

# Fabrizio Cutolo

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

1,384  
citations

393982

19  
h-index

377514

34  
g-index

63  
all docs

63  
docs citations

63  
times ranked

1086  
citing authors

#	ARTICLE	IF	CITATIONS
1	Augmented reality in neurosurgery: a systematic review. <i>Neurosurgical Review</i> , 2017, 40, 537-548.	1.2	233
2	Augmented reality as an aid in maxillofacial surgery: Validation of a wearable system allowing maxillary repositioning. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2014, 42, 1970-1976.	0.7	155
3	Augmented reality in open surgery. <i>Updates in Surgery</i> , 2018, 70, 389-400.	0.9	78
4	A new head-mounted display-based augmented reality system in neurosurgical oncology: a study on phantom. <i>Computer Assisted Surgery</i> , 2017, 22, 39-53.	0.6	69
5	Development of a novel algorithm for human fall detection using wearable sensors. , 2008, , .		42
6	Robust and Accurate Algorithm for Wearable Stereoscopic Augmented Reality with Three Indistinguishable Markers. <i>Electronics (Switzerland)</i> , 2016, 5, 59.	1.8	37
7	Software Framework for Customized Augmented Reality Headsets in Medicine. <i>IEEE Access</i> , 2020, 8, 706-720.	2.6	37
8	Review on Augmented Reality in Oral and Cranio-Maxillofacial Surgery: Toward "Surgery-Specific" Head-Up Displays. <i>IEEE Access</i> , 2020, 8, 59015-59028.	2.6	36
9	Wearable Augmented Reality Platform for Aiding Complex 3D Trajectory Tracing. <i>Sensors</i> , 2020, 20, 1612.	2.1	34
10	Evaluation of a Wearable AR Platform for Guiding Complex Craniotomies in Neurosurgery. <i>Annals of Biomedical Engineering</i> , 2021, 49, 2590-2605.	1.3	34
11	Augmented Reality to Improve Surgical Simulation: Lessons Learned Towards the Design of a Hybrid Laparoscopic Simulator for Cholecystectomy. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 2091-2104.	2.5	32
12	Video see through AR head-mounted display for medical procedures. , 2014, , .		31
13	The Wearable VOSTARS System for Augmented Reality-Guided Surgery: Preclinical Phantom Evaluation for High-Precision Maxillofacial Tasks. <i>Journal of Clinical Medicine</i> , 2020, 9, 3562.	1.0	31
14	Augmented reality visualization of deformable tubular structures for surgical simulation. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2016, 12, 231-240.	1.2	28
15	Augmented Reality-Assisted Craniotomy for Parasagittal and Convexity En Plaque Meningiomas and Custom-Made Cranio-Plasty: A Preliminary Laboratory Report. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 9955.	1.2	28
16	Perspective Preserving Solution for Quasi-Orthoscopic Video See-Through HMDs. <i>Technologies</i> , 2018, 6, 9.	3.0	26
17	Augmented Reality in Healthcare. <i>Journal of Healthcare Engineering</i> , 2019, 2019, 1-2.	1.1	26
18	Upbeat: Augmented Reality-Guided Dancing for Prosthetic Rehabilitation of Upper Limb Amputees. <i>Journal of Healthcare Engineering</i> , 2019, 2019, 1-9.	1.1	25

#	ARTICLE	IF	CITATIONS
19	Are augmented reality headsets in surgery a dead end?. Expert Review of Medical Devices, 2019, 16, 999-1001.	1.4	24
20	Toed-in vs Parallel Displays in Video See-Through Head-Mounted Displays for Close-Up View. IEEE Access, 2019, 7, 159698-159711.	2.6	23
21	Application of a New Wearable Augmented Reality Video See-Through Display to Aid Percutaneous Procedures in Spine Surgery. Lecture Notes in Computer Science, 2016, , 43-54.	1.0	22
22	Brain Tumor and Augmented Reality: New Technologies for the Future. International Journal of Environmental Research and Public Health, 2022, 19, 6347.	1.2	20
23	Head-Mounted Augmented Reality Platform for Markerless Orthopaedic Navigation. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 910-921.	3.9	18
24	Human-PnP: Ergonomic AR Interaction Paradigm for Manual Placement of Rigid Bodies. Lecture Notes in Computer Science, 2015, , 50-60.	1.0	18
25	[POSTER] Hybrid Video/Optical See-Through HMD. , 2017, , .		17
26	Projected Augmented Reality to Drive Osteotomy Surgery: Implementation and Comparison With Video See-Through Technology. IEEE Access, 2020, 8, 169024-169035.	2.6	17
27	Alignment-Free Offline Calibration of Commercial Optical See-Through Head-Mounted Displays With Simplified Procedures. IEEE Access, 2020, 8, 223661-223674.	2.6	15
28	Architecture of a Hybrid Video/Optical See-through Head-Mounted Display-Based Augmented Reality Surgical Navigation Platform. Information (Switzerland), 2022, 13, 81.	1.7	15
29	Hybrid Simulation and Planning Platform for Cryosurgery with Microsoft HoloLens. Sensors, 2021, 21, 4450.	2.1	14
30	Simulation-guided navigation for vector control in pediatric mandibular distraction osteogenesis. Journal of Cranio-Maxillo-Facial Surgery, 2017, 45, 969-980.	0.7	12
31	Letter to the Editor on "Augmented Reality Based Navigation for Computer Assisted Hip Resurfacing: A Proof of Concept Study". Annals of Biomedical Engineering, 2019, 47, 2151-2153.	1.3	12
32	Ambiguity-Free Optical "Inertial Tracking for Augmented Reality Headsets. Sensors, 2020, 20, 1444.	2.1	12
33	In Situ Visualization for 3D Ultrasound-Guided Interventions with Augmented Reality Headset. Bioengineering, 2021, 8, 131.	1.6	12
34	Parallax Free Registration for Augmented Reality Optical See-Through Displays in the Peripersonal Space. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 1608-1618.	2.9	12
35	[Poster] HMD Video see though AR with unfixed cameras vergence. , 2014, , .		11
36	Letter to the Editor: Augmented reality "guided neurosurgery. Journal of Neurosurgery, 2016, 125, 235-237.	0.9	11

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37	Optical See-Through Head-Mounted Displays With Short Focal Distance: Conditions for Mitigating Parallax-Related Registration Error. <i>Frontiers in Robotics and AI</i> , 2020, 7, 572001.	2.0	11
38	Augmented reality system for freehand guide of magnetic endovascular devices. , 2014, 2014, 490-3.		10
39	Off-Line Camera-Based Calibration for Optical See-Through Head-Mounted Displays. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 193.	1.3	10
40	Closed " Loop Calibration for Optical See-Through Near Eye Display with Infinity Focus. , 2018, , .		9
41	Low-Computational Cost Stitching Method in a Three-Eyed Endoscope. <i>Journal of Healthcare Engineering</i> , 2019, 2019, 1-12.	1.1	9
42	Robust Laparoscopic Instruments Tracking Using Colored Strips. <i>Lecture Notes in Computer Science</i> , 2017, , 129-143.	1.0	6
43	The Role of Camera Convergence in Stereoscopic Video See-through Augmented Reality Displays. <i>International Journal of Advanced Computer Science and Applications</i> , 2018, 9, .	0.5	6
44	AR Visualization of "Synthetic Calot's Triangle" for Training in Cholecystectomy. , 2016, , .		6
45	Neural correlates of human-robot handshaking. , 2010, , .		5
46	The vostars project: a new wearable hybrid video and optical see-through augmented reality surgical system for maxillofacial surgery. <i>International Journal of Oral and Maxillofacial Surgery</i> , 2019, 48, 153.	0.7	5
47	Wearable AR and 3D Ultrasound: Towards a Novel Way to Guide Surgical Dissections. <i>IEEE Access</i> , 2021, 9, 156746-156757.	2.6	5
48	AR interaction paradigm for closed reduction of long-bone fractures via external fixation. , 2016, , .		4
49	Rotation-constrained optical see-through headset calibration with bare-hand alignment. , 2021, , .		4
50	Proof of Concept: Wearable Augmented Reality Video See-Through Display for Neuro-Endoscopy. <i>Lecture Notes in Computer Science</i> , 2018, , 95-104.	1.0	3
51	Augmented Reality in Image-Guided Surgery. , 2018, , 1-11.		3
52	Wearable Augmented Reality Optical See Through Displays Based on Integral Imaging. <i>Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering</i> , 2017, , 345-356.	0.2	3
53	Device-Agnostic Augmented Reality Rendering Pipeline for AR in Medicine. , 2021, , .		3
54	Key Ergonomics Requirements and Possible Mechanical Solutions for Augmented Reality Head-Mounted Displays in Surgery. <i>Multimodal Technologies and Interaction</i> , 2022, 6, 15.	1.7	3

#	ARTICLE	IF	CITATIONS
55	A sensorized glove for hand rehabilitation. , 2009, , .		2
56	Configurable Software Framework for 2D/3D Video See-Through Displays in Medical Applications. Lecture Notes in Computer Science, 2016, , 30-42.	1.0	2
57	Automatic Calibration of Commercial Optical See-Through Head-Mounted Displays for Medical Applications. , 2020, , .		2
58	Can Liquid Lenses Increase Depth of Field in Head Mounted Video See-Through Devices?. Journal of Imaging, 2021, 7, 138.	1.7	2
59	Projected Augmented Reality to Guide Manual Precision Tasks: An Alternative to Head Mounted Displays. IEEE Transactions on Human-Machine Systems, 2022, 52, 567-577.	2.5	2
60	Towards a Wearable Augmented Reality Visor for High-Precision Manual Tasks. , 2020, , .		1
61	Augmented Reality in Image-Guided Surgery. , 2018, , 1-11.		1
62	Towards the Development of a Quasi-Orthoscopic Hybrid Video/Optical See-Through HMD for Manual Tasks. Lecture Notes in Computer Science, 2019, , 170-178.	1.0	0
63	Errata to "Parallax Free Registration for Augmented Reality Optical See-Through Displays in the Peripersonal Space"[1] (DOI: 10.1109/TVCG.2020.3021534). IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 3069-3069.	2.9	0