nico Verdonschot

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	The importance of continuous remnant preservation in anterior cruciate ligament reconstruction. Knee Surgery, Sports Traumatology, Arthroscopy, 2022, 30, 1818-1827.	4.2	5
2	Computational tibial bone remodeling over a population after total knee arthroplasty: A comparative study. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 776-786.	3.4	5
3	Experimental measurements of femoral primary stability in two cementless posterior-stabilized knee replacement implants. Medical Engineering and Physics, 2022, 99, 103734.	1.7	3
4	A FE study on the effect of interference fit and coefficient of friction on the micromotions and interface gaps of a cementless PEEK femoral component. Journal of Biomechanics, 2022, 137, 111057.	2.1	8
5	The sensitivity of an anatomical coordinate system to anatomical variation and its effect on the description of knee kinematics as obtained from dynamic CT imaging Medical Engineering and Physics, 2022, 102, 103781.	1.7	1
6	The Functionality Verification through Pilot Human Subject Testing of MyFlex-δ: An ESR Foot Prosthesis with Spherical Ankle Joint. Applied Sciences (Switzerland), 2022, 12, 4575.	2.5	0
7	Acute Anterior Cruciate Ligament Rupture: Repair or Reconstruction? Five-Year Results of a Randomized Controlled Clinical Trial. American Journal of Sports Medicine, 2022, 50, 1779-1787.	4.2	18
8	A three-dimensional finite-element model of gluteus medius muscle incorporating inverse-dynamics-based optimization for simulation of non-uniform muscle contraction. Medical Engineering and Physics, 2021, 87, 38-44.	1.7	7
9	The effect of different interference fits on the primary fixation of a cementless femoral component during experimental testing. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 113, 104189.	3.1	8
10	Decreased stress shielding with a PEEK femoral total knee prosthesis measured in validated computational models. Journal of Biomechanics, 2021, 118, 110270.	2.1	25
11	Biomechanical Consequences of Tibial Insert Thickness after Total Knee Arthroplasty: A Musculoskeletal Simulation Study. Applied Sciences (Switzerland), 2021, 11, 2423.	2.5	7
12	Age at surgery is correlated with pain scores following trochlear osteotomy in lateral patellar instability: a cross-sectional study of 113 cases. Journal of Orthopaedic Surgery and Research, 2021, 16, 337.	2.3	3
13	No effect in primary stability after increasing interference fit in cementless TKA tibial components. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 118, 104435.	3.1	3
14	Evaluation of inter- and intra-operator reliability of manual segmentation of femoral metastatic lesions. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 1841-1849.	2.8	4
15	The Added Value of Musculoskeletal Simulation for the Study of Physical Performance in Military Tasks. Sensors, 2021, 21, 5588.	3.8	0
16	Development of a crushable foam model for human trabecular bone. Medical Engineering and Physics, 2021, 96, 53-63.	1.7	8
17	Patient-specific finite element computer models improve fracture risk assessments in cancer patients with femoral bone metastases compared to clinical guidelines. Bone, 2020, 130, 115101.	2.9	35
18	MRI as Diagnostic Modality for Analyzing the Problematic Knee Arthroplasty: A Systematic Review. Journal of Magnetic Resonance Imaging, 2020, 51, 446-458.	3.4	14

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19	Axial cortical involvement of metastatic lesions to identify impending femoral fractures; a clinical validation study. Radiotherapy and Oncology, 2020, 144, 59-64.	0.6	9
20	Population-based effect of total knee arthroplasty alignment on simulated tibial bone remodeling. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 104014.	3.1	5
21	Measurement of midshaft clavicle vertical displacement is not influenced by radiographic projection. JSES International, 2020, 4, 251-255.	1.6	1
22	The Effects of Cyclic Loading and Motion on the Implant–Cement Interface and Cement Mantle of PEEK and Cobalt–Chromium Femoral Total Knee Arthroplasty Implants: A Preliminary Study. Materials, 2020, 13, 3323.	2.9	13
23	Functional outcomes, union rate, and complications of the Anser Clavicle Pin at 1 year: a novel intramedullary device in managing midshaft clavicle fractures. JSES International, 2020, 4, 272-279.	1.6	2
24	Biomechanical loading of the porcine femorotibial joint during maximal movements: An exploratory, ex vivo study. Veterinary Journal, 2020, 261, 105480.	1.7	0
25	Functional outcomes and complications of intramedullary fixation devices for Midshaft clavicle fractures: a systematic review and meta-analysis. BMC Musculoskeletal Disorders, 2020, 21, 395.	1.9	7
26	A robust and semi-automatic quantitative measurement of patellofemoral instability based on four dimensional computed tomography. Medical Engineering and Physics, 2020, 78, 29-38.	1.7	9
27	A novel approach for optimal graft positioning and tensioning in anterior cruciate ligament reconstructive surgery based on the finite element modeling technique. Knee, 2020, 27, 384-396.	1.6	17
28	The implications of non-anatomical positioning of a meniscus prosthesis on predicted human knee joint biomechanics. Medical and Biological Engineering and Computing, 2020, 58, 1341-1355.	2.8	4
29	The diagnostic potential of low-field MRI in problematic total knee arthroplasties - a feasibility study. Journal of Experimental Orthopaedics, 2020, 7, 59.	1.8	5
30	Towards a Standard Approach to Assess Tibial Bone Loss Following Total Knee Arthroplasty. Clinical Reviews in Bone and Mineral Metabolism, 2020, 18, 72-86.	0.8	2
31	Generic implant classification enables comparison across implant designs: the Dutch Arthroplasty Register implant library. EFORT Open Reviews, 2019, 4, 344-350.	4.1	6
32	Forces acting on the clavicle during shoulder abduction, forward humeral flexion and activities of daily living. Clinical Biomechanics, 2019, 69, 79-86.	1.2	7
33	Sensitivity of muscle and intervertebral disc force computations to variations in muscle attachment sites. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 1135-1143.	1.6	7
34	Calibration with or without phantom for fracture risk prediction in cancer patients with femoral bone metastases using CT-based finite element models. PLoS ONE, 2019, 14, e0220564.	2.5	40
35	Automated segmentation of trabecular and cortical bone from proton density weighted MRI of the knee. Medical and Biological Engineering and Computing, 2019, 57, 1015-1027.	2.8	10
36	The effects of manufacturing tolerances and assembly force on the volumetric wear at the taper junction in modular total hip arthroplasty. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 1061-1072.	1.6	20

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37	Reproducibility and discriminant validity of two clinically feasible measurement methods to obtain coronal plane gait kinematics in participants with a lower extremity amputation. PLoS ONE, 2019, 14, e0217046.	2.5	1
38	Twente Spine Model: A thorough investigation of the spinal loads in a complete and coherent musculoskeletal model of the human spine. Medical Engineering and Physics, 2019, 68, 35-45.	1.7	33
39	Symmetry and spatial distribution of muscle glucose uptake in the lower limbs during walking measured using FDG-PET. PLoS ONE, 2019, 14, e0215276.	2.5	2
40	A noninvasive MRI based approach to estimate the mechanical properties of human knee ligaments. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 93, 43-51.	3.1	8
41	Magnetic-resonance-imaging-based three-dimensional muscle reconstruction of hip abductor muscle volume in a person with a transfemoral bone-anchored prosthesis: A feasibility study. Physiotherapy Theory and Practice, 2019, 35, 495-504.	1.3	11
42	Accelerated 4 <scp>D</scp> phase contrast <scp>MRI</scp> in skeletal muscle contraction. Magnetic Resonance in Medicine, 2018, 80, 1799-1811.	3.0	20
43	Inducing targeted failure in cadaveric testing of 3-segment spinal units with and without simulated metastases. Medical Engineering and Physics, 2018, 51, 104-110.	1.7	4
44	The peripheral soft tissues should not be ignored in the finite element models of the human knee joint. Medical and Biological Engineering and Computing, 2018, 56, 1189-1199.	2.8	9
45	Trochleoplasty procedures show complication rates similar to other patellar-stabilizing procedures. Knee Surgery, Sports Traumatology, Arthroscopy, 2018, 26, 2841-2857.	4.2	40
46	Strain imaging of the lateral collateral ligament using high frequency and conventional ultrasound imaging: An ex-vivo comparison. Journal of Biomechanics, 2018, 73, 233-237.	2.1	8
47	Flexing and downsizing the femoral component is not detrimental to patellofemoral biomechanics in posterior-referencing cruciate-retaining total knee arthroplasty. Knee Surgery, Sports Traumatology, Arthroscopy, 2018, 26, 3377-3385.	4.2	20
48	In situ comparison of A-mode ultrasound tracking system and skin-mounted markers for measuring kinematics of the lower extremity. Journal of Biomechanics, 2018, 72, 134-143.	2.1	3
49	Anterior referencing of tibial slope in total knee arthroplasty considerably influences knee kinematics: a musculoskeletal simulation study. Knee Surgery, Sports Traumatology, Arthroscopy, 2018, 26, 1540-1548.	4.2	21
50	Finite element wear prediction using adaptive meshing at the modular taper interface of hip implants. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 616-623.	3.1	22
51	Lessons learnt from early failure of a patient trial with a polymer-on-polymer resurfacing hip arthroplasty. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 89, 59-65.	3.3	2
52	Biomechanical comparison of two different locking plates for open wedge high tibial osteotomy. Journal of Orthopaedic Science, 2018, 23, 105-111.	1.1	11
53	Specific muscle strength is reduced in facioscapulohumeral dystrophy: An MRI based musculoskeletal analysis. Neuromuscular Disorders, 2018, 28, 238-245.	0.6	11
54	Evaluation of interference fit and bone damage of an uncemented femoral knee implant. Clinical Biomechanics, 2018, 51, 1-9.	1.2	13

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55	Feasibility of A-mode ultrasound based intraoperative registration in computer-aided orthopedic surgery: A simulation and experimental study. PLoS ONE, 2018, 13, e0199136.	2.5	9
56	A Novel Ultrasound-Based Lower Extremity Motion Tracking System. Advances in Experimental Medicine and Biology, 2018, 1093, 131-142.	1.6	2
57	Computer-aided detection of fasciculations and other movements in muscle with ultrasound: Development and clinical application. Clinical Neurophysiology, 2018, 129, 2567-2576.	1.5	9
58	Can patient-specific finite element models better predict fractures in metastatic bone disease than experienced clinicians?. Bone and Joint Research, 2018, 7, 430-439.	3.6	44
59	Effect of different CT scanners and settings on femoral failure loads calculated by finite element models. Journal of Orthopaedic Research, 2018, 36, 2288-2295.	2.3	16
60	Measuring relative positions and orientations of the tibia with respect to the femur using one-channel 3D-tracked A-mode ultrasound tracking system: A cadaveric study. Medical Engineering and Physics, 2018, 57, 61-68.	1.7	2
61	Caseâ€specific nonâ€linear finite element models to predict failure behavior in two functional spinal units. Journal of Orthopaedic Research, 2018, 36, 3208-3218.	2.3	19
62	Low-field magnetic resonance imaging offers potential for measuring tibial component migration. Journal of Experimental Orthopaedics, 2018, 5, 4.	1.8	8
63	Gait symmetry and hip strength in women with developmental dysplasia following hip arthroplasty compared to healthy subjects: A cross-sectional study. PLoS ONE, 2018, 13, e0193487.	2.5	16
64	Radiographic positions of femoral ACL, AM and PL centres: accuracy of guidelines based on the lateral quadrant method. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 2321-2329.	4.2	16
65	Twente spine model: A complete and coherent dataset for musculo-skeletal modeling of the lumbar region of the human spine. Journal of Biomechanics, 2017, 53, 111-119.	2.1	12
66	Relaxation of the MCL after an Open-Wedge High Tibial Osteotomy results in decreasing contact pressures of the knee over time. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 800-807.	4.2	17
67	A preclinical numerical assessment of a polyetheretherketone femoral component in total knee arthroplasty during gait. Journal of Experimental Orthopaedics, 2017, 4, 3.	1.8	38
68	Twente spine model: A complete and coherent dataset for musculo-skeletal modeling of the thoracic and cervical regions of the human spine. Journal of Biomechanics, 2017, 58, 52-63.	2.1	19
69	Evaluation of a Surrogate Contact Model in Force-Dependent Kinematic Simulations of Total Knee Replacement. Journal of Biomechanical Engineering, 2017, 139, .	1.3	12
70	A combined experimental and finite element approach to analyse the fretting mechanism of the head–stem taper junction in total hip replacement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 862-870.	1.8	17
71	Restriction of Cervical Intervertebral Movement With Different Types of External Immobilizers. Spine, 2017, 42, E1182-E1189.	2.0	10
72	A modelling approach demonstrating micromechanical changes in the tibial cemented interface due to in vivo service. Journal of Biomechanics, 2017, 56, 19-25.	2.1	3

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73	Tuning Cell and Tissue Development by Combining Multiple Mechanical Signals. Tissue Engineering - Part B: Reviews, 2017, 23, 494-504.	4.8	17
74	Estimating severity of sideways fall using a generic multi linear regression model based on kinematic input variables. Journal of Biomechanics, 2017, 54, 19-25.	2.1	5
75	Acetabular Reconstructions with Impaction Bone-Grafting and a Cemented Cup in Patients Younger Than 50 Years of Age. Journal of Bone and Joint Surgery - Series A, 2017, 99, 1640-1646.	3.0	15
76	Specific strength is reduced in facioscapulohumeral dystrophy muscles. An MRI-based musculoskeletal analysis. Neuromuscular Disorders, 2017, 27, S200.	0.6	0
77	Improving stress shielding following total hip arthroplasty by using a femoral stem made of β type Ti-33.6Nb-4Sn with a Young's modulus gradation. Journal of Biomechanics, 2017, 63, 135-143.	2.1	46
78	Accelerated 4D selfâ€gated MRI of tibiofemoral kinematics. NMR in Biomedicine, 2017, 30, e3791.	2.8	13
79	The influence of ligament modelling strategies on the predictive capability of finite element models of the human knee joint. Journal of Biomechanics, 2017, 65, 1-11.	2.1	64
80	In Vivo Performance of a Novel, Anatomically Shaped, Total Meniscal Prosthesis Made of Polycarbonate Urethane: A 12-Month Evaluation in Goats. American Journal of Sports Medicine, 2017, 45, 2824-2834.	4.2	16
81	Fixation strength of a polyetheretherketone femoral component in total knee arthroplasty. Medical Engineering and Physics, 2017, 49, 157-162.	1.7	10
82	Experimental and computational analysis of micromotions of an uncemented femoral knee implant using elastic and plastic bone material models. Journal of Biomechanics, 2017, 61, 137-143.	2.1	16
83	Experimental pre-clinical assessment of the primary stability of two cementless femoral knee components. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 75, 322-329.	3.1	12
84	Ultrasound Imaging of Muscle Contraction of the Tibialis Anterior in Patients with Facioscapulohumeral Dystrophy. Ultrasound in Medicine and Biology, 2017, 43, 2537-2545.	1.5	15
85	A New Craniothoracic Mattress for Immobilization of the Cervical Spine in Critical Care Patients. Journal of Trauma Nursing: the Official Journal of the Society of Trauma Nurses, 2017, 24, 261-269.	0.5	2
86	The mechanical response of a polyetheretherketone femoral knee implant under a deep squatting loading condition. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 1204-1212.	1.8	30
87	Limited short-term effect of palliative radiation therapy on quantitative computed tomography-derived bone mineral density in femora with metastases. Advances in Radiation Oncology, 2017, 2, 53-61.	1.2	13
88	Subject-specific musculoskeletal loading of the tibia: Computational load estimation. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 334-343.	3.1	19
89	Periprosthetic cortical bone remodeling in patients with an osseointegrated leg prosthesis. Journal of Orthopaedic Research, 2017, 35, 1237-1241.	2.3	24
90	Water and fat separation in realâ€time MRI of joint movement with phaseâ€sensitive bSSFP. Magnetic Resonance in Medicine, 2017, 78, 58-68.	3.0	5

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91	Strain shielding in trabecular bone at the tibial cement-bone interface. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 66, 181-186.	3.1	16
92	Tibial component with and without stem extension in a trabecular metal cone construct. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 3644-3652.	4.2	17
93	Kneeling and standing up from a chair as performance-based tests to evaluate knee function in the high-flexion range: a randomized controlled trial comparing a conventional and a high-flexion TKA design. BMC Musculoskeletal Disorders, 2017, 18, 324.	1.9	6
94	Influence of Additive Manufactured Scaffold Architecture on the Distribution of Surface Strains and Fluid Flow Shear Stresses and Expected Osteochondral Cell Differentiation. Frontiers in Bioengineering and Biotechnology, 2017, 5, 6.	4.1	45
95	FE analysis of the effects of simplifications in experimental testing on micromotions of uncemented femoral knee implants. Journal of Orthopaedic Research, 2016, 34, 812-819.	2.3	17
96	Short-term clinical results of revision elbow arthroplasty using the Latitude total elbow arthroplasty. Bone and Joint Journal, 2016, 98-B, 1086-1092.	4.4	19
97	Experimental Measurement of the Static Coefficient of Friction at the Ti–Ti Taper Connection in Total Hip Arthroplasty. Journal of Biomechanical Engineering, 2016, 138, 4032446.	1.3	8
98	The effect of radiotherapy, and radiotherapy combined with bisphosphonates or RANK ligand inhibitors on bone quality in bone metastases. A systematic review. Radiotherapy and Oncology, 2016, 119, 194-201.	0.6	19
99	Experimental and computational micromechanics at the tibial cement-trabeculae interface. Journal of Biomechanics, 2016, 49, 1641-1648.	2.1	12
100	Sensitivity of subject-specific models to Hill muscle–tendon model parameters in simulations of gait. Journal of Biomechanics, 2016, 49, 1953-1960.	2.1	47
101	Design of an elasticized collagen scaffold: A method to induce elasticity in a rigid protein. Acta Biomaterialia, 2016, 44, 277-285.	8.3	10
102	Musculoskeletal modeling of human lower limb during normal walking, one-legged forward hopping and side jumping: Comparison of measured EMG and predicted muscle activity patterns. Journal of Biomechanics, 2016, 49, 3660-3666.	2.1	15
103	PO-0778: Limited short-term effect of radiotherapy on bone density in metastatic femoral bone. Radiotherapy and Oncology, 2016, 119, S365-S366.	0.6	0
104	Assessment of passive muscle elongation using Diffusion Tensor MRI: Correlation between fiber length and diffusion coefficients. NMR in Biomedicine, 2016, 29, 1813-1824.	2.8	14
105	Curved Beam Computed Tomography based Structural Rigidity Analysis of Bones with Simulated Lytic Defect: A Comparative Study with Finite Element Analysis. Scientific Reports, 2016, 6, 32397.	3.3	15
106	Endothelial cell alignment as a result of anisotropic strain and flow induced shear stress combinations. Scientific Reports, 2016, 6, 29510.	3.3	76
107	A novel diffusionâ€ŧensor <scp>MRI</scp> approach for skeletal muscle fascicle length measurements. Physiological Reports, 2016, 4, e13012	1.7	29
108	A comparison between dynamic implicit and explicit finite element simulations of the native knee joint. Medical Engineering and Physics, 2016, 38, 1123-1130.	1.7	28

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109	The ability of external immobilizers to restrict movement of the cervical spine: a systematic review. European Spine Journal, 2016, 25, 2023-2036.	2.2	17
110	Functional biomechanical performance of a novel anatomically shaped polycarbonate urethane total meniscus replacement. Knee Surgery, Sports Traumatology, Arthroscopy, 2016, 24, 1485-1494.	4.2	19
111	In-situ mechanical behavior and slackness of the anterior cruciate ligament at multiple knee flexion angles. Medical Engineering and Physics, 2016, 38, 209-215.	1.7	19
112	Acetabular revision with impaction bone grafting and a cemented polyethylene acetabular component. Bone and Joint Journal, 2015, 97-B, 1338-1344.	4.4	21
113	Mid-term clinical results of a modern convertible total elbow arthroplasty. Bone and Joint Journal, 2015, 97-B, 681-688.	4.4	33
114	Muscle Activity during Walking Measured Using 3D MRI Segmentations and [18F]-Fluorodeoxyglucose in Combination with Positron Emission Tomography. Medicine and Science in Sports and Exercise, 2015, 47, 1896-1905.	0.4	13
115	Short Term Evaluation of an Anatomically Shaped Polycarbonate Urethane Total Meniscus Replacement in a Goat Model. PLoS ONE, 2015, 10, e0133138.	2.5	30
116	A Subject-Specific Musculoskeletal Modeling Framework to Predict In Vivo Mechanics of Total Knee Arthroplasty. Journal of Biomechanical Engineering, 2015, 137, 020904.	1.3	209
117	Towards clinical application of biomechanical tools for the prediction of fracture risk in metastatic bone disease. Journal of Biomechanics, 2015, 48, 761-766.	2.1	17
118	TLEM 2.0 – A comprehensive musculoskeletal geometry dataset for subject-specific modeling of lower extremity. Journal of Biomechanics, 2015, 48, 734-741.	2.1	136
119	A novel framework for the temporal analysis of bone mineral density in metastatic lesions using CT images of the femur. , 2015, , .		Ο
120	The Effect of Surface Morphology on the Primary Fixation Strength of Uncemented Femoral Knee Prosthesis: A Cadaveric Study. Journal of Arthroplasty, 2015, 30, 300-307.	3.1	14
121	Muscle optimization techniques impact the magnitude of calculated hip joint contact forces. Journal of Orthopaedic Research, 2015, 33, 430-438.	2.3	44
122	A medium throughput device to study the effects of combinations of surface strains and fluid-flow shear stresses on cells. Lab on A Chip, 2015, 15, 429-439.	6.0	32
123	Incorporating in vivo fall assessments in the simulation of femoral fractures with finite element models. Medical Engineering and Physics, 2015, 37, 593-598.	1.7	4
124	Material properties of the human posterior knee capsule. Bio-Medical Materials and Engineering, 2015, 25, 177-187.	0.6	3
125	Gait and lower limb muscle strength in women after triple innominate osteotomy. BMC Musculoskeletal Disorders, 2015, 16, 68.	1.9	11
126	The sensitivity of cartilage contact pressures in the knee joint to the size and shape of an anatomically shaped meniscal implant. Journal of Biomechanics, 2015, 48, 1427-1435.	2.1	24

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127	Patellofemoral Pressure Changes After Static and Dynamic Medial Patellofemoral Ligament Reconstructions. American Journal of Sports Medicine, 2015, 43, 2538-2544.	4.2	35
128	Three-dimensional ultrasound strain imaging of skeletal muscles. , 2015, , .		0
129	An experimental study to investigate biomechanical aspects of the initial stability of press-fit implants. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 42, 177-185.	3.1	25
130	Porous titanium particles for acetabular reconstruction in total hip replacement show extensive bony armoring after 15 weeks. Monthly Notices of the Royal Astronomical Society: Letters, 2014, 85, 600-608.	3.3	4
131	Can Orthopedic Oncologists Predict Functional Outcome in Patients with Sarcoma after Limb Salvage Surgery in the Lower Limb? A Nationwide Study. Sarcoma, 2014, 2014, 1-11.	1.3	10
132	Modeling mechanical signals on the surface of µCT and CAD based rapid prototype scaffold models to predict (early stage) tissue development. Biotechnology and Bioengineering, 2014, 111, 1864-1875.	3.3	18
133	Cartilage adhesive and mechanical properties of enzymatically crosslinked polysaccharide tyramine conjugate hydrogels. Polymers for Advanced Technologies, 2014, 25, 568-574.	3.2	24
134	Effect of medial–lateral malpositioning of the femoral component in total knee arthroplasty on anterior knee pain at greater than 8years of follow-up. Knee, 2014, 21, 1258-1262.	1.6	15
135	Releasing the circumferential fixation of the medial meniscus does not affect its kinematics. Knee, 2014, 21, 1033-1038.	1.6	8
136	Recent improvements in SPE3D: a VR-based surgery planning environment. , 2014, , .		0
137	Probability of mechanical loosening of the femoral component in high flexion total knee arthroplasty can be reduced by rather simple surgical techniques. Knee, 2014, 21, 209-215.	1.6	19
138	Femoral loosening of high-flexion total knee arthroplasty: The effect of posterior cruciate ligament retention and bone quality reduction. Medical Engineering and Physics, 2014, 36, 318-324.	1.7	12
139	Finite element analysis and CT-based structural rigidity analysis to assess failure load in bones with simulated lytic defects. Bone, 2014, 58, 160-167.	2.9	51
140	An extensive posterior approach of the elbow with osteotomy of the medial epicondyle. Journal of Shoulder and Elbow Surgery, 2014, 23, 313-317.	2.6	7
141	Prediction of ground reaction forces and moments during various activities of daily living. Journal of Biomechanics, 2014, 47, 2321-2329.	2.1	152
142	Preoperative Ambulatory Measurement of Asymmetric Leg Loading During Sit-to-Stand in Hip Arthroplasty Patients. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 585-592.	4.9	9
143	3D geometry analysis of the medial meniscus – a statistical shape modeling approach. Journal of Anatomy, 2014, 225, 395-402.	1.5	21
144	ACETABULAR LOAD-TRANSFER AND MECHANICAL STABILITY: A FINITE ELEMENT ANALYSIS COMPARING DIFFERENT CEMENTLESS SOCKETS. Journal of Mechanics in Medicine and Biology, 2014, 14, 1450063.	0.7	1

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145	Assessment of asymmetric leg loading before and after total hip arthroplasty using instrumented shoes. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 20.	4.6	12
146	Prophylactic vertebroplasty can decrease the fracture risk of adjacent vertebrae: An in vitro cadaveric study. Medical Engineering and Physics, 2014, 36, 944-948.	1.7	23
147	Improving peri-prosthetic bone adaptation around cementless hip stems: A clinical and finite element study. Medical Engineering and Physics, 2014, 36, 345-353.	1.7	26
148	Evaluation of a morphing based method to estimate muscle attachment sites of the lower extremity. Journal of Biomechanics, 2014, 47, 1144-1150.	2.1	45
149	Generating finite element models of the knee: How accurately can we determine ligament attachment sites from MRI scans?. Medical Engineering and Physics, 2014, 36, 701-707.	1.7	18
150	Gait and gait-related activities of daily living after total hip arthroplasty: A systematic review. Clinical Biomechanics, 2014, 29, 705-718.	1.2	83
151	Stable fixation of the IBP humeral component implanted without cement in total elbow replacement. Bone and Joint Journal, 2014, 96-B, 229-236.	4.4	5
152	Accuracy of a computer-assisted planning and placement system for anatomical femoral tunnel positioning in anterior cruciate ligament reconstruction. International Journal of Medical Robotics and Computer Assisted Surgery, 2014, 10, 438-446.	2.3	17
153	Pre-operative ambulatory measurement of asymmetric lower limb loading during walking in total hip arthroplasty patients. Journal of NeuroEngineering and Rehabilitation, 2013, 10, 41.	4.6	7
154	Bone ingrowth potential of electron beam and selective laser melting produced trabecular-like implant surfaces with and without a biomimetic coating. Journal of Materials Science: Materials in Medicine, 2013, 24, 745-753.	3.6	70
155	Stability of the unlinked Latitude total elbow prosthesis: A biomechanical in vitro analysis. Clinical Biomechanics, 2013, 28, 502-508.	1.2	10
156	A validation study on muscle activity prediction of a lower limb musculoskeletal model using EMG during normal walking. , 2013, , .		4
157	Linking of total elbow prosthesis during surgery; a biomechanical analysis. Journal of Shoulder and Elbow Surgery, 2013, 22, 1236-1241.	2.6	13
158	Toward a method to simulate the process of bone ingrowth in cementless THA using finite element method. Medical Engineering and Physics, 2013, 35, 543-548.	1.7	8
159	Effect of polyurethane scaffold architecture on ingrowth speed and collagen orientation in a subcutaneous rat pocket model. Biomedical Materials (Bristol), 2013, 8, 025004.	3.3	15
160	Experimental assessment of a new direct fixation implant for artificial limbs. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 21, 77-85.	3.1	10
161	Science versus design; comparable, contrastive or conducive?. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 21, 195-201.	3.1	6
162	Periacetabular Bone Mineral Density Changes After Resurfacing Hip Arthroplasty Versus Conventional Total Hip Arthroplasty. A Randomized Controlled DEXA Study. Journal of Arthroplasty, 2013, 28, 1177-1184.	3.1	12

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163	Biomechanical evaluation of three different fixation methods of the Chevron osteotomy of the olecranon: An analysis with Roentgen Stereophotogrammatic Analysis. Clinical Biomechanics, 2013, 28, 752-756.	1.2	19
164	Influence of preparation techniques to the strength of the bone–cement interface behind the flange in total knee arthroplasty. Knee, 2013, 20, 186-190.	1.6	14
165	Characterization of polyurethane scaffold surface functionalization with diamines and heparin. Journal of Biomedical Materials Research - Part A, 2013, 101A, 919-922.	4.0	9
166	Does Bone Cement In Percutaneous Vertebroplasty Act as a Stress Riser?. Spine, 2013, 38, 2092-2097.	2.0	19
167	Lower body kinematics evaluation based on a multidirectional four-dimensional structured light measurement. Journal of Biomedical Optics, 2013, 18, 056014.	2.6	18
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