

Luca Cristofolini

List of Publications by Year in descending order

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Version: 2024-02-01

206
papers

9,982
citations

71004

43
h-index

45040

94
g-index

221
all docs

221
docs citations

221
times ranked

7089
citing authors

#	ARTICLE	IF	CITATIONS
1	Global and local characterization explains the different mechanisms of failure of the human ribs. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 125, 104931.	1.5	1
2	Critical Review of the State-of-the-Art on Lumbar Percutaneous Cement Discolplasty. <i>Frontiers in Surgery</i> , 2022, 9, .	0.6	4
3	Primary stability of a press-fit cup in combination with impaction grafting in an acetabular defect model. <i>Journal of Orthopaedic Research</i> , 2021, 39, 929-940.	1.2	1
4	Hierarchical chitinous matrices byssus-inspired with mechanical properties tunable by Fe(III) and oxidation. <i>Carbohydrate Polymers</i> , 2021, 251, 116984.	5.1	5
5	Reconstruction of proximal humeral fractures without screws using a reinforced bone substitute. <i>Journal of Biomechanics</i> , 2021, 115, 110138.	0.9	4
6	A CT-based method to compute femur remodelling after total hip arthroplasty. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2021, 9, 428-437.	1.3	0
7	Load-sharing biomechanics of lumbar fixation and fusion with pedicle subtraction osteotomy. <i>Scientific Reports</i> , 2021, 11, 3595.	1.6	17
8	Tissue Engineering for the Insertions of Tendons and Ligaments: An Overview of Electrospun Biomaterials and Structures. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 645544.	2.0	38
9	Editorial: Special Issue of the Italian Chapter of the European Society of Biomechanics dedicated to "Biomechanics for in silico clinical trials". <i>Medical Engineering and Physics</i> , 2021, 89, 12-13.	0.8	0
10	Tuning the Structure of Nylon 6,6 Electrospun Bundles to Mimic the Mechanical Performance of Tendon Fascicles. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 626433.	2.0	15
11	Experimental study exploring the factors that promote rib fragility in the elderly. <i>Scientific Reports</i> , 2021, 11, 9307.	1.6	6
12	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
13	Type, size, and position of metastatic lesions explain the deformation of the vertebrae under complex loading conditions. <i>Bone</i> , 2021, 151, 116028.	1.4	8
14	DOES CEMENT CURING CAUSE CONCERNING INCREASE OF THE TEMPERATURE WHEN DELIVERED IN THE HUMAN HUMERUS?. <i>Journal of Mechanics in Medicine and Biology</i> , 2021, 21, .	0.3	0
15	Effects Induced by Osteophytes on the Strain Distribution in the Vertebral Body Under Different Loading Configurations. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 756609.	2.0	5
16	Hierarchical electrospun tendon-ligament bioinspired scaffolds induce changes in fibroblasts morphology under static and dynamic conditions. <i>Journal of Microscopy</i> , 2020, 277, 160-169.	0.8	31
17	Testing the impact of discoplasty on the biomechanics of the intervertebral disc with simulated degeneration: An in vitro study. <i>Medical Engineering and Physics</i> , 2020, 84, 51-59.	0.8	16
18	Effect of cup medialization on primary stability of press-fit acetabular cups. <i>Clinical Biomechanics</i> , 2020, 80, 105172.	0.5	1

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19	Three dimensional bone mineral density changes in the femur over 1Âyear in primary total hip arthroplasty patients. <i>Clinical Biomechanics</i> , 2020, 78, 105092.	0.5	9
20	Reconstruction of proximal humeral fractures with a reduced number of screws and a reinforced bone substitute. <i>Medical Engineering and Physics</i> , 2020, 82, 97-103.	0.8	3
21	Assessing the Mechanical Weakness of Vertebrae Affected by Primary Tumors: A Feasibility Study. <i>Materials</i> , 2020, 13, 3256.	1.3	3
22	Primary Stability of Revision Acetabular Reconstructions Using an Innovative Bone Graft Substitute: A Comparative Biomechanical Study on Cadaveric Pelvises. <i>Materials</i> , 2020, 13, 4312.	1.3	3
23	Regional Nanoindentation Properties in Different Locations on the Mouse Tibia From C57BL/6 and Balb/C Female Mice. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 478.	2.0	10
24	The strain distribution in the lumbar anterior longitudinal ligament is affected by the loading condition and bony features: An in vitro full-field analysis. <i>PLoS ONE</i> , 2020, 15, e0227210.	1.1	20
25	Digital Image Correlation (DIC) Assessment of the Non-Linear Response of the Anterior Longitudinal Ligament of the Spine during Flexion and Extension. <i>Materials</i> , 2020, 13, 384.	1.3	13
26	Morphologically bioinspired hierarchical nylon 6,6 electrospun assembly recreating the structure and performance of tendons and ligaments. <i>Medical Engineering and Physics</i> , 2019, 71, 79-90.	0.8	27
27	Effect of different motor tasks on hip cup primary stability and on the strains in the periacetabular bone: An in vitro study. <i>Clinical Biomechanics</i> , 2019, 70, 137-145.	0.5	6
28	Uncertainties of synchrotron microCT-based digital volume correlation bone strain measurements under simulated deformation. <i>Journal of Biomechanics</i> , 2019, 86, 232-237.	0.9	17
29	A reliable in vitro approach to assess the stability of acetabular implants using digital image correlation. <i>Strain</i> , 2019, 55, e12318.	1.4	7
30	Multiscale hierarchical bioresorbable scaffolds for the regeneration of tendons and ligaments. <i>Biofabrication</i> , 2019, 11, 035026.	3.7	45
31	Î²-Chitin samples with similar microfibril arrangement change mechanical properties varying the degree of acetylation. <i>Carbohydrate Polymers</i> , 2019, 207, 26-33.	5.1	26
32	Full-field in vitro investigation of hard and soft tissue strain in the spine by means of Digital Image Correlation. <i>Muscles, Ligaments and Tendons Journal</i> , 2019, 07, 538.	0.1	16
33	In Vitro Experimental Studies and Numerical Modeling to Investigate the Biomechanical Effects of Surgical Interventions on the Spine. <i>Critical Reviews in Biomedical Engineering</i> , 2019, 47, 295-322.	0.5	1
34	Full-field strain distribution in multi-vertebra spine segments: An in vitro application of digital image correlation. <i>Medical Engineering and Physics</i> , 2018, 52, 76-83.	0.8	23
35	Standardization of hemipelvis alignment for in vitro biomechanical testing. <i>Journal of Orthopaedic Research</i> , 2018, 36, 1645-1652.	1.2	15
36	Tendon Fascicle-Inspired Nanofibrous Scaffold of Polylactic acid/Collagen with Enhanced 3D-Structure and Biomechanical Properties. <i>Scientific Reports</i> , 2018, 8, 17167.	1.6	59

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37	The Size of Simulated Lytic Metastases Affects the Strain Distribution on the Anterior Surface of the Vertebra. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	0.6	17
38	Concepts of Differently Shaped Rods Translation and Direct Vertebral Rotation for the Surgical Treatment of Adolescent Idiopathic Scoliosis. <i>Journal of the American Academy of Orthopaedic Surgeons</i> , The, 2018, 26, e496.	1.1	0
39	Biofabrication of Electrospun Scaffolds for the Regeneration of Tendons and Ligaments. <i>Materials</i> , 2018, 11, 1963.	1.3	101
40	Patient-specific mobility assessment to monitor recovery after total hip arthroplasty. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2018, 232, 1048-1059.	1.0	11
41	High-resolution x-ray tomographic morphological characterisation of electrospun nanofibrous bundles for tendon and ligament regeneration and replacement. <i>Journal of Microscopy</i> , 2018, 272, 196-206.	0.8	21
42	Standard and linear cementation of a polished short hip stem: Long-term in vitro implant stability. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2736-2744.	1.2	6
43	Graphene Materials Strengthen Aqueous Polyurethane Adhesives. <i>ACS Omega</i> , 2018, 3, 8829-8835.	1.6	12
44	THE EFFECT OF COMPUTED TOMOGRAPHY CURRENT REDUCTION ON PROXIMAL FEMUR SUBJECT-SPECIFIC FINITE ELEMENT MODELS. <i>Journal of Mechanics in Medicine and Biology</i> , 2017, 17, 1750012.	0.3	4
45	Biofabrication of bundles of poly(lactic acid)-collagen blends mimicking the fascicles of the human Achilles tendon. <i>Biofabrication</i> , 2017, 9, 015025.	3.7	53
46	Investigating the Mechanobiology of Cancer Cell-ECM Interaction Through Collagen-Based 3D Scaffolds. <i>Cellular and Molecular Bioengineering</i> , 2017, 10, 223-234.	1.0	46
47	Strain uncertainties on two digital volume correlation approaches in prophylactically augmented vertebrae: Local analysis on bone and cement-bone microstructures. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 67, 117-126.	1.5	47
48	Local displacement and strain uncertainties in different bone types by digital volume correlation of synchrotron microtomograms. <i>Journal of Biomechanics</i> , 2017, 58, 27-36.	0.9	43
49	METHODS FOR THE CHARACTERIZATION OF THE LONG-TERM MECHANICAL PERFORMANCE OF CEMENTS FOR VERTEBROPLASTY AND KYPHOPLASTY: CRITICAL REVIEW AND SUGGESTIONS FOR TEST METHODS. <i>Journal of Mechanics in Medicine and Biology</i> , 2017, 17, 1730002.	0.3	4
50	Critical Examination of Stress Shielding Evaluation of Hip Prostheses. <i>Critical Reviews in Biomedical Engineering</i> , 2017, 45, 549-623.	0.5	8
51	Precision of Digital Volume Correlation Approaches for Strain Analysis in Bone Imaged with Micro-Computed Tomography at Different Dimensional Levels. <i>Frontiers in Materials</i> , 2017, 4, .	1.2	58
52	Micro Finite Element models of the vertebral body: Validation of local displacement predictions. <i>PLoS ONE</i> , 2017, 12, e0180151.	1.1	55
53	Full-field in vitro investigation of hard and soft tissue strain in the spine by means of Digital Image Correlation. <i>Muscles, Ligaments and Tendons Journal</i> , 2017, 7, 538.	0.1	10
54	Can CT image deblurring improve finite element predictions at the proximal femur?. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 63, 337-351.	1.5	22

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55	Effect of the In Vitro Boundary Conditions on the Surface Strain Experienced by the Vertebral Body in the Elastic Regime. <i>Journal of Biomechanical Engineering</i> , 2016, 138, .	0.6	5
56	Elastic Full-Field Strain Analysis and Microdamage Progression in the Vertebral Body from Digital Volume Correlation. <i>Strain</i> , 2016, 52, 446-455.	1.4	42
57	Comparison of different filtering strategies to reduce noise in strain measurement with digital image correlation. <i>Journal of Strain Analysis for Engineering Design</i> , 2016, 51, 416-430.	1.0	26
58	A PRELIMINARY IN VITRO BIOMECHANICAL EVALUATION OF PROPHYLACTIC CEMENT AUGMENTATION OF THE THORACOLUMBAR VERTEBRAE. <i>Journal of Mechanics in Medicine and Biology</i> , 2016, 16, 1650074.	0.3	5
59	Application of digital volume correlation to study the efficacy of prophylactic vertebral augmentation. <i>Clinical Biomechanics</i> , 2016, 39, 14-24.	0.5	30
60	Digital volume correlation can be used to estimate local strains in natural and augmented vertebrae: An organ-level study. <i>Journal of Biomechanics</i> , 2016, 49, 3882-3890.	0.9	50
61	The use of digital image correlation in the biomechanical area: a review. <i>International Biomechanics</i> , 2016, 3, 1-21.	0.9	196
62	Simultaneous double rod and en-bloc direct vertebral rotation technique for correction of main thoracic adolescent idiopathic scoliosis: retrospective analysis of 14 cases. <i>Journal of Biological Regulators and Homeostatic Agents</i> , 2016, 30, 181-186.	0.7	11
63	Three-Dimensional Local Measurements of Bone Strain and Displacement: Comparison of Three Digital Volume Correlation Approaches. <i>Journal of Biomechanical Engineering</i> , 2015, 137, .	0.6	68
64	In vitro evidence of the structural optimization of the human skeletal bones. <i>Journal of Biomechanics</i> , 2015, 48, 787-796.	0.9	30
65	USE OF DIGITAL IMAGE CORRELATION TO INVESTIGATE THE BIOMECHANICS OF THE VERTEBRA. <i>Journal of Mechanics in Medicine and Biology</i> , 2015, 15, 1540004.	0.3	45
66	Experimental Stress Analysis for Materials and Structures. <i>Springer Series in Solid and Structural Mechanics</i> , 2015, , .	0.2	26
67	Strain distribution in the proximal Human femur during in vitro simulated sideways fall. <i>Journal of Biomechanics</i> , 2015, 48, 2130-2143.	0.9	46
68	Overview of Digital Image Correlation. <i>Springer Series in Solid and Structural Mechanics</i> , 2015, , 187-213.	0.2	3
69	Local Stress Models for Variable Loads. <i>Springer Series in Solid and Structural Mechanics</i> , 2015, , 259-324.	0.2	0
70	Fatigue-Fractured Surfaces of Acrylic Bone Cements. <i>International Review of Civil Engineering</i> , 2015, 6, 25.	0.3	0
71	Introduction to the Application of Strain Gages. <i>Springer Series in Solid and Structural Mechanics</i> , 2015, , 23-100.	0.2	2
72	A NEW PARADIGM FOR THE IN VITRO SIMULATION OF SIDEWAYS FALL LOADING OF THE PROXIMAL HUMAN FEMUR. <i>Journal of Mechanics in Medicine and Biology</i> , 2014, 14, 1450005.	0.3	8

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73	EXPERIMENTAL METHODS FOR THE BIOMECHANICAL INVESTIGATION OF THE HUMAN SPINE: A REVIEW. Journal of Mechanics in Medicine and Biology, 2014, 14, 1430002.	0.3	11
74	DIFFERENCES BETWEEN CONTRALATERAL BONES OF THE HUMAN LOWER LIMBS: A MULTISCALE INVESTIGATION. Journal of Mechanics in Medicine and Biology, 2014, 14, 1450032.	0.3	3
75	Reproducible reference frame for in vitro testing of the human vertebrae. Journal of Biomechanics, 2014, 47, 313-318.	0.9	21
76	To what extent can linear finite element models of human femora predict failure under stance and fall loading configurations?. Journal of Biomechanics, 2014, 47, 3531-3538.	0.9	125
77	Fracture and fatigue in osteocytes. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 231-237.	1.5	9
78	Specimen-specific modeling of hip fracture pattern and repair. Journal of Biomechanics, 2014, 47, 536-543.	0.9	58
79	A practical approach to optimizing the preparation of speckle patterns for digital-image correlation. Measurement Science and Technology, 2014, 25, 107001.	1.4	105
80	Strain distribution in the lumbar vertebrae under different loading configurations. Spine Journal, 2013, 13, 1281-1292.	0.6	29
81	Numerical description and experimental validation of a rheology model for non-Newtonian fluid flow in cancellous bone. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 27, 43-53.	1.5	14
82	Accurate in vitro identification of fracture onset in bones: Failure mechanism of the proximal human femur. Journal of Biomechanics, 2013, 46, 158-164.	0.9	20
83	Shape and function of the diaphysis of the human tibia. Journal of Biomechanics, 2013, 46, 1882-1892.	0.9	21
84	Comments on "Experimental versus computational analysis of micromotions at the implant - bone interface". Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2012, 226, 417-419.	1.0	0
85	MECHANICAL PROPERTIES OF THE HUMAN METATARSAL BONES. Journal of Mechanics in Medicine and Biology, 2012, 12, 1250062.	0.3	7
86	FOR WHICH LOADING SCENARIOS IS THE PROXIMAL FEMUR OPTIMIZED?. Journal of Biomechanics, 2012, 45, S283.	0.9	1
87	SENSITIVITY OF STRAIN IN THE VERTEBRAL BODY TO LOADING DIRECTION. Journal of Biomechanics, 2012, 45, S616.	0.9	1
88	Biomechanical robustness of a new proximal epiphyseal hip replacement to patient variability and surgical uncertainties: A FE study. Medical Engineering and Physics, 2012, 34, 161-171.	0.8	22
89	Accuracy of finite element predictions in sideways load configurations for the proximal human femur. Journal of Biomechanics, 2012, 45, 394-399.	0.9	158
90	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

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91	METHOD TO ANALYZE THE FATIGUE CRACKS IN ACRYLIC BONE CEMENT. <i>Journal of Mechanics in Medicine and Biology</i> , 2012, 12, 1250017.	0.3	0
92	Anatomical Reference Frames for Long Bones: Biomechanical Applications. , 2012, , 2971-2999.		3
93	Assessment of femoral neck fracture risk for a novel proximal epiphyseal hip prosthesis. <i>Clinical Biomechanics</i> , 2011, 26, 585-591.	0.5	9
94	The human proximal femur behaves linearly elastic up to failure under physiological loading conditions. <i>Journal of Biomechanics</i> , 2011, 44, 2259-2266.	0.9	66
95	A new hip epiphyseal prosthesis: Design revision driven by a validated numerical procedure. <i>Medical Engineering and Physics</i> , 2011, 33, 1203-1211.	0.8	17
96	Re-use of explanted osteosynthesis devices: A reliable and inexpensive reprocessing protocol. <i>Injury</i> , 2011, 42, 1101-1106.	0.7	10
97	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
98	Extensive Risk Analysis of Mechanical Failure for an Epiphyseal Hip Prosthesis: A Combined Numericalâ€”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
99	A Method to Improve Experimental Validation of Finiteâ€”Element Models of Long Bones. <i>Strain</i> , 2010, 46, 242-251.	1.4	1
100	Combined Wear Behavior and Longâ€”Term Implantâ€”Bone Fixation of Total Knee Replacement: A Novel In Vitro Setâ€”up. <i>Artificial Organs</i> , 2010, 34, E177-83.	1.0	6
101	A Reproducible and Inexpensive Method of Measuring Hip Abductor Strength. <i>HIP International</i> , 2010, 20, 512-517.	0.9	5
102	Structural behaviour and strain distribution of the long bones of the human lower limbs. <i>Journal of Biomechanics</i> , 2010, 43, 826-835.	0.9	48
103	Assessment of implant stability of cementless hip prostheses through the frequency response function of the stemâ€”bone system. <i>Sensors and Actuators A: Physical</i> , 2010, 163, 526-532.	2.0	21
104	A Novel Method for Determining the Time and Location of Abrupt Fracture Initiation in Bones. <i>Journal of Strain Analysis for Engineering Design</i> , 2010, 45, 481-493.	1.0	8
105	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. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2010, 224, 53-65.	1.0	4
106	Mechanical testing of bones: the positive synergy of finiteâ€”element models and <i>in vitro</i> experiments. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 2725-2763.	1.6	63
107	Finite Element Modeling of Resurfacing Hip Prosthesis: Estimation of Accuracy Through Experimental Validation. <i>Journal of Biomechanical Engineering</i> , 2010, 132, 021002.	0.6	18
108	Effect of undersizing on the long-term stability of the Exeter hip stem: A comparative <i>in vitro</i> study. <i>Clinical Biomechanics</i> , 2010, 25, 899-908.	0.5	17

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109	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
110	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
111	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
112	Pre-clinical validation of joint prostheses: A systematic approach. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 120-127.	1.5	31
113	Outcome of hybrid stem fixation in osteoporotic female patients. A minimum five-year follow-up study. International Orthopaedics, 2009, 33, 1489-1494.	0.9	1
114	Implant fixation in knee replacement: Preliminary in vitro comparison of ceramic and metal cemented femoral components. Knee, 2009, 16, 101-108.	0.8	27
115	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
116	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. Journal of Biomechanics, 2008, 41, 356-367.	0.9	304
117	Comparison of three standard anatomical reference frames for the tibia-fibula complex. Journal of Biomechanics, 2008, 41, 3384-3389.	0.9	20
118	A modified method for assigning material properties to FE models of bones. Medical Engineering and Physics, 2008, 30, 444-453.	0.8	122
119	MULTI-SCALE TESTING OF THE MECHANICAL PROPERTIES OF THE HUMAN FEMORAL DIAPHYSIS. Journal of Biomechanics, 2008, 41, S502.	0.9	0
120	DIFFERENCES IN TRABECULAR ANISOTROPY BETWEEN OSTEOARTHRITIC AND NORMAL BONE. Journal of Biomechanics, 2008, 41, S46.	0.9	1
121	Sensitivity of the Primary Stability of a Cementless Hip Stem to Its Position and Orientation. Artificial Organs, 2008, 32, 555-560.	1.0	14
122	A New Method of In Vitro Wear Assessment of the UHMWPE Tibial Insert in Total Knee Replacement. Artificial Organs, 2008, 32, 942-948.	1.0	19
123	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?. Clinical Biomechanics, 2008, 23, 408-414.	0.5	9
124	Multiscale modelling of the skeleton for the prediction of the risk of fracture. Clinical Biomechanics, 2008, 23, 845-852.	0.5	36
125	Experimental Validation of a Finite Element Model of a Human Cadaveric Tibia. Journal of Biomechanical Engineering, 2008, 130, 031016.	0.6	87
126	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

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127	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
128	Fatigue-fractured surfaces of commercial bone cements. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 157-158.	0.9	1
129	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
130	Experimental validation of a finite element model of a composite tibia. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 315-324.	1.0	24
131	Preclinical assessment of the long-term endurance of cemented hip stems. Part 2: in-vitro and ex-vivo 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
132	In-vitro 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
133	Increased long-term failure risk associated with excessively thin cement mantle in cemented hip arthroplasty: A comparative in vitro study. Clinical Biomechanics, 2007, 22, 410-421.	0.5	41
134	Partially cemented AncaDualFit hip stems do not fail in simulated active patients. Clinical Biomechanics, 2007, 22, 191-202.	0.5	6
135	Predicting the subject-specific primary stability of cementless implants during pre-operative planning: Preliminary validation of subject-specific finite-element models. Journal of Biomechanics, 2007, 40, 2552-2558.	0.9	56
136	Subject-specific finite element models can accurately predict strain levels in long bones. Journal of Biomechanics, 2007, 40, 2982-2989.	0.9	274
137	In vitro replication of spontaneous fractures of the proximal human femur. Journal of Biomechanics, 2007, 40, 2837-2845.	0.9	112
138	Quantitative Crack Surface Morphology of Bone Cements in Relation to Propagation Rate. Fatigue and Fracture of Engineering Materials and Structures, 2007, 30, 783-795.	1.7	3
139	Modular Hip Stems: Determination of Disassembly Force of a Neck-Stem Coupling. Artificial Organs, 2007, 31, 166-170.	1.0	24
140	In Vitro Long-term Fatigue Endurance of the Secondary "Cement Injection Stem" Hip Prosthesis. Artificial Organs, 2007, 31, 441-451.	1.0	7
141	Fractures of the proximal femur: correlates of radiological evidence of osteoporosis. Skeletal Radiology, 2007, 36, 703-704.	1.2	3
142	Intra-operative evaluation of cementless hip implant stability: A prototype device based on vibration analysis. Medical Engineering and Physics, 2007, 29, 886-894.	0.8	39
143	The material mapping strategy influences the accuracy of CT-based finite element models of bones: An evaluation against experimental measurements. Medical Engineering and Physics, 2007, 29, 973-979.	0.8	251
144	Analysis of 16 retrieved proximal cemented femoral stems. Journal of Arthroplasty, 2006, 21, 464-465.	1.5	3

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145	Biomechanical Testing of the Proximal Femoral Epiphysis: Intact and Implanted Condition. , 2006, , 431.		3
146	Stem Damage During Implantation of Modular Hip Prostheses. Artificial Organs, 2006, 30, 564-567.	1.0	7
147	MULTIAXIAL MINIATURIZED LOAD CELL FOR MEASURING FORCES ACTING THROUGH A STERNOTOMY. Experimental Techniques, 2006, 30, 23-28.	0.9	3
148	A physical phantom for the calibration of three-dimensional X-ray microtomography examination. Journal of Microscopy, 2006, 222, 124-134.	0.8	40
149	Response to Letter to the Editor: Comparative in vitro study on the long-term performance of cemented hip stems: Validation of a protocol to discriminate between "good" and "bad" designs. o Journal of Biomechanics, 2006, 39, 395-396.		
150	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 J. Biomechanics 2005; 38: 1143-1154. Journal of Biomechanics, 2006, 39, 3085-3087.	0.9	4
151	Device to measure intra-operatively the primary stability of cementless hip stems. Medical Engineering and Physics, 2006, 28, 475-482.	0.8	24
152	Improvement of experimental-numerical cross-validation in studies of the proximal femur. Journal of Biomechanics, 2006, 39, S473.	0.9	1
153	Experimentally validated finite element model of a human tibia. Journal of Biomechanics, 2006, 39, S494.	0.9	0
154	Primary stability of an anatomical cementless hip stem: A statistical analysis. Journal of Biomechanics, 2006, 39, 1169-1179.	0.9	110
155	Subject-specific finite element models of long bones: An in vitro evaluation of the overall accuracy. Journal of Biomechanics, 2006, 39, 2457-2467.	0.9	212
156	Finite-Element Modeling of Bones From CT Data: Sensitivity to Geometry and Material Uncertainties. IEEE Transactions on Biomedical Engineering, 2006, 53, 2194-2200.	2.5	88
157	INTRA-OPERATIVE TESTS ON CEMENTLESS HIP STEM MECHANICAL STABILITY. Journal of Mechanics in Medicine and Biology, 2006, 06, 25-34.	0.3	3
158	On the Biomechanical Stability of Cementless Straight Conical Hip Stems. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2006, 220, 473-480.	1.0	17
159	A Device to Test the Primary Stability in Cementless Hip Arthroplasty Through Mechanical Vibrations. , 2006, , .		0
160	Effect of the initial implant fitting on the predicted secondary stability of a cementless stem. Medical and Biological Engineering and Computing, 2004, 42, 222-229.	1.6	31
161	An experimental analogue to model the fibrous tissue layer in cemented hip replacements. Journal of Biomedical Materials Research Part B, 2004, 69B, 232-240.	3.0	12
162	Modelling the fibrous tissue layer in cemented hip replacements: experimental and finite element methods. Journal of Biomechanics, 2004, 37, 13-26.	0.9	32

#	ARTICLE	IF	CITATIONS
163	Comparative in vitro study on the long term performance of cemented hip stems: validation of a protocol to discriminate between "good" and "bad" designs. Journal of Biomechanics, 2003, 36, 1603-1615.	0.9	98
164	Correspondence Letter. Journal of Biomechanics, 2003, 36, 303-304.	0.9	8
165	Experimental investigation of bone remodelling using composite femurs. Clinical Biomechanics, 2003, 18, 523-536.	0.5	39
166	Strain patterns induced by press-fitting and by an external load in hip arthroplasty: A photoelastic coating study on bone models. Journal of Strain Analysis for Engineering Design, 2003, 38, 289-301.	1.0	3
167	Fatigue strength of PMMA bone cement mixed with gentamicin and barium sulphate vs pure PMMA. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2003, 217, 9-12.	1.0	50
168	Discarding specimens for fatigue testing of orthopaedic bone cement: a comment on Cristofolini et al. (2000) Fatigue Fract. Engng. Mater. Struct. 23, 953-957. Fatigue and Fracture of Engineering Materials and Structures, 2002, 25, 315-316.	1.7	6
169	A methodology and criterion for acrylic bone cement fatigue tests. Fatigue and Fracture of Engineering Materials and Structures, 2002, 25, 317-318.	1.7	4
170	Fatigue strength of shot-peened nitrided steel: optimization of process parameters by means of design of the experiment. Fatigue and Fracture of Engineering Materials and Structures, 2002, 25, 695-707.	1.7	25
171	Finite element and experimental models of cemented hip joint reconstructions can produce similar bone and cement strains in pre-clinical tests. Journal of Biomechanics, 2002, 35, 499-510.	0.9	109
172	ISB recommendation on definitions of joint coordinate system of various joints for the reporting of human joint motion" part I: ankle, hip, and spine. Journal of Biomechanics, 2002, 35, 543-548.	0.9	2,491
173	Pre-clinical validation of a new partially cemented femoral prosthesis by synergetic use of numerical and experimental methods. Journal of Biomechanics, 2001, 34, 723-731.	0.9	53
174	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
175	Temperature and ageing condition effects on the characterization of acrylic bone cement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2001, 215, 113-118.	1.0	6
176	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
177	A CAD-CAM methodology to produce bone-remodelled composite femurs for preclinical investigations. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2001, 215, 459-469.	1.0	10
178	In vitro testing of the primary stability of the VerSys enhanced taper stem: A comparative study in intact and intraoperatively cracked femora. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2001, 215, 75-83.	1.0	15
179	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
180	The effect on the fatigue strength of bone cement of adding sodium fluoride. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2001, 215, 251-253.	1.0	14

#	ARTICLE	IF	CITATIONS
181	Initial stability of a new hybrid fixation hip stem: Experimental measurement of implant-bone micromotion under torsional load in comparison with cemented and cementless stems. <i>Journal of Biomedical Materials Research Part B</i> , 2000, 50, 605-615.	3.0	52
182	Large-sliding contact elements accurately predict levels of bone-implant micromotion relevant to osseointegration. <i>Journal of Biomechanics</i> , 2000, 33, 1611-1618.	0.9	259
183	Mechanical validation of whole bone composite tibia models. <i>Journal of Biomechanics</i> , 2000, 33, 279-288.	0.9	292
184	Radiopacity and Fatigue Characterization of a Novel Acrylic Bone Cement with Sodium Fluoride. <i>Artificial Organs</i> , 2000, 24, 751-757.	1.0	11
185	A methodology and criterion for acrylic bone cement fatigue tests. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2000, 23, 953-957.	1.7	36
186	A novel transducer for the measurement of cement-prosthesis interface forces in cemented orthopaedic devices. <i>Medical Engineering and Physics</i> , 2000, 22, 493-501.	0.8	10
187	Development and validation of a technique for strain measurement inside polymethyl methacrylate. <i>Journal of Strain Analysis for Engineering Design</i> , 2000, 35, 21-33.	1.0	22
188	Towards the standardization of in vitro load transfer investigations of hip prostheses. <i>Journal of Strain Analysis for Engineering Design</i> , 1999, 34, 1-15.	1.0	30
189	Methods for Quantitative Analysis of the Primary Stability in Uncemented Hip Prostheses. <i>Artificial Organs</i> , 1999, 23, 851-859.	1.0	55
190	In vitro stress shielding measurements can be affected by large errors. <i>Journal of Arthroplasty</i> , 1999, 14, 215-219.	1.5	29
191	Endurance testing of hip prostheses: a comparison between the load fixed in ISO 7206 standard and the physiological loads. <i>Clinical Biomechanics</i> , 1999, 14, 339-345.	0.5	32
192	A comparative study on different methods of automatic mesh generation of human femurs. <i>Medical Engineering and Physics</i> , 1998, 20, 1-10.	0.8	186
193	In vitro testing of a novel limb salvage prosthesis for the distal femur. <i>Clinical Biomechanics</i> , 1998, 13, 608-615.	0.5	34
194	In vitro measured strains in the loaded femur: Quantification of experimental error. <i>Journal of Strain Analysis for Engineering Design</i> , 1997, 32, 193-200.	1.0	15
195	Muscular Activity and the Biomechanics of the Hip. <i>HIP International</i> , 1997, 7, 39-41.	0.9	4
196	Comparison of uniaxial and triaxial rosette gages for strain measurement in the femur. <i>Experimental Mechanics</i> , 1997, 37, 350-354.	1.1	21
197	Relationship between bone-prosthesis bonding and load transfer in total hip reconstruction. <i>Journal of Biomechanics</i> , 1997, 30, 621-630.	0.9	86
198	A Critical Analysis of Stress Shielding Evaluation of Hip Prostheses. <i>Critical Reviews in Biomedical Engineering</i> , 1997, 25, 409-483.	0.5	118

#	ARTICLE	IF	CITATIONS
199	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
200	Mechanical validation of whole bone composite femur models. Journal of Biomechanics, 1996, 29, 525-535.	0.9	466
201	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
202	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
203	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
204	Evaluation of experimental and finite element models of synthetic and cadaveric femora for pre-clinical design-analysis. Clinical Materials, 1994, 17, 131-140.	0.5	31
205	Strains induced by thigh muscles in the proximal femur. Journal of Biomechanics, 1994, 27, 757.	0.9	0
206	Experimental errors in the application of photoelastic coatings on human femurs with uncemented hip stems. Strain, 1994, 30, 95-104.	1.4	19