Egon Perilli

List of Publications by Year
in descending order

68 papers	1,999 citations	279487 23 h-index	243296 44 g-index
71 all docs	71 docs citations	71 times ranked	2453 citing authors

#	Article	IF	Citations
1	Mathematical relationships between bone density and mechanical properties: A literature review. Clinical Biomechanics, 2008, 23, 135-146.	0.5	453
2	Application of the digital volume correlation technique for the measurement of displacement and strain fields in bone: A literature review. Journal of Biomechanics, 2014, 47, 923-934.	0.9	122
3	Dependence of mechanical compressive strength on local variations in microarchitecture in cancellous bone of proximal human femur. Journal of Biomechanics, 2008, 41, 438-446.	0.9	115
4	Mechanical testing of cancellous bone from the femoral head: Experimental errors due to off-axis measurements. Journal of Biomechanics, 2007, 40, 2426-2433.	0.9	100
5	In utero transplantation of adult bone marrow decreases perinatal lethality and rescues the bone phenotype in the knockin murine model for classical, dominant osteogenesis imperfecta. Blood, 2009, 114, 459-468.	0.6	93
6	Application of in vivo micro-computed tomography in the temporal characterisation of subchondral bone architecture in a rat model of low-dose monosodium iodoacetate-induced osteoarthritis. Arthritis Research and Therapy, 2011, 13, R210.	1.6	82
7	Failure strength of human vertebrae: Prediction using bone mineral density measured by DXA and bone volume by micro-CT. Bone, 2012, 50, 1416-1425.	1.4	73
8	Structural parameters and mechanical strength of cancellous bone in the femoral head in osteoarthritis do not depend on age. Bone, 2007, 41, 760-768.	1.4	62
9	MicroCT examination of human bone specimens: effects of polymethylmethacrylate embedding on structural parameters. Journal of Microscopy, 2007, 225, 192-200.	0.8	62
10	Detecting early bone changes using in vivo micro-CT in ovariectomized, zoledronic acid-treated, and sham-operated rats. Osteoporosis International, 2010, 21, 1371-1382.	1.3	61
11	Modic (endplate) changes in the lumbar spine: bone micro-architecture and remodelling. European Spine Journal, 2015, 24, 1926-1934.	1.0	61
12	Pre-emptive, early, and delayed alendronate treatment in a rat model of knee osteoarthritis: effect on subchondral trabecular bone microarchitecture and cartilage degradation of the tibia, bone/cartilage turnover, and joint discomfort. Osteoarthritis and Cartilage, 2013, 21, 1595-1604.	0.6	51
13	A physical phantom for the calibration of three-dimensional X-ray microtomography examination. Journal of Microscopy, 2006, 222, 124-134.	0.8	40
14	Regional Heterogeneity in the Configuration of the Intracortical Canals of the Femoral Shaft. Calcified Tissue International, 2015, 97, 327-335.	1.5	32
15	Micro-CT examination of human bone: from biopsies towards the entire organ. Annali Dell'Istituto Superiore Di Sanita, 2012, 48, 75-82.	0.2	32
16	Systematic mapping of the subchondral bone 3D microarchitecture in the human tibial plateau: Variations with joint alignment. Journal of Orthopaedic Research, 2017, 35, 1927-1941.	1.2	30
17	External and internal bone microâ€architecture in normal and KienbÃ¶ck's lunates: A wholeâ€bone microâ€computed tomography study. Journal of Orthopaedic Research, 2014, 32, 826-833.	1.2	29
18	The Etiology and Pathogenesis of KienbÃ¶ck Disease. Journal of Wrist Surgery, 2016, 05, 248-254.	0.3	29

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19	Time-elapsed synchrotron-light microstructural imaging of femoral neck fracture. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 84, 265-272.	1.5	28
20	Quantification of human bone microarchitecture damage in press-fit femoral knee implantation using HR-pQCT and digital volume correlation. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 278-287.	1.5	28
21	Critical molecular regulators, histomorphometric indices and their correlations in the trabecular bone in primary hip osteoarthritis. Osteoarthritis and Cartilage, 2010, 18, 1337-1344.	0.6	25
22	Does cancellous screw insertion torque depend on bone mineral density and/or microarchitecture?. Journal of Biomechanics, 2014, 47, 347-353.	0.9	25
23	Relationships between inÂvivo dynamic knee joint loading, static alignment and tibial subchondral bone microarchitecture in end-stage knee osteoarthritis. Osteoarthritis and Cartilage, 2018, 26, 547-556.	0.6	25
24	The X-Linked Inhibitor of Apoptosis Protein Inhibitor Embelin Suppresses Inflammation and Bone Erosion in Collagen Antibody Induced Arthritis Mice. Mediators of Inflammation, 2015, 2015, 1-10.	1.4	22
25	Novel Assessment of Subregional Bone Mineral Density Using DXA and pQCT and Subregional Microarchitecture Using Micro-CT in Whole Human Vertebrae: Applications, Methods, and Correspondence Between Technologies. Journal of Clinical Densitometry, 2010, 13, 161-174.	0.5	21
26	Human bone material characterization: integrated imaging surface investigation of male fragility fractures. Osteoporosis International, 2012, 23, 1297-1309.	1.3	21
27	Pullout strength of cancellous screws in human femoral heads depends on applied insertion torque, trabecular bone microarchitecture and areal bone mineral density. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 40, 354-361.	1.5	20
28	Caffeic Acid Phenethyl Ester Abrogates Bone Resorption in a Murine Calvarial Model of Polyethylene Particle-Induced Osteolysis. Calcified Tissue International, 2015, 96, 565-574.	1.5	18
29	Development of a surrogate model based on patient weight, bone mass and geometry to predict femoral neck strains and fracture loads. Journal of Biomechanics, 2017, 55, 121-127.	0.9	17
30	Quantifying Not Only Bone Loss, but Also Soft Tissue Swelling, in a Murine Inflammatory Arthritis Model Using Microâ€Computed Tomography. Scandinavian Journal of Immunology, 2015, 81, 142-150.	1.3	16
31	Parthenolide reduces empty lacunae and osteoclastic bone surface resorption induced by polyethylene particles in a murine calvarial model of periâ€implant osteolysis. Journal of Biomedical Materials Research - Part A, 2015, 103, 3572-3579.	2.1	16
32	MHC Class II Transactivator Is an In Vivo Regulator of Osteoclast Differentiation and Bone Homeostasis Co-opted From Adaptive Immunity. Journal of Bone and Mineral Research, 2014, 29, 290-303.	3.1	15
33	On local micro-architecture analysis of trabecular bone in three dimensions. International Orthopaedics, 2013, 37, 1645-1646.	0.9	14
34	Joint loading and proximal tibia subchondral trabecular bone microarchitecture differ with walking gait patterns in end-stage knee osteoarthritis. Osteoarthritis and Cartilage, 2017, 25, 1623-1632.	0.6	14
35	Measurement of subregional vertebral bone mineral density in vitro using lateral projection dual-energy X-ray absorptiometry: validation with peripheral quantitative computed tomography. Journal of Bone and Mineral Metabolism, 2012, 30, 222-231.	1.3	13
36	Damage tolerance and toughness of elderly human femora. Acta Biomaterialia, 2021, 123, 167-177.	4.1	13

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37	Dependence of trabecular structure on bone quantity: A comparison between osteoarthritic and non-pathological bone. Clinical Biomechanics, 2011, 26, 632-639.	0.5	11
38	An Innovative CCD-Based High-Resolution CT System for Analysis of Trabecular Bone Tissue. IEEE Transactions on Nuclear Science, 2006, 53, 2584-2590.	1.2	10
39	Mixed effects of caffeic acid phenethyl ester (CAPE) on joint inflammation, bone loss and gastrointestinal inflammation in a murine model of collagen antibody-induced arthritis. Inflammopharmacology, 2017, 25, 55-68.	1.9	10
40	Tibial cartilage, subchondral bone plate and trabecular bone microarchitecture in varusâ€Âand valgusâ€osteoarthritis versus controls. Journal of Orthopaedic Research, 2021, 39, 1988-1999.	1.2	10
41	Micro-CT scan optimisation for mechanical loading of tibia with titanium tibial tray: A digital volume correlation zero strain error analysis. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 134, 105336.	1.5	9
42	Ageing Effects on 3-Dimensional Femoral Neck Cross-Sectional Asymmetry: Implications for Age-Related Bone Fragility in Falling. Journal of Clinical Densitometry, 2019, 22, 153-161.	0.5	8
43	Assessing the Effects of Parthenolide on Inflammation, Bone Loss, and Glial Cells within a Collagen Antibody-Induced Arthritis Mouse Model. Mediators of Inflammation, 2020, 2020, 1-13.	1.4	8
44	Body Anthropometry and Bone Strength Conjointly Determine the Risk of Hip Fracture in a Sideways Fall. Annals of Biomedical Engineering, 2021, 49, 1380-1390.	1.3	8
45	Quality control protocol for in vitro microâ€computed tomography. Journal of Microscopy, 2010, 238, 162-172.	0.8	7
46	Discrete tomography in an in vivo small animal bone study. Journal of Bone and Mineral Metabolism, 2018, 36, 40-53.	1.3	5
47	Subregional DXA-Derived Vertebral Bone Mineral Measures are Stronger Predictors of Failure Load in Specimens with Lower Areal Bone Mineral Density, Compared to Those with Higher Areal Bone Mineral Density. Calcified Tissue International, 2014, 95, 97-107.	1.5	4
48	Time dependent loss of trabecular bone in human tibial plateau fractures. Journal of Orthopaedic Research, 2018, 36, 2865-2875.	1.2	4
49	A fresh look at Cladarosymblema narrienense, a tetrapodomorph fish (Sarcopterygii:) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T f 5 e12597.	0.9	4
50	A novel approach for an integrated straw tube-microstrip detector. IEEE Transactions on Nuclear Science, 2006, 53, 1375-1379.	1.2	3
51	Three-dimensional cortical and trabecular bone microstructure of the proximal ulna. Archives of Orthopaedic and Trauma Surgery, 2021, , 1.	1.3	3
52	COMPRESSIVE PROPERTIES OF TRABECULAR BONE RELATED TO MICROCT EVALUATED MORPHOMETRIC PARAMETERS: PRELIMINARY RESULTS. Journal of Mechanics in Medicine and Biology, 2005, 05, 349-355.	0.3	2
53	Regional differences in the three-dimensional bone microstructure of the radial head: implications for observed fracture patterns. Archives of Orthopaedic and Trauma Surgery, 2020, , 1.	1.3	2
54	Investigating in vivo knee volumetric bone mineral density and walking gait mechanics in healthy people. Bone, 2021, 143, 115662.	1.4	2

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55	A semiautomated method to quantitatively assess osteolytic lesion volume and bone mineral density within acetabular regions of interest from CT. Journal of Orthopaedic Research, 2022, 40, 396-408.	1.2	2
56	Relationships between tibial articular cartilage, in vivo external joint moments and static alignment in endâ€stage knee osteoarthritis: A microâ€CT study. Journal of Orthopaedic Research, 2022, 40, 1125-1134.	1.2	2
57	DIFFERENCES IN TRABECULAR ANISOTROPY BETWEEN OSTEOARTHRITIC AND NORMAL BONE. Journal of Biomechanics, 2008, 41, S46.	0.9	1
58	119 CHARACTERISATION OF TEMPORAL SUBCHONDRAL BONE CHANGES IN A RAT MODEL OF LOW-DOSE MONOSODIUM IODOACETATE INDUCED OSTEOARTHRITIS: AN IN VIVO MICRO-CT STUDY. Osteoarthritis and Cartilage, 2011, 19, S61-S62.	0.6	1
59	Quantifying shape changes of silicone breast implants in a murine model using in vivo microâ€CT. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 1447-1452.	1.6	1
60	Effects of Mild and Moderate Monoclonal Antibody Dose on Inflammation, Bone Loss, and Activation of the Central Nervous System in a Female Collagen Antibody-induced Arthritis Mouse Model. Journal of Histochemistry and Cytochemistry, 2021, 69, 511-522.	1.3	1
61	Mouse genetic models reveal MHC Class II Transactivator as a novel regulator of osteoclastogenesis and bone homeostasis co-opted from adaptive immunity. Bone, 2009, 44, S228.	1.4	0
62	Whole human vertebral body BMD and bone volume fraction examined by DXA and micro-CT. Bone, 2009, 44, S375.	1.4	0
63	MHC class II transactivator is an in vivo regulator of osteoclast differentiation and bone homeostasis co-opted from adaptive immunity. Bone, 2012, 50, S31-S32.	1.4	0
64	Linking proximal tibia bone microarchitecture to in vivo dynamic knee joint loads in end-stage knee osteoarthritis. Osteoarthritis and Cartilage, 2016, 24, S98.	0.6	0
65	A systematic mapping of tibial plateau bone microarchitecture in end-stage knee osteoarthritis. Osteoarthritis and Cartilage, 2016, 24, S248-S249.	0.6	0
66	Regional Differences in the Three-dimensional Bone Microstructure of the Radial Head: Implications for Observed Fracture Patterns. JSES Open Access, 2019, 3, 254.	0.9	0
67	Osseous Anatomy and Microanatomy of the Lunate. , 2016, , 13-21.		0
68	Editorial: Cross-Disciplinary Approaches to Characterize Gait and Posture Disturbances in Aging and Related Diseases. Frontiers in Bioengineering and Biotechnology, 2022, 10, 888910.	2.0	0