Louis M Ferreira

List of Publications by Year
in descending order

124 papers	2,939 citations	147801 31 h-index	206112 48 g-index
126 all docs	126 docs citations	126 times ranked	1662 citing authors

#	Article	IF	Citations
1	3D strain analysis of trabecular bone within the osteoarthritic humeral head subjected to stepwise compressive loads. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 125, 104922.	3.1	1
2	Experimental DVC validation of heterogeneous micro finite element models applied to subchondral trabecular bone of the humeral head. Journal of Orthopaedic Research, 2022, 40, 2039-2047.	2.3	4
3	MMA: The Fight Against Sleep Apnea. FASEB Journal, 2022, 36, .	0.5	0
4	Joint Protection Programmes for People with Osteoarthritis and Rheumatoid Arthritis of the Hand: An Overview of Systematic Reviews. Physiotherapy Canada Physiotherapie Canada, 2021, 73, 56-65.	0.6	9
5	Robotâ€Automated Cartilage Contouring for Complex Ear Reconstruction: A Cadaveric Study. Laryngoscope, 2021, 131, 1002-1007.	2.0	5
6	Biomechanical Impact of a Zygoma Complex Fracture Using Human Cadaver. Journal of Craniofacial Surgery, 2021, 32, 2045-2049.	0.7	2
7	Use of Thermoplastic Rings Following Venting of Flexor Tendon Pulleys: A Biomechanical Analysis. Journal of Hand Surgery, 2021, 46, 485-492.	1.6	3
8	Does the Walch type B shoulder have a transverse force couple imbalance? A volumetric analysis of segmented rotator cuff muscles in osteoarthritic shoulders. Journal of Shoulder and Elbow Surgery, 2021, 30, 2344-2354.	2.6	8
9	Barriers, facilitators, preferences and expectations of joint protection programmes for patients with hand arthritis: a cross-sectional survey. BMJ Open, 2021, 11, e041935.	1.9	2
10	Fullâ€field experimental analysis of the influence of microstructural parameters on the mechanical properties of humeral head trabecular bone. Journal of Orthopaedic Research, 2021, , .	2.3	2
11	The Effect of Flexor Digitorum Profundus Repair Position Relative to Camper Chiasm on Tendon Biomechanics. Journal of Hand Surgery, 2021, , .	1.6	1
12	Morphological and Apparentâ€Level Stiffness Variations Between Normal and Osteoarthritic Bone in the Humeral Head. Journal of Orthopaedic Research, 2020, 38, 503-509.	2.3	5
13	Bite Force Simulator: A Novel Technique to Simulate Craniofacial Strain In Vitro. Journal of Craniofacial Surgery, 2020, 31, 838-842.	0.7	2
14	Vibration Analysis in Robot-Driven Glenoid Reaming Procedure. , 2020, , .		3
15	Evaluation of the content validity index of the Australian/Canadian osteoarthritis hand index, the patient-rated wrist/hand evaluation and the thumb disability exam in people with hand arthritis. Health and Quality of Life Outcomes, 2020, 18, 302.	2.4	11
16	Full-field comparisons between strains predicted by QCT-derived finite element models of the scapula and experimental strains measured by digital volume correlation. Journal of Biomechanics, 2020, 113, 110101.	2.1	7
17	Evaluation of individual finger forces during activities of daily living in healthy individuals and those with hand arthritis. Journal of Hand Therapy, 2020, 33, 188-197.	1.5	21
18	The Application of Digital Volume Correlation (DVC) to Evaluate Strain Predictions Generated by Finite Element Models of the Osteoarthritic Humeral Head. Annals of Biomedical Engineering, 2020, 48, 2859-2869.	2.5	8

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19	Revision shoulder arthroplasty: a systematic review and comparison of North American vs. European outcomes and complications. Journal of Shoulder and Elbow Surgery, 2020, 29, 1071-1082.	2.6	29
20	Osteoarticular distal clavicle autograft for the management of instability-related glenoid bone loss: an anatomic and cadaveric study. Journal of Shoulder and Elbow Surgery, 2020, 29, 1615-1620.	2.6	14
21	Analysis of the process parameters affecting the bone burring process: An inâ€vitro porcine study. International Journal of Medical Robotics and Computer Assisted Surgery, 2019, 15, e2028.	2.3	4
22	Material Mapping of QCT-Derived Scapular Models: A Comparison with Micro-CT Loaded Specimens Using Digital Volume Correlation. Annals of Biomedical Engineering, 2019, 47, 2188-2198.	2.5	13
23	The Effect of Wrist Position on Finger Tendon Loads Following Pulley Sectioning and Operative Reconstruction. Journal of Hand Surgery Global Online, 2019, 1, 154-160.	0.8	3
24	Effect of Radial Neck Length on Joint Loading. Journal of Shoulder and Elbow Arthroplasty, 2019, 3, 247154921982996.	0.8	3
25	Performance of QCT-Derived scapula finite element models in predicting local displacements using digital volume correlation. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 339-345.	3.1	22
26	The Walch type B humerus: glenoid retroversion is associated with torsional differences in the humerus. Journal of Shoulder and Elbow Surgery, 2019, 28, 1801-1808.	2.6	15
27	A comparison of densityâ€“modulus relationships used in finite element modeling of the shoulder. Medical Engineering and Physics, 2019, 66, 40-46.	1.7	4
28	The effectiveness of joint-protection programs on pain, hand function, and grip strength levels in patients with hand arthritis: A systematic review and meta-analysis. Journal of Hand Therapy, 2019, 32, 194-211.	1.5	33
29	Polyethylene glenoid component fixation geometry influences stability in total shoulder arthroplasty. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 271-279.	1.6	4
30	Development of a validated glenoid trabecular density-modulus relationship. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 90, 140-145.	3.1	11
31	The Effect of Material Heterogeneity, Element Type, and Down-Sampling on Trabecular Stiffness in Micro Finite Element Models. Annals of Biomedical Engineering, 2019, 47, 615-623.	2.5	10
32	The effect of implant linking and ligament integrity on humeral loading of a convertible total elbow arthroplasty. Shoulder and Elbow, 2019, 11, 45-52.	1.5	11
33	Experimental analysis of the process parameters affecting bone burring operations. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2018, 232, 33-44.	1.8	8
34	Development of a vibration haptic simulator for shoulder arthroplasty. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1049-1062.	2.8	6
35	A computer and image-assisted guidance system for radial head arthroplasty. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2018, 6, 204-210.	1.9	0
36	A 3D comparison of humeral head retroversion by sex and measurement technique. Shoulder and Elbow, 2018, 10, 192-200.	1.5	11

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37	Is the Walch B3 glenoid significantly worse than the B2?. Shoulder and Elbow, 2018, 10, 256-261.	1.5	11
38	Quantifying performance metrics of cervical spine mobilization for improved education and clinical outcomes: Early experience with a novel wearable device. Journal of Rehabilitation and Assistive Technologies Engineering, 2018, 5, 205566831876539.	0.9	2
39	Wearable strain gauge-based technology measures manual tactile forces during the activities of daily living. Journal of Rehabilitation and Assistive Technologies Engineering, 2018, 5, 205566831879358.	0.9	2
40	Characterization of the dysplastic Walch type C glenoid. Bone and Joint Journal, 2018, 100-B, 1074-1079.	4.4	8
41	Fast Generation of Cartesian Meshes from Micro-Computed Tomography Data. Computer-Aided Design and Applications, 2018, 16, 161-171.	0.6	9
42	A Scoping Review of Joint Protection Programs for People with Hand Arthritis. The Open Orthopaedics Journal, 2018, 12, 500-513.	0.2	3
43	Characterization of the Walch B3 glenoid in primary osteoarthritis. Journal of Shoulder and Elbow Surgery, 2017, 26, 909-914.	2.6	55
44	In-Vitro Quantification of Medial Collateral Ligament Tension in the Elbow. Journal of Applied Biomechanics, 2017, 33, 277-281.	0.8	5
45	Quantitative Computed Tomography (QCT) derived Bone Mineral Density (BMD) in finite element studies: a review of the literature. Journal of Experimental Orthopaedics, 2016, 3, 36.	1.8	65
46	A biomechanical assessment of fixation methods for a coronoid prosthesis. Clinical Biomechanics, 2016, 32, 14-19.	1.2	3
47	The arthritic glenoid: anatomy and arthroplasty designs. Current Reviews in Musculoskeletal Medicine, 2016, 9, 23-29.	3.5	10
48	Development of a Computational Elbow Model with Experimental Validation of Kinematics and Muscle Forces. Journal of Applied Biomechanics, 2016, 32, 407-414.	0.8	2
49	A finite element analysis of augmented glenoid components. Journal of Shoulder and Elbow Surgery, 2016, 25, e166-e168.	2.6	1
50	Hemiarthroplasty of the elbow: the effect of implant size on joint congruency. Journal of Shoulder and Elbow Surgery, 2016, 25, 297-303.	2.6	15
51	Premorbid retroversion is significantly greater in type B2 glenoids. Journal of Shoulder and Elbow Surgery, 2016, 25, 1064-1068.	2.6	33
52	A comparison of normal and osteoarthritic humeral head size and morphology. Journal of Shoulder and Elbow Surgery, 2016, 25, 502-509.	2.6	23
53	Augmented Glenoid Replacement for Total Shoulder Arthroplasty. , 2016, , 111-119.		0
54	An intra-bone axial load transducer: development and validation in an in-vitro radius model. Journal of Experimental Orthopaedics, 2015, 2, 19.	1.8	2

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55	Volar Subluxation of the Ulnar Head in Dorsal Translation Deformities of Distal Radius Fractures. Journal of Orthopaedic Trauma, 2015, 29, 295-300.	1.4	10
56	Load Transfer at the Distal Ulna Following Simulated Distal Radius Fracture Malalignment. Journal of Hand Surgery, 2015, 40, 217-223.	1.6	7
57	Augmented glenoid component designs for type B2 erosions: a computational comparison by volume of bone removal and quality of remaining bone. Journal of Shoulder and Elbow Surgery, 2015, 24, 1218-1226.	2.6	64
58	Radial head implant diameter: A biomechanical assessment of the forgotten dimension. Clinical Biomechanics, 2015, 30, 444-447.	1.2	14
59	Effectiveness of CT for the detection of glenoid bone graft resorption following reverse shoulder arthroplasty. Orthopaedics and Traumatology: Surgery and Research, 2015, 101, 427-430.	2.0	15
60	Effect of Volarly Angulated Distal Radius Fractures on Forearm Rotation and Distal Radioulnar Joint Kinematics. Journal of Hand Surgery, 2015, 40, 2236-2242.	1.6	23
61	Quantification of the position, orientation, and surface area of bone loss in type B2 glenoids. Journal of Shoulder and Elbow Surgery, 2015, 24, 503-510.	2.6	38
62	Regional bone density variations in osteoarthritic glenoids: a comparison of symmetric to asymmetric (type B2) erosion patterns. Journal of Shoulder and Elbow Surgery, 2015, 24, 425-432.	2.6	37
63	A Refined Technique to Calculate Finite Helical Axes From Rigid Body Trackers. Journal of Biomechanical Engineering, 2014, 136, 124506.	1.3	2
64	The Effect of Radial Head Implant Length on Radiocapitellar Articular Properties and Load Transfer Within the Forearm. Journal of Orthopaedic Trauma, 2014, 28, 348-353.	1.4	19
65	An anthropometric study of the distal humerus. Journal of Shoulder and Elbow Surgery, 2014, 23, 463-469.	2.6	28
66	Distal Radioulnar Joint Kinematics in Simulated Dorsally Angulated Distal Radius Fractures. Journal of Hand Surgery, 2014, 39, 656-663.	1.6	36
67	Hemiarthroplasty of the elbow: the effect of implant size on kinematics and stability. Journal of Shoulder and Elbow Surgery, 2014, 23, 946-954.	2.6	7
68	Reconstruction of the Coronoid Process Using the Tip of the Ipsilateral Olecranon. Journal of Bone and Joint Surgery - Series A, 2014, 96, 590-596.	3.0	32
69	Does the dynamic sling effect of the Latarjet procedure improve shoulder stability? A biomechanical evaluation. Journal of Shoulder and Elbow Surgery, 2013, 22, 821-827.	2.6	125
70	Measurements of the ispilateral capitellum can reliably predict the diameter of the radial head. Journal of Shoulder and Elbow Surgery, 2013, 22, 1724-1728.	2.6	9
71	Selecting the diameter of a radial head implant: an assessment of local landmarks. Journal of Shoulder and Elbow Surgery, 2013, 22, 1395-1399.	2.6	19
72	Does the Dynamic Sling Effect of the Latarjet Procedure Improve Shoulder Joint Stability? A Biomechanical Evaluation. Journal of Shoulder and Elbow Surgery, 2013, 22, e42.	2.6	0

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73	The shoulder remplissage procedure for Hill-Sachs defects: does technique matter?. Journal of Shoulder and Elbow Surgery, 2013, 22, 835-841.	2.6	45
74	The Effect of a Coronoid Prosthesis on Restoring Stability to the Coronoid-Deficient Elbow: A Biomechanical Study. Journal of Hand Surgery, 2013, 38, 1753-1761.	1.6	25
75	The effect of excision of the radial head and metallic radial head replacement on the tension in the interosseous membrane. Bone and Joint Journal, 2013, 95-B, 1383-1387.	4.4	21
76	Development of an image-based technique to examine joint congruency at the elbow. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 280-290.	1.6	29
77	The Effect of the Remplissage Procedure on Shoulder Stability and Range of Motion. Journal of Bone and Joint Surgery - Series A, 2012, 94, 1003-1012.	3.0	81
78	Kinematics and laxity of a linked total elbow arthroplasty following computer navigated implant positioning. Computer Aided Surgery, 2012, 17, 249-258.	1.8	3
79	Moderate to large engaging Hill-Sachs defects: an inÂvitro biomechanical comparison of the remplissage procedure, allograft humeral head reconstruction, and partial resurfacing arthroplasty. Journal of Shoulder and Elbow Surgery, 2012, 21, 1142-1151.	2.6	75
80	Elbow Kinematics After Radiocapitellar Arthroplasty. Journal of Hand Surgery, 2012, 37, 1024-1032.	1.6	14
81	Reconstruction of the coronoid using an extended prosthesis: an inÂvitro biomechanical study. Journal of Shoulder and Elbow Surgery, 2012, 21, 969-976.	2.6	24
82	Capitellar excision and hemiarthroplasty affects elbow kinematics and stability. Journal of Shoulder and Elbow Surgery, 2012, 21, 1024-1031.e4.	2.6	22
83	The effect of implant malalignment on joint loading in total elbow arthroplasty: an inÂvitro study. Journal of Shoulder and Elbow Surgery, 2012, 21, 1032-1038.	2.6	28
84	Rehabilitation of the Medial- and Lateral Collateral Ligament-deficient Elbow: An InÂVitro Biomechanical Study. Journal of Hand Therapy, 2012, 25, 363-373.	1.5	23
85	The impact of capitellar arthroplasty on elbow contact mechanics: Implications for implant design. Clinical Biomechanics, 2011, 26, 458-463.	1.2	17
86	A morphological analysis of the humeral capitellum with an interest in prosthesis design. Journal of Shoulder and Elbow Surgery, 2011, 20, 880-884.	2.6	32
87	Osteochondral Lesions of the Capitellum Do Not Affect Elbow Kinematics and Stability With Intact Collateral Ligaments: An In Vitro Biomechanical Study. Journal of Hand Surgery, 2011, 36, 74-80.	1.6	6
88	Biomechanical Analysis of Fixation of Middle Third Fractures of the Clavicle. Journal of Orthopaedic Trauma, 2011, 25, 39-43.	1.4	60
89	The Effect of Triceps Repair Techniques Following Olecranon Excision on Elbow Stability and Extension Strength: An In Vitro Biomechanical Study. Journal of Orthopaedic Trauma, 2011, 25, 420-424.	1.4	8
90	A comparison of two headless compression screws for operative treatment of scaphoid fractures. Journal of Orthopaedic Surgery and Research, 2011, 6, 27.	2.3	28

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91	Motionâ€derived coordinate systems reduce interâ€subject variability of elbow flexion kinematics. Journal of Orthopaedic Research, 2011, 29, 596-601.	2.3	11
92	The effect of the conjoined tendon of the short head of the biceps and coracobrachialis on shoulder stability and kinematics during in-vitro simulation. Journal of Biomechanics, 2011, 44, 1192-1195.	2.1	30
93	Development of an active elbow flexion simulator to evaluate joint kinematics with the humerus in the horizontal position. Journal of Biomechanics, 2010, 43, 2114-2119.	2.1	38
94	Contribution of the Olecranon to Elbow Stability. Journal of Bone and Joint Surgery - Series A, 2010, 92, 949-957.	3.0	53
95	Effect of coronal shear fractures of the distal humerus on elbow kinematics and stability. Journal of Shoulder and Elbow Surgery, 2010, 19, 670-680.	2.6	47
96	Cementless fixation of radial head implants is affected by implant stem geometry: An in vitro study. Clinical Biomechanics, 2010, 25, 422-426.	1.2	14
97	Defining the Flexion-Extension Axis of the Ulna: Implications for Intra-Operative Elbow Alignment. Journal of Biomechanical Engineering, 2009, 131, 021005.	1.3	9
98	The Effect of Anteromedial Facet Fractures of the Coronoid and Lateral Collateral Ligament Injury on Elbow Stability and Kinematics. Journal of Bone and Joint Surgery - Series A, 2009, 91, 1448-1458.	3.0	158
99	The effect of surface area digitizations on the prediction of spherical anatomical geometries for computer-assisted applications. Journal of Biomechanics, 2009, 42, 1158-1161.	2.1	1
100	Morphologic analysis of the proximal ulna with special interest in elbow implant sizing and alignment. Journal of Shoulder and Elbow Surgery, 2009, 18, 27-32.	2.6	34
101	The influence of type II coronoid fractures, collateral ligament injuries, and surgical repair on the kinematics and stability of the elbow: An in vitro biomechanical study. Journal of Shoulder and Elbow Surgery, 2009, 18, 408-417.	2.6	35
102	Improved accuracy of computer assisted glenoid implantation in total shoulder arthroplasty: An in-vitro randomized controlled trial. Journal of Shoulder and Elbow Surgery, 2009, 18, 907-914.	2.6	118
103	Effect of the Posterior Bundle of the Medial Collateral Ligament on Elbow Stability. Journal of Hand Surgery, 2009, 34, 116-123.	1.6	39
104	The Effect of Multiplanar Distal Radius Fractures on Forearm Rotation: In Vitro Biomechanical Study. Journal of Hand Surgery, 2009, 34, 838-848.	1.6	22
105	Motion-Derived Joint Coordinate Systems Reduce Inter-Subject Variability of Elbow Flexion Kinematics. , 2009, , .		0
106	Humeral head translation decreases with muscle loading. Journal of Shoulder and Elbow Surgery, 2008, 17, 132-138.	2.6	19
107	Lateral Collateral Ligament Repair Restores the Initial Varus Stability of the Elbow: An In Vitro Biomechanical Study. Journal of Orthopaedic Trauma, 2008, 22, 615-623.	1.4	47
108	Design and development of a computer assisted glenoid implantation technique for shoulder replacement surgery. Computer Aided Surgery, 2007, 12, 152-159.	1.8	37

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109	Comminuted Talar Neck Fractures: A Mechanical Comparison of Fixation Techniques. Journal of Orthopaedic Trauma, 2007, 21, 47-51.	1.4	43
110	In vitro kinematics of the shoulder following rotator cuff injury. Clinical Biomechanics, 2007, 22, 1068-1073.	1.2	27
111	Early experience with computer-assisted shoulder hemiarthroplasty for fractures of the proximal humerus: Development of a novel technique and an in vitro comparison with traditional methods. Journal of Shoulder and Elbow Surgery, 2007, 16, S117-S125.	2.6	42
112	An anthropometric study of the bilateral anatomy of the humerus. Journal of Shoulder and Elbow Surgery, 2007, 16, 477-483.	2.6	68
113	The Effect of Medial Collateral Ligament Repair Tension on Elbow Joint Kinematics and Stability. Journal of Hand Surgery, 2007, 32, 1210-1217.	1.6	51
114	Initial repair strengths of two methods for acute medial collateral ligament injuries of the elbow. Journal of Orthopaedic Research, 2007, 25, 612-616.	2.3	5
115	The effect of muscle loading on the kinematics of in vitro glenohumeral abduction. Journal of Biomechanics, 2007, 40, 2953-2960.	2.1	46
116	Design and development of a computer assisted glenoid implantation technique for shoulder replacement surgery. Computer Aided Surgery, 2007, 12, 152-159.	1.8	0
117	Design and implementation of an instrumented ulnar head prosthesis to measure loads in vitro. Journal of Biomechanics, 2006, 39, 1335-1341.	2.1	16
118	Effect of simulated muscle activity on distal radioulnar joint loading in vitro. Journal of Orthopaedic Research, 2006, 24, 1395-1404.	2.3	7
119	Cyclic Loading of Rotator Cuff Repairs: An In Vitro Biomechanical Comparison of Bioabsorbable Tacks With Transosseous Sutures. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2005, 21, 875-880.	2.7	24
120	A biomechanical comparison of four reconstruction techniques for the medial collateral ligament-deficient elbow. Journal of Shoulder and Elbow Surgery, 2005, 14, 207-215.	2.6	116
121	The Medial Collateral Ligament of the Elbow is not Isometric. American Journal of Sports Medicine, 2004, 32, 85-90.	4.2	46
122	Assessment of screw displacement axis accuracy and repeatability for joint kinematic description using an electromagnetic tracking device. Journal of Biomechanics, 2004, 37, 163-167.	2.1	18
123	Interfragmentary compression across a simulated scaphoid fractureâ€"analysis of 3 screws. Journal of Hand Surgery, 2004, 29, 273-278.	1.6	68
124	The effect of metallic radial head arthroplasty on radiocapitellar joint contact area. Clinical Biomechanics, 2003, 18, 115-118.	1.2	80