Hannah Jean Lundberg

List of Publications by Year
in descending order

43	673	623699 14	580810 25
papers	citations	h-index	g-index

44	44	44	571
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cartilage Thickness in Cadaveric Ankles: Measurement with Double-Contrast Multiâ€“Detector Row CT Arthrography versus MR Imaging. Radiology, 2004, 233, 768-773.	7.3	99
2	Mechanical, chemical and biological damage modes within headâ€neck tapers of CoCrMo and Ti6Al4V contemporary hip replacements. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1672-1685.	3.4	68
3	Does Surface Topography Play a Role in Taper Damage in Head-neck Modular Junctions?. Clinical Orthopaedics and Related Research, 2016, 474, 2232-2242.	1.5	49
4	What Factors Drive Taper Corrosion?. Journal of Arthroplasty, 2018, 33, 2707-2711.	3.1	49
5	Direct comparison of measured and calculated total knee replacement force envelopes during walking in the presence of normal and abnormal gait patterns. Journal of Biomechanics, 2012, 45, 990-996.	2.1	36
6	Tribocorrosion and oral and maxillofacial surgical devices. British Journal of Oral and Maxillofacial Surgery, 2014, 52, 396-400.	0.8	34
7	Intelligence-Based Spine Care Model: A New Era of Research and Clinical Decision-Making. Global Spine Journal, 2021, 11, 135-145.	2.3	24
8	A parametric approach to numerical modeling of TKR contact forces. Journal of Biomechanics, 2009, 42, 541-545.	2.1	22
9	Contact conditions for total hip head-neck modular taper junctions with microgrooved stem tapers. Journal of Biomechanics, 2020, 103, 109689.	2.1	20
10	Effects of episodic subluxation events on third body ingress and embedment in the THA bearing surface. Journal of Biomechanics, 2008, 41, 2090-2096.	2.1	19
11	Fine Tuning Total Knee Replacement Contact Force Prediction Algorithms Using Blinded Model Validation. Journal of Biomechanical Engineering, 2013, 135, 021015.	1.3	19
12	Effects of implant design parameters on fluid convection, potentiating third-body debris ingress into the bearing surface during THA impingement/subluxation. Journal of Biomechanics, 2007, 40, 1676-1685.	2.1	18
13	A reduction in the knee adduction moment with medial thrust gait is associated with a medial shift in center of plantar pressure. Medical Engineering and Physics, 2016, 38, 615-621.	1.7	17
14	Finite element evaluation of the newest ISO testing standard for polyethylene total knee replacement liners. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2018, 232, 545-552.	1.8	17
15	Comparison of Antagonist Muscle Activity During Walking Between Total Knee Replacement and Control Subjects Using Unnormalized Electromyography. Journal of Arthroplasty, 2016, 31, 1331-1339.	3.1	15
16	Problematic sites of third body embedment in polyethylene for total hip wear acceleration. Journal of Biomechanics, 2006, 39, 1208-1216.	2.1	14
17	The choice of the femoral center of rotation affects material loss in total knee replacement wear testing â€“ A parametric finite element study of ISO 14243-3. Journal of Biomechanics, 2019, 88, 104-112.	2.1	13
18	Are Damage Modes Related to Microstructure and Material Loss in Severely Damaged CoCrMo Femoral Heads?. Clinical Orthopaedics and Related Research, 2021, 479, 2083-2096.	1.5	13

#	Article	IF	Citations
19	Fretting-corrosion in hip taper modular junctions: The influence of topography and pH levels â€“ An in-vitro study. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 118, 104443.	3.1	13
20	Comparison of ISO Standard and TKR patient axial force profiles during the stance phase of gait. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2012, 226, 227-234.	1.8	12
21	Hamstring Activity in the Anterior Cruciate Ligament Injured Patient: Injury Implications and Comparison With Quadriceps Activity. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2016, 32, 1651-1659.	2.7	12
22	Modelling changes in modular taper micromechanics due to surgeon assembly technique in total hip arthroplasty. Bone and Joint Journal, 2020, 102-B, 33-40.	4.4	12
23	Contact Mechanics and Plastic Deformation at the Local Surface Topography Level After Assembly of Modular Head-Neck Junctions in Modern Total Hip Replacement Devices. , 2015, , 59-82.		11
24	Nonidentical and outlier duty cycles as factors accelerating UHMWPE wear in THA: A finite element exploration. Journal of Orthopaedic Research, 2007, 25, 30-43.	2.3	9
25	Habitual hip joint activity level of the penned EMU (Dromaius novaehollandie). Iowa orthopaedic journal, The, 2007, 27, 17-23.	0.5	9
26	Are Instrumented Knee Forces Representative of a Larger Population of Cruciate-Retaining Total Knee Arthroplasties?. Journal of Arthroplasty, 2017, 32, 2268-2273.	3.1	6
27	Interaction of surface topography and taper mismatch on headâ€stem modular junction contact mechanics during assembly in modern total hip replacement. Journal of Orthopaedic Research, 2023, 41, 418-425.	2.3	6
28	Grand Challenge Competition: A Parametric Numerical Model to Predict In Vivo Medial and Lateral Knee Forces in Walking Gaits. , 2012, , .		5
29	Sensitivity of total knee replacement wear to variability in motion and load input: A parametric finite element analysis study. Journal of Orthopaedic Research, 2020, 38, 1538-1549.	2.3	5
30	Imprinting and Column Damage on CoCrMo Head Taper Surfaces in Total Hip Replacements. , 2018, , 131-155.		5
31	Methods for locating the tibio-femoral contact pathway in total knee replacements using marker-based gait analysis and standard radiography. Iowa orthopaedic journal, The, 2014, 34, 94-101.	0.5	5
32	Model validation for estimating taper microgroove deformation during total hip arthroplasty head-neck assembly. Journal of Biomechanics, 2022, 140, 111172.	2.1	5
33	Can a gait-dependent model predict wear on retrieved total knee arthroplasty components?. Bone and Joint Journal, 2020, 102-B, 129-137.	4.4	3
34	Computational Parametric Studies for Preclinical Evaluation of Total Knee Replacements. Lecture Notes in Computational Vision and Biomechanics, 2020, , 60-85.	0.5	3
35	Optimal surgical component alignment minimizes TKR wear â€“ An in silico study with nine alignment parameters. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 125, 104939.	3.1	2
36	Comparison of Numerically Modeled Knee Joint Contact Forces to Instrumented Total Knee Prosthesis Forces. , 2009, , .		1

#	Article	IF	Citations
37	The Effect of the Tibiofemoral Contact Path Centroid Location on TKR Contact Forces. , 2010, , .		1
38	Linear Penetration as a Surrogate Measure for Volumetric Wear in TKR Tibial Inserts. , 2018, , 75-92.		1
39	Calculated Axial Forces at the Knee in Total Knee Replacement Patients During Chair and Stair Activities. , 2012, , .		0
40	Computational Framework for Determining Patient-Specific Total Knee Arthroplasty Loading. Journal of Medical Devices, Transactions of the ASME, 2013, 7, 0409041-409041.	0.7	0
41	Computational Framework for Determining Patient-Specific Total Knee Arthroplasty Loading. , 2013, , .		0
42	Biomechanical Effect of Macroscopic Degeneration in a Lumbar Intervertebral Disc. , 2008, , .		0
43	A Novel Multilayered Annular Model to Predict Delamination in a Lumbar Intervertebral Disc. , 2009, , .		0