

Massimiliano Baleani

List of Publications by Year in descending order

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69
papers

2,530
citations

201385

27
h-index

205818

48
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70
all docs

70
docs citations

70
times ranked

2678
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of a Novel Passive-Dynamic Custom AFO for Drop-Foot Patients: Design Principles, Manufacturing Technique, Mechanical Properties Characterization and Functional Evaluation. Applied Sciences (Switzerland), 2022, 12, 4721.	1.3	5
2	A case-driven hypothesis for multi-stage crack growth mechanism in fourth-generation ceramic head fracture. Journal of Orthopaedic Surgery and Research, 2022, 17, .	0.9	4
3	Measurement of apparent mechanical properties of trabecular bone tissue: Accuracy and limitation of digital image correlation technique. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103542.	1.5	7
4	Long term breeding of the Lmna G609G progeric mouse: Characterization of homozygous and heterozygous models. Experimental Gerontology, 2020, 130, 110784.	1.2	18
5	An experimental procedure to perform mechanical characterization of small-sized bone specimens from thin femoral cortical wall. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 112, 104046.	1.5	5
6	Torsional Stability of Total HIP Arthroplasty: In-Vitro and FEM Analysis with New Trends for the Future. , 2020, , 77-86.		0
7	Achievable accuracy of hip screw holding power estimation by insertion torque measurement. Clinical Biomechanics, 2018, 52, 57-65.	0.5	4
8	Experimentally Achievable Accuracy Using a Digital Image Correlation Technique in measuring Small-Magnitude (0.1%) Homogeneous Strain Fields. Materials, 2018, 11, 751.	1.3	25
9	Nonunion fracture healing: Evaluation of effectiveness of demineralized bone matrix and mesenchymal stem cells in a novel sheep bone nonunion model. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1972-1985.	1.3	19
10	Elastic properties and strain-to-crack-initiation of calcium phosphate bone cements: Revelations of a high-resolution measurement technique. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 74, 428-437.	1.5	28
11	In Vivo Damage of the Head-Neck Junction in Hard-on-Hard Total Hip Replacements: Effect of Femoral Head Size, Metal Combination, and 12/14 Taper Design. Materials, 2017, 10, 733.	1.3	11
12	In Vitro Comparative Study of Fretting-Corrosion Resistance of Ti6Al4V and Co28Cr6Mo in a Taper Joint Subjected to High Bending Moment. Corrosion, 2017, 73, 1520-1529.	0.5	5
13	Suprpectoral biceps tenodesis: A biomechanical comparison of a new "soft anchor" tenodesis technique versus interference screw biceps tendon fixation. Clinical Biomechanics, 2015, 30, 188-194.	0.5	19
14	Suturing the myotendinous junction in total hip arthroplasty: A biomechanical comparison of different stitching techniques. Clinical Biomechanics, 2015, 30, 1077-1082.	0.5	3
15	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
16	An effective procedure to create a speckle pattern on biological soft tissue for digital image correlation measurements. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 1-8.	1.5	69
17	Human bone hardness seems to depend on tissue type but not on anatomical site in the long bones of an old subject. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2013, 227, 200-206.	1.0	22
18	"Trunionitis": A Cause for Concern?. Seminars in Arthroplasty, 2012, 23, 248-250.	0.3	6

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19	Compressive behaviour of child and adult cortical bone. <i>Bone</i> , 2011, 49, 769-776.	1.4	129
20	The effect of adding 10% of barium sulphate radiopacifier on the mechanical behaviour of acrylic bone cement. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2011, 34, 374-382.	1.7	8
21	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
22	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
23	Volume to density relation in adult human bone tissue. <i>Journal of Biomechanics</i> , 2011, 44, 103-108.	0.9	45
24	Reduced tissue hardness of trabecular bone is associated with severe osteoarthritis. <i>Journal of Biomechanics</i> , 2011, 44, 1593-1598.	0.9	33
25	Anisotropy and inhomogeneity of the trabecular structure can describe the mechanical strength of osteoarthritic cancellous bone. <i>Journal of Biomechanics</i> , 2010, 43, 1160-1166.	0.9	43
26	Osteon Classification in Human Fibular Shaft by Circularly Polarized Light. <i>Cells Tissues Organs</i> , 2010, 191, 260-268.	1.3	25
27	The effect of vacuum mixing and pre-heating the femoral component on the mechanical properties of the cement mantle. <i>Journal of Bone and Joint Surgery: British Volume</i> , 2010, 92-B, 454-460.	3.4	6
28	Microindentation on cortical human bone: Effects of tissue condition and indentation location on hardness values. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2009, 223, 913-918.	1.0	25
29	Pre-clinical validation of joint prostheses: A systematic approach. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2009, 2, 120-127.	1.5	31
30	Letter to the Editor referring to the article "Some basic relationship between density values in cancellous bone and cortical bone" published on <i>Journal of Biomechanics</i> (volume 41, Issue 9, Pages) Tj ETQq0 0.0 rgBT /@verlock 10		
31	Effect of stem preheating on the fatigue behaviour of bone cement around hip prostheses. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2009, 223, 637-641.	1.0	5
32	Osteoarthritic cancellous bone seems to orientate its structure to compensate for tissue degeneration. <i>IFMBE Proceedings</i> , 2009, , 1389-1391.	0.2	0
33	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
34	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
35	Biological and Biomechanical Effects of Vancomycin and Meropenem in Acrylic Bone Cement. <i>Journal of Arthroplasty</i> , 2008, 23, 1232-1238.	1.5	75
36	Multiscale modelling of the skeleton for the prediction of the risk of fracture. <i>Clinical Biomechanics</i> , 2008, 23, 845-852.	0.5	36

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37	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
38	Multiscale investigation of the functional properties of the human femur. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 3319-3341.	1.6	41
39	Fatigue-fractured surfaces of commercial bone cements. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2007, 10, 157-158.	0.9	1
40	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
41	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
42	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
43	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
44	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
45	Fatigue and Wear Characterization of the Preformed Hip Spacer. , 2007, , 121-127.		0
46	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
47	Analysis of 16 retrieved proximal cemented femoral stems. <i>Journal of Arthroplasty</i> , 2006, 21, 464-465.	1.5	3
48	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
49	MULTIAXIAL MINIATURIZED LOAD CELL FOR MEASURING FORCES ACTING THROUGH A STERNOTOMY. <i>Experimental Techniques</i> , 2006, 30, 23-28.	0.9	3
50	Radiopacity of tantalum-loaded acrylic bone cement. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2006, 220, 787-791.	1.0	18
51	COMPRESSIVE PROPERTIES OF TRABECULAR BONE RELATED TO MICROCT EVALUATED MORPHOMETRIC PARAMETERS: PRELIMINARY RESULTS. <i>Journal of Mechanics in Medicine and Biology</i> , 2005, 05, 349-355.	0.3	2
52	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
53	The muscle standardised femur. <i>Journal of Biomechanics</i> , 2003, 36, 145-146.	0.9	13
54	Surgical repair of the rotator cuff: a biomechanical evaluation of different tendon grasping and bone suture fixation techniques. <i>Clinical Biomechanics</i> , 2003, 18, 721-729.	0.5	46

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55	The muscle standardized femur: A step forward in the replication of numerical studies in biomechanics. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2003, 217, 105-110.	1.0	39
56	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
57	The influence of stem insertion rate on the porosity of the cement mantle of hip joint replacements. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2003, 217, 199-205.	1.0	16
58	Initial Stability of a Cementless Acetabular Cup Design: Experimental Investigation on the Effect of Adding Fins to the Rim of the Cup. Artificial Organs, 2001, 25, 664-669.	1.0	51
59	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
60	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
61	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
62	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. Journal of Biomedical Materials Research Part B, 2000, 50, 605-615.	3.0	52
63	Large-sliding contact elements accurately predict levels of bone-implant micromotion relevant to osseointegration. Journal of Biomechanics, 2000, 33, 1611-1618.	0.9	259
64	The Effect of Sandblasting Treatment on Endurance Properties of Titanium Alloy Hip Prostheses. Artificial Organs, 2000, 24, 296-299.	1.0	63
65	Endurance verification of custom-made hip prostheses. International Journal of Fatigue, 2000, 22, 865-871.	2.8	6
66	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
67	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
68	An FEA-based protocol for the pre-clinical validation of custom-made hip implants. Journal of Medical Engineering and Technology, 1998, 22, 257-262.	0.8	9
69	Fretting wear in a modular neck hip prosthesis. , 1997, 35, 207-216.		126