

Jacques A De Guise

List of Publications by Year in descending order

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118
papers

4,861
citations

94433

37
h-index

98798

67
g-index

118
all docs

118
docs citations

118
times ranked

3569
citing authors

#	ARTICLE	IF	CITATIONS
1	Predictive Modeling for Personalized Three-Dimensional Burn Injury Assessments. Journal of Burn Care and Research, 2020, 41, 121-130.	0.4	2
2	Toward Automated 3D Spine Reconstruction from Biplanar Radiographs Using CNN for Statistical Spine Model Fitting. IEEE Transactions on Medical Imaging, 2019, 38, 2796-2806.	8.9	43
3	Can total knee arthroplasty restore the correlation between radiographic mechanical axis angle and dynamic coronal plane alignment during gait?. Knee, 2019, 26, 586-594.	1.6	7
4	Comparison of MRI- and CT-based semiautomated liver segmentation: a validation study. Abdominal Radiology, 2017, 42, 478-489.	2.1	19
5	Liver Segmentation on CT and MR Using Laplacian Mesh Optimization. IEEE Transactions on Biomedical Engineering, 2017, 64, 2110-2121.	4.2	53
6	Automatic spine and pelvis detection in frontal X-rays using deep neural networks for patch displacement learning. , 2016, , .		15
7	Sparse and multi-object pose+shape modeling of the three-dimensional scoliotic spine. , 2016, , .		4
8	Validation of a Semiautomated Liver Segmentation Method Using CT for Accurate Volumetry. Academic Radiology, 2015, 22, 1088-1098.	2.5	17
9	Comparison of knee gait kinematics of workers exposed to knee straining posture to those of non-knee straining workers. Gait and Posture, 2013, 38, 187-191.	1.4	10
10	IDENTIFICATION OF KNEE FRONTAL PLANE KINEMATIC PATTERNS IN NORMAL GAIT BY PRINCIPAL COMPONENT ANALYSIS. Journal of Mechanics in Medicine and Biology, 2013, 13, 1350026.	0.7	16
11	Analysis of humeral head displacements from sequences of biplanar X-rays: repeatability study and preliminary results in healthy subjects. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 221-229.	1.6	8
12	Clinical Significance of Lumbosacral Kyphosis in Adolescent Spondylolisthesis. Spine, 2012, 37, 304-308.	2.0	27
13	Fast 3D reconstruction of the lower limb using a parametric model and statistical inferences and clinical measurements calculation from biplanar X-rays. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 457-466.	1.6	194
14	Analyzing gait pathologies using a depth camera. , 2012, 2012, 4835-8.		6
15	A Kohonen neural network description of scoliosis fused regions and their corresponding Lenke classification. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 257-264.	2.8	5
16	Gait adaptation in chronic anterior cruciate ligament-deficient patients: Pivot-shift avoidance gait. Clinical Biomechanics, 2011, 26, 181-187.	1.2	56
17	Effects of physiotherapy treatment on knee osteoarthritis gait data using principal component analysis. Clinical Biomechanics, 2011, 26, 284-291.	1.2	29
18	Evaluation of unipodal stance in knee osteoarthritis patients using knee accelerations and center of pressure. Osteoarthritis and Cartilage, 2011, 19, 281-286.	1.3	18

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19	Accounting for velocity of the pivot shift test manoeuvre decreases kinematic variability. <i>Knee</i> , 2011, 18, 88-93.	1.6	22
20	Tissue Characterization of Equine Tendons With Clinical B-Scan Images Using a Shock Filter Thinning Algorithm. <i>IEEE Transactions on Medical Imaging</i> , 2011, 30, 597-605.	8.9	3
21	Computer algorithms and applications used to assist the evaluation and treatment of adolescent idiopathic scoliosis: a review of published articles 2000â€“2009. <i>European Spine Journal</i> , 2011, 20, 1058-1068.	2.2	14
22	Passive contribution of the rotator cuff to abduction and joint stability. <i>Surgical and Radiologic Anatomy</i> , 2011, 33, 767-773.	1.2	11
23	Relationships between viscoelastic properties of lumbar intervertebral disc and degeneration grade assessed by MRI. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 593-599.	3.1	35
24	Objective grading of the pivot shift phenomenon using a support vector machine approach. <i>Journal of Biomechanics</i> , 2011, 44, 1-5.	2.1	21
25	Depth energy image for gait symmetry quantification. , 2011, 2011, 5136-9.		12
26	A Variability Study of Computerized Sagittal Sacral Radiologic Measures. <i>Spine</i> , 2010, 35, 71-75.	2.0	13
27	A Decision Tree Can Increase Accuracy When Assessing Curve Types According to Lenke Classification of Adolescent Idiopathic Scoliosis. <i>Spine</i> , 2010, 35, 1054-1059.	2.0	9
28	Feature selection using a principal component analysis of the kinematics of the pivot shift phenomenon. <i>Journal of Biomechanics</i> , 2010, 43, 3080-3084.	2.1	57
29	Guidewire tracking during endovascular neurosurgery. <i>Medical Engineering and Physics</i> , 2010, 32, 813-821.	1.7	11
30	A semi-automated software tool to study treadmill locomotion in the rat: From experiment videos to statistical gait analysis. <i>Journal of Neuroscience Methods</i> , 2010, 190, 279-288.	2.5	12
31	A Computer-Aided Method for Scoliosis Fusion Level Selection by a Topologically Ordered Self Organizing Kohonen Network. , 2010, , .		1
32	Ultrasound Bâ€“scan image simulation, segmentation, and analysis of the equine tendon. <i>Medical Physics</i> , 2010, 37, 1038-1046.	3.0	8
33	3D shape reconstruction of bone from two x-ray images using 2D/3D non-rigid registration based on moving least-squares deformation. , 2010, , .		10
34	Method for fast and accurate segmentation processing from prior shape: application to femoral head segmentation on x-ray images. , 2009, , .		7
35	The responsiveness of three-dimensional knee accelerations used as an estimation of knee instability and loading transmission during gait in osteoarthritis patient's follow-up. <i>Osteoarthritis and Cartilage</i> , 2009, 17, 213-219.	1.3	23
36	Comparison of methods to assess quadriceps muscle volume using magnetic resonance imaging. <i>Journal of Magnetic Resonance Imaging</i> , 2009, 30, 1116-1123.	3.4	57

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37	Assessment of lumbosacral kyphosis in spondylolisthesis: a computer-assisted reliability study of six measurement techniques. <i>European Spine Journal</i> , 2009, 18, 212-217.	2.2	25
38	3D-patient-specific geometry of the muscles involved in knee motion from selected MRI images. <i>Medical and Biological Engineering and Computing</i> , 2009, 47, 579-587.	2.8	25
39	3D reconstruction of the spine from biplanar X-rays using parametric models based on transversal and longitudinal inferences. <i>Medical Engineering and Physics</i> , 2009, 31, 681-687.	1.7	300
40	Functional calibration procedure for 3D knee joint angle description using inertial sensors. <i>Journal of Biomechanics</i> , 2009, 42, 2330-2335.	2.1	251
41	Coupling 2D/3D registration method and statistical model to perform 3D reconstruction from partial x-rays images data. , 2009, 2009, 1008-11.		10
42	Performance evaluation of a medical robotic 3D-ultrasound imaging system. <i>Medical Image Analysis</i> , 2008, 12, 275-290.	11.6	38
43	Gesture as an important factor in 3D kinematic assessment of the knee. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2008, 16, 64-70.	4.2	3
44	Parametric subject-specific model for in vivo 3D reconstruction using bi-planar X-rays: application to the upper femoral extremity. <i>Medical and Biological Engineering and Computing</i> , 2008, 46, 799-805.	2.8	34
45	A simple and rapid method for electromagnetic field distortion correction when using two Fastrak sensors for biomechanical studies. <i>Journal of Biomechanics</i> , 2008, 41, 1813-1817.	2.1	6
46	Automatic Classification of Asymptomatic and Osteoarthritis Knee Gait Patterns Using Kinematic Data Features and the Nearest Neighbor Classifier. <i>IEEE Transactions on Biomedical Engineering</i> , 2008, 55, 1230-1232.	4.2	51
47	New Accelerometric Method to Discriminate Between Asymptomatic Subjects and Patients With Medial Knee Osteoarthritis During 3-D Gait. <i>IEEE Transactions on Biomedical Engineering</i> , 2008, 55, 1415-1422.	4.2	62
48	Test-Retest Reliability and Minimal Clinical Change Determination for 3-Dimensional Tibial and Femoral Accelerations During Treadmill Walking in Knee Osteoarthritis Patients. <i>Archives of Physical Medicine and Rehabilitation</i> , 2008, 89, 732-737.	0.9	37
49	Reliability of a method for analyzing three-dimensional knee kinematics during gait. <i>Gait and Posture</i> , 2008, 28, 170-174.	1.4	37
50	Surface reconstruction from planar x-ray images using moving least squares. , 2008, 2008, 3967-70.		10
51	Effect of depth of correlation on cross-correlation blood flow measurements in glass microchannels. , 2008, , .		2
52	A thinning algorithm for equine tendon structure identification from 2D ultrasound images. , 2008, , .		1
53	HIERARCHICAL ANALYSIS AND CLASSIFICATION OF ASYMPTOMATIC AND KNEE OSTEOARTHRITIS GAIT PATTERNS USING A WAVELET REPRESENTATION OF KINETIC DATA AND THE NEAREST NEIGHBOR CLASSIFIER. <i>Journal of Mechanics in Medicine and Biology</i> , 2008, 08, 45-54.	0.7	9
54	Bone enhancement in digital dual energy radiographs from normalization with a synthetic background image. <i>Physics in Medicine and Biology</i> , 2008, 53, 1259-1275.	3.0	1

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55	Wires segmentation in fluoroscopic images during cerebral aneurysm endovascular intervention. , 2008, , .		1
56	Postural Model of Sagittal Spino-Pelvic Alignment and Its Relevance for Lumbosacral Developmental Spondylolisthesis. Spine, 2008, 33, 2316-2325.	2.0	85
57	Automated Method for Clinic and Morphologic Analysis of Bones Using Implicit Modeling Technique. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5095-8.	0.5	3
58	The effect of axis alignment on shoulder joint kinematics analysis during arm abduction. Clinical Biomechanics, 2007, 22, 758-766.	1.2	17
59	Comparing three attachment systems used to determine knee kinematics during gait. Gait and Posture, 2007, 25, 533-543.	1.4	34
60	Optimization of Spatial Resolution for Peripheral Magnetic Resonance Angiography. Academic Radiology, 2007, 14, 54-61.	2.5	5
61	Relation between the sagittal pelvic and lumbar spine geometries following surgical correction of adolescent idiopathic scoliosis. European Spine Journal, 2007, 16, 531-536.	2.2	52
62	Comparison between constrained and non-constrained Cobb techniques for the assessment of thoracic kyphosis and lumbar lordosis. European Spine Journal, 2007, 16, 1325-1331.	2.2	31
63	Lumbar intervertebral disc mobility: effect of disc degradation and of geometry. European Journal of Orthopaedic Surgery and Traumatology, 2007, 17, 533-541.	1.4	11
64	P3E-6 3D Tissue Characterization of the Equine Superficial Digital Flexor Tendons From In Vivo Ultrasound Images. , 2006, , .		1
65	Gesture standardization increases the reproducibility of 3D kinematic measurements of the knee joint. Clinical Biomechanics, 2006, 21, 502-507.	1.2	3
66	Computerized Assessment of Sagittal Curvatures of the Spine. Journal of Spinal Disorders and Techniques, 2006, 19, 507-512.	1.9	24
67	Resolution enhancement in digital x-ray imaging. Physics in Medicine and Biology, 2006, 51, 2415-2439.	3.0	2
68	Parallel Robot for Medical 3D-Ultrasound Imaging. , 2006, , .		10
69	3D reconstruction of the pelvis from bi-planar radiography. Computer Methods in Biomechanics and Biomedical Engineering, 2006, 9, 1-5.	1.6	61
70	Resolution enhancement in dual-energy x-ray imaging. , 2005, 5747, 614.		1
71	A reproducible method for studying three-dimensional knee kinematics. Journal of Biomechanics, 2005, 38, 1926-1931.	2.1	81
72	Evaluation of a full-scale gas microstrip detector for low-dose X-ray imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 536, 52-60.	1.6	19

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73	Personalized Body Segment Parameters From Biplanar Low-Dose Radiography. IEEE Transactions on Biomedical Engineering, 2005, 52, 1756-1763.	4.2	49
74	Three-Dimensional Biplanar Reconstruction of Scoliotic Rib Cage Using the Estimation of a Mixture of Probabilistic Prior Models. IEEE Transactions on Biomedical Engineering, 2005, 52, 1713-1728.	4.2	40
75	A Hierarchical Statistical Modeling Approach for the Unsupervised 3-D Biplanar Reconstruction of the Scoliotic Spine. IEEE Transactions on Biomedical Engineering, 2005, 52, 2041-2057.	4.2	97
76	Three-dimensional X-ray absorptiometry (3D-XA): a method for reconstruction of human bones using a dual X-ray absorptiometry device. Osteoporosis International, 2005, 16, 969-976.	3.1	35
77	Physical characteristics of a low-dose gas microstrip detector for orthopedic x-ray imaging. Medical Physics, 2005, 32, 1193-1204.	3.0	25
78	3D elastic registration of vessel structures from IVUS data on biplane angiography1. Academic Radiology, 2005, 12, 10-16.	2.5	19
79	Geometrical accuracy and fusion of multimodal vascular images: A phantom study. Medical Physics, 2004, 31, 1434-1443.	3.0	23
80	Quantitative magnetic resonance imaging evaluation of knee osteoarthritis progression over two years and correlation with clinical symptoms and radiologic changes. Arthritis and Rheumatism, 2004, 50, 476-487.	6.7	235
81	Validation of the relative 3D orientation of vertebrae reconstructed by bi-planar radiography. Medical Engineering and Physics, 2004, 26, 415-422.	1.7	29
82	A Method for Modeling Noise in Medical Images. IEEE Transactions on Medical Imaging, 2004, 23, 1221-1232.	8.9	237
83	A 3D Generic Inverse Dynamic Method using Wrench Notation and Quaternion Algebra. Computer Methods in Biomechanics and Biomedical Engineering, 2004, 7, 159-166.	1.6	95
84	Fast accurate stereoradiographic 3D-reconstruction of the spine using a combined geometric and statistic model. Clinical Biomechanics, 2004, 19, 240-247.	1.2	173
85	Effect of Ski Binding Parameters on Knee Biomechanics: A Three-Dimensional Computational Study. Medicine and Science in Sports and Exercise, 2004, 36, 1218-1225.	0.4	24
86	Three-dimensional stereo reconstruction of a mass of radioactive coils after embolization of cerebral aneurysms. , 2004, 5367, 773.		0
87	Thoracic Pedicle Morphometry in Vertebrae from Scoliotic Spines. Spine, 2004, 29, 239-248.	2.0	96
88	Three-dimensional (3D) detailed reconstruction of human vertebrae from low-dose digital stereoradiography. European Journal of Orthopaedic Surgery and Traumatology, 2003, 13, 57-62.	1.4	29
89	Computer based method for the three-dimensional kinematic analysis of combined posterior cruciate ligament and postero-lateral complex reconstructions on cadaver knees. Knee, 2003, 10, 249-256.	1.6	5
90	Reliability of a quantification imaging system using magnetic resonance images to measure cartilage thickness and volume in human normal and osteoarthritic knees. Osteoarthritis and Cartilage, 2003, 11, 351-360.	1.3	134

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91	Assessment of the 3-d reconstruction and high-resolution geometrical modeling of the human skeletal trunk from 2-d radiographic images. IEEE Transactions on Biomedical Engineering, 2003, 50, 989-998.	4.2	157
92	Computer-aided method for quantification of cartilage thickness and volume changes using mri: validation study using a synthetic model. IEEE Transactions on Biomedical Engineering, 2003, 50, 978-988.	4.2	134
93	In vitro evaluation of combined graft deformation in anterior cruciate ligament reconstructions. Journal of Biomechanics, 2003, 36, 1641-1647.	2.1	1
94	3D/2D registration and segmentation of scoliotic vertebrae using statistical models. Computerized Medical Imaging and Graphics, 2003, 27, 321-337.	5.8	147
95	A Biplanar Reconstruction Method Based on 2D and 3D Contours: Application to the Distal Femur. Computer Methods in Biomechanics and Biomedical Engineering, 2003, 6, 1-6.	1.6	119
96	Registration and fusion of multimodal vascular images: a phantom study. , 2003, , .		0
97	Three-dimensional reconstruction of the human spine from bi-planar radiographs: using multiscale wavelet analysis and spline interpolators for semi-automation. , 2003, , .		4
98	Title is missing!. Spine, 2003, 28, 1404-1409.	2.0	7
99	Morphometric Analysis of Anatomic Scoliotic Specimens. Spine, 2002, 27, 2305-2311.	2.0	97
100	Computer-based method for the 3-D kinematic analysis of posterior cruciate ligament and postero-lateral corner lesions. Knee, 2002, 9, 301-308.	1.6	10
101	Comparison of two methods for reconstruction of the posterior cruciate ligament using a computer based method: quantitative evaluation of laxity, three-dimensional kinematics and ligament deformation measurement in cadaver knees. Knee, 2002, 9, 291-299.	1.6	16
102	Three-dimensional surface rendering reconstruction of scoliotic vertebrae using a non stereo-corresponding points technique. European Spine Journal, 2002, 11, 344-352.	2.2	37
103	Idiopathic Scoliosis in Three Dimensions. Spine, 2001, 26, 2719-2726.	2.0	39
104	Preoperative and early postoperative three-dimensional changes of the rib cage after posterior instrumentation in adolescent idiopathic scoliosis. European Spine Journal, 2001, 10, 101-106.	2.2	20
105	Analysis of pressure distribution at the body-seat interface in able-bodied and paraplegic subjects using a deformable active contour algorithm. Medical Engineering and Physics, 2001, 23, 359-367.	1.7	43
106	A Three-Dimensional Radiographic Comparison of Cotrel-Dubousset and Colorado Instrumentations for the Correction of Idiopathic Scoliosis. Spine, 2000, 25, 205.	2.0	69
107	3D reconstruction method from biplanar radiography using non-stereocorresponding points and elastic deformable meshes. Medical and Biological Engineering and Computing, 2000, 38, 133-139.	2.8	142
108	Three-dimensional knee analyzer validation by simple fluoroscopic study. Knee, 2000, 7, 221-231.	1.6	36

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109	Long-term three-dimensional changes of the spine after posterior spinal instrumentation and fusion in adolescent idiopathic scoliosis. <i>European Spine Journal</i> , 1999, 8, 16-21.	2.2	40
110	Intraoperative Comparison of Two Instrumentation Techniques for the Correction of Adolescent Idiopathic Scoliosis. <i>Spine</i> , 1999, 24, 2011.	2.0	56
111	Three-dimensional measurement of wedged scoliotic vertebrae and intervertebral disks. <i>European Spine Journal</i> , 1998, 7, 59-65.	2.2	48
112	Estimation of 3D location and orientation of human vertebral facet joints from standing digital radiographs. <i>Medical and Biological Engineering and Computing</i> , 1998, 36, 389-394.	2.8	5
113	<title>Simplified active contour model applied to bone structure segmentation in digital radiographs</title>. , 1998, , .		8
114	<title>Digital radiography segmentation of a scoliotic vertebral body using deformable models</title>. , 1997, , .		6
115	Rib Cage-Spine Coupling Patterns Involved in Brace Treatment of Adolescent Idiopathic Scoliosis. <i>Spine</i> , 1997, 22, 629-635.	2.0	49
116	Experimental correlation-based identification of X-ray CT point spread function. Part 1: method and experimental results. <i>Medical and Biological Engineering and Computing</i> , 1997, 35, 2-8.	2.8	7
117	Experimental correlation-based identification of X-ray CT point spread function. Part 2: simulation and design of input signal. <i>Medical and Biological Engineering and Computing</i> , 1997, 35, 9-16.	2.8	5
118	Computer assisted knee surgery: Diagnostics and planning of knee surgery. <i>Computer Aided Surgery</i> , 1997, 2, 108-123.	1.8	16