

Nicolas Padoy

List of Publications by Year in descending order

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Version: 2024-02-01

35
papers

2,212
citations

361413

20
h-index

395702

33
g-index

36
all docs

36
docs citations

36
times ranked

1382
citing authors

#	ARTICLE	IF	CITATIONS
1	ClipAssistNet: bringing real-time safety feedback to operating rooms. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 5-13.	2.8	8
2	Artificial Intelligence for Surgical Safety. Annals of Surgery, 2022, 275, 955-961.	4.2	113
3	Surgical data science “ from concepts toward clinical translation. Medical Image Analysis, 2022, 76, 102306.	11.6	107
4	Statistical models to preoperatively predict operative difficulty in laparoscopic cholecystectomy: A systematic review. Surgery, 2022, 171, 1158-1167.	1.9	8
5	Multicentric validation of EndoDigest: a computer vision platform for video documentation of the critical view of safety in laparoscopic cholecystectomy. Surgical Endoscopy and Other Interventional Techniques, 2022, 36, 8379-8386.	2.4	9
6	Rendezvous: Attention mechanisms for the recognition of surgical action triplets in endoscopic videos. Medical Image Analysis, 2022, 78, 102433.	11.6	47
7	Self-supervised learning via cluster distance prediction for operating room context awareness. International Journal of Computer Assisted Radiology and Surgery, 2022, , 1.	2.8	0
8	Artificial Intelligence and Surgery: Ethical Dilemmas and Open Issues. Journal of the American College of Surgeons, 2022, 235, 268-275.	0.5	21
9	Unsupervised domain adaptation for clinician pose estimation and instance segmentation in the operating room. Medical Image Analysis, 2022, 80, 102525.	11.6	6
10	Computer vision in surgery. Surgery, 2021, 169, 1253-1256.	1.9	68
11	Computer Vision in the Operating Room: Opportunities and Caveats. IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 2-10.	3.2	25
12	A Kinematic Bottleneck Approach for Pose Regression of Flexible Surgical Instruments Directly From Images. IEEE Robotics and Automation Letters, 2021, 6, 2938-2945.	5.1	14
13	Multi-task temporal convolutional networks for joint recognition of surgical phases and steps in gastric bypass procedures. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 1111-1119.	2.8	46
14	Surgical data science and artificial intelligence for surgical education. Journal of Surgical Oncology, 2021, 124, 221-230.	1.7	33
15	Intraoperative Time-Out to Promote the Implementation of the Critical View of Safety in Laparoscopic Cholecystectomy: A Video-Based Assessment of 343 Procedures. Journal of the American College of Surgeons, 2021, 233, 497-505.	0.5	17
16	Encode the Unseen: Predictive Video Hashing for Scalable Mid-stream Retrieval. Lecture Notes in Computer Science, 2021, , 427-442.	1.3	1
17	A Computer Vision Platform to Automatically Locate Critical Events in Surgical Videos. Annals of Surgery, 2021, 274, e93-e95.	4.2	43
18	Formalizing video documentation of the Critical View of Safety in laparoscopic cholecystectomy: a step towards artificial intelligence assistance to improve surgical safety. Surgical Endoscopy and Other Interventional Techniques, 2020, 34, 2709-2714.	2.4	40

#	ARTICLE	IF	CITATIONS
19	Future-State Predicting LSTM for Early Surgery Type Recognition. IEEE Transactions on Medical Imaging, 2020, 39, 556-566.	8.9	26
20	CAI4CAI: The Rise of Contextual Artificial Intelligence in Computer-Assisted Interventions. Proceedings of the IEEE, 2020, 108, 198-214.	21.3	80
21	Self-supervision on Unlabelled or Data for Multi-person 2D/3D Human Pose Estimation. Lecture Notes in Computer Science, 2020, , 761-771.	1.3	4
22	Self-Supervised Surgical Tool Segmentation using Kinematic Information. , 2019, , .		23
23	Face detection in the operating room: comparison of state-of-the-art methods and a self-supervised approach. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1049-1058.	2.8	10
24	Machine and deep learning for workflow recognition during surgery. Minimally Invasive Therapy and Allied Technologies, 2019, 28, 82-90.	1.2	96
25	Weakly supervised convolutional LSTM approach for tool tracking in laparoscopic videos. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1059-1067.	2.8	86
26	RSDNet: Learning to Predict Remaining Surgery Duration from Laparoscopic Videos Without Manual Annotations. IEEE Transactions on Medical Imaging, 2019, 38, 1069-1078.	8.9	77
27	Human Pose Estimation on Privacy-Preserving Low-Resolution Depth Images. Lecture Notes in Computer Science, 2019, , 583-591.	1.3	16
28	See It With Your Own Eyes: Markerless Mobile Augmented Reality for Radiation Awareness in the Hybrid Room. IEEE Transactions on Biomedical Engineering, 2017, 64, 429-440.	4.2	19
29	Surgical data science for next-generation interventions. Nature Biomedical Engineering, 2017, 1, 691-696.	22.5	283
30	A Multi-view RGB-D Approach for Human Pose Estimation in Operating Rooms. , 2017, , .		30
31	Articulated clinician detection using 3D pictorial structures on RGB-D data. Medical Image Analysis, 2017, 35, 215-224.	11.6	19
32	EndoNet: A Deep Architecture for Recognition Tasks on Laparoscopic Videos. IEEE Transactions on Medical Imaging, 2017, 36, 86-97.	8.9	540
33	Data-driven spatio-temporal RGBD feature encoding for action recognition in operating rooms. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 737-747.	2.8	35
34	Statistical modeling and recognition of surgical workflow. Medical Image Analysis, 2012, 16, 632-641.	11.6	203
35	Modeling and Online Recognition of Surgical Phases Using Hidden Markov Models. Lecture Notes in Computer Science, 2008, 11, 627-635.	1.3	29