Thomas LangÃ¸

List of Publications by Year
in descending order

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74 papers	2,394 citations	201674 27 h-index	214800 47 g-index
75 all docs	75 docs citations	75 times ranked	2250 citing authors

#	Article	IF	Citations
1	A review of calibration techniques for freehand 3-D ultrasound systems. Ultrasound in Medicine and Biology, 2005, 31, 449-471.	1.5	229
2	SonoWand, an Ultrasound-based Neuronavigation System. Neurosurgery, 2000, 47, 1373-1380.	1.1	200
3	A review of calibration techniques for freehand 3-D ultrasound systems. Ultrasound in Medicine and Biology, 2005, 31, 143-165.	1.5	196
4	European association of endoscopic surgeons (EAES) consensus statement on the use of robotics in general surgery. Surgical Endoscopy and Other Interventional Techniques, 2015, 29, 253-288.	2.4	114
5	Probe calibration for freehand 3-D ultrasound. Ultrasound in Medicine and Biology, 2003, 29, 1607-1623.	1.5	92
6	A study of psychomotor skills in minimally invasive surgery: what differentiates expert and nonexpert performance. Surgical Endoscopy and Other Interventional Techniques, 2013, 27, 854-863.	2.4	91
7	Accuracy Evaluation of a 3D Ultrasound-Based Neuronavigation System. Computer Aided Surgery, 2002, 7, 197-222.	1.8	72
8	The Role of Tactile Feedback in Laparoscopic Surgery. Surgical Laparoscopy, Endoscopy and Percutaneous Techniques, 2006, 16, 390-400.	0.8	70
9	CustusX: an open-source research platform for image-guided therapy. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 505-519.	2.8	67
10	Multimodal Image Fusion in Ultrasound-Based Neuronavigation: Improving Overview and Interpretation by Integrating Preoperative MRI with Intraoperative 3D Ultrasound. Computer Aided Surgery, 2003, 8, 49-69.	1.8	62
11	Perceiving haptic feedback in virtual reality simulators. Surgical Endoscopy and Other Interventional Techniques, 2013, 27, 2391-2397.	2.4	62
12	Lack of transfer of skills after virtual reality simulator training with haptic feedback. Minimally Invasive Therapy and Allied Technologies, 2017, 26, 346-354.	1.2	60
13	SonoWand, an Ultrasound-based Neuronavigation System. Neurosurgery, 2000, 47, 1373-1380.	1.1	58
14	Laparoscopic navigation pointer for three-dimensional image?guided surgery. Surgical Endoscopy and Other Interventional Techniques, 2004, 18, 1242-1248.	2.4	56
15	Navigated Bronchoscopy. Journal of Bronchology and Interventional Pulmonology, 2014, 21, 242-264.	1.4	55
16	3D ultrasound-based navigation for radiofrequency thermal ablation in the treatment of liver malignancies. Surgical Endoscopy and Other Interventional Techniques, 2003, 17, 933-938.	2.4	47
17	Airway Segmentation and Centerline Extraction from Thoracic CT â€“ Comparison of a New Method to State of the Art Commercialized Methods. PLoS ONE, 2015, 10, e0144282.	2.5	42
18	Accuracy evaluation of a 3D ultrasound-based neuronavigation system. Computer Aided Surgery, 2002, 7, 197-222.	1.8	41

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19	Laparoscopic ultrasound: a survey of its current and future use, requirements, and integration with navigation technology. Surgical Endoscopy and Other Interventional Techniques, 2010, 24, 2944-2953.	2.4	38
20	Navigated laparoscopic ultrasound in abdominal soft tissue surgery: technological overview and perspectives. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 585-599.	2.8	37
21	Multimodal Phantom of Liver Tissue. PLoS ONE, 2013, 8, e64180.	2.5	37
22	Semantic segmentation and detection of mediastinal lymph nodes and anatomical structures in CT data for lung cancer staging. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 977-986.	2.8	37
23	Navigated ultrasound in laparoscopic surgery. Minimally Invasive Therapy and Allied Technologies, 2009, 18, 36-53.	1.2	32
24	Cooling vest for improving surgeonsâ€™ thermal comfort: A multidisciplinary design project. Minimally Invasive Therapy and Allied Technologies, 2009, 18, 20-29.	1.2	32
25	Navigation in laparoscopy â€“ prototype research platform for improved imageâ€guided surgery. Minimally Invasive Therapy and Allied Technologies, 2008, 17, 17-33.	1.2	31
26	A robust and automatic method for evaluating accuracy in 3-D ultrasound-based navigation. Ultrasound in Medicine and Biology, 2003, 29, 1439-1452.	1.5	30
27	Are Cold Light Sources Really Cold?. Surgical Laparoscopy, Endoscopy and Percutaneous Techniques, 2006, 16, 370-376.	0.8	29
28	Initial experience with stereoscopic visualization of three-dimensional ultrasound data in surgery. Surgical Endoscopy and Other Interventional Techniques, 2000, 14, 1074-1078.	2.4	28
29	Limitations of haptic feedback devices on construct validity of the LapSimÂ® virtual reality simulator. Surgical Endoscopy and Other Interventional Techniques, 2013, 27, 1386-1396.	2.4	27
30	Navigated laparoscopy â€“ liver shift and deformation due to pneumoperitoneum in an animal model. Minimally Invasive Therapy and Allied Technologies, 2012, 21, 241-248.	1.2	26
31	Accuracy of electromagnetic tracking with a prototype field generator in an interventional OR setting. Medical Physics, 2011, 39, 399-406.	3.0	21
32	An integrated model-based software for FUS in moving abdominal organs. International Journal of Hyperthermia, 2015, 31, 240-250.	2.5	21
33	A novel platform for electromagnetic navigated ultrasound bronchoscopy (EBUS). International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 1431-1443.	2.8	21
34	Three-Dimensional Blood Vessel Segmentation and Centerline Extraction based on Two-Dimensional Cross-Section Analysis. Annals of Biomedical Engineering, 2015, 43, 1223-1234.	2.5	20
35	Laparoscopic Ultrasound for Hepatocellular Carcinoma and Colorectal Liver Metastasis. Surgical Laparoscopy, Endoscopy and Percutaneous Techniques, 2013, 23, 135-144.	0.8	19
36	Liver deformation in an animal model due to pneumoperitoneum assessed by a vessel-based deformable registration. Minimally Invasive Therapy and Allied Technologies, 2014, 23, 279-286.	1.2	19

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37	Bronchoscope-induced Displacement of Lung Targets. Journal of Bronchology and Interventional Pulmonology, 2013, 20, 206-212.	1.4	18
38	Anthropomorphic liver phantom with flow for multimodal image-guided liver therapy research and training. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 61-72.	2.8	18
39	A novel research platform for electromagnetic navigated bronchoscopy using cone beam CT imaging and an animal model. Minimally Invasive Therapy and Allied Technologies, 2011, 20, 30-41.	1.2	16
40	Wavelet-based edge detection in ultrasound images. Ultrasound in Medicine and Biology, 2001, 27, 89-99.	1.5	15
41	Motion tracking in the liver: Validation of a method based on 4D ultrasound using a nonrigid registration technique. Medical Physics, 2014, 41, 082903.	3.0	15
42	Automatic registration of CT images to patient during the initial phase of bronchoscopy: A clinical pilot study. Medical Physics, 2014, 41, 041903.	3.0	15
43	Psychomotor skills assessment by motion analysis in minimally invasive surgery on an animal organ. Minimally Invasive Therapy and Allied Technologies, 2017, 26, 240-248.	1.2	14
44	Intraoperative localized constrained registration in navigated bronchoscopy. Medical Physics, 2017, 44, 4204-4212.	3.0	14
45	A multimodal image guiding system for Navigated Ultrasound Bronchoscopy (EBUS): A human feasibility study. PLoS ONE, 2017, 12, e0171841.	2.5	14
46	A Methodical Quantification of Needle Visibility and Echogenicity in Ultrasound Images. Ultrasound in Medicine and Biology, 2019, 45, 998-1009.	1.5	14
47	High-definition television in medicine. Surgical Endoscopy and Other Interventional Techniques, 2006, 20, 349-350.	2.4	12
48	Blood Vessel Segmentation and Centerline Tracking Using Local Structure Analysis. IFMBE Proceedings, 2015, , 122-125.	0.3	12
49	Ultrasound-based navigation for open liver surgery using active liver tracking. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 1765-1773.	2.8	10
50	Workflow and intervention times of MR-guided focused ultrasound â€“ Predicting the impact of new techniques. Journal of Biomedical Informatics, 2016, 60, 38-48.	4.3	9
51	Can a Dinosaur Think? Implementation of Artificial Intelligence in Extracorporeal Shock Wave Lithotripsy. European Urology Open Science, 2021, 27, 33-42.	0.4	9
52	Development of a Multimodal Tumor Model for Porcine Liver. Journal of Gastrointestinal Surgery, 2010, 14, 1969-1973.	1.7	7
53	Degree of Adhesions After Repair of Incisional Hernia. Journal of the Society of Laparoendoscopic Surgeons, 2010, 14, 399-404.	1.1	7
54	3D multiscale vessel enhancement based centerline extraction of blood vessels. , 2013, , .		7

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55	A new visualization method for navigated bronchoscopy. Minimally Invasive Therapy and Allied Technologies, 2018, 27, 119-126.	1.2	7
56	Laboratory test of Single Landmark registration method for ultrasound-based navigation in laparoscopy using an open-source platform. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1927-1936.	2.8	6
57	Navigated Bronchoscopy With Electromagnetic Trackingâ€"Cone Beam Computed Tomography Influence on Tracking and Registration Accuracy. Journal of Bronchology and Interventional Pulmonology, 2011, 18, 329-336.	1.4	5
58	An open electromagnetic tracking framework applied to targeted liver tumour ablation. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1475-1484.	2.8	5
59	Mediastinal lymph nodes segmentation using 3D convolutional neural network ensembles and anatomical priors guiding. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2023, 11, 44-58.	1.9	5
60	Peripheral tumour targeting using open-source virtual bronchoscopy with electromagnetic tracking: a multi-user pre-clinical study. Minimally Invasive Therapy and Allied Technologies, 2019, 28, 363-372.	1.2	4
61	Teacher-student approach for lung tumor segmentation from mixed-supervised datasets. PLoS ONE, 2022, 17, e0266147.	2.5	4
62	Can effective pedagogy be ensured in minimally invasive surgery e-learning?. Minimally Invasive Therapy and Allied Technologies, 2020, , 1-11.	1.2	3
63	Using the CustusX toolkit to create an image guided bronchoscopy application: Fraxinus. PLoS ONE, 2019, 14, e0211772.	2.5	2
64	Blockâ€matchingâ€based registration to evaluate ultrasound visibility of percutaneous needles in liverâ€mimicking phantoms. Medical Physics, 2021, 48, 7602.	3.0	2
65	An experimental operating room project for advanced laparoscopic surgery. Seminars in Laparoscopic Surgery, 2004, 11, 211-6.	1.0	2
66	Laparoscopic Pancreas Surgery: Image Guidance Solutions. , 2017, , .		1
67	Aspiration and altered airway anatomy: a presentation with a twist. BMJ Case Reports, 2018, 2018, bcr-2018-224331.	0.5	1
68	Accuracy evaluation of a 3D ultrasound-based neuronavigation system. , 2002, , 63-68.		1
69	Real-time endoscope and intraoperative ultrasound integration in computer assisted navigated surgery. International Congress Series, 2005, 1281, 606-611.	0.2	0
70	A new removable airway stent. European Clinical Respiratory Journal, 2016, 3, 30010.	1.5	0
71	ENDOBRONCHIAL TUMOR TARGETING USING A NOVEL ALIGNMENT OF AN OPEN-SOURCE VIRTUAL BRONCHOSCOPY PLATFORM WITH ELECTROMAGNETIC TRACKING: A MULTI-USER PRECLINICAL STUDY. Chest, 2018, 154, 869A.	0.8	0
72	Pulmonologist evaluation on new CT visualization for guidance to lung lesions during bronchoscopy. Minimally Invasive Therapy and Allied Technologies, 2019, 28, 22-28.	1.2	0

#	ARTICLE	IF	CITATIONS
73	Computer-Aided Interventions. , 2006, , 271-287.		0
74	A novel clip-on device for electromagnetic tracking in endobronchial ultrasound bronchoscopy. Minimally Invasive Therapy and Allied Technologies, 2022, 31, 1041-1049.	1.2	0