem preheating on the fatigue behaviour of bone cement around hip prostheses. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2009, 223, 637-641.	1.0	5
161	Designing a socio-economic assessment method for integrative biomedical research: the Osteoporotic Virtual Physiological Human project. Studies in Health Technology and Informatics, 2009, 150, 876-80.	0.2	4
162	Is Laterality Associated With a Higher Rate of Hip Arthroplasty on the Dominant Side?. Artificial Organs, 2008, 32, 73-77.	1.0	8

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163	An accurate estimation of bone density improves the accuracy of subject-specific finite element models. <i>Journal of Biomechanics</i> , 2008, 41, 2483-2491.	0.9	333
164	Dependence of mechanical compressive strength on local variations in microarchitecture in cancellous bone of proximal human femur. <i>Journal of Biomechanics</i> , 2008, 41, 438-446.	0.9	115
165	Subject-specific finite element models implementing a maximum principal strain criterion are able to estimate failure risk and fracture location on human femurs tested in vitro. <i>Journal of Biomechanics</i> , 2008, 41, 356-367.	0.9	304
166	On the mechanical stability of porous coated press fit titanium implants: A finite element study of a pushout test. <i>Journal of Biomechanics</i> , 2008, 41, 1675-1681.	0.9	20
167	Comparison of three standard anatomical reference frames for the tibia–fibula complex. <i>Journal of Biomechanics</i> , 2008, 41, 3384-3389.	0.9	20
168	A modified method for assigning material properties to FE models of bones. <i>Medical Engineering and Physics</i> , 2008, 30, 444-453.	0.8	122
169	Tribology and total hip joint replacement: Current concepts in mechanical simulation. <i>Medical Engineering and Physics</i> , 2008, 30, 1305-1317.	0.8	141
170	TOOLS AND METHODS FOR THE MULTISCALE MODELLING OF THE SKELETAL SYSTEM. <i>Journal of Biomechanics</i> , 2008, 41, S200.	0.9	0
171	Comparative study on the wear behaviour of different conventional and cross-linked polyethylenes for total hip replacement. <i>Tribology International</i> , 2008, 41, 813-822.	3.0	39
172	The effects of irradiation and EtO-treatment on ultrahigh molecular weight polyethylene acetabular cups following accelerated aging: Degradation of mechanical properties and morphology changes during hip simulator tests. <i>Journal of Molecular Structure</i> , 2008, 875, 254-263.	1.8	23
173	Sensitivity of the Primary Stability of a Cementless Hip Stem to Its Position and Orientation. <i>Artificial Organs</i> , 2008, 32, 555-560.	1.0	14
174	A New Method of In Vitro Wear Assessment of the UHMWPE Tibial Insert in Total Knee Replacement. <i>Artificial Organs</i> , 2008, 32, 942-948.	1.0	19
175	Multiscale modelling and team science: the future of orthopaedic biomechanics. <i>Journal of Foot and Ankle Research</i> , 2008, 1, .	0.7	1
176	Mathematical relationships between bone density and mechanical properties: A literature review. <i>Clinical Biomechanics</i> , 2008, 23, 135-146.	0.5	453
177	Can the rasp be used to predict intra-operatively the primary stability that can be achieved by press-fitting the stem in cementless hip arthroplasty?. <i>Clinical Biomechanics</i> , 2008, 23, 408-414.	0.5	9
178	Multiscale modelling of the skeleton for the prediction of the risk of fracture. <i>Clinical Biomechanics</i> , 2008, 23, 845-852.	0.5	36
179	A new meshless approach for subject-specific strain prediction in long bones: Evaluation of accuracy. <i>Clinical Biomechanics</i> , 2008, 23, 1192-1199.	0.5	27
180	The effects of embalming using a 4% formalin solution on the compressive mechanical properties of human cortical bone. <i>Clinical Biomechanics</i> , 2008, 23, 1294-1298.	0.5	122

#	ARTICLE	IF	CITATIONS
181	The EuroPhysiome, STEP and a roadmap for the virtual physiological human. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 2979-2999.	1.6	92
182	Using Web Services for Distributed Medical Visualisation. , 2008, , .		6
183	Unicompartmental knee prostheses: <i>in vitro</i> wear assessment of the menisci tibial insert after two different fixation methods. Physics in Medicine and Biology, 2008, 53, 5357-5369.	1.6	21
184	Editorial. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 2975-2978.	1.6	39
185	Predictive role of the $\hat{\beta}$ ratio in the evaluation of metal-on-metal total hip replacement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2008, 222, 617-628.	1.0	13
186	Long-term implant bone fixation of the femoral component in total knee replacement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2008, 222, 319-331.	1.0	28
187	3D Multiscale Visualisation for Medical Datasets. , 2008, , .		4
188	Fast 3D mesh generation of femur based on planar parameterization and morphing. , 2008, , .		4
189	Multiscale investigation of the functional properties of the human femur. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3319-3341.	1.6	41
190	Editorial. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3223-3224.	1.6	6
191	The Virtual Physiological Human – A European Initiative for <i>in silico</i> Human Modelling . Journal of Physiological Sciences, 2008, 58, 441-446.	0.9	74
192	Thermomechanical analysis of ultra-high molecular weight polyethylene-metal hip prostheses. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 561-568.	1.0	12
193	Fatigue-fractured surfaces of commercial bone cements. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 157-158.	0.9	1
194	Preclinical assessment of the long-term endurance of cemented hip stems. Part 1: Effect of daily activities - a comparison of two load histories. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 569-584.	1.0	23
195	Virtual palpation of skeletal landmarks with multimodal display interfaces. Informatics for Health and Social Care, 2007, 32, 191-198.	1.0	19
196	Preclinical assessment of the long-term endurance of cemented hip stems. Part 2: <i>in-vitro</i> and <i>ex-vivo</i> fatigue damage of the cement mantle. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 585-599.	1.0	19
197	<i>In-vitro</i> method for assessing femoral implant bone micromotions in resurfacing hip implants under different loading conditions. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 943-950.	1.0	24
198	Increased long-term failure risk associated with excessively thin cement mantle in cemented hip arthroplasty: A comparative <i>in vitro</i> study. Clinical Biomechanics, 2007, 22, 410-421.	0.5	41

#	ARTICLE	IF	CITATIONS
199	Partially cemented AncaDualFit hip stems do not fail in simulated active patients. <i>Clinical Biomechanics</i> , 2007, 22, 191-202.	0.5	6
200	Changes in femur stress after hip resurfacing arthroplasty: Response to physiological loads. <i>Clinical Biomechanics</i> , 2007, 22, 440-448.	0.5	65
201	Structural parameters and mechanical strength of cancellous bone in the femoral head in osteoarthritis do not depend on age. <i>Bone</i> , 2007, 41, 760-768.	1.4	62
202	Meniscal wear at a three-component total ankle prosthesis by a knee joint simulator. <i>Journal of Biomechanics</i> , 2007, 40, 1871-1876.	0.9	39
203	Predicting the subject-specific primary stability of cementless implants during pre-operative planning: Preliminary validation of subject-specific finite-element models. <i>Journal of Biomechanics</i> , 2007, 40, 2552-2558.	0.9	56
204	Subject-specific finite element models can accurately predict strain levels in long bones. <i>Journal of Biomechanics</i> , 2007, 40, 2982-2989.	0.9	274
205	In vitro replication of spontaneous fractures of the proximal human femur. <i>Journal of Biomechanics</i> , 2007, 40, 2837-2845.	0.9	112
206	The effect of tissue condition and applied load on Vickers hardness of human trabecular bone. <i>Journal of Biomechanics</i> , 2007, 40, 3267-3270.	0.9	41
207	The effect of gentamicin sulphate on the fracture properties of a manually mixed bone cement. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2007, 30, 479-488.	1.7	4
208	Quantitative Crack Surface Morphology of Bone Cements in Relation to Propagation Rate. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2007, 30, 783-795.	1.7	3
209	MicroCT examination of human bone specimens: effects of polymethylmethacrylate embedding on structural parameters. <i>Journal of Microscopy</i> , 2007, 225, 192-200.	0.8	62
210	In Vitro Long-term Fatigue Endurance of the Secondary "Cement Injection Stem" Hip Prosthesis. <i>Artificial Organs</i> , 2007, 31, 441-451.	1.0	7
211	Relationship Between Biometric Characteristics and Stem Size of Uncemented Hip Prostheses. <i>Artificial Organs</i> , 2007, 31, 480-483.	1.0	4
212	Investigation on Wear of Knee Prostheses Under Fixed Kinematic Conditions. <i>Artificial Organs</i> , 2007, 32, 070802063815007-???	1.0	21
213	The multimod application framework: A rapid application development tool for computer aided medicine. <i>Computer Methods and Programs in Biomedicine</i> , 2007, 85, 138-151.	2.6	51
214	Personal Digital Assistant in an orthopaedic wireless ward: The HandHealth project. <i>Computer Methods and Programs in Biomedicine</i> , 2007, 86, 21-29.	2.6	4
215	Multimod Data Manager: A tool for data fusion. <i>Computer Methods and Programs in Biomedicine</i> , 2007, 87, 148-159.	2.6	34
216	Engineering for Health - A Partner in Building the Knowledge Economy of Europe. <i>IEEE Engineering in Medicine and Biology Magazine</i> , 2007, 26, 53-59.	1.1	5

#	ARTICLE	IF	CITATIONS
217	Mechanical testing of cancellous bone from the femoral head: Experimental errors due to off-axis measurements. <i>Journal of Biomechanics</i> , 2007, 40, 2426-2433.	0.9	100
218	The material mapping strategy influences the accuracy of CT-based finite element models of bones: An evaluation against experimental measurements. <i>Medical Engineering and Physics</i> , 2007, 29, 973-979.	0.8	251
219	Digital Human Modelling: A Global Vision and a European Perspective. <i>Lecture Notes in Computer Science</i> , 2007, , 549-558.	1.0	8
220	Efficacy of stereoscopic visualization and six degrees of freedom interaction in preoperative planning of total hip replacement. <i>Informatics for Health and Social Care</i> , 2006, 31, 205-218.	1.0	4
221	Mechanical effects of the use of vancomycin and meropenem in acrylic bone cement. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2006, 77, 617-621.	1.2	56
222	A new software tool for 3D motion analyses of the musculo-skeletal system. <i>Clinical Biomechanics</i> , 2006, 21, 870-879.	0.5	20
223	Comparative study of different tendon grasping techniques for arthroscopic repair of the rotator cuff. <i>Clinical Biomechanics</i> , 2006, 21, 799-803.	0.5	40
224	Low-dose computed tomography: A solution for in vivo medical imaging and accurate patient-specific 3D bone modeling?. <i>Clinical Biomechanics</i> , 2006, 21, 992-998.	0.5	24
225	Stem Damage During Implantation of Modular Hip Prostheses. <i>Artificial Organs</i> , 2006, 30, 564-567.	1.0	7
226	Comments on "Stair climbing is more critical than walking in pre-clinical assessment of primary stability in cementless THA in vitro" by Jean-Pierre Kassi, Markus O. Heller, Ulrich Stoeckle, Carsten Perka, Georg N. Duda, Published on <i>J. Biomechanics</i> 2005; 38: 1143-1154. <i>Journal of Biomechanics</i> , 2006, 39, 3085-3087.	0.9	4
227	Multimodal visualization interface for data management, self-learning and data presentation. <i>Surgical and Radiologic Anatomy</i> , 2006, 28, 518-524.	0.6	4
228	Primary stability of an anatomical cementless hip stem: A statistical analysis. <i>Journal of Biomechanics</i> , 2006, 39, 1169-1179.	0.9	110
229	Subject-specific finite element models of long bones: An in vitro evaluation of the overall accuracy. <i>Journal of Biomechanics</i> , 2006, 39, 2457-2467.	0.9	212
230	Finite-Element Modeling of Bones From CT Data: Sensitivity to Geometry and Material Uncertainties. <i>IEEE Transactions on Biomedical Engineering</i> , 2006, 53, 2194-2200.	2.5	88
231	The predictive Power of Surface Profile Parameters on the Amount of Wear Measured In Vitro on Metal-On-Polyethylene Artificial Hip Joints. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2006, 220, 457-464.	1.0	49
232	On the Biomechanical Stability of Cementless Straight Conical Hip Stems. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2006, 220, 473-480.	1.0	17
233	Advanced multimodal visualisation of clinical gait and fluoroscopy analyses in the assessment of total knee replacement. <i>Computer Methods and Programs in Biomedicine</i> , 2005, 79, 227-240.	2.6	12
234	Evaluation of achievable registration accuracy of the femur during minimally invasive total hip replacement. <i>Medical and Biological Engineering and Computing</i> , 2005, 43, 421-430.	1.6	3

#	ARTICLE	IF	CITATIONS
235	Kinematic study of a reconstructed hip in paediatric oncology. <i>Medical and Biological Engineering and Computing</i> , 2005, 43, 102-106.	1.6	5
236	MULTIMODAL DISPLAY INTERFACE FOR PLANNING AND MONITORING COMPLEX SKELETAL RECONSTRUCTIONS. <i>Journal of Mechanics in Medicine and Biology</i> , 2005, 05, 465-468.	0.3	1
237	Extracting clinically relevant data from finite element simulations. <i>Clinical Biomechanics</i> , 2005, 20, 451-454.	0.5	271
238	Erratum to "Extracting clinically relevant data from finite element simulations" [<i>Clinical Biomechanics</i> 20 (2005) 451-454]. <i>Clinical Biomechanics</i> , 2005, 20, 1010.	0.5	0
239	A procedure and criterion for bone cement fracture toughness tests. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2004, 218, 445-450.	1.0	7
240	Validation of two algorithms to evaluate the interface between bone and orthopaedic implants. <i>Computer Methods and Programs in Biomedicine</i> , 2004, 74, 143-150.	2.6	15
241	JIDE: a new software for computer-aided design of hip prosthesis. <i>Computer Methods and Programs in Biomedicine</i> , 2004, 75, 213-220.	2.6	6
242	A new software for prediction of femoral neck fractures. <i>Computer Methods and Programs in Biomedicine</i> , 2004, 75, 141-145.	2.6	9
243	New aspects and approaches in pre-operative planning of hip reconstruction: a computer simulation. <i>Langenbeck's Archives of Surgery</i> , 2004, 389, 400-404.	0.8	18
244	Effect of the initial implant fitting on the predicted secondary stability of a cementless stem. <i>Medical and Biological Engineering and Computing</i> , 2004, 42, 222-229.	1.6	31
245	Numerical model to predict the longterm mechanical stability of cementless orthopaedic implants. <i>Medical and Biological Engineering and Computing</i> , 2004, 42, 747-753.	1.6	10
246	Automatic generation of accurate subject-specific bone finite element models to be used in clinical studies. <i>Journal of Biomechanics</i> , 2004, 37, 1597-1605.	0.9	139
247	An improved method for the automatic mapping of computed tomography numbers onto finite element models. <i>Medical Engineering and Physics</i> , 2004, 26, 61-69.	0.8	234
248	Specialised CT scan protocols for 3-D pre-operative planning of total hip replacement. <i>Medical Engineering and Physics</i> , 2004, 26, 237-245.	0.8	46
249	An automated method to position prosthetic components within multiple anatomical spaces. <i>Computer Methods and Programs in Biomedicine</i> , 2003, 70, 121-127.	2.6	16
250	A new method to compare planned and achieved position of an orthopaedic implant. <i>Computer Methods and Programs in Biomedicine</i> , 2003, 71, 117-127.	2.6	18
251	CT-based surgical planning software improves the accuracy of total hip replacement preoperative planning. <i>Medical Engineering and Physics</i> , 2003, 25, 371-377.	0.8	99
252	The muscle standardised femur. <i>Journal of Biomechanics</i> , 2003, 36, 145-146.	0.9	13

#	ARTICLE	IF	CITATIONS
253	The primary stability of a cementless stem varies between subjects as much as between activities. <i>Journal of Biomechanics</i> , 2003, 36, 777-785.	0.9	82
254	Accuracy and repeatability of cementless total hip replacement surgery in patients with deformed anatomies. <i>Informatics for Health and Social Care</i> , 2003, 28, 59-71.	1.0	16
255	The muscle standardized femur: A step forward in the replication of numerical studies in biomechanics. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2003, 217, 105-110.	1.0	39
256	Development and numerical validation of a finite element model of the muscle standardized femur. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2003, 217, 165-172.	1.0	12
257	Strain distribution within the human femur due to physiological and simplified loading: Finite element analysis using the muscle standardized femur model. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2003, 217, 173-189.	1.0	97
258	Mechanical strength of a femoral reconstruction in paediatric oncology: A finite element study. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2003, 217, 111-119.	1.0	42
259	Automatic Generation of Finite Element Meshes from Computed Tomography Data. <i>Critical Reviews in Biomedical Engineering</i> , 2003, 31, 27-72.	0.5	40
260	Growth and remodelling of the autologous bone transplant used in a pediatric femoral reconstruction. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2002, 216, 95-104.	1.0	11
261	Prediction of Hip Fracture Can Be Significantly Improved by a Single Biomedical Indicator. <i>Annals of Biomedical Engineering</i> , 2002, 30, 801-807.	1.3	35
262	Effect of display modality on spatial accuracy of orthopaedic surgery pre-operative planning applications. <i>Informatics for Health and Social Care</i> , 2002, 27, 21-32.	1.0	17
263	Hip-Op: an innovative software to plan total hip replacement surgery. <i>Informatics for Health and Social Care</i> , 2002, 27, 71-83.	1.0	46
264	A methodology and criterion for acrylic bone cement fatigue tests. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2002, 25, 317-318.	1.7	4
265	The role of parameter identification in finite element contact analyses with reference to orthopaedic biomechanics applications. <i>Journal of Biomechanics</i> , 2002, 35, 61-67.	0.9	50
266	Even a thin layer of soft tissue may compromise the primary stability of cementless hip stems. <i>Clinical Biomechanics</i> , 2001, 16, 765-775.	0.5	64
267	Comparison of logistic and Bayesian classifiers for evaluating the risk of femoral neck fracture in osteoporotic patients. <i>Medical and Biological Engineering and Computing</i> , 2001, 39, 633-637.	1.6	14
268	Pre-clinical validation of a new partially cemented femoral prosthesis by synergetic use of numerical and experimental methods. <i>Journal of Biomechanics</i> , 2001, 34, 723-731.	0.9	53
269	HIDE: a new hybrid environment for the design of custom-made hip prosthesis. <i>Computer Methods and Programs in Biomedicine</i> , 2001, 64, 137-144.	2.6	14
270	Border-tracing algorithm implementation for the femoral geometry reconstruction. <i>Computer Methods and Programs in Biomedicine</i> , 2001, 65, 175-182.	2.6	44

#	ARTICLE	IF	CITATIONS
271	Comments on "Femoral surface strain in intact composite femurs: A custom computer analysis of the photoelastic coating technique" [with reply]. IEEE Transactions on Biomedical Engineering, 2001, 48, 944-946.	2.5	1
272	Interface biomechanics of the Anca Dual Fit hip stem: An in vitro experimental study. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2001, 215, 555-564.	1.0	6
273	Design revision of a partially cemented hip stem. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2001, 215, 471-478.	1.0	6
274	A comparison between automatically generated linear and parabolic tetrahedra when used to mesh a human femur. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2001, 215, 85-94.	1.0	43
275	Large-sliding contact elements accurately predict levels of bone-implant micromotion relevant to osseointegration. Journal of Biomechanics, 2000, 33, 1611-1618.	0.9	259
276	Mechanical validation of whole bone composite tibia models. Journal of Biomechanics, 2000, 33, 279-288.	0.9	292
277	The Effect of Sandblasting Treatment on Endurance Properties of Titanium Alloy Hip Prostheses. Artificial Organs, 2000, 24, 296-299.	1.0	63
278	A novel transducer for the measurement of cement-prosthesis interface forces in cemented orthopaedic devices. Medical Engineering and Physics, 2000, 22, 493-501.	0.8	10
279	Selection of the best element type in the finite element analysis of hip prostheses. Journal of Medical Engineering and Technology, 2000, 24, 145-148.	0.8	8
280	Development and validation of a technique for strain measurement inside polymethyl methacrylate. Journal of Strain Analysis for Engineering Design, 2000, 35, 21-33.	1.0	22
281	Development of a software for the design of custom-made hip prostheses using an open-source rapid application development environment. Informatics for Health and Social Care, 2000, 25, 183-193.	1.0	1
282	A new method for the automatic mesh generation of bone segments from CT data. Journal of Medical Engineering and Technology, 1999, 23, 77-81.	0.8	28
283	Material properties assignment to finite element models of bone structures: a new method. Medical Engineering and Physics, 1999, 20, 735-740.	0.8	162
284	Methods for Quantitative Analysis of the Primary Stability in Uncemented Hip Prostheses. Artificial Organs, 1999, 23, 851-859.	1.0	55
285	A study of the application sharing capabilities in telemedicine. Computer Methods and Programs in Biomedicine, 1999, 58, 89-97.	2.6	13
286	Spatial positioning of an hip stem solid model within the CT data set of the host bone. Computer Methods and Programs in Biomedicine, 1999, 58, 219-226.	2.6	7
287	CT data sets surface extraction for biomechanical modeling of long bones. Computer Methods and Programs in Biomedicine, 1999, 59, 159-166.	2.6	37
288	Risk of fracture in elderly patients: a new predictive index based on bone mineral density and finite element analysis. Computer Methods and Programs in Biomedicine, 1999, 60, 23-33.	2.6	53

#	ARTICLE	IF	CITATIONS
289	In vitro stress shielding measurements can be affected by large errors. Journal of Arthroplasty, 1999, 14, 215-219.	1.5	29
290	Endurance testing of hip prostheses: a comparison between the load fixed in ISO 7206 standard and the physiological loads. Clinical Biomechanics, 1999, 14, 339-345.	0.5	32
291	TRI2SOLID: an application of reverse engineering methods to the creation of CAD models of bone segments. Computer Methods and Programs in Biomedicine, 1998, 56, 211-220.	2.6	50
292	A comparative study on different methods of automatic mesh generation of human femurs. Medical Engineering and Physics, 1998, 20, 1-10.	0.8	186
293	Analysis of titanium induced CT artifacts in the development of biomechanical finite element models. Medical Engineering and Physics, 1998, 20, 653-659.	0.8	30
294	Optimal CT scanning plan for long-bone 3-D reconstruction. IEEE Transactions on Medical Imaging, 1998, 17, 663-666.	5.4	24
295	In vitro measured strains in the loaded femur: Quantification of experimental error. Journal of Strain Analysis for Engineering Design, 1997, 32, 193-200.	1.0	15
296	Comparison of uniaxial and triaxial rosette gages for strain measurement in the femur. Experimental Mechanics, 1997, 37, 350-354.	1.1	21
297	Fretting wear in a modular neck hip prosthesis. , 1997, 35, 207-216.		126
298	Global asymptotic stability of bone remodeling theories. Journal of Biomechanics, 1997, 31, 289-294.	0.9	3
299	Design-related fretting wear in modular neck hip prosthesis. , 1996, 30, 181-186.		94
300	Bone remodelling adjacent to intramedullary stems: an optimal structures approach. Biomaterials, 1996, 17, 223-232.	5.7	6
301	Discussion on the design of a hip joint simulator. Medical Engineering and Physics, 1996, 18, 234-240.	0.8	24
302	A minimal parametric model of the femur to describe axial elastic strain in response to loads. Medical Engineering and Physics, 1996, 18, 502-514.	0.8	12
303	Mechanical validation of whole bone composite femur models. Journal of Biomechanics, 1996, 29, 525-535.	0.9	466
304	The "standardized femur program"™ proposal for a reference geometry to be used for the creation of finite element models of the femur. Journal of Biomechanics, 1996, 29, 1241.	0.9	98
305	Effects of some technological aspects on the fatigue strength of a cementless hip stem. Journal of Biomedical Materials Research Part B, 1995, 29, 875-881.	3.0	20
306	Influence of thigh muscles on the axial strains in a proximal femur during early stance in gait. Journal of Biomechanics, 1995, 28, 617-624.	0.9	86

#	ARTICLE	IF	CITATIONS
307	Initial stability of uncemented hip stems: an in-vitro protocol to measure torsional interface motion. Medical Engineering and Physics, 1995, 17, 163-171.	0.8	69
308	Strains induced by thigh muscles in the proximal femur. Journal of Biomechanics, 1994, 27, 757.	0.9	0
309	Automatic fracture reduction with a computer-controlled external fixator. Medical Engineering and Physics, 1994, 16, 143-149.	0.8	10
310	Digital dynamic range expansion applied to X-ray densitometric analysis of total hip replacement. Journal of Biomedical Engineering, 1993, 15, 57-59.	0.7	9
311	A software simulation of tibial fracture reduction with external fixator. Computer Methods and Programs in Biomedicine, 1993, 40, 89-94.	2.6	7
312	A generalized procedure for predicting bone mass regulation by mechanical strain. Calcified Tissue International, 1990, 47, 296-301.	1.5	20
313	The body level. , 0, , 47-76.		0
314	Applications of multiscale modeling. , 0, , 154-172.		0