Juan A SÃ¡nchez-Margallo

List of Publications by Year
in descending order

45 papers	778 citations	623734 14 h-index	552781 26 g-index
47 all docs	47 docs citations	47 times ranked	879 citing authors

#	Article	IF	Citations
1	Methods and Tools for Objective Assessment of Psychomotor Skills in Laparoscopic Surgery. Journal of Surgical Research, 2011, 171, e81-e95.	1.6	124
2	EVA: Laparoscopic Instrument Tracking Based on Endoscopic Video Analysis for Psychomotor Skills Assessment. Surgical Endoscopy and Other Interventional Techniques, 2013, 27, 1029-1039.	2.4	86
3	The use of 3D laparoscopic imaging systems in surgery: EAES consensus development conference 2018. Surgical Endoscopy and Other Interventional Techniques, 2019, 33, 3251-3274.	2.4	75
4	European association for endoscopic surgery (EAES) consensus statement on single-incision endoscopic surgery. Surgical Endoscopy and Other Interventional Techniques, 2019, 33, 996-1019.	2.4	51
5	Objective analysis of surgeonsâ€™ ergonomy during laparoendoscopic single-site surgery through the use of surface electromyography and a motion capture data glove. Surgical Endoscopy and Other Interventional Techniques, 2014, 28, 1314-1320.	2.4	41
6	Anatomical changes due to pneumoperitoneum analyzed by MRI: an experimental study in pigs. Surgical and Radiologic Anatomy, 2011, 33, 389-396.	1.2	39
7	Objective assessment based on motion-related metrics and technical performance in laparoscopic suturing. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 307-314.	2.8	34
8	Decomposition and analysis of laparoscopic suturing task using tool-motion analysis (TMA): improving the objective assessment. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 305-313.	2.8	25
9	Initial experience using a robotic-driven laparoscopic needle holder with ergonomic handle: assessment of surgeonsâ€™ task performance and ergonomics. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 2069-2077.	2.8	23
10	Application of Mixed Reality in Medical Training and Surgical Planning Focused on Minimally Invasive Surgery. Frontiers in Virtual Reality, 2021, 2, .	3.7	21
11	Use of natural user interfaces for image navigation during laparoscopic surgery: initial experience. Minimally Invasive Therapy and Allied Technologies, 2017, 26, 253-261.	1.2	18
12	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
13	Video-based assistance system for training in minimally invasive surgery. Minimally Invasive Therapy and Allied Technologies, 2011, 20, 197-205.	1.2	17
14	Systems and technologies for objective evaluation of technical skills in laparoscopic surgery. Minimally Invasive Therapy and Allied Technologies, 2014, 23, 40-51.	1.2	17
15	Ergonomic Analysis of Muscle Activity in the Forearm and Back Muscles During Laparoscopic Surgery. Surgical Laparoscopy, Endoscopy and Percutaneous Techniques, 2013, 23, 203-207.	0.8	16
16	Construct validity of a video-tracking system based on orthogonal cameras approach for objective assessment of laparoscopic skills. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 2283-2293.	2.8	16
17	Ergonomic Assessment of Hand Movements in Laparoscopic Surgery Using the CyberGloveÂ®. , 2010, , 121-128.		15
18	Utilidad de un sistema de seguimiento Ã³ptico de instrumental en cirugÃa laparoscÃ³pica para evaluaciÃ³n de destrezas motoras. CirugÃa EspaÃ±ola, 2014, 92, 421-428.	0.2	14

#	Article	IF	Citations
19	A Methodical Quantification of Needle Visibility and Echogenicity in Ultrasound Images. Ultrasound in Medicine and Biology, 2019, 45, 998-1009.	1.5	14
20	Usefulness of an Optical Tracking System in Laparoscopic Surgery for Motor Skills Assessment. CirugÃa EspaÃ±ola (English Edition), 2014, 92, 421-428.	0.1	13
21	Ergonomics in Laparoscopic Surgery. , 0, , .		13
22	Comparative Study of the Use of Different Sizes of an Ergonomic Instrument Handle for Laparoscopic Surgery. Applied Sciences (Switzerland), 2020, 10, 1526.	2.5	12
23	Application of a motion capture data glove for hand and wrist ergonomic analysis during laparoscopy. Minimally Invasive Therapy and Allied Technologies, 2014, 23, 350-356.	1.2	10
24	Assessment of Postural Ergonomics and Surgical Performance in Laparoendoscopic Single-Site Surgery Using a Handheld Robotic Device. Surgical Innovation, 2018, 25, 208-217.	0.9	10
25	Handheld Devices for Laparoscopic Surgery. , 2018, , .		10
26	Muscle activity and hand motion in veterinarians performing laparoscopic training tasks with a box trainer. American Journal of Veterinary Research, 2016, 77, 186-193.	0.6	7
27	Interpretation of motion analysis of laparoscopic instruments based on principal component analysis in box trainer settings. Surgical Endoscopy and Other Interventional Techniques, 2018, 32, 3096-3107.	2.4	6
28	Comparative Study of the Influence of Three-Dimensional Versus Two-Dimensional Urological Laparoscopy on Surgeons' Surgical Performance and Ergonomics: A Systematic Review and Meta-Analysis. Journal of Endourology, 2021, 35, 123-137.	2.1	6
29	An Analysis of Skills Acquisition During a Training Program for Experienced Laparoscopists in Laparoendoscopic Single-Site Surgery. Surgical Innovation, 2014, 21, 320-326.	0.9	3
30	Introductory Chapter: Addressing the Challenges of Laparoscopic Surgery. , 0, , .		3
31	Technical Evaluation of a Third Generation Optical Pose Tracker for Motion Analysis and Image-Guided Surgery. Lecture Notes in Computer Science, 2013, , 75-82.	1.3	3
32	Use of a new device for gasless endosurgery in a laparoscopic diaphragmatic hernia repair ex vivo canine model: A preâ€clinical study. Veterinary Medicine and Science, 2022, 8, 460-468.	1.6	3
33	Head Stabilization during Minimal Invasive Surgery Tasks: An Uncontrolled Manifold Analysis. Procedia Manufacturing, 2015, 3, 1434-1441.	1.9	2
34	Blockâ€matchingâ€based registration to evaluate ultrasound visibility of percutaneous needles in liverâ€mimicking phantoms. Medical Physics, 2021, 48, 7602.	3.0	2
35	Correlating Personal Resourcefulness and Psychomotor Skills: An Analysis of Stress, Visual Attention and Technical Metrics. Sensors, 2022, 22, 837.	3.8	2
36	A method to assess upper-body postural variability in laparoscopic surgery. , 2014, , .		1

#	Article	IF	Citations
37	Analysis of Surgeonsâ€™ Muscle Activity During the Use of a Handheld Robotic Instrument in Laparoendoscopic Single-Site Surgery. Advances in Intelligent Systems and Computing, 2017, , 3-15.	0.6	1
38	Laparoscopic Pancreas Surgery: Image Guidance Solutions. , 2017, , .		1
39	Compliant joint echogenicity in ultrasound images: towards highly visible steerable needles. , 2018, , .		1
40	Measuring Workload and Performance of Surgeons Using Body Sensors of Smartwatches. Springer Proceedings in Complexity, 2020, , 67-74.	0.3	1
41	Identification of intra-abdominal lymphatics in canine carcasses by laparoscopic fluorescence lymphography with intradermal and intrapopliteal ICG administration. PLoS ONE, 2020, 15, e0241992.	2.5	1
42	Laparoscopic Video and Ultrasounds Image Processing in Minimally Invasive Pancreatic Surgeries. Smart Innovation, Systems and Technologies, 2016, , 333-343.	0.6	0
43	Wearable Technology for Assessment and Surgical Assistance in Minimally Invasive Surgery. , 0, , .		0
44	EVA: Endoscopic Video Analysis of the Surgical Scene for the Assessment of MIS Psychomotor Skills. IFMBE Proceedings, 2014, , 52-56.	0.3	0
45	Comparative Assessment Between 3D and Conventional 2D Imaging Systems in Laparoscopic Practice. IFMBE Proceedings, 2020, , 703-710.	0.3	0