

# Lueder Alexander Kahrs

## List of Publications by Year in descending order

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57  
papers

374  
citations

759233

12  
h-index

940533

16  
g-index

60  
all docs

60  
docs citations

60  
times ranked

382  
citing authors

#	ARTICLE	IF	CITATIONS
1	Preclinical Performance Evaluation of a Robotic Endoscope for Non-Contact Laser Surgery. <i>Annals of Biomedical Engineering</i> , 2021, 49, 585-600.	2.5	27
2	Configuration optimization and experimental accuracy evaluation of a bone-attached, parallel robot for skull surgery. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2016, 11, 421-436.	2.8	26
3	Tissue surface information for intraoperative incision planning and focus adjustment in laser surgery. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2015, 10, 171-181.	2.8	20
4	Toward Assistive Technologies for Focus Adjustment in Teleoperated Robotic Non-Contact Laser Surgery. <i>IEEE Transactions on Medical Robotics and Bionics</i> , 2019, 1, 145-157.	3.2	20
5	Planning and simulation of microsurgical laser bone ablation. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2010, 5, 155-162.	2.8	17
6	Stereo vision-based tracking of soft tissue motion with application to online ablation control in laser microsurgery. <i>Medical Image Analysis</i> , 2017, 40, 80-95.	11.6	17
7	4RALP and Beyond: Micro-Technologies and Systems for Robot-Assisted Endoscopic Laser Microsurgery. <i>Frontiers in Robotics and AI</i> , 2021, 8, 664655.	3.2	16
8	Forces and Trauma Associated with Minimally Invasive Image-Guided Cochlear Implantation. <i>Otolaryngology - Head and Neck Surgery</i> , 2014, 150, 638-645.	1.9	14
9	New augmented reality and robotic based methods for head-surgery. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2005, 1, 49-56.	2.3	13
10	Temporal bone borehole accuracy for cochlear implantation influenced by drilling strategy: an in vitro study. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2014, 9, 1033-1043.	2.8	13
11	Comparative study on surface reconstruction accuracy of stereo imaging devices for microsurgery. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2016, 11, 145-156.	2.8	13
12	Soft tissue motion tracking with application to tablet-based incision planning in laser surgery. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2016, 11, 2325-2337.	2.8	12
13	A 3 mm Wristed Instrument for the da Vinci Robot: Setup, Characterization, and Phantom Tests for Cleft Palate Repair. <i>IEEE Transactions on Medical Robotics and Bionics</i> , 2020, 2, 130-139.	3.2	12
14	Intracochlear Visualization. <i>Otology and Neurotology</i> , 2011, 32, 1590-1595.	1.3	11
15	High-accuracy drilling with an image guided light weight robot: autonomous versus intuitive feed control. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2017, 12, 1763-1773.	2.8	10
16	Visual servoing of a laser ablation based cochleostomy. <i>Proceedings of SPIE</i> , 2008, , .	0.8	9
17	High precision cochleostomy by use of a pulsed CO <sub>2</sub> laser – an experimental approach. <i>Cochlear Implants International</i> , 2009, 10, 58-62.	1.2	9
18	Flexible Robot for Laser Phonomicrosurgery. , 2015, , 265-271.		8

#	ARTICLE	IF	CITATIONS
19	Adding Flexible Instrumentation to a Curved Videolaryngoscope: A Novel Tool for Laryngeal Surgery. Laryngoscope, 2021, 131, E561-E568.	2.0	8
20	Quantifying the uncertainty of deep learning-based computer-aided diagnosis for patient safety. Current Directions in Biomedical Engineering, 2019, 5, 223-226.	0.4	7
21	Visualization of surgical 3D information with projector-based augmented reality. Studies in Health Technology and Informatics, 2005, 111, 243-6.	0.3	7
22	Freely-Available, True-Color Volume Rendering Software and Cryohistology Data Sets for Virtual Exploration of the Temporal Bone Anatomy. Orl, 2013, 75, 46-53.	1.1	6
23	An experimental evaluation of loads occurring during guided drilling for cochlear implantation. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1625-1637.	2.8	6
24	Volumetric 3D stitching of optical coherence tomography volumes. Current Directions in Biomedical Engineering, 2018, 4, 327-330.	0.4	6
25	A Novel Instrument for Endoscopic Ear Surgery With a Steerable Flexible Tip. Otology and Neurotology, 2021, Publish Ahead of Print, e1683-e1690.	1.3	6
26	Color-encoded distance for interactive focus positioning in laser microsurgery. Optics and Lasers in Engineering, 2016, 83, 71-79.	3.8	5
27	Towards microprocessor-based control of droplet parameters for endoscopic laryngeal adductor reflex triggering. Current Directions in Biomedical Engineering, 2017, 3, 239-243.	0.4	5
28	Design, prototype development and pre-clinical validation of a novel instrument with a compliant steerable tip to facilitate endoscopic ear surgery. Journal of Medical Engineering and Technology, 2021, 45, 22-34.	1.4	5
29	Workflow and simulation of image-to-physical registration of holes inside spongy bone. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1425-1437.	2.8	4
30	Concept description and accuracy evaluation of a moldable surgical targeting system. Journal of Medical Imaging, 2021, 8, 015003.	1.5	4
31	Semantic denoising autoencoders for retinal optical coherence tomography. , 2019, , .		4
32	Feature tracking for automated volume of interest stabilization on 4D-OCT images. , 2017, , .		3
33	Droplet applicator module for reproducible and controlled endoscopic laryngeal adductor reflex stimulation. Biomicrofluidics, 2020, 14, 044112.	2.4	3
34	Endoscopic guidance system for stimulation of the laryngeal adductor reflex by droplet impact. , 2019, , .		3
35	Comparison of tablet-based strategies for incision planning in laser microsurgery. , 2015, , .		2
36	Endoluminal non-contact soft tissue ablation using fiber-based Er:YAG laser delivery. Proceedings of SPIE, 2016, , .	0.8	2

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37	Inter- and intra-operator reliability in patient-specific template positioning for total hip arthroplasty. A cadaver study. International Journal of Medical Robotics and Computer Assisted Surgery, 2018, 14, e1887.	2.3	2
38	Workflow assessment as a preclinical development tool. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1389-1401.	2.8	2
39	Euclidean distances of laryngopharyngeal structures obtained from CT data for preclinical development of laryngoscopic devices. Surgical and Radiologic Anatomy, 2020, 42, 695-700.	1.2	2
40	Deep-learning-based 2.5D flow field estimation for maximum intensity projections of 4D optical coherence tomography. , 2019, , .		2
41	First Study on Laser Bone Ablation System at the Skull Base for Micro Surgery Based on Vision Navigation. , 2006, , .		1
42	Measurement of distances between anatomical structures using a translating stage with mounted endoscope. , 2012, , .		1
43	Cochlear shape description and analyzing via medial models. , 2015, , .		1
44	Methods for intraoperative, sterile pose-setting of patient-specific microstereotactic frames. Proceedings of SPIE, 2015, , .	0.8	1
45	Fast and automatic depth control of iterative bone ablation based on optical coherence tomography data. Proceedings of SPIE, 2015, , .	0.8	1
46	Methods for a fusion of optical coherence tomography and stereo camera image data. , 2015, , .		1
47	Echtzeit-Überwachung der Position eines Cochlea-Implantats während der Insertion in ein Innenohrphantom. TM Technisches Messen, 2017, 84, 98-101.	0.7	1
48	Real-Time Coarse-to-Fine Depth Estimation on Stereo Endoscopic Images With Self-Supervised Learning. , 2021, , .		1
49	Stereo Laryngoscopic Impact Site Prediction for Droplet-Based Stimulation of the Laryngeal Adductor Reflex. IEEE Access, 2021, 9, 112177-112192.	4.2	1
50	Panorama imaging for image-to-physical registration of narrow drill holes inside spongy bones. , 2017, , .		1
51	User evaluation study on illumination requirements to design an augmented reality projector for open liver surgery. , 2018, , .		1
52	The NEAR project: Active endoscopes in the operating room. Virtual Environments, Human-Computer Interfaces and Measurements Systems, 2009 VECIMS '09 IEEE International Conference on, 2009, , .	0.0	0
53	Bent rigid endoscopes: a challenge for accurate distortion correction and 3D reconstruction. Proceedings of SPIE, 2012, , .	0.8	0
54	An actuated larynx phantom for pre-clinical evaluation of droplet-based reflex-stimulating laryngoscopes. Current Directions in Biomedical Engineering, 2019, 5, 137-140.	0.4	0

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55	Ergebnisse eines neuen Kalibrier-Algorithmus für Augmented-Reality-Systeme mit hohen Genauigkeits-Anforderungen. Informatik Aktuell, 2004, , 376-380.	0.6	0
56	Optical Coherence Tomography Navigated Surgery for Different Internal Auditory Canal Tumor Approaches. Journal of Neurological Surgery, Part B: Skull Base, 2015, 76, .	0.8	0
57	Optische Vermessung mittels kodierten Lichts von variabel reflektierenden Oberflächen zur Registrierung oder Dokumentation. , 2006, , 340-344.		0