Guangzhi Wang

List of Publications by Year
in descending order

80	1,011	471509	477307
papers	citations	17	29
		h-index	g-index

86	86	86	1250
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Robust liver vessel extraction using 3D U-Net with variant dice loss function. Computers in Biology and Medicine, 2018, 101, 153-162.	7.0	117
2	In vivo load sharing among the quadriceps components. Journal of Orthopaedic Research, 2003, 21, 565-571.	2.3	86
3	In vivo and Noninvasive Three-Dimensional Patellar Tracking Induced by Individual Heads of Quadriceps. Medicine and Science in Sports and Exercise, 2004, 36, 93-101.	0.4	71
4	Dynamic and static control of the human knee joint in abduction–adduction. Journal of Biomechanics, 2001, 34, 1107-1115.	2.1	64
5	Hyperactive tendon reflexes in spastic multiple sclerosis: Measures and mechanisms of action. Archives of Physical Medicine and Rehabilitation, 2000, 81, 901-909.	0.9	53
6	The accuracy and repeatability of an automatic 2D–3D fluoroscopic image-model registration technique for determining shoulder joint kinematics. Medical Engineering and Physics, 2012, 34, 1303-1309.	1.7	47
7	Fully automatic liver segmentation in CT images using modified graph cuts and feature detection. Computers in Biology and Medicine, 2018, 95, 198-208.	7.0	41
8	Optimal delivery systems for bone morphogenetic proteins in orthopedic applications should model initial tissue repair structures by using a heparin-incorporated fibrin–fibronectin matrix. Medical Hypotheses, 2008, 71, 374-378.	1.5	30
9	Muscle strength in knee varus and valgus. Medicine and Science in Sports and Exercise, 2001, 33, 1194-1199.	0.4	28
10	Assessment of the hypoxic–ischemic encephalopathy in neonates using non-invasive near-infrared spectroscopy. Physiological Measurement, 2004, 25, 749-761.	2.1	26
11	A surgical robot with augmented reality visualization for stereoelectroencephalography electrode implantation. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1355-1368.	2.8	26
12	Segmentation of carotid plaque using multicontrast 3D gradient echo MRI. Journal of Magnetic Resonance Imaging, 2012, 35, 812-819.	3.4	25
13	Stiffness, viscosity, and upper-limb inertia about the glenohumeral abduction axis. Journal of Orthopaedic Research, 2000, 18, 94-100.	2.3	22
14	Automatic Radiofrequency Ablation Planning for Liver Tumors With Multiple Constraints Based on Set Covering. IEEE Transactions on Medical Imaging, 2020, 39, 1459-1471.	8.9	22
15	Effect of Joint Line Elevation after Posterior-stabilized and Cruciate-retaining Total Knee Arthroplasty on Clinical Function and Kinematics. Chinese Medical Journal, 2015, 128, 2866-2872.	2.3	21
16	An in-vitro biomechanical study of different fixation techniques for the extended trochanteric osteotomy in revision THA. Journal of Orthopaedic Surgery and Research, 2013, 8, 7.	2.3	20
17	An automatic markerless registration method for neurosurgical robotics based on an optical camera. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 253-265.	2.8	19
18	2D/4D marker-free tumor tracking using 4D CBCT as the reference image. Physics in Medicine and Biology, 2014, 59, 2219-2233.	3.0	13

#	Article	IF	Citations
19	High‐resolution diffusion tensor imaging in cervical spondylotic myelopathy: a preliminary follow‐up study. NMR in Biomedicine, 2017, 30, e3769.	2.8	13
20	Subject-specific real-time respiratory liver motion compensation method for ultrasound-MRI/CT fusion imaging. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 517-529.	2.8	12
21	A method for ultrasound probe calibration based on arbitrary wire phantom. Cogent Engineering, 2019, 6, .	2.2	12
22	Design of a robot-assisted system for transforaminal percutaneous endoscopic lumbar surgeries: study protocol. Journal of Orthopaedic Surgery and Research, 2020, 15, 479.	2.3	12
23	Shape context and projection geometry constrained vasculature matching for 3D reconstruction of coronary artery. Neurocomputing, 2016, 195, 65-73.	5.9	11
24	Vascular segmentation of head phase-contrast magnetic resonance angiograms using grayscale and shape features. Computer Methods and Programs in Biomedicine, 2017, 142, 157-166.	4.7	11
25	Cerebrovascular segmentation of TOF-MRA based on seed point detection and multiple-feature fusion. Computerized Medical Imaging and Graphics, 2018, 69, 1-8.	5.8	11
26	The study of fiducial localization error of image in point-based registration. , 2009, 2009, 5088-91.		10
27	Local structure orientation descriptor based on intra-image similarity for multimodal registration of liver ultrasound and MR images. Computers in Biology and Medicine, 2016, 76, 69-79.	7.0	10
28	Cerebrovascular segmentation and planning of depth electrode insertion for epilepsy surgery. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 905-916.	2.8	9
29	High‐fidelity fast volumetric brain MRI using synergistic wave‐controlled aliasing in parallel imaging and a hybrid denoising generative adversarial network (HDnGAN). Medical Physics, 2022, 49, 1000-1014.	3.0	9
30	A motion compensation method for bi-plane robot-assisted internal fixation surgery of a femur neck fracture. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2016, 230, 942-948.	1.8	8
31	Intelligent HMI in Orthopedic Navigation. Advances in Experimental Medicine and Biology, 2018, 1093, 207-224.	1.6	8
32	Development and Validation of an Artificial Intelligence Preoperative Planning System for Total Hip Arthroplasty. Frontiers in Medicine, 2022, 9, 841202.	2.6	8
33	Cerebrovascular segmentation in phase-contrast magnetic resonance angiography by multi-feature fusion and vessel completion. Computerized Medical Imaging and Graphics, 2022, 98, 102070.	5.8	8
34	A robust registration method for real-time ultrasound image fusion with pre-acquired 3D dataset. , 2011, 2011, 2638-41.		7
35	<i>In vivo</i> tomographic imaging of lung colonization of tumour in mouse with simultaneous fluorescence and X‐ray CT. Journal of Biophotonics, 2014, 7, 110-116.	2.3	7
36	Adaptive Ridge Point Refinement for Seeds Detection in X-Ray Coronary Angiogram. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-10.	1.3	7

#	Article	IF	Citations
37	Ultrasound fusion image error correction using subject-specific liver motion model and automatic image registration. Computers in Biology and Medicine, 2016, 79, 99-109.	7.0	7
38	Multiple objective planning for thermal ablation of liver tumors. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 1775-1786.	2.8	7
39	In vitro kinematic measurements of the patellar tendon in two different types of posterior-stabilized total knee arthroplasties. , 2010, 2010, 3938-41.		6
40	A convenient and stable vertebrae instance segmentation method for transforaminal endoscopic surgery planning. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 1263-1276.	2.8	6
41	Cortical vessel imaging and visualization for image guided depth electrode insertion. Computerized Medical Imaging and Graphics, 2013, 37, 123-130.	5.8	5
42	A stereotaxic image-guided surgical robotic system for depth electrode insertion. , 2014, 2014, 6167-70.		5
43	Robust extraction for low-contrast liver tumors using modified adaptive likelihood estimation. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1565-1578.	2.8	5
44	Gripping force sensory feedback for a myoelectrically controlled forearm prosthesis. , 0, , .		4
45	A "eye-in-body" integrated surgery robot system for stereotactic surgery. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 2123-2135.	2.8	4
46	Assessment of blood and oxygen delivery to flaps of rhesus using near infrared steady-state spectroscopy. Science Bulletin, 2002, 47, 1797.	1.7	4
47	Dynamic and static properties of the human knee joint in axial rotation. , 0, , .		3
48	Assessment of blood and oxygen delivery to flaps of rhesus using near infrared steady-state spectroscopy. Science Bulletin, 2002, 47, 1797-1802.	9.0	3
49	Minimally Invasive Electrical Impedance Tomography - Promising Way to Decrease Diagnostics Uncertainty. , 2006, , .		3
50	Tension and motion measurement for extended trochanteric osteotomy with different fixation methods. , 2009, 2009, 5255-8.		3
51	An approach to the correspondence problem in the 1-D optical transducers tracking system. Proceedings of SPIE, 2009, , .	0.8	3
52	A novel objective method for assessing high-contrast spatial resolution in <scp>CT</scp> based on the Rayleigh criterion. Medical Physics, 2017, 44, 460-469.	3.0	3
53	An X-ray-free method to accurately identify the elbow flexion–extension axis for the placement of a hinged external fixator. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 375-387.	2.8	3
54	A CT Image-Based Virtual Sensing Method to Estimate Bone Drilling Force for Surgical Robots. IEEE Transactions on Biomedical Engineering, 2022, 69, 871-881.	4.2	3

#	ARTICLE	IF	CITATIONS
55	A Preliminary Exploration to Make Stereotactic Surgery Robots Aware of the Semantic 2D/3D Working Scene. IEEE Transactions on Medical Robotics and Bionics, 2022, 4, 17-27.	3.2	3
56	Dynamics of patellar tendon reflex in spastic multiple sclerosis patients. , 0, , .		2
57	Aberration analysis and adjustment of nonspherical lens in the linear CCDs three-dimensional measurement system. , 2004, , .		2
58	The Geometry Parameters Measurement in the Computer Aided Knee Replacement Surgery System. , 2009, , .		2
59	Hardware acceleration for motion tracking system used in image-guided surgery. , 2010, , .		2
60	An image-free surgical navigation system for Total Knee Arthroplasty. , 2011, , .		2
61	An in Vivo Study of the Dynamic Q Angle of the Knee Joint during Flexion. IFMBE Proceedings, 2013, , 234-237.	0.3	2
62	Analysis of the sensitivity of reflectance near-infrared tissue oximeter using the methods of simulation and experiment. , 1999, , .		1
63	Effects of Muscle Electrical Stimulation on Bone Mineral Density in the Hindlimb Bones of the Tail-Suspended Rats. , 2005, 2006, 567-8.		1
64	A Trial of Measuring the Displacement of Tibial Fragments with Pinless External Fixator. , 2005, 2005, 2002-5.		1
65	Theoretical Analytical Flow Model in Hollow Microneedles for Non-forced Fluid Extraction. , 2006, , .		1
66	Minimally Invasive Electrical Impedance Measurements of Ovum Exemplified Using Microelectrodes. , 2007, , .		1
67	A New System for Soft-Tissue Balance Measurement in Total Knee Replacement. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 3627-3632.	4.7	1
68	An improved FDK algorithm using camera calibration technique for reconstruction of misaligned CBCT system. , 2012, 2012, 5991-4.		1
69	Target visibility enhancement for C-arm cone beam CT-fluoroscopy-guided hepatic needle placement: implementation and accuracy evaluation. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 263-273.	2.8	1
70	Accuracy of Fiducial Marker Based Multimodal Image Registration in Image Guided Surgery. IFMBE Proceedings, 2010, , 1538-1541.	0.3	1
71	Passive and active mechanical properties of the human knee joint in abduction-adduction. , 0, , .		0
72	Identification of time-varying joint dynamics using wavelets. , 0, , .		0

#	Article	IF	Citations
73	Reflex and intrinsic mechanical changes in spastic limbs of MS patients. , 0, , .		0
74	\<title\>Near-infrared spectroscopic assessment of oxygen delivery to free flaps on monkeys following vascular occlusions and inhalation of pure oxygen\</title\>. , 2002, 4536, 28.		0
75	Using noninvasive NIRS to evaluate the metabolic capability of infant brain. , 2005, , .		0
76	A Research on The Hospital Intranet-Based Three-Dimensional Image Assisted Diagnosis System. , 2005, 2005, 5165-7.		0
77	A Method for Widening the Range of Force Measurement and Gap Adjustment in the Total Knee Replacement. , 2008, , .		0
78	A respiration correction method for real-time ultrasound image fusion with pre-acquired 3D dataset. , 2013, , .		0
79	A Quantitative Method for Prediction of True Lumen Recanalization in Chronic Total Occlusion of the Superficial Femoral Artery. Annals of Vascular Surgery, 2021, 77, 101-108.	0.9	0
80	Metrology applications of quantitative evaluation methods in CT phantom images. , 2015, , .		0