Andrew E Anderson

List of Publications by Year
in descending order

74 papers	3,076 citations	185998 28 h-index	161609 54 g-index
75 all docs	75 docs citations	75 times ranked	2282 citing authors

#	Article	IF	Citations
1	Subject-Specific Finite Element Model of the Pelvis: Development, Validation and Sensitivity Studies. Journal of Biomechanical Engineering, 2005, 127, 364-373.	0.6	294
2	Validation of Finite Element Predictions of Cartilage Contact Pressure in the Human Hip Joint. Journal of Biomechanical Engineering, 2008, 130, 051008.	0.6	214
3	Radiographic Prevalence of Femoroacetabular Impingement in Collegiate Football Players. Journal of Bone and Joint Surgery - Series A, 2011, 93, e111.	1.4	213
4	Verification, validation and sensitivity studies in computational biomechanics. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 171-184.	0.9	190
5	Role of the acetabular labrum in load support across the hip joint. Journal of Biomechanics, 2011, 44, 2201-2206.	0.9	179
6	Finite element prediction of cartilage contact stresses in normal human hips. Journal of Orthopaedic Research, 2012, 30, 1133-1139.	1.2	172
7	Effects of idealized joint geometry on finite element predictions of cartilage contact stresses in the hip. Journal of Biomechanics, 2010, 43, 1351-1357.	0.9	160
8	Influence of Ankle Position and Radiographic Projection Angle on Measurement of Supramalleolar Alignment on the Anteroposterior and Hindfoot Alignment Views. Foot and Ankle International, 2015, 36, 1352-1361.	1.1	88
9	Correlations between the alpha angle and femoral head asphericity: Implications and recommendations for the diagnosis of cam femoroacetabular impingement. European Journal of Radiology, 2014, 83, 788-796.	1.2	80
10	Medial Distal Tibial Angle: Comparison between Weightbearing Mortise View and Hindfoot Alignment View. Foot and Ankle International, 2012, 33, 655-661.	1.1	78
11	Statistical shape modeling of cam femoroacetabular impingement. Journal of Orthopaedic Research, 2013, 31, 1620-1626.	1.2	74
12	Soft tissue artifact causes significant errors in the calculation of joint angles and range of motion at the hip. Gait and Posture, 2017, 55, 184-190.	0.6	72
13	Accuracy and Feasibility of Dual Fluoroscopy and Model-Based Tracking to Quantify in Vivo Hip Kinematics During Clinical Exams. Journal of Applied Biomechanics, 2014, 30, 461-470.	0.3	70
14	Subject-Specific Analysis of Joint Contact Mechanics: Application to the Study of Osteoarthritis and Surgical Planning. Journal of Biomechanical Engineering, 2013, 135, 021003.	0.6	59
15	Hip Internal Rotation Is Correlated to Radiographic Findings of Cam Femoroacetabular Impingement in Collegiate Football Players. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2012, 28, 1661-1670.	1.3	57
16	Accuracy and feasibility of high-speed dual fluoroscopy and model-based tracking to measure in vivo ankle arthrokinematics. Gait and Posture, 2015, 41, 888-893.	0.6	54
17	Higher medially-directed joint reaction forces are a characteristic of dysplastic hips: A comparative study using subject-specific musculoskeletal models. Journal of Biomechanics, 2017, 54, 80-87.	0.9	50
18	Accuracy of Functional and Predictive Methods to Calculate the Hip Joint Center in Young Non-pathologic Asymptomatic Adults with Dual Fluoroscopy as a Reference Standard. Annals of Biomedical Engineering, 2016, 44, 2168-2180.	1.3	48

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19	Correlation between radiographic measures of acetabular morphology with 3D femoral head coverage in patients with acetabular retroversion. Monthly Notices of the Royal Astronomical Society: Letters, 2012, 83, 233-239.	1.2	44
20	In-vivo hip arthrokinematics during supine clinical exams: Application to the study of femoroacetabular impingement. Journal of Biomechanics, 2015, 48, 2879-2886.	0.9	44
21	Cartilage Thickness: Factors Influencing Multidetector CT Measurements in a Phantom Study. Radiology, 2008, 246, 133-141.	3.6	43
22	Specimen-specific predictions of contact stress under physiological loading in the human hip: validation and sensitivity studies. Biomechanics and Modeling in Mechanobiology, 2014, 13, 387-400.	1.4	43
23	Three-dimensional Quantification of Femoral Head Shape in Controls and Patients with Cam-type Femoroacetabular Impingement. Annals of Biomedical Engineering, 2013, 41, 1162-1171.	1.3	39
24	In-vivo quantification of dynamic hip joint center errors and soft tissue artifact. Gait and Posture, 2016, 50, 246-251.	0.6	38
25	Acetabular Cartilage Thickness: Accuracy of Three-Dimensional Reconstructions from Multidetector CT Arthrograms in a Cadaver Study. Radiology, 2010, 255, 544-552.	3.6	37
26	Subject-specific Patterns of Femur-labrum Contact are Complex and Vary in Asymptomatic Hips and Hips With Femoroacetabular Impingement. Clinical Orthopaedics and Related Research, 2014, 472, 3912-3922.	0.7	37
27	Which Two-dimensional Radiographic Measurements of Cam Femoroacetabular Impingement Best Describe the Three-dimensional Shape of the Proximal Femur?. Clinical Orthopaedics and Related Research, 2019, 477, 242-253.	0.7	37
28	In Vivo Kinematics of the Tibiotalar and Subtalar Joints in Asymptomatic Subjects: A High-Speed Dual Fluoroscopy Study. Journal of Biomechanical Engineering, 2016, 138, .	0.6	35
29	Application of High-Speed Dual Fluoroscopy to Study In Vivo Tibiotalar and Subtalar Kinematics in Patients With Chronic Ankle Instability and Asymptomatic Control Subjects During Dynamic Activities. Foot and Ankle International, 2017, 38, 1236-1248.	1.1	29
30	In Vivo Measurements of the Ischiofemoral Space in Recreationally Active Participants During Dynamic Activities: A High-Speed Dual Fluoroscopy Study. American Journal of Sports Medicine, 2017, 45, 2901-2910.	1.9	29
31	Do Your Routine Radiographs to Diagnose Cam Femoroacetabular Impingement Visualize the Region of the Femoral Head-Neck Junction You Intended?. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2019, 35, 1796-1806.	1.3	29
32	Quantitative comparison of cortical bone thickness using correspondence-based shape modeling in patients with cam femoroacetabular impingement. Journal of Orthopaedic Research, 2017, 35, 1743-1753.	1.2	26
33	Statistical shape modeling of the talocrural joint using a hybrid multi-articulation joint approach. Scientific Reports, 2021, 11, 7314.	1.6	23
34	Hip rotation during standing and dynamic activities and the compensatory effect of femoral anteversion: An in-vivo analysis of asymptomatic young adults using three-dimensional computed tomography models and dual fluoroscopy. Gait and Posture, 2018, 61, 276-281.	0.6	22
35	Morphologic analysis of the subtalar joint using statistical shape modeling. Journal of Orthopaedic Research, 2020, 38, 2625-2633.	1.2	22
36	Compensatory Motion of the Subtalar Joint Following Tibiotalar Arthrodesis. Journal of Bone and Joint Surgery - Series A, 2020, 102, 600-608.	1.4	22

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37	Soft tissue artifact causes underestimation of hip joint kinematics and kinetics in a rigid-body musculoskeletal model. Journal of Biomechanics, 2020, 108, 109890.	0.9	21
38	In Vivo Pelvic and Hip Joint Kinematics in Patients With Cam Femoroacetabular Impingement Syndrome: A Dual Fluoroscopy Study. Journal of Orthopaedic Research, 2020, 38, 823-833.	1.2	20
39	Age-related differences in humerothoracic, scapulothoracic, and glenohumeral kinematics during elevation and rotation motions. Journal of Biomechanics, 2021, 117, 110266.	0.9	20
40	Accuracy of 3D dual echo steady state (DESS) MR arthrography to quantify acetabular cartilage thickness. Journal of Magnetic Resonance Imaging, 2015, 42, 1329-1338.	1.9	18
41	Musculoskeletal models with generic and subject-specific geometry estimate different joint biomechanics in dysplastic hips. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 259-270.	0.9	18
42	Predicting tibiotalar and subtalar joint angles from skin-marker data with dual-fluoroscopy as a reference standard. Gait and Posture, 2016, 49, 136-143.	0.6	17
43	Benchmarking off-the-shelf statistical shape modeling tools in clinical applications. Medical Image Analysis, 2022, 76, 102271.	7.0	17
44	Subject-Specific Axes of Rotation Based on Talar Morphology Do Not Improve Predictions of Tibiotalar and Subtalar Joint Kinematics. Annals of Biomedical Engineering, 2017, 45, 2109-2121.	1.3	16
45	Threeâ€dimensional femoral head coverage in the standing position represents that measured in vivo during gait. Clinical Anatomy, 2018, 31, 1177-1183.	1.5	15
46	Imaging of the subtalar joint: A novel approach to an old problem. Journal of Orthopaedic Research, 2019, 37, 921-926.	1.2	15
47	Changes in chondrolabral mechanics, coverage, and congruency following periâ€acetabular osteotomy for treatment of acetabular retroversion: A patientâ€specific finite element study. Journal of Orthopaedic Research, 2017, 35, 2567-2576.	1.2	14
48	Reliable interpretation of scapular kinematics depends on coordinate system definition. Gait and Posture, 2020, 81, 183-190.	0.6	13
49	How Does Chondrolabral Damage and Labral Repair Influence the Mechanics of the Hip in the Setting of Cam Morphology? A Finite-Element Modeling Study. Clinical Orthopaedics and Related Research, 2022, 480, 602-615.	0.7	12
50	Does Removal of Subchondral Cortical Bone Provide Sufficient Resection Depth for Treatment of Cam Femoroacetabular Impingement?. Clinical Orthopaedics and Related Research, 2017, 475, 1977-1986.	0.7	10
51	Can measurements from an anteroposterior radiograph predict pelvic sagittal inclination?. Journal of Orthopaedic Research, 2020, 38, 1477-1485.	1.2	10
52	Total Ankle Replacement Provides Symmetrical Postoperative Kinematics: A Biplane Fluoroscopy Imaging Study. Foot and Ankle International, 2022, 43, 818-829.	1.1	10
53	The effect of pelvic tilt on threeâ€dimensional coverage of the femoral head: A computational simulation study using patientâ€specific anatomy. Anatomical Record, 2021, 304, 258-265.	0.8	8
54	The modified Shriners Hospitals for Children Greenville (mSHCG) multi-segment foot model provides clinically acceptable measurements of ankle and midfoot angles: A dual fluoroscopy study. Gait and Posture, 2021, 85, 258-265.	0.6	8

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55	Modified False-Profile Radiograph of the Hip Provides Better Visualization of the Anterosuperior Femoral Head-Neck Junction. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2018, 34, 1236-1243.	1.3	7
56	Methodology for Measurement of in vivo Tibiotalar Kinematics After Total Ankle Replacement Using Dual Fluoroscopy. Frontiers in Bioengineering and Biotechnology, 2020, 8, 375.	2.0	7
57	Patients with camâ€type femoroacetabular impingement demonstrate increased change in boneâ€toâ€bone distance during walking: A dual fluoroscopy study. Journal of Orthopaedic Research, 2023, 41, 161-169.	1.2	7
58	Inclusion of the Acetabular Labrum Reduces Simulated Range of Motion of the Hip Compared With Bone Contact Models. Arthroscopy, Sports Medicine, and Rehabilitation, 2020, 2, e779-e787.	0.8	6
59	Effect of Patient Positioning on Measurement of the Anterior Center-Edge Angle on False-Profile Radiographs and Its 3-Dimensional Mapping to the Acetabular Rim. Orthopaedic Journal of Sports Medicine, 2022, 10, 232596712110738.	0.8	6
60	CORR InsightsÂ®: Increased Hip Stresses Resulting From a Cam Deformity and Decreased Femoral Neck-Shaft Angle During Level Walking. Clinical Orthopaedics and Related Research, 2017, 475, 1009-1012.	0.7	5
61	Assessment of Acetabular Morphology Using the Acetabular Anterior Center-Edge Angle on Modified False-Profile Radiographs. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2019, 35, 3060-3066.	1.3	5
62	The effect of using different coordinate systems on in-vivo hip angles can be estimated from computed tomography images. Journal of Biomechanics, 2019, 95, 109318.	0.9	5
63	Novel model for the induction of postnatal murine hip deformity. Journal of Orthopaedic Research, 2019, 37, 151-160.	1.2	4
64	Combined Estimation of Shape and Pose for Statistical Analysis of Articulating Joints. Lecture Notes in Computer Science, 2020, 12474, 111-121.	1.0	3
65	Prediction of Femoral Head Coverage from Articulated Statistical Shape Models of Patients with Developmental Dysplasia of the Hip. Journal of Orthopaedic Research, 2021, , .	1.2	3
66	Longitudinal study of knee load avoidant movement behavior after total knee arthroplasty with recommendations for future retraining interventions. Knee, 2021, 30, 90-99.	0.8	2
67	The anterior center edge angle has limited ability to predict three-dimensional coverage of the femoral head in patients with developmental dysplasia of the hip undergoing curved periacetabular osteotomy. Archives of Orthopaedic and Trauma Surgery, 2022, , 1.	1.3	2
68	Ankle strength, muscle size, and adipose content following unilateral tibiotalar arthrodesis. Journal of Orthopaedic Research, 2019, 37, 1143-1152.	1.2	1
69	CORR InsightsÂ®: Head-Neck Osteoplasty has Minor Effect on the Strength of an Ovine Cam-FAI Model: In Vitro and Finite Element Analyses. Clinical Orthopaedics and Related Research, 2016, 474, 2641-2644.	0.7	0
70	CORR InsightsÂ®: Patient Age and Hip Morphology Alter Joint Mechanics in Computational Models of Patients with Hip Dysplasia. Clinical Orthopaedics and Related Research, 2019, 477, 1246-1248.	0.7	0
71	CORR InsightsÂ®: Does Coronal Plane Malalignment of the Tibial Insert in Total Ankle Arthroplasty Alter Distal Foot Bone Mechanics? A Cadaveric Gait Study. Clinical Orthopaedics and Related Research, 2020, 478, 1696-1698.	0.7	0
72	In Vivo Quantification of Hip Arthrokinematics during Dynamic Weight-bearing Activities using Dual Fluoroscopy. Journal of Visualized Experiments, 2021, , .	0.2	0

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73	CORR InsightsÂ®: Is Anterior Rotation of the Acetabulum Necessary to Normalize Joint Contact Pressure in Periacetabular Osteotomy? A Finite-element Analysis Study. Clinical Orthopaedics and Related Research, 2021, Publish Ahead of Print, .	0.7	0
74	Pathomechanics of theÂDysplastic Hip. , 2020, , 39-53.		0