Claudio Belvedere

List of Publications by Year
in descending order

78	1,712	236612	329751
papers	citations	25 h-index	37 g-index

81	81	81	1558
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Pelvic Reconstruction Procedure for Custom-Made Prosthesis Design of Bone Tumor Surgical Treatments. Applied Sciences (Switzerland), 2022, 12, 1654.	1.3	5
2	Superimposition of ground reaction force on tibial-plateau supporting diagnostics and post-operative evaluations in high-tibial osteotomy. A novel methodology. Gait and Posture, 2022, 94, 144-152.	0.6	5
3	Effect of Ligament Mapping from Different Magnetic Resonance Image Quality on Joint Stability in a Personalized Dynamic Model of the Human Ankle Complex. Applied Sciences (Switzerland), 2022, 12, 5087.	1.3	0
4	Comparison of Bone Segmentation Software over Different Anatomical Parts. Applied Sciences (Switzerland), 2022, 12, 6097.	1.3	2
5	Techniques for 3D foot bone orientation angles in weight-bearing from cone-beam computed tomography. Foot and Ankle Surgery, 2021, 27, 168-174.	0.8	22
6	Weight bearing versus conventional CT for the measurement of patellar alignment and stability in patients after surgical treatment for patellar recurrent dislocation. Radiologia Medica, 2021, 126, 869-877.	4.7	10
7	Biomechanical-Based Protocol for in vitro Study of Cartilage Response to Cyclic Loading: A Proof-of-Concept in Knee Osteoarthritis. Frontiers in Bioengineering and Biotechnology, 2021, 9, 634327.	2.0	5
8	Mechanical and in vitro biological properties of uniform and graded Cobaltâ€chrome lattice structures in orthopedic implants. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 2091-2103.	1.6	18
9	Angular and linear measurements of adult flexible flatfoot via weight-bearing CT scans and 3D bone reconstruction tools. Scientific Reports, 2021, 11, 16139.	1.6	26
10	Effect of artificial surface shapes and their malpositioning on the mechanics of the replaced ankle joint for possible better prosthesis designs. Clinical Biomechanics, 2021, 90, 105489.	0.5	3
11	Can Computer-Assisted Total Knee Arthroplasty Support the Prediction of Postoperative Three-Dimensional Kinematics of the Tibiofemoral and Patellofemoral Joints at the Replaced Knee?. Journal of Knee Surgery, 2021, 34, 1014-1025.	0.9	2
12	New anatomical reference systems for the bones of the foot and ankle complex: definitions and exploitation on clinical conditions. Journal of Foot and Ankle Research, 2021, 14, 66.	0.7	8
13	Three-dimensional displacement after a medializing calcaneal osteotomy in relation to the osteotomy angle and hindfoot alignment. Foot and Ankle Surgery, 2020, 26, 78-84.	0.8	22
14	A novel Cervical Spine Protection device for reducing neck injuries in contact sports: design concepts and preliminary in vivo testing. Sports Biomechanics, 2020, 19, 382-394.	0.8	2
15	Estimating the stabilizing function of ankle and subtalar ligaments via a morphology-specific three-dimensional dynamic model. Journal of Biomechanics, 2020, 98, 109421.	0.9	7
16	Radiographic angular measurements of the foot and ankle in weight-bearing: A literature review. Foot and Ankle Surgery, 2020, 26, 509-517.	0.8	33
17	Custom-Made Total Talonavicular Replacement in a Professional Rock Climber: Functional Evaluation With Gait Analysis and 3-Dimensional Medical Imaging in Weightbearing at 5 Yearsâ€™ Follow-Up. Journal of Foot and Ankle Surgery, 2020, 59, 1118-1127.	0.5	4
18	Correlations between weightâ€bearing 3D bone architecture and dynamic plantar pressure measurements in the diabetic foot. Journal of Foot and Ankle Research, 2020, 13, 64.	0.7	9

#	Article	IF	Citations
19	An Anatomical-Based Subject-Specific Model of In-Vivo Knee Joint 3D Kinematics From Medical Imaging. Applied Sciences (Switzerland), 2020, 10, 2100.	1.3	24
20	Cup-To-Neck Contact and Range of Motion after Total Hip Arthroplasty with Large Head Diameters: An Original Three-Dimensional Combined Gait and Videofluoroscopy Analysis. Applied Sciences (Switzerland), 2020, 10, 2695.	1.3	1
21	Does navigated patellar resurfacing in total knee arthroplasty result in proper bone cut, motion and clinical outcomes?. Clinical Biomechanics, 2019, 69, 168-177.	0.5	4
22	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.	1.1	15
23	CoCr porous scaffolds manufactured via selective laser melting in orthopedics: Topographical, mechanical, and biological characterization. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 2343-2353.	1.6	35
24	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. Seminars in Musculoskeletal Radiology, 2019, 23, 643-656.	0.4	27
25	Conventional versus computer-assisted surgery in total knee arthroplasty: comparison at ten years follow-up. International Orthopaedics, 2019, 43, 1355-1363.	0.9	26
26	Quantitative comparison of freeware software for bone mesh from DICOM files. Journal of Biomechanics, 2019, 84, 247-251.	0.9	18
27	New comprehensive procedure for customâ€made total ankle replacements: Medical imaging, joint modeling, prosthesis design, and 3D printing. Journal of Orthopaedic Research, 2019, 37, 760-768.	1.2	29
28	Experimental evaluation of current and novel approximations of articular surfaces of the ankle joint. Journal of Biomechanics, 2018, 75, 159-163.	0.9	8
29	Analysis of surface-to-surface distance mapping during three-dimensional motion at the ankle and subtalar joints. Journal of Biomechanics, 2018, 76, 204-211.	0.9	29
30	Knee laxity modifications after ACL rupture and surgical intra- and extra-articular reconstructions: intra-operative measures in reconstructed and healthy knees. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 2725-2735.	2.3	26
31	Experimental evaluation of a new morphological approximation of the articular surfaces of the ankle joint. Journal of Biomechanics, 2017, 53, 97-104.	0.9	20
32	Kinematic models of lower limb joints for musculo-skeletal modelling and optimization in gait analysis. Journal of Biomechanics, 2017, 62, 77-86.	0.9	52
33	Corrosion Resistance and Mechanical Characterization of Ankle Prostheses Fabricated via Selective Laser Melting. Procedia CIRP, 2017, 65, 25-31.	1.0	11
34	Fluoroscopic and Gait Analyses for the Functional Performance ofÂaÂCustom-Made Total Talonavicular Replacement. Journal of Foot and Ankle Surgery, 2017, 56, 836-844.	0.5	10
35	In vivo kinematics of knee replacement during daily living activities: Condylar and post-cam contact assessment by three-dimensional fluoroscopy and finite element analyses. Journal of Orthopaedic Research, 2017, 35, 1396-1403.	1.2	24
36	Three-dimensional patellar tendon fibre kinematics in navigated TKA with and without patellar resurfacing. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 3834-3843.	2.3	3

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37	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.	0.9	18
38	Fabrication of Coâ€“Crâ€“Mo endoprosthetic ankle devices by means of Selective Laser Melting (SLM). Materials and Design, 2016, 106, 60-68.	3.3	90
39	Custom-Made Total Talonavicular Replacement in a Professional Rock Climber. Journal of Foot and Ankle Surgery, 2016, 55, 1271-1275.	0.5	14
40	Knee Prosthesis Navigation. , 2016, , 129-149.		0
41	Better joint motion and muscle activity are achieved using kinematic alignment than neutral mechanical alignment in total knee replacement. Gait and Posture, 2015, 42, S19-S20.	0.6	8
42	VARIATION OF THE ANKLE MOTION WITH THE PIVOT-POINT POSITION AS PREDICTED BY A SPHERICAL MODEL OF THE JOINT. Journal of Mechanics in Medicine and Biology, 2015, 15, 1540039.	0.3	1
43	Effects of frontal and sagittal thorax attitudes in gait on trunk and pelvis three-dimensional kinematics. Medical Engineering and Physics, 2015, 37, 1032-1036.	0.8	7
44	Wear simulation of total knee prostheses using load and kinematics waveforms from stair climbing. Journal of Biomechanics, 2015, 48, 3830-3836.	0.9	34
45	Tibial component alignment and risk of loosening in unicompartmental knee arthroplasty: a radiographic and radiostereometric study. Knee Surgery, Sports Traumatology, Arthroscopy, 2014, 22, 3157-3162.	2.3	69
46	A new protocol from real joint motion data for wear simulation in total knee arthroplasty: Stair climbing. Medical Engineering and Physics, 2014, 36, 1605-1610.	0.8	21
47	Threeâ€dimensional implant position and orientation after total knee replacement performed with patientâ€specific instrumentation systems. Journal of Orthopaedic Research, 2014, 32, 331-337.	1.2	14
48	Tibio-femoral and patello-femoral joint kinematics during navigated total knee arthroplasty with patellar resurfacing. Knee Surgery, Sports Traumatology, Arthroscopy, 2014, 22, 1719-1727.	2.3	26
49	Intra- and post-operative accuracy assessments of two different patient-specific instrumentation systems for total knee replacement. Knee Surgery, Sports Traumatology, Arthroscopy, 2014, 22, 621-629.	2.3	48
50	Human knee laxity in ACL-deficient and physiological contralateral joints: intra-operative measurements using a navigation system. BioMedical Engineering OnLine, 2014, 13, 86.	1.3	14
51	One-degree-of-freedom spherical model for the passive motion of the human ankle joint. Medical and Biological Engineering and Computing, 2014, 52, 363-373.	1.6	21
52	Load along the tibial shaft during activities of daily living. Journal of Biomechanics, 2014, 47, 1198-1205.	0.9	11
53	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.	2.3	16
54	Functional performance of a total ankle replacement: thorough assessment by combining gait and fluoroscopic analyses. Clinical Biomechanics, 2013, 28, 79-87.	0.5	27

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55	Load along the femur shaft during activities of daily living. Journal of Biomechanics, 2013, 46, 2002-2010.	0.9	14
56	Patellar Tracking in Computer-Assisted Surgery. , 2013, , 187-201.		1
57	Accuracy of Computer-Assisted Surgery. , 2013, , 3-20.		1
58	TKA: Measured Resection Technique. , 2013, , 27-42.		0
59	Kinematics of the Three Components of a Total Ankle Replacement: In Vivo Fluoroscopic Analysis. Foot and Ankle International, 2012, 33, 290-300.	1.1	25
60	Geometrical changes of knee ligaments and patellar tendon during passive flexion. Journal of Biomechanics, 2012, 45, 1886-1892.	0.9	38
61	Fluoroscopic and gait analyses for the assessment of the functional performance of an original total ankle replacement. Journal of Foot and Ankle Research, 2012, 5, .	0.7	0
62	Validation of a one degreeâ€ofâ€freedom spherical model for kinematics analysis of the human ankle joint. Journal of Foot and Ankle Research, 2012, 5, .	0.7	3
63	Joint line is well restored when navigation surgery is performed for total knee arthroplasty. Knee Surgery, Sports Traumatology, Arthroscopy, 2012, 20, 495-502.	2.3	23
64	Position of the prosthesis components in total ankle replacement and the effect on motion at the replaced joint. International Orthopaedics, 2012, 36, 571-578.	0.9	30
65	A new protocol for multi-segment trunk kinematics. , 2011, , .		5
66	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.	1.0	20
67	Multi-segment trunk kinematics during locomotion and elementary exercises. Clinical Biomechanics, 2011, 26, 562-571.	0.5	155
68	Inâ€Vivo knee kinematics in rotationally unconstrained total knee arthroplasty. Journal of Orthopaedic Research, 2011, 29, 1484-1490.	1.2	25
69	Does medio-lateral motion occur in the normal knee? An in-vitro study in passive motion. Journal of Biomechanics, 2011, 44, 877-884.	0.9	17
70	The Mark Coventry Award Articular: Contact Estimation in TKA Using In Vivo Kinematics and Finite Element Analysis. Clinical Orthopaedics and Related Research, 2010, 468, 19-28.	0.7	46
71	Articular surface approximation in equivalent spatial parallel mechanism models of the human knee joint: An experiment-based assessment. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2010, 224, 1121-1132.	1.0	41
72	Threeâ€dimensional patellar motion at the natural knee during passive flexion/extension. An in vitro study. Journal of Orthopaedic Research, 2009, 27, 1426-1431.	1.2	25

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73	In vivo kinematics and kinetics of a biâ€cruciate substituting total knee arthroplasty: A combined fluoroscopic and gait analysis study. Journal of Orthopaedic Research, 2009, 27, 1569-1575.	1.2	63
74	A new one-DOF fully parallel mechanism for modelling passive motion at the human tibiotalar joint. Journal of Biomechanics, 2009, 42, 1403-1408.	0.9	34
75	Quantitative comparison of current models for trunk motion in human movement analysis. Clinical Biomechanics, 2009, 24, 542-550.	0.5	66
76	Alignment of resection planes in total knee replacement obtained with the conventional technique, as assessed by a modern computerâ€based navigation system. International Journal of Medical Robotics and Computer Assisted Surgery, 2007, 3, 117-124.	1.2	27
77	Patellar tracking during total knee arthroplasty: an in vitro feasibility study. Knee Surgery, Sports Traumatology, Arthroscopy, 2007, 15, 985-993.	2.3	49
78	A new software tool for 3D motion analyses of the musculo-skeletal system. Clinical Biomechanics, 2006, 21, 870-879.	0.5	20