Martin Wagner

List of Publications by Year
in descending order

40 papers	1,480 citations	393982 19 h-index	360668 35 g-index
40 all docs	40 docs citations	40 times ranked	1401 citing authors

#	Article	IF	Citations
1	Surgical data science for next-generation interventions. Nature Biomedical Engineering, 2017, 1, 691-696.	11.6	283
2	Machine Learning for Surgical Phase Recognition. Annals of Surgery, 2021, 273, 684-693.	2.1	135
3	Surgical data science – from concepts toward clinical translation. Medical Image Analysis, 2022, 76, 102306.	7.0	107
4	Exploiting the potential of unlabeled endoscopic video data with self-supervised learning. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 925-933.	1.7	93
5	Real-time image guidance in laparoscopic liver surgery: first clinical experience with a guidance system based on intraoperative CT imaging. Surgical Endoscopy and Other Interventional Techniques, 2014, 28, 933-940.	1.3	89
6	Physics-based shape matching for intraoperative image guidance. Medical Physics, 2014, 41, 111901.	1.6	65
7	Context-aware Augmented Reality in laparoscopic surgery. Computerized Medical Imaging and Graphics, 2013, 37, 174-182.	3.5	59
8	Toward a standard ontology of surgical process models. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1397-1408.	1.7	54
9	Reirradiation Using Carbon Ions in Patients with Locally Recurrent Rectal Cancer at HIT: First Results. Annals of Surgical Oncology, 2015, 22, 2068-2074.	0.7	50
10	Active learning using deep Bayesian networks for surgical workflow analysis. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1079-1087.	1.7	41
11	Comparative validation of multi-instance instrument segmentation in endoscopy: Results of the ROBUST-MIS 2019 challenge. Medical Image Analysis, 2021, 70, 101920.	7.0	41
12	Direct Observation versus Endoscopic Video Recording-Based Rating with the Objective Structured Assessment of Technical Skills for Training of Laparoscopic Cholecystectomy. European Surgical Research, 2016, 57, 1-9.	0.6	40
13	Robust near real-time estimation of physiological parameters from megapixel multispectral images with inverse Monte Carlo and random forest regression. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 909-917.	1.7	37
14	Heidelberg colorectal data set for surgical data science in the sensor operating room. Scientific Data, 2021, 8, 101.	2.4	37
15	Prediction of laparoscopic procedure duration using unlabeled, multimodal sensor data. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1089-1095.	1.7	36
16	Crowdtruth validation: a new paradigm for validating algorithms that rely on image correspondences. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1201-1212.	1.7	29
17	A Delphi consensus statement for digital surgery. Npj Digital Medicine, 2022, 5, .	5.7	28
18	Robust deep learning-based semantic organ segmentation in hyperspectral images. Medical Image Analysis, 2022, 80, 102488.	7.0	27

#	Article	IF	Citations
19	Crowdsourcing for Reference Correspondence Generation in Endoscopic Images. Lecture Notes in Computer Science, 2014, 17, 349-356.	1.0	26
20	A learning robot for cognitive camera control in minimally invasive surgery. Surgical Endoscopy and Other Interventional Techniques, 2021, 35, 5365-5374.	1.3	24
21	Tissue classification for laparoscopic image understanding based on multispectral texture analysis. Journal of Medical Imaging, 2017, 4, 015001.	0.8	21
22	IMHOTEP: cross-professional evaluation of a three-dimensional virtual reality system for interactive surgical operation planning, tumor board discussion and immersive training for complex liver surgery in a head-mounted display. Surgical Endoscopy and Other Interventional Techniques, 2022, 36, 126-134.	1.3	20
23	Projective biomechanical depth matching for soft tissue registration in laparoscopic surgery. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1101-1110.	1.7	19
24	Artificial Intelligence-Assisted Surgery: Potential and Challenges. Visceral Medicine, 2020, 36, 450-455.	0.5	19
25	Image-based laparoscopic bowel measurement. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 407-419.	1.7	17
26	Deep learning for semantic segmentation of organs and tissues in laparoscopic surgery. Current Directions in Biomedical Engineering, 2020, 6, .	0.2	16
27	Intraoperative on-the-fly organ-mosaicking for laparoscopic surgery. Journal of Medical Imaging, 2015, 2, 045001.	0.8	13
28	Paradigm shift: cognitive surgery. Innovative Surgical Sciences, 2017, 2, 139-143.	0.4	9
29	Mobile, real-time, and point-of-care augmented reality is robust, accurate, and feasible: a prospective pilot study. Surgical Endoscopy and Other Interventional Techniques, 2018, 32, 2958-2967.	1.3	9
30	Cooperative Assistance in Robotic Surgery through Multi-Agent Reinforcement Learning. , 2021, , .		9
31	The Problem of Appetite Loss After Major Abdominal Surgery. Annals of Surgery, 2022, 276, 256-269.	2.1	7
32	Computer-assisted 3D bowel length measurement for quantitative laparoscopy. Surgical Endoscopy and Other Interventional Techniques, 2018, 32, 4052-4061.	1.3	5
33	Tissue classification for laparoscopic image understanding based on multispectral texture analysis. , 2016, , .		4
34	Effects of laparoscopy, laparotomy, and respiratory phase on liver volume in a live porcine model for liver resection. Surgical Endoscopy and Other Interventional Techniques, 2021, 35, 7049-7057.	1.3	4
35	Comparison of Conventional Methods for Bowel Length Measurement in Laparoscopic Surgery to a Novel Computer-Assisted 3D Measurement System. Obesity Surgery, 2021, 31, 4692-4700.	1.1	3
36	Superpixel-based structure classification for laparoscopic surgery. , 2016, , .		2

#	ARTICLE	IF	CITATIONS
37	Flexible Facile Tactile Sensor for Smart Vessel Phantoms. Current Directions in Biomedical Engineering, 2021, 7, 87-91.	0.2	1
38	Gamified Expert Annotation Systems: Meta-Requirements and Tentative Design. Lecture Notes in Computer Science, 2022, , 154-166.	1.0	1
39	Knowledge-based workspace optimization of a redundant robot for minimally invasive robotic surgery (MIRS). , 2015, , .		0
40	Implementing, Connecting, and Evaluating a Standard-Based Integrated Operating Room within a German University Hospital. ACI Open, 2018, 02, e10-e20.	0.2	0