Luis Cardoso

List of Publications by Year
in descending order

74 papers	4,040 citations	186265 28 h-index	128289 60 g-index
76 all docs	76 docs citations	76 times ranked	5151 citing authors

#	Article	IF	Citations
1	FSH Directly Regulates Bone Mass. Cell, 2006, 125, 247-260.	28.9	612
2	A hypothesis for vulnerable plaque rupture due to stress-induced debonding around cellular microcalcifications in thin fibrous caps. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14678-14683.	7.1	472
3	Revised microcalcification hypothesis for fibrous cap rupture in human coronary arteries. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10741-10746.	7.1	289
4	Osteocyte Apoptosis Controls Activation of Intracortical Resorption in Response to Bone Fatigue. Journal of Bone and Mineral Research, 2009, 24, 597-605.	2.8	286
5	A mechanistic analysis of the role of microcalcifications in atherosclerotic plaque stability: potential implications for plaque rupture. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H619-H628.	3.2	201
6	Advances in assessment of bone porosity, permeability and interstitial fluid flow. Journal of Biomechanics, 2013, 46, 253-265.	2.1	142
7	Activation of bone remodeling after fatigue: Differential response to linear microcracks and diffuse damage. Bone, 2010, 47, 766-772.	2.9	127
8	Blood and interstitial flow in the hierarchical pore space architecture of bone tissue. Journal of Biomechanics, 2015, 48, 842-854.	2.1	121
9	Atherosclerotic Plaque Targeting Mechanism of Long-Circulating Nanoparticles Established by Multimodal Imaging. ACS Nano, 2015, 9, 1837-1847.	14.6	105
10	3D Assessment of Cortical Bone Porosity and Tissue Mineral Density Using High-Resolution ÂµCT: Effects of Resolution and Threshold Method. Journal of Bone and Mineral Research, 2014, 29, 142-150.	2.8	101
11	In Vitro Acoustic Waves Propagation in Human and Bovine Cancellous Bone. Journal of Bone and Mineral Research, 2003, 18, 1803-1812.	2.8	97
12	Lactation-Induced Changes in the Volume of Osteocyte Lacunar-Canalicular Space Alter Mechanical Properties in Cortical Bone Tissue. Journal of Bone and Mineral Research, 2017, 32, 688-697.	2.8	75
13	Physiological loading of joints prevents cartilage degradation through CITED2. FASEB Journal, 2011, 25, 182-191.	0.5	74
14	Changing Views of the Biomechanics of Vulnerable Plaque Rupture: A Review. Annals of Biomedical Engineering, 2014, 42, 415-431.	2.5	71
15	Matrix metalloproteinase-3 in articular cartilage is upregulated by joint immobilization and suppressed by passive joint motion. Matrix Biology, 2010, 29, 420-426.	3.6	64
16	Strain-induced mechanotransduction through primary cilia, extracellular ATP, purinergic calcium signaling, and ERK1/2 transactivates CITED2 and downregulates MMP-1 and MMP-13 gene expression in chondrocytes. Osteoarthritis and Cartilage, 2016, 24, 892-901.	1.3	63
17	Micro-CT based analysis of a new paradigm for vulnerable plaque rupture: cellular microcalcifications in fibrous caps. MCB Molecular and Cellular Biomechanics, 2008, 5, 37-47.	0.7	63
18	The explosive growth of small voids in vulnerable cap rupture; cavitation and interfacial debonding. Journal of Biomechanics, 2013, 46, 396-401.	2.1	59

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19	Microcalcifications Increase Coronary Vulnerable Plaque Rupture Potential: A Patient-Based Micro-CT Fluidâ€“Structure Interaction Study. Annals of Biomedical Engineering, 2012, 40, 1443-1454.	2.5	58
20	Effect of tissue properties, shape and orientation of microcalcifications on vulnerable cap stability using different hyperelastic constitutive models. Journal of Biomechanics, 2014, 47, 870-877.	2.1	58
21	Reductions in serum <scp>IGF</scp>â€1 during aging impair health span. Aging Cell, 2014, 13, 408-418.	6.7	56
22	S100A9-RAGE Axis Accelerates Formation of Macrophage-Mediated Extracellular Vesicle Microcalcification in Diabetes Mellitus. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 1838-1853.	2.4	52
23	Fabric dependence of wave propagation in anisotropic porous media. Biomechanics and Modeling in Mechanobiology, 2011, 10, 39-65.	2.8	47
24	The effects of estrogen deficiency on cortical bone microporosity and mineralization. Bone, 2018, 110, 1-10.	2.9	47
25	Experimental Determination of the Permeability in the Lacunar-Canalicular Porosity of Bone. Journal of Biomechanical Engineering, 2009, 131, 101007.	1.3	43
26	First skull ofAntillothrix bernensis, an extinct relict monkey from the Dominican Republic. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 67-74.	2.6	37
27	Analytical and numerical modeling of the hearing system: Advances towards the assessment of hearing damage. Hearing Research, 2017, 349, 111-128.	2.0	35
28	Mixture theory-based poroelasticity as a model of interstitial tissue growth. Mechanics of Materials, 2012, 44, 47-57.	3.2	32
29	Fabric dependence of quasi-waves in anisotropic porous media. Journal of the Acoustical Society of America, 2011, 129, 3302-3316.	1.1	29
30	The role of oxygen transport in atherosclerosis and vascular disease. Journal of the Royal Society Interface, 2020, 17, 20190732.	3.4	29
31	A symmetry invariant formulation of the relationship between the elasticity tensor and the fabric tensor. Mechanics of Materials, 2012, 54, 70-83.	3.2	28
32	Serum IGF-1 Is Insufficient to Restore Skeletal Size in the Total Absence of the Growth Hormone Receptor. Journal of Bone and Mineral Research, 2013, 28, 1575-1586.	2.8	28
33	Nutraceuticals and osteoarthritis pain. , 2018, 187, 167-179.		26
34	Computational Stress Analysis of Atherosclerotic Plaques in ApoE Knockout Mice. Annals of Biomedical Engineering, 2010, 38, 738-747.	2.5	25
35	Unbound (bioavailable) IGF1 enhances somatic growth. DMM Disease Models and Mechanisms, 2011, 4, 649-658.	2.4	25
36	Role of structural anisotropy of biological tissues in poroelastic wave propagation. Mechanics of Materials, 2012, 44, 174-188.	3.2	25

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37	Ovariectomy increases vascular calcification via the OPG/RANKL cytokine signalling pathway. European Journal of Clinical Investigation, 2008, 38, 211-217.	3.4	24
38	Microarchitecture and bone quality in the human calcaneus: Local variations of fabric anisotropy. Journal of Bone and Mineral Research, 2012, 27, 2562-2572.	2.8	24
39	DMPâ€1 â€mediated Ghr gene recombination compromises skeletal development and impairs skeletal response to intermittent PTH. FASEB Journal, 2016, 30, 635-652.	0.5	24
40	IN VITROACOUSTIC WAVE PROPAGATION IN HUMAN AND BOVINE CANCELLOUS BONE AS PREDICTED BY BIOT'S THEORY. Journal of Mechanics in Medicine and Biology, 2008, 08, 183-201.	0.7	21
41	Imaging and analysis of microcalcifications and lipid/necrotic core calcification in fibrous cap atheroma. International Journal of Cardiovascular Imaging, 2015, 31, 1079-1087.	1.5	21
42	Selective estrogen receptor modulation influences atherosclerotic plaque composition in a rabbit menopause model. Atherosclerosis, 2008, 201, 76-84.	0.8	20
43	Dynamic permeability of the lacunarâ€“canalicular system in human cortical bone. Biomechanics and Modeling in Mechanobiology, 2014, 13, 801-812.	2.8	20
44	A dual wedge microneedle for sampling of perilymph solution via round window membrane. Biomedical Microdevices, 2016, 18, 24.	2.8	20
45	High resolution micro arthrography of hard and soft tissues in a murine model. Osteoarthritis and Cartilage, 2012, 20, 1011-1019.	1.3	19
46	Quantification of transient increase of the blood–brain barrier permeability to macromolecules by optimized focused ultrasound combined with microbubbles. International Journal of Nanomedicine, 2014, 9, 4437.	6.7	17
47	Human cochlear hydrodynamics: A high-resolution Î¼CT-based finite element study. Journal of Biomechanics, 2017, 50, 209-216.	2.1	17
48	Microcalcifications, Their Genesis, Growth, and Biomechanical Stability in Fibrous Cap Rupture. Advances in Experimental Medicine and Biology, 2018, 1097, 129-155.	1.6	17
49	Effect of Maternal Care on Hearing Onset Induced by Developmental Changes in the Auditory Periphery. Journal of Neuroscience, 2014, 34, 4528-4533.	3.6	14
50	Mechanical Intervention for Maintenance of Cartilage and Bone. Clinical Medicine Insights: Arthritis and Musculoskeletal Disorders, 2011, 4, CMAMD.S6982.	1.2	12
51	Analytical basis for the determination of the lacunarâ€“canalicular permeability of bone using cyclic loading. Biomechanics and Modeling in Mechanobiology, 2012, 11, 767-780.	2.8	12
52	Botoxâ€induced muscle paralysis alters intracortical porosity and osteocyte lacunar density in skeletally mature rats. Journal of Orthopaedic Research, 2019, 37, 1153-1163.	2.3	10
53	Development and Validation of a Motion and Loading System for a Rat Knee Joint In Vivo. Annals of Biomedical Engineering, 2010, 38, 621-631.	2.5	9
54	Nanoanalytical analysis of bisphosphonate-driven alterations of microcalcifications using a 3D hydrogel system and in vivo mouse model. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	9

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55	Defining the relationship between maternal care behavior and sensory development in Wistar rats: Auditory periphery development, eye opening and brain gene expression. PLoS ONE, 2020, 15, e0237933.	2.5	6
56	Skeletal Response of Male Mice to Anabolic Hormone Therapy in the Absence of theIgfalsGene. Endocrinology, 2014, 155, 987-999.	2.8	5
57	Changes of Elastic Constants and Anisotropy Patterns in Trabecular Bone During Disuse-Induced Bone Loss Assessed by Poroelastic Ultrasound. Journal of Biomechanical Engineering, 2015, 137, .	1.3	4
58	Increased cochlear otic capsule thickness and intracortical canal porosity in the oim mouse model of osteogenesis imperfecta. Journal of Structural Biology, 2021, 213, 107708.	2.8	4
59	Stenting-induced Vasa Vasorum compression and subsequent flow resistance: a finite element study. Biomechanics and Modeling in Mechanobiology, 2021, 20, 121-133.	2.8	3
60	Tuning Thermal Dosage to Facilitate Mesenchymal Stem Cell Osteogenesis in Pro-Inflammatory Environment. Journal of Biomechanical Engineering, 2021, 143, .	1.3	2
61	Fabric dependence of bone ultrasound. Acta of Bioengineering and Biomechanics, 2010, 12, 3-23.	0.4	2
62	The Role of Microarchitecture on Absorption and Scattering of Ultrasound Waves in Trabecular Bone. , 2013, , .		1
63	Microcalcifications and plaque rupture. , 2021, , 381-409.		1
64	Risk of Rupture in Coronary Vulnerable Plaques: Fluid-Structure Interaction Studies Using Patient Based Micro-CT and IVUS Measurements. , 2011, , .		0
65	Assessment of Cancellous Bone Microarchitecture from Poroelastic Ultrasound (PEUS) Theory. , 2013, , .		0
66	Investigation of the Flow in the Microscopic Level and its Contribution to the Poroelastic Properties in Cortical Bone. , 2013, , .		0
67	Mathematical Quantification of the Impact of Microstructure on the Various Effective Properties of Bones. , 2019, , 143-154.		0
68	Title is missing!. , 2020, 15, e0237933.		0
69	Title is missing!. , 2020, 15, e0237933.		0
70	Title is missing!. , 2020, 15, e0237933.		0
71	Title is missing!. , 2020, 15, e0237933.		0
72	Title is missing!. , 2020, 15, e0237933.		0

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73	Title is missing!. , 2020, 15, e0237933.		0
74	Computational Modeling of Deep Tissue Heating by an Automatic Thermal Massage Bed: Predicting the Effects on Circulation. Frontiers in Medical Technology, 0, 4, .	2.5	0