Philip E Riches

List of Publications by Year
in descending order

39 papers	1,687 citations	430442 18 h-index	329751 37 g-index
39 all docs	39 docs citations	39 times ranked	2543 citing authors

#	Article	IF	Citations
1	3D bioactive composite scaffolds for bone tissue engineering. Bioactive Materials, 2018, 3, 278-314.	8.6	866
2	High Degree of Accuracy of a Novel Image-free Handheld Robot for Unicondylar Knee Arthroplasty in a Cadaveric Study. Clinical Orthopaedics and Related Research, 2015, 473, 206-212.	0.7	96
3	The internal mechanics of the intervertebral disc under cyclic loading. Journal of Biomechanics, 2002, 35, 1263-1271.	0.9	87
4	Temperature dependence of soleus H-reflex and M wave in young and older women. European Journal of Applied Physiology, 2005, 94, 491-499.	1.2	66
5	3D bioprinting of mature bacterial biofilms for antimicrobial resistance drug testing. Biofabrication, 2019, 11, 045018.	3.7	56
6	Computer assisted orthopaedic surgery: Past, present and future. Medical Engineering and Physics, 2019, 72, 55-65.	0.8	53
7	Thermal Damage Done to Bone by Burring and Sawing With and Without Irrigation in Knee Arthroplasty. Journal of Arthroplasty, 2016, 31, 1102-1108.	1.5	50
8	Research Synthesis of Recommended Acetabular Cup Orientations for Total Hip Arthroplasty. Journal of Arthroplasty, 2014, 29, 377-382.	1.5	45
9	Accuracy of a freehand sculpting tool for unicondylar knee replacement. International Journal of Medical Robotics and Computer Assisted Surgery, 2014, 10, 162-169.	1.2	41
10	Determination of the strain-dependent hydraulic permeability of the compressed bovine nucleus pulposus. Journal of Biomechanics, 2008, 41, 903-906.	0.9	28
11	Anterior cruciate ligament repair with internal brace augmentation: A systematic review. Knee, 2022, 35, 192-200.	0.8	28
12	Confined compression of collagen hydrogels. Journal of Biomechanics, 2013, 46, 837-840.	0.9	27
13	Non-invasive computer-assisted measurement of knee alignment. Computer Aided Surgery, 2012, 17, 29-39.	1.8	22
14	Moderate alterations in lower limbs muscle temperature do not affect postural stability during quiet standing in both young and older women. Journal of Electromyography and Kinesiology, 2007, 17, 292-298.	0.7	21
15	Health costs and efficiencies of patient-specific and single-use instrumentation in total knee arthroplasty: a randomised controlled trial. BMJ Open Quality, 2019, 8, e000493.	0.4	21
16	3D biofabrication for soft tissue and cartilage engineering. Medical Engineering and Physics, 2020, 82, 13-39.	0.8	21
17	The strain-dependent osmotic pressure and stiffness of the bovine nucleus pulposus apportioned into ionic and non-ionic contributors. Journal of Biomechanics, 2008, 41, 2411-2416.	0.9	19
18	Standardising the clinical assessment of coronal knee laxity. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2012, 226, 699-708.	1.0	18

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19	Development and mechanical characterisation of self-compressed collagen gels. Materials Science and Engineering C, 2018, 84, 243-247.	3.8	13
20	Identification of Movement Strategies During the Sit-to-Walk Movement in Patients With Knee Osteoarthritis. Journal of Applied Biomechanics, 2018, 34, 96-103.	0.3	12
21	Comparison of power and EMG during 6-s all-out cycling between young and older women. Journal of Sports Sciences, 2012, 30, 1311-1321.	1.0	11
22	The assessment of instability in the osteoarthritic knee. EFORT Open Reviews, 2019, 4, 70-76.	1.8	11
23	A dynamic model of the head acceleration associated with heading a soccer ball. Sports Engineering, 2006, 9, 39-47.	0.5	10
24	Controlling the variable of pressure in the production of test footwear impressions. Science and Justice - Journal of the Forensic Science Society, 2012, 52, 168-176.	1.3	9
25	Inertial properties of the German Shepherd Dog. PLoS ONE, 2018, 13, e0206037.	1.1	8
26	Development and presentation of the first design process model for sports equipment design. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2017, 28, 495-509.	1.2	7
27	On the relationships between applied force, photography technique, and the quantification of bruise appearance. Forensic Science International, 2019, 305, 109998.	1.3	6
28	Lower limb alignment becomes more varus and hyperextended from supine to bipedal stance in asymptomatic, osteoarthritic and prosthetic neutral or varus knees. Knee Surgery, Sports Traumatology, Arthroscopy, 2019, 27, 1635-1641.	2.3	5
29	The effects of upper limb loading on spinal shrinkage during treadmill walking. European Spine Journal, 2012, 21, 2688-2692.	1.0	4
30	Validity and Reliability of an Alternative Method for Measuring Power Output During Six-Second All-out Cycling. Journal of Applied Biomechanics, 2014, 30, 598-603.	0.3	4
31	Proteoglycans exert a significant effect on human meniscal stiffness through ionic effects. Clinical Biomechanics, 2020, 77, 105028.	0.5	4
32	Sensitivity analysis of permeability parameters of bovine nucleus pulposus obtained through inverse fitting of the nonlinear biphasic equation: effect of sampling strategy. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 29-36.	0.9	3
33	Tensile properties of the transverse carpal ligament and carpal tunnel complex. Clinical Biomechanics, 2015, 30, 649-656.	0.5	3
34	Lower limb alignment and laxity measures before, during and after total knee arthroplasty: A prospective cohort study. Clinical Biomechanics, 2017, 47, 61-65.	0.5	3
35	The ionic contribution of proteoglycans to mechanical stiffness of the meniscus. Medical Engineering and Physics, 2019, 64, 23-27.	0.8	3
36	Identifying car ingress movement strategies before and after total knee replacement. International Biomechanics, 2020, 7, 9-18.	0.9	3

#	Article	IF	Citations
37	Implant design affects walking and stair navigation after total knee arthroplasty: a double-blinded randomised controlled trial. Journal of Orthopaedic Surgery and Research, 2021, 16, 177.	0.9	3
38	Assessment of forces imparted on seating systems by children with special needs during daily living activities. , 2012, , .		0
39	Dynamic stability during stair negotiation after total knee arthroplasty. Clinical Biomechanics, 2021, 87, 105410.	0.5	0