Matthew S Holden

List of Publications by Year
in descending order

20 papers	154 citations	1478505 6 h-index	1199594 12 g-index
20 all docs	20 docs citations	20 times ranked	229 citing authors

#	Article	IF	Citations
1	Feasibility of video-based skills assessment: a study on ultrasound-guided needle insertions using simulated projections. , 2022, , .		0
2	Characterizing the biomechanical differences between novice and expert point‐of‐care ultrasound practitioners using a low‐cost gyroscope and accelerometer integrated sensor: A pilot study. AEM Education and Training, 2022, 6, e10733.	1.2	0
3	Ultrasound video analysis for skill level assessment in FAST ultrasound. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2021, 9, 308-312.	1.9	2
4	Skills Classification in Cardiac Ultrasound with Temporal Convolution and Domain Knowledge Using a Low-Cost Probe Tracker. Ultrasound in Medicine and Biology, 2021, 47, 3002-3013.	1.5	3
5	Reconstructing the nasal septum from instrument motion during septoplasty surgery. Journal of Medical Imaging, 2021, 8, 065001.	1.5	0
6	Wanted: automated objective proficiency assessment metrics for the FAST exam (and other POCUS) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.7	1
7	Machine learning methods for automated technical skills assessment with instructional feedback in ultrasound-guided interventions. International Journal of Computer Assisted Radiology and Surgery, 2019, 14, 1993-2003.	2.8	16
8	Surgery Tutor for Computational Assessment of Technical Proficiency in Soft-Tissue Tumor Resection in a Simulated Setting. Journal of Surgical Education, 2019, 76, 872-880.	2.5	1
9	Cognitive load theory as a framework for simulation-based, ultrasound-guided internal jugular catheterization training: Once is not enough. Canadian Journal of Emergency Medicine, 2019, 21, 141-148.	1.1	4
10	Self-guided training for deep brain stimulation planning using objective assessment. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 1129-1139.	2.8	3
11	Objective assessment of colonoscope manipulation skills in colonoscopy training. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 105-114.	2.8	4
12	A learning curve analysis of ultrasound-guided in-plane and out-of-plane vascular access training with Perk Tutor. , 2018, , .		3
13	Training with Perk Tutor improves ultrasound-guided in-plane needle insertion skill. , 2017, , .		1
14	Sonographic Accuracy as a Novel Tool for Point‐of‐care Ultrasound Competency Assessment. AEM Education and Training, 2017, 1, 316-324.	1.2	13
15	Overall Proficiency Assessment in Point-of-Care Ultrasound Interventions: The Stopwatch is not Enough. Lecture Notes in Computer Science, 2017, , 146-153.	1.3	3
16	Development and Evaluation of a Simulation-based Curriculum for Ultrasound-guided Central Venous Catheterization. Canadian Journal of Emergency Medicine, 2016, 18, 405-413.	1.1	29
17	The Development and Validation of Hand Motion Analysis to Evaluate Competency in Central Line Catheterization. Academic Emergency Medicine, 2015, 22, 212-218.	1.8	40
18	Examination of Learning Trajectories for Simulated Lumbar Puncture Training Using Hand Motion Analysis. Academic Emergency Medicine, 2015, 22, 1187-1195.	1.8	15

#	Article	IF	Citations
19	Assessment of Lumbar Puncture Skill in Experts and Nonexperts Using Checklists and Quantitative Tracking of Needle Trajectories: Implications for Competency-Based Medical Education. Teaching and Learning in Medicine, 2015, 27, 51-56.	2.1	6
20	Tracked Ultrasonography Snapshots Enhance Needle Guidance for Percutaneous Renal Access: A Pilot Study. Journal of Endourology, 2014, 28, 1040-1045.	2.1	10