

Alberto Leardini

List of Publications by Year in descending order

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Version: 2024-02-01

230
papers

15,881
citations

38742

50
h-index

17592

121
g-index

237
all docs

237
docs citations

237
times ranked

8341
citing authors

#	ARTICLE	IF	CITATIONS
1	ISB recommendation on definitions of joint coordinate system of various joints for the reporting of human joint motion—part I: ankle, hip, and spine. <i>Journal of Biomechanics</i> , 2002, 35, 543-548.	2.1	2,491
2	Position and orientation in space of bones during movement: anatomical frame definition and determination. <i>Clinical Biomechanics</i> , 1995, 10, 171-178.	1.2	1,393
3	Human movement analysis using stereophotogrammetry. <i>Gait and Posture</i> , 2005, 21, 212-225.	1.4	946
4	Position and orientation in space of bones during movement: experimental artefacts. <i>Clinical Biomechanics</i> , 1996, 11, 90-100.	1.2	609
5	Rear-foot, mid-foot and fore-foot motion during the stance phase of gait. <i>Gait and Posture</i> , 2007, 25, 453-462.	1.4	545
6	Human movement analysis using stereophotogrammetry. <i>Gait and Posture</i> , 2005, 21, 186-196.	1.4	449
7	Human movement analysis using stereophotogrammetry. <i>Gait and Posture</i> , 2005, 21, 226-237.	1.4	438
8	Validation of a functional method for the estimation of hip joint centre location. <i>Journal of Biomechanics</i> , 1999, 32, 99-103.	2.1	359
9	A new anatomically based protocol for gait analysis in children. <i>Gait and Posture</i> , 2007, 26, 560-571.	1.4	358
10	Human movement analysis using stereophotogrammetry. <i>Gait and Posture</i> , 2005, 21, 197-211.	1.4	337
11	Quantitative comparison of five current protocols in gait analysis. <i>Gait and Posture</i> , 2008, 28, 207-216.	1.4	283
12	Data management in gait analysis for clinical applications. <i>Clinical Biomechanics</i> , 1998, 13, 204-215.	1.2	274
13	Quantification of soft tissue artefact in motion analysis by combining 3D fluoroscopy and stereophotogrammetry: a study on two subjects. <i>Clinical Biomechanics</i> , 2005, 20, 320-329.	1.2	231
14	An anatomically based protocol for the description of foot segment kinematics during gait. <i>Clinical Biomechanics</i> , 1999, 14, 528-536.	1.2	228
15	Effects of hip joint centre mislocation on gait analysis results. <i>Journal of Biomechanics</i> , 2000, 33, 1479-1487.	2.1	195
16	A geometric model of the human ankle joint. <i>Journal of Biomechanics</i> , 1999, 32, 585-591.	2.1	190
17	Alignments and Clinical Results in Conventional and Navigated Total Knee Arthroplasty. <i>Clinical Orthopaedics and Related Research</i> , 2007, 457, 156-162.	1.5	188
18	Kinematics of the human ankle complex in passive flexion; a single degree of freedom system. <i>Journal of Biomechanics</i> , 1999, 32, 111-118.	2.1	173

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19	Cruciate ligament forces in the human knee during rehabilitation exercises. <i>Clinical Biomechanics</i> , 2000, 15, 176-187.	1.2	172
20	A model-based method for the reconstruction of total knee replacement kinematics. <i>IEEE Transactions on Medical Imaging</i> , 1999, 18, 981-991.	8.9	168
21	A prospective randomized assessment of earlier functional recovery in THA patients treated by minimally invasive direct anterior approach: A gait analysis study. <i>Clinical Biomechanics</i> , 2009, 24, 812-818.	1.2	163
22	Multi-segment trunk kinematics during locomotion and elementary exercises. <i>Clinical Biomechanics</i> , 2011, 26, 562-571.	1.2	155
23	Estimation of spatial-temporal gait parameters in level walking based on a single accelerometer: Validation on normal subjects by standard gait analysis. <i>Computer Methods and Programs in Biomedicine</i> , 2012, 108, 129-137.	4.7	148
24	Mobility of the subtalar joint in the intact ankle complex. <i>Journal of Biomechanics</i> , 2001, 34, 805-809.	2.1	122
25	Multiple anatomical landmark calibration for optimal bone pose estimation. <i>Human Movement Science</i> , 1997, 16, 259-274.	1.4	119
26	Femoral rollback of cruciate-retaining and posterior-stabilized total knee replacements: In vivo fluoroscopic analysis during activities of daily living. <i>Journal of Orthopaedic Research</i> , 2006, 24, 2222-2229.	2.3	109
27	The Role of the Passive Structures in the Mobility and Stability of the Human Ankle Joint: A Literature Review. <i>Foot and Ankle International</i> , 2000, 21, 602-615.	2.3	107
28	Finite element analysis of a total ankle replacement during the stance phase of gait. <i>Journal of Biomechanics</i> , 2006, 39, 1435-1443.	2.1	104
29	ISB recommendations on the reporting of intersegmental forces and moments during human motion analysis. <i>Journal of Biomechanics</i> , 2020, 99, 109533.	2.1	104
30	Soft Tissue Artifact Compensation in Knee Kinematics by Double Anatomical Landmark Calibration: Performance of a Novel Method During Selected Motor Tasks. <i>IEEE Transactions on Biomedical Engineering</i> , 2005, 52, 992-998.	4.2	94
31	Fabrication of Co-Cr-Mo endoprosthetic ankle devices by means of Selective Laser Melting (SLM). <i>Materials and Design</i> , 2016, 106, 60-68.	7.0	90
32	Alignment Deviation Between Bone Resection and Final Implant Positioning in Computer-Navigated Total Knee Arthroplasty. <i>Journal of Bone and Joint Surgery - Series A</i> , 2008, 90, 765-771.	3.0	86
33	Repeatability of a multi-segment foot protocol in adult subjects. <i>Gait and Posture</i> , 2011, 33, 133-135.	1.4	76
34	Fluoroscopic and gait analysis of the functional performance in stair ascent of two total knee replacement designs. <i>Gait and Posture</i> , 2003, 17, 225-234.	1.4	75
35	Mobility of the Human Ankle and the Design of Total Ankle Replacement. <i>Clinical Orthopaedics and Related Research</i> , 2004, 424, 39-46.	1.5	75
36	Validation of the angular measurements of a new inertial-measurement-unit based rehabilitation system: comparison with state-of-the-art gait analysis. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2014, 11, 136.	4.6	72

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37	Multi-segment foot models and their use in clinical populations. <i>Gait and Posture</i> , 2019, 69, 50-59.	1.4	72
38	Tibial component alignment and risk of loosening in unicompartmental knee arthroplasty: a radiographic and radiostereometric study. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2014, 22, 3157-3162.	4.2	69
39	Quantitative comparison of current models for trunk motion in human movement analysis. <i>Clinical Biomechanics</i> , 2009, 24, 542-550.	1.2	66
40	The stability of the cemented tibial component of total knee arthroplasty. <i>Journal of Arthroplasty</i> , 2004, 19, 775-782.	3.1	65
41	Biomechanics of the natural, arthritic, and replaced human ankle joint. <i>Journal of Foot and Ankle Research</i> , 2014, 7, 8.	1.9	65
42	Modifying the Rizzoli foot model to improve the diagnosis of pes planus: application to kinematics of feet in teenagers. <i>Journal of Foot and Ankle Research</i> , 2014, 7, 754.	1.9	64
43	In vivo kinematics and kinetics of a cruciate substituting total knee arthroplasty: A combined fluoroscopic and gait analysis study. <i>Journal of Orthopaedic Research</i> , 2009, 27, 1569-1575.	2.3	63
44	Geometry and mechanics of the human ankle complex and ankle prosthesis design. <i>Clinical Biomechanics</i> , 2001, 16, 706-709.	1.2	62
45	Can TKA design affect the clinical outcome? Comparison between two guided-motion systems. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2014, 22, 581-589.	4.2	60
46	Wear patterns on tibial plateau from varus osteoarthritic knees. <i>Clinical Biomechanics</i> , 2006, 21, 152-158.	1.2	58
47	Mathematical models of passive motion at the human ankle joint by equivalent spatial parallel mechanisms. <i>Medical and Biological Engineering and Computing</i> , 2007, 45, 305-313.	2.8	58
48	Role of Passive Structures in the Mobility and Stability of the Human Subtalar Joint: A Literature Review. <i>Foot and Ankle International</i> , 2003, 24, 402-409.	2.3	57
49	Optimization and smoothing techniques in movement analysis. <i>International Journal of Bio-medical Computing</i> , 1996, 41, 137-151.	0.5	56
50	GAIT analysis in patients operated with a novel total ankle prosthesis. <i>Gait and Posture</i> , 2009, 30, 132-137.	1.4	56
51	Kinematic models of lower limb joints for musculo-skeletal modelling and optimization in gait analysis. <i>Journal of Biomechanics</i> , 2017, 62, 77-86.	2.1	52
52	Ligament fibre recruitment and forces for the anterior drawer test at the human ankle joint. <i>Journal of Biomechanics</i> , 2003, 36, 363-372.	2.1	50
53	Inter-laboratory consistency of gait analysis measurements. <i>Gait and Posture</i> , 2013, 38, 934-939.	1.4	50
54	Patellar tracking during total knee arthroplasty: an in vitro feasibility study. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2007, 15, 985-993.	4.2	49

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55	Ankle morphometry evaluated using a new semi-automated technique based on X-ray pictures. <i>Clinical Biomechanics</i> , 2005, 20, 307-311.	1.2	48
56	Intra- and post-operative accuracy assessments of two different patient-specific instrumentation systems for total knee replacement. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2014, 22, 621-629.	4.2	48
57	Computer-assisted design of the sagittal shapes of a ligament-compatible total ankle replacement. <i>Medical and Biological Engineering and Computing</i> , 2001, 39, 168-175.	2.8	46
58	The Mark Coventry Award Articular: Contact Estimation in TKA Using In Vivo Kinematics and Finite Element Analysis. <i>Clinical Orthopaedics and Related Research</i> , 2010, 468, 19-28.	1.5	46
59	Navigation-assisted total knee arthroplasty in knees with osteoarthritis due to extra-articular deformity. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2012, 20, 546-551.	4.2	46
60	Three-dimensional computer graphics-based ankle morphometry with computerized tomography for total ankle replacement design and positioning. <i>Clinical Anatomy</i> , 2014, 27, 659-668.	2.7	43
61	Effect of sub-optimal neuromotor control on the hip joint load during level walking. <i>Journal of Biomechanics</i> , 2011, 44, 1716-1721.	2.1	42
62	Muscle activity around the knee and gait performance in unicompartmental knee arthroplasty patients: a comparative study on fixed- and mobile-bearing designs. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2012, 20, 1042-1048.	4.2	42
63	Dynamic in-vivo tibio-femoral and bearing motions in mobile bearing knee arthroplasty. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2004, 12, 144-151.	4.2	41
64	Articular contact at the tibiotalar joint in passive flexion. <i>Journal of Biomechanics</i> , 2005, 38, 1205-1212.	2.1	41
65	Articular surface approximation in equivalent spatial parallel mechanism models of the human knee joint: An experiment-based assessment. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2010, 224, 1121-1132.	1.8	41
66	Kinect and wearable inertial sensors for motor rehabilitation programs at home: state of the art and an experimental comparison. <i>BioMedical Engineering OnLine</i> , 2020, 19, 25.	2.7	40
67	A model for lever-arm length calculation of the flexor and extensor muscles at the ankle. <i>Gait and Posture</i> , 2002, 15, 220-229.	1.4	39
68	Meniscal wear at a three-component total ankle prosthesis by a knee joint simulator. <i>Journal of Biomechanics</i> , 2007, 40, 1871-1876.	2.1	39
69	Femoral anatomical frame: assessment of various definitions. <i>Medical Engineering and Physics</i> , 2003, 25, 425-431.	1.7	38
70	A global method based on thin-plate splines for correction of geometric distortion: An application to fluoroscopic images. <i>Medical Physics</i> , 2003, 30, 124-131.	3.0	38
71	Geometrical changes of knee ligaments and patellar tendon during passive flexion. <i>Journal of Biomechanics</i> , 2012, 45, 1886-1892.	2.1	38
72	Analysis of Function After Intra-articular Fracture of the Os Calcis. <i>Foot and Ankle International</i> , 1999, 20, 417-421.	2.3	37

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73	Correlates between kinematics and baropodometric measurements for an integrated in-vivo assessment of the segmental foot function in gait. <i>Journal of Biomechanics</i> , 2014, 47, 2654-2659.	2.1	37
74	Multiscale modelling of the skeleton for the prediction of the risk of fracture. <i>Clinical Biomechanics</i> , 2008, 23, 845-852.	1.2	36
75	Femoral loads during gait in a patient with massive skeletal reconstruction. <i>Clinical Biomechanics</i> , 2012, 27, 273-280.	1.2	36
76	Estimation of pelvis kinematics in level walking based on a single inertial sensor positioned close to the sacrum: validation on healthy subjects with stereophotogrammetric system. <i>BioMedical Engineering OnLine</i> , 2014, 13, 146.	2.7	36
77	Effect of plano-€valgus foot posture on midfoot kinematics during barefoot walking in an adolescent population. <i>Journal of Foot and Ankle Research</i> , 2018, 11, 55.	1.9	36
78	Total Ankle Replacement Compatible with Ligament Function Produces Mobility, Good Clinical Scores, and Low Complication Rates: An Early Clinical Assessment. <i>Clinical Orthopaedics and Related Research</i> , 2010, 468, 2746-2753.	1.5	35
79	CoCr porous scaffolds manufactured via selective laser melting in orthopedics: Topographical, mechanical, and biological characterization. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2019, 107, 2343-2353.	3.4	35
80	On the Modeling of Passive Motion of the Human Knee Joint by Means of Equivalent Planar and Spatial Parallel Mechanisms. <i>Autonomous Robots</i> , 2004, 16, 219-232.	4.8	34
81	Influence of tibial component posterior slope on in vivo knee kinematics in fixed-bearing total knee arthroplasty. <i>Journal of Orthopaedic Research</i> , 2006, 24, 581-587.	2.3	34
82	Multimod Data Manager: A tool for data fusion. <i>Computer Methods and Programs in Biomedicine</i> , 2007, 87, 148-159.	4.7	34
83	A new one-DOF fully parallel mechanism for modelling passive motion at the human tibiotalar joint. <i>Journal of Biomechanics</i> , 2009, 42, 1403-1408.	2.1	34
84	Wear simulation of total knee prostheses using load and kinematics waveforms from stair climbing. <i>Journal of Biomechanics</i> , 2015, 48, 3830-3836.	2.1	34
85	Repeatability of a new protocol for gait analysis in adult subjects. <i>Gait and Posture</i> , 2010, 32, 282-284.	1.4	33
86	Radiographic angular measurements of the foot and ankle in weight-bearing: A literature review. <i>Foot and Ankle Surgery</i> , 2020, 26, 509-517.	1.7	33
87	Double-step registration of in vivo stereophotogrammetry with both in vitro 6-DOFs electrogoniometry and CT medical imaging. <i>Journal of Biomechanics</i> , 2006, 39, 2087-2095.	2.1	32
88	EMG-based measures of fatigue during a repetitive squat exercise. <i>IEEE Engineering in Medicine and Biology Magazine</i> , 2001, 20, 133-143.	0.8	31
89	Range of motion and repeatability of knee kinematics for 11 clinically relevant motor tasks. <i>Gait and Posture</i> , 2010, 32, 597-602.	1.4	31
90	Position of the prosthesis components in total ankle replacement and the effect on motion at the replaced joint. <i>International Orthopaedics</i> , 2012, 36, 571-578.	1.9	30

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91	How Much Clinical and Functional Impairment do Children Treated With Knee Rotationplasty Experience in Adulthood?. <i>Clinical Orthopaedics and Related Research</i> , 2016, 474, 995-1004.	1.5	30
92	Early Clinical Results of the BOX Ankle Replacement Are Satisfactory: A Multicenter Feasibility Study of 158 Ankles. <i>Journal of Foot and Ankle Surgery</i> , 2011, 50, 641-647.	1.0	29
93	Analysis of surface-to-surface distance mapping during three-dimensional motion at the ankle and subtalar joints. <i>Journal of Biomechanics</i> , 2018, 76, 204-211.	2.1	29
94	Functional evaluation of bilateral subtalar arthroereisis for the correction of flexible flatfoot in children: 1-year follow-up. <i>Gait and Posture</i> , 2018, 64, 152-158.	1.4	29
95	New comprehensive procedure for custom-made total ankle replacements: Medical imaging, joint modeling, prosthesis design, and 3D printing. <i>Journal of Orthopaedic Research</i> , 2019, 37, 760-768.	2.3	29
96	Dynamic simulation of the natural and replaced human ankle joint. <i>Medical and Biological Engineering and Computing</i> , 2002, 40, 193-199.	2.8	28
97	In shoe pressure measurements during different motor tasks while wearing safety shoes: The effect of custom made insoles vs. prefabricated and off-the-shelf. <i>Gait and Posture</i> , 2016, 50, 232-238.	1.4	28
98	Alignment of resection planes in total knee replacement obtained with the conventional technique, as assessed by a modern computer-based navigation system. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2007, 3, 117-124.	2.3	27
99	Functional performance of a total ankle replacement: thorough assessment by combining gait and fluoroscopic analyses. <i>Clinical Biomechanics</i> , 2013, 28, 79-87.	1.2	27
100	Weight-bearing CT Technology in Musculoskeletal Pathologies of the Lower Limbs: Techniques, Initial Applications, and Preliminary Combinations with Gait-Analysis Measurements at the Istituto Ortopedico Rizzoli. <i>Seminars in Musculoskeletal Radiology</i> , 2019, 23, 643-656.	0.7	27
101	Age-related changes in kinematics of the knee joint during deep squat. <i>Knee</i> , 2012, 19, 208-212.	1.6	26
102	Three-Dimensional Vertebral Wedging in Mild and Moderate Adolescent Idiopathic Scoliosis. <i>PLoS ONE</i> , 2013, 8, e71504.	2.5	26
103	Tibio-femoral and patello-femoral joint kinematics during navigated total knee arthroplasty with patellar resurfacing. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2014, 22, 1719-1727.	4.2	26
104	Knee laxity modifications after ACL rupture and surgical intra- and extra-articular reconstructions: intra-operative measures in reconstructed and healthy knees. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2017, 25, 2725-2735.	4.2	26
105	Conventional versus computer-assisted surgery in total knee arthroplasty: comparison at ten years follow-up. <i>International Orthopaedics</i> , 2019, 43, 1355-1363.	1.9	26
106	Angular and linear measurements of adult flexible flatfoot via weight-bearing CT scans and 3D bone reconstruction tools. <i>Scientific Reports</i> , 2021, 11, 16139.	3.3	26
107	Three-dimensional patellar motion at the natural knee during passive flexion/extension. An in vitro study. <i>Journal of Orthopaedic Research</i> , 2009, 27, 1426-1431.	2.3	25
108	Wear behaviour in total ankle replacement: A comparison between an in vitro simulation and retrieved prostheses. <i>Clinical Biomechanics</i> , 2009, 24, 661-669.	1.2	25

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109	In vivo knee kinematics in rotationally unconstrained total knee arthroplasty. <i>Journal of Orthopaedic Research</i> , 2011, 29, 1484-1490.	2.3	25
110	Kinematics of the Three Components of a Total Ankle Replacement: <i>In Vivo</i> Fluoroscopic Analysis. <i>Foot and Ankle International</i> , 2012, 33, 290-300.	2.3	25
111	In vivo kinematics of knee replacement during daily living activities: Condylar and post-cam contact assessment by three-dimensional fluoroscopy and finite element analyses. <i>Journal of Orthopaedic Research</i> , 2017, 35, 1396-1403.	2.3	24
112	Reliability of medial-longitudinal-arch measures for skin-markers based kinematic analysis. <i>Journal of Biomechanics</i> , 2019, 88, 180-185.	2.1	24
113	An Anatomical-Based Subject-Specific Model of In-Vivo Knee Joint 3D Kinematics From Medical Imaging. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2100.	2.5	24
114	A new semi-automated measurement technique based on X-ray pictures for ankle morphometry. <i>Journal of Biomechanics</i> , 2004, 37, 1113-1118.	2.1	23
115	Joint line is well restored when navigation surgery is performed for total knee arthroplasty. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2012, 20, 495-502.	4.2	23
116	Kinematic correlates of walking cadence in the foot. <i>Journal of Biomechanics</i> , 2010, 43, 2425-2433.	2.1	22
117	A new protocol for 3D assessment of foot during gait: Application on patients with equinovarus foot. <i>Clinical Biomechanics</i> , 2011, 26, 1033-1038.	1.2	22
118	Three-dimensional displacement after a medializing calcaneal osteotomy in relation to the osteotomy angle and hindfoot alignment. <i>Foot and Ankle Surgery</i> , 2020, 26, 78-84.	1.7	22
119	Techniques for 3D foot bone orientation angles in weight-bearing from cone-beam computed tomography. <i>Foot and Ankle Surgery</i> , 2021, 27, 168-174.	1.7	22
120	Functional Outcome of Meniscal-Bearing Total Ankle Replacement. <i>Journal of the American Podiatric Medical Association</i> , 2008, 98, 19-26.	0.3	21
121	A new protocol from real joint motion data for wear simulation in total knee arthroplasty: Stair climbing. <i>Medical Engineering and Physics</i> , 2014, 36, 1605-1610.	1.7	21
122	One-degree-of-freedom spherical model for the passive motion of the human ankle joint. <i>Medical and Biological Engineering and Computing</i> , 2014, 52, 363-373.	2.8	21
123	Joint kinematics from functional adaptation: A validation on the tibio-talar articulation. <i>Journal of Biomechanics</i> , 2015, 48, 2960-2967.	2.1	21
124	Validation of a novel Kinect-based device for 3D scanning of the foot plantar surface in weight-bearing. <i>Journal of Foot and Ankle Research</i> , 2019, 12, 46.	1.9	21
125	A new software tool for 3D motion analyses of the musculo-skeletal system. <i>Clinical Biomechanics</i> , 2006, 21, 870-879.	1.2	20
126	Comparison of three standard anatomical reference frames for the tibia-fibula complex. <i>Journal of Biomechanics</i> , 2008, 41, 3384-3389.	2.1	20

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127	A one-degree-of-freedom spherical mechanism for human knee joint modelling. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2011, 225, 725-735.	1.8	20
128	Multi-segment foot mobility in a hinged ankle-foot orthosis: the effect of rotation axis position. Gait and Posture, 2014, 40, 274-277.	1.4	20
129	Experimental evaluation of a new morphological approximation of the articular surfaces of the ankle joint. Journal of Biomechanics, 2017, 53, 97-104.	2.1	20
130	Gait Analysis with an Integrated System for Functional Assessment of Talocalcaneal Coalition. Journal of the American Podiatric Medical Association, 2006, 96, 107-115.	0.3	19
131	Can Patellar Tendon Angle reveal sagittal kinematics in total knee arthroplasty?. Knee Surgery, Sports Traumatology, Arthroscopy, 2010, 18, 949-954.	4.2	19
132	Comparing the kinematic output of the Oxford and Rizzoli Foot Models during normal gait and voluntary pathological gait in healthy adults. Gait and Posture, 2020, 82, 126-132.	1.4	19
133	Dynamic 3D scanning as a markerless method to calculate multi-segment foot kinematics during stance phase: Methodology and first application. Journal of Biomechanics, 2014, 47, 2531-2539.	2.1	18
134	Functional and clinical evaluation at 5-year follow-up of a three-component prosthesis and osteochondral allograft transplantation for total ankle replacement. Clinical Biomechanics, 2015, 30, 59-65.	1.2	18
135	A new protocol for wear testing of total knee prostheses from real joint kinematic data: Towards a scenario of realistic simulations of daily living activities. Journal of Biomechanics, 2016, 49, 2925-2931.	2.1	18
136	Quantitative comparison of freeware software for bone mesh from DICOM files. Journal of Biomechanics, 2019, 84, 247-251.	2.1	18
137	Mechanical and in vitro biological properties of uniform and graded Cobalt-Chrome lattice structures in orthopedic implants. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 2091-2103.	3.4	18
138	Does medio-lateral motion occur in the normal knee? An in-vitro study in passive motion. Journal of Biomechanics, 2011, 44, 877-884.	2.1	17
139	Effects of positioning on radiographic measurements of ankle morphology: a computerized tomography-based simulation study. BioMedical Engineering OnLine, 2013, 12, 131.	2.7	17
140	Multiple linear regression approach for the analysis of the relationships between joints mobility and regional pressure-based parameters in the normal-arched foot. Journal of Biomechanics, 2016, 49, 3485-3491.	2.1	17
141	Three-dimensional motion analysis of the human knee joint: comparison between intra- and post-operative measurements. Knee Surgery, Sports Traumatology, Arthroscopy, 2013, 21, 2375-2383.	4.2	16
142	Ligament fibre recruitment at the human ankle joint complex in passive flexion. Journal of Biomechanics, 2004, 37, 1823-1829.	2.1	15
143	Comparison of cartilage and bone morphological models of the ankle joint derived from different medical imaging technologies. Quantitative Imaging in Medicine and Surgery, 2019, 9, 1368-1382.	2.0	15
144	Effect of Trunk Sagittal Attitude on Shoulder, Thorax and Pelvis Three-Dimensional Kinematics in Able-Bodied Subjects during Gait. PLoS ONE, 2013, 8, e77168.	2.5	15

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145	Migration of Cemented Stem and Restrictor After Total Hip Arthroplasty. <i>Journal of Arthroplasty</i> , 2005, 20, 244-249.	3.1	14
146	Load along the femur shaft during activities of daily living. <i>Journal of Biomechanics</i> , 2013, 46, 2002-2010.	2.1	14
147	Three-dimensional implant position and orientation after total knee replacement performed with patient-specific instrumentation systems. <i>Journal of Orthopaedic Research</i> , 2014, 32, 331-337.	2.3	14
148	Human knee laxity in ACL-deficient and physiological contralateral joints: intra-operative measurements using a navigation system. <i>BioMedical Engineering OnLine</i> , 2014, 13, 86.	2.7	14
149	Custom-Made Total Talonavicular Replacement in a Professional Rock Climber. <i>Journal of Foot and Ankle Surgery</i> , 2016, 55, 1271-1275.	1.0	14
150	Functional and Clinical Assessment of Two Ankle Arthrodesis Techniques. <i>Journal of Foot and Ankle Surgery</i> , 2015, 54, 399-405.	1.0	13
151	ISB recommendations for skin-marker-based multi-segment foot kinematics. <i>Journal of Biomechanics</i> , 2021, 125, 110581.	2.1	13
152	Computer-assisted preoperative planning of a novel design of total ankle replacement. <i>Computer Methods and Programs in Biomedicine</i> , 2002, 67, 231-243.	4.7	12
153	Pre-operative planning and gait analysis of total hip replacement following hip fusion. <i>Computer Methods and Programs in Biomedicine</i> , 2003, 70, 215-221.	4.7	12
154	Mathematical model for pre-operative planning of linear and closing-wedge metatarsal osteotomies for the correction of hallux valgus. <i>Medical and Biological Engineering and Computing</i> , 2004, 42, 209-215.	2.8	12
155	Effect of different inertial parameter sets on joint moment calculation during stair ascending and descending. <i>Medical Engineering and Physics</i> , 2005, 27, 537-541.	1.7	12
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