

João I Vilaça

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4404961/publications.pdf>

Version: 2024-02-01

93
papers

1,257
citations

430442

18
h-index

414034

32
g-index

96
all docs

96
docs citations

96
times ranked

1565
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of the Business Model and User Experience for a Pill Dispenser: A Designer Perspective. Springer Series in Design and Innovation, 2022, , 552-564.	0.2	4
2	A review of image processing methods for fetal head and brain analysis in ultrasound images. Computer Methods and Programs in Biomedicine, 2022, 215, 106629.	2.6	25
3	Automated segmentation of normal and diseased coronary arteries â€œ The ASOCA challenge. Computerized Medical Imaging and Graphics, 2022, 97, 102049.	3.5	18
4	Fetal head circumference delineation using convolutional neural networks with registration-based ellipse fitting. , 2022, , .		1
5	3D segmentation of the left atrial appendage in computed tomography for planning of transcatheter occlusion. , 2022, , .		1
6	Assessment of LAA Strain and Thrombus Mobility and Its Impact on Thrombus Resolutionâ€™Added-Value of a Novel Echocardiographic Thrombus Tracking Method. Cardiovascular Engineering and Technology, 2022, , 1.	0.7	4
7	Realistic 3D infant head surfaces augmentation to improve AI-based diagnosis of cranial deformities. Journal of Biomedical Informatics, 2022, 132, 104121.	2.5	0
8	Kidney Segmentation in 3-D Ultrasound Images Using a Fast Phase-Based Approach. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1521-1531.	1.7	9
9	Anthropometric Landmark Detection in 3D Head Surfaces Using a Deep Learning Approach. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 2643-2654.	3.9	6
10	Feasibility and Accuracy of Automated Three-Dimensional Echocardiographic Analysis of Left Atrial Appendage for Transcatheter Closure. Journal of the American Society of Echocardiography, 2021, , .	1.2	5
11	Technical Note: Assessment of electromagnetic tracking systems in a surgical environment using ultrasonography and ureteroscopy instruments for percutaneous renal access. Medical Physics, 2020, 47, 19-26.	1.6	17
12	Guest Editorial: Special Issue on Serious Games for Health. IEEE Transactions on Games, 2020, 12, 337-340.	1.2	2
13	Assessment of aortic valve tract dynamics using automatic tracking of 3D transesophageal echocardiographic images. International Journal of Cardiovascular Imaging, 2019, 35, 881-895.	0.7	10
14	Semiautomatic Estimation of Device Size for Left Atrial Appendage Occlusion in 3-D TEE Images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 922-929.	1.7	9
15	Automatic Denavit-Hartenberg Parameter Identification for Serial Manipulators. , 2019, , .		15
16	Synthetic infant head shapes with deformational plagiocephaly: concept and 3D model parameterization. , 2019, , .		2
17	Surfaceâ€based registration between CT and US for imageâ€guided percutaneous renal access â€œ A feasibility study. Medical Physics, 2019, 46, 1115-1126.	1.6	3
18	Semi-automatic aortic valve tract segmentation in 3D cardiac magnetic resonance images using shape-based B-spline explicit active surfaces. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
19	Automatic left ventricular segmentation in 4D interventional ultrasound data using a patient-specific temporal synchronized shape prior. , 2019, , .		0
20	Deep learning-based detection of anthropometric landmarks in 3D infants head models. , 2019, , .		7
21	Patient-specific outcome simulation after surgical correction of Pectus Excavatum: a preliminary study. , 2019, , .		0
22	Automatic strategy for extraction of anthropometric measurements for the diagnostic and evaluation of deformational plagiocephaly from infantâ€™s head models. , 2019, , .		4
23	Three-dimensional color Doppler ultrasound simulation to mimic paravalvular regurgitation. , 2019, , .		0
24	Validation of a Novel Software Tool for Automatic Aortic Annular Sizing in Three-Dimensional Transesophageal Echocardiographic Images. Journal of the American Society of Echocardiography, 2018, 31, 515-525.e5.	1.2	17
25	A novel multi-atlas strategy with dense deformation field reconstruction for abdominal and thoracic multi-organ segmentation from computed tomography. Medical Image Analysis, 2018, 45, 108-120.	7.0	30
26	Kidney segmentation in ultrasound, magnetic resonance and computed tomography images: A systematic review. Computer Methods and Programs in Biomedicine, 2018, 157, 49-67.	2.6	67
27	Fast Segmentation of the Left Atrial Appendage in 3-D Transesophageal Echocardiographic Images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 2332-2342.	1.7	14
28	A Novel Interventional Guidance Framework for Transseptal Puncture in Left Atrial Interventions. Lecture Notes in Computer Science, 2018, , 93-101.	1.0	1
29	MITT: Medical Image Tracking Toolbox. IEEE Transactions on Medical Imaging, 2018, 37, 2547-2557.	5.4	24
30	Segmentation of kidney and renal collecting system on 3D computed tomography images. , 2018, , .		3
31	Personalized dynamic phantom of the right and left ventricles based on patient-specific anatomy for echocardiography studies â€™ Preliminary results. , 2018, , .		3
32	Automated segmentation of the atrial region and fossa ovalis towards computer-aided planning of inter-atrial wall interventions. Computer Methods and Programs in Biomedicine, 2018, 161, 73-84.	2.6	2
33	A Dual-Modal CT/US Kidney Phantom Model for Image-Guided Percutaneous Renal Access. Lecture Notes in Computational Vision and Biomechanics, 2018, , 378-387.	0.5	1
34	Automatic 3D aortic annulus sizing by computed tomography in the planning of transcatheter aortic valve implantation. Journal of Cardiovascular Computed Tomography, 2017, 11, 25-32.	0.7	24
35	A new methodology for assessment of pectus excavatum correction after bar removal in Nuss procedure: Preliminary study. Journal of Pediatric Surgery, 2017, 52, 1089-1097.	0.8	14
36	Novel Solutions Applied in Transseptal Puncture: A Systematic Review. Journal of Medical Devices, Transactions of the ASME, 2017, 11, .	0.4	8

#	ARTICLE	IF	CITATIONS
37	Fast left ventricle tracking using localized anatomical affine optical flow. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e2871.	1.0	20
38	Classification algorithms for body posture. , 2017, , .		2
39	Ureterscopy-assisted Percutaneous Kidney Access Made Easy: First Clinical Experience with a Novel Navigation System Using Electromagnetic Guidance (IDEAL Stage 1). European Urology, 2017, 72, 610-616.	0.9	52
40	Comparative Study of 2D and 3D Optical Imaging Systems: Laparoendoscopic Single-Site Surgery in an Ex Vivo Model. Surgical Innovation, 2017, 24, 598-604.	0.4	4
41	Development of a patient-specific atrial phantom model for planning and training of interatrial interventions. Medical Physics, 2017, 44, 5638-5649.	1.6	21
42	A competitive strategy for atrial and aortic tract segmentation based on deformable models. Medical Image Analysis, 2017, 42, 102-116.	7.0	16
43	Fully automatic left ventricular myocardial strain estimation in 2D short-axis tagged magnetic resonance imaging. Physics in Medicine and Biology, 2017, 62, 6899-6919.	1.6	5
44	Instrumented vest for postural reeducation. , 2017, , .		5
45	Fully Automatic 3-D-TEE Segmentation for the Planning of Transcatheter Aortic Valve Implantation. IEEE Transactions on Biomedical Engineering, 2017, 64, 1711-1720.	2.5	16
46	Dense motion field estimation from myocardial boundary displacements. International Journal for Numerical Methods in Biomedical Engineering, 2016, 32, e02758.	1.0	6
47	Aortic Valve Tract Segmentation From 3D-TEE Using Shape-Based B-Spline Explicit Active Surfaces. IEEE Transactions on Medical Imaging, 2016, 35, 2015-2025.	5.4	16
48	Kidney segmentation in 3D CT images using B-Spline Explicit Active Surfaces. , 2016, , .		3
49	Assessment of Laparoscopic Skills Performance. Surgical Innovation, 2016, 23, 52-61.	0.4	16
50	Multi-centre validation of an automatic algorithm for fast 4D myocardial segmentation in cine CMR datasets. European Heart Journal Cardiovascular Imaging, 2016, 17, 1118-1127.	0.5	14
51	Improving the robustness of interventional 4D ultrasound segmentation through the use of personalized prior shape models. Proceedings of SPIE, 2015, , .	0.8	1
52	Fast left ventricle tracking in CMR images using localized anatomical affine optical flow. , 2015, , .		3
53	Finite element analysis of pectus carinatus surgical correction via a minimally invasive approach. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 711-720.	0.9	10
54	Semi-automatic 3D segmentation of costal cartilage in CT data from Pectus Excavatum patients. , 2015, , .		2

#	ARTICLE	IF	CITATIONS
55	Voxel-based registration of simulated and real patient CBCT data for accurate dental implant pose estimation. , 2015, , .		1
56	Computer-aided recognition of dental implants in X-ray images. , 2015, , .		4
57	Accuracy Comparison of Implant Impression Techniques: A Systematic Review. Clinical Implant Dentistry and Related Research, 2015, 17, e751-64.	1.6	68
58	A-scan ultrasound system for real-time puncture safety assessment during percutaneous nephrolithotomy. Proceedings of SPIE, 2015, , .	0.8	0
59	Validation of percutaneous puncture trajectory during renal access using 4D ultrasound reconstruction. , 2015, , .		0
60	Robust temporal alignment of multimodal cardiac sequences. , 2015, , .		2
61	Targeting lactate transport suppresses <i>in vivo</i> breast tumour growth. Oncotarget, 2015, 6, 19177-19189.	0.8	92
62	Automatic Prebent Customized Prosthesis for Pectus Excavatum Minimally Invasive Surgery Correction. Surgical Innovation, 2014, 21, 290-296.	0.4	13
63	Hand-held robotic device for laparoscopic surgery and training. , 2014, , .		1
64	Real-time hand tracking for rehabilitation and character animation. , 2014, , .		22
65	Artificial neural networks for automatic modelling of the pectus excavatum corrective prosthesis. , 2014, , .		1
66	Preliminary clinical trial in percutaneous nephrolithotomy using a real-time navigation system for percutaneous kidney access. Proceedings of SPIE, 2014, , .	0.8	0
67	Electromagnetic tracker feasibility in the design of a dental superstructure for edentulous patients. , 2014, , .		1
68	Automated Image Analysis of Lung Branching Morphogenesis from Microscopic Images of Fetal Rat Explants. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-9.	0.7	1
69	Fast automatic myocardial segmentation in 4D cine CMR datasets. Medical Image Analysis, 2014, 18, 1115-1131.	7.0	126
70	Automatic modeling of pectus excavatum corrective prosthesis using artificial neural networks. Medical Engineering and Physics, 2014, 36, 1338-1345.	0.8	8
71	Analysis of autoclave induced dimensional changes on addition silicones. , 2014, , 135-140.		0
72	Kidney Targeting and Puncturing During Percutaneous Nephrolithotomy: Recent Advances and Future Perspectives. Journal of Endourology, 2013, 27, 826-834.	1.1	45

#	ARTICLE	IF	CITATIONS
73	Palco: A multisensor realtime 3D cartoon production system. , 2013, , .		2
74	Collecting System Percutaneous Access Using Real-Time Tracking Sensors: First Pig Model In-Vivo Experience. Journal of Urology, 2013, 190, 1932-1937.	0.2	51
75	Variations of the soft tissue thicknesses external to the ribs in Pectus Excavatum patients. Journal of Pediatric Surgery, 2013, 48, 1878-1886.	0.8	6
76	Pectus excavatum postsurgical outcome based on preoperative soft body dynamics simulation. , 2012, , .		5
77	Thoracic wall reconstruction using ultrasound images to model/bend the thoracic prosthesis for correction of pectus excavatum. Proceedings of SPIE, 2012, , .	0.8	0
78	Automatic segmentation and 3D feature extraction of protein aggregates in <i>Caenorhabditis elegans</i> . Proceedings of SPIE, 2012, , .	0.8	1
79	An image processing application for liver tumour segmentation. , 2011, , .		8
80	A laparoscopic surgery training interface. , 2011, , .		9
81	An Image Processing Application for Quantification of Protein Aggregates in <i>Caenorhabditis Elegans</i> . Advances in Intelligent and Soft Computing, 2011, , 31-38.	0.2	2
82	Neuron-specific proteotoxicity of mutant ataxin-3 in <i>C. elegans</i> : rescue by the DAF-16 and HSF-1 pathways. Human Molecular Genetics, 2011, 20, 2996-3009.	1.4	101
83	Virtual simulation of the postsurgical cosmetic outcome in patients with Pectus Excavatum. , 2011, , .		3
84	A Mobile Health Care Rule-Based System. Communications in Computer and Information Science, 2011, , 371-383.	0.4	1
85	Non-contact 3D acquisition system based on stereo vision and laser triangulation. Machine Vision and Applications, 2010, 21, 341-350.	1.7	25
86	3D surface profile equipment for the characterization of the pavement texture “TexScan. Mechatronics, 2010, 20, 674-685.	2.0	44
87	A Digital Game Development Education Project. , 2010, , .		1
88	Identifying Clones in Functional Programs for Refactoring. Communications in Computer and Information Science, 2010, , 309-317.	0.4	0
89	Automatic trajectory generation for the milling of sculpted surfaces acquired from laser scanning systems. , 2009, , .		0
90	Calibration procedure for 3D measurement systems using two cameras and a laser line. Optics and Laser Technology, 2009, 41, 112-119.	2.2	40

#	ARTICLE	IF	CITATIONS
91	A new machine for acquire pavement texture. , 2009, , .		4
92	A New Software Application for Footwear Industry. , 2007, , .		3
93	Stereo Vision Calibration Procedure for 3D Surface measurements. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	2