Eric J Seibel

List of Publications by Year
in descending order

66 papers	1,271 citations	516215 16 h-index	395343 33 g-index
67 all docs	67 docs citations	67 times ranked	1311 citing authors

#	Article	IF	Citations
1	Scanning fiber endoscopy with highly flexible, 1 mm catheterscopes for wide‐field, full‐color imaging. Journal of Biophotonics, 2010, 3, 385-407.	1.1	257
2	Unique features of optical scanning, single fiber endoscopy. Lasers in Surgery and Medicine, 2002, 30, 177-183.	1.1	120
3	Tethered Capsule Endoscopy, A Low-Cost and High-Performance Alternative Technology for the Screening of Esophageal Cancer and Barrett's Esophagus. IEEE Transactions on Biomedical Engineering, 2008, 55, 1032-1042.	2.5	75
4	Targeted detection of murine colonic dysplasia in vivo with flexible multispectral scanning fiber endoscopy. Journal of Biomedical Optics, 2012, 17, 021103.	1.4	71
5	Surface Mosaics of the Bladder Reconstructed From Endoscopic Video for Automated Surveillance. IEEE Transactions on Biomedical Engineering, 2012, 59, 1670-1680.	2.5	68
6	Semi-autonomous simulated brain tumor ablation with RAVENII Surgical Robot using behavior tree. , 2015, 2015, 3868-3875.		67
7	Scanning Fiber Endoscope Improves Detection of 5-Aminolevulinic Acid‐Induced Protoporphyrin IX Fluorescence at the Boundary of Infiltrative Glioma. World Neurosurgery, 2018, 113, e51-e69.	0.7	50
8	Microscopy with ultraviolet surface excitation for wide-area pathology of breast surgical margins. Journal of Biomedical Optics, 2019, 24, 1.	1.4	40
9	Multimodal laser-based angioscopy for structural, chemical and biological imaging of atherosclerosis. Nature Biomedical Engineering, 2017, 1, .	11.6	38
10	Optical Characterization of Neurosurgical Operating Microscopes: Quantitative Fluorescence and Assessment of PpIX Photobleaching. Scientific Reports, 2018, 8, 12543.	1.6	37
11	Target-to-background enhancement in multispectral endoscopy with background autofluorescence mitigation for quantitative molecular imaging. Journal of Biomedical Optics, 2014, 19, 076014.	1.4	30
12	Multiplexed endoscopic imaging of Barrett's neoplasia using targeted fluorescent heptapeptides in a phase 1 proof-of-concept study. Gut, 2021, 70, 1010-1013.	6.1	24
13	Three-dimensional measurement of small inner surface profiles using feature-based 3-D panoramic registration. Optical Engineering, 2017, 56, 014108.	0.5	23
14	Trimodal detection of early childhood caries using laser light scanning and fluorescence spectroscopy: clinical prototype. Journal of Biomedical Optics, 2013, 18, 111412.	1.4	19
15	Semi‐autonomous image‐guided brain tumour resection using an integrated robotic system: A bench‐top study. International Journal of Medical Robotics and Computer Assisted Surgery, 2018, 14, e1872.	1.2	19
16	44.1: Volumetric Display using Scanned Fiber Array. Digest of Technical Papers SID International Symposium, 2010, 41, 653-656.	0.1	18
17	Rapid scanning catheterscope for expanded forward-view volumetric imaging with optical coherence tomography. Optics Letters, 2015, 40, 3165.	1.7	18
18	Spectrally enhanced imaging of occlusal surfaces and artificial shallow enamel erosions with a scanning fiber endoscope. Journal of Biomedical Optics, 2012, 17, 0760191.	1.4	16

#	Article	IF	Citations
19	RetinaMatch: Efficient Template Matching of Retina Images for Teleophthalmology. IEEE Transactions on Medical Imaging, 2019, 38, 1993-2004.	5.4	15
20	Accurate three-dimensional virtual reconstruction of surgical field using calibrated trajectories of an image-guided medical robot. Journal of Medical Imaging, 2014, 1, 035002.	0.8	13
21	Miniature gastrointestinal endoscopy: Now and the future. World Journal of Gastroenterology, 2019, 25, 4051-4060.	1.4	13
22	New Endoscopic and Cytologic Tools for Cancer Surveillance in the Digestive Tract. Gastrointestinal Endoscopy Clinics of North America, 2009, 19, 299-307.	0.6	12
23	Path planning for semi-automated simulated robotic neurosurgery. , 2015, 2015, 2639-2645.		12
24	Toward real-time quantification of fluorescence molecular probes using target/background ratio for guiding biopsy and endoscopic therapy of esophageal neoplasia. Journal of Medical Imaging, 2017, 4, 1.	0.8	12
25	57.1: Nearâ€toâ€Eye Display using Scanning Fiber Display Engine. Digest of Technical Papers SID International Symposium, 2010, 41, 848-851.	0.1	11
26	Axial-Stereo 3-D Optical Metrology for Inner Profile of Pipes Using a Scanning Laser Endoscope. International Journal of Optomechatronics, 2015, 9, 238-247.	3.3	11
27	Controlling the Trajectory of a Flexible Ultrathin Endoscope for Fully Automated Bladder Surveillance. IEEE/ASME Transactions on Mechatronics, 2014, 19, 366-373.	3.7	10
28	Electromechanical Modeling and Adaptive Feedforward Control of a Self-Sensing Scanning Fiber Endoscope. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	0.9	10
29	Scanning Fiber Angioscopy. Neurosurgery, 2017, 64, 188-198.	0.6	10
30	Detection of Barrettâ€™s neoplasia with a near-infrared fluorescent heterodimeric peptide. Endoscopy, 2022, 54, 1198-1204.	1.0	10
31	Registration of free-hand OCT daughter endoscopy to 3D organ reconstruction. Biomedical Optics Express, 2016, 7, 4995.	1.5	9
32	P-37: Optical Fiber scanning as a Microdisplay source for a Wearable Low Vision Aid. Digest of Technical Papers SID International Symposium, 2002, 33, 338.	0.1	8
33	47.4: <i>Invited Paper</i>: 3D Displays using Scanning Laser Projection. Digest of Technical Papers SID International Symposium, 2012, 43, 640-643.	0.1	8
34	Scanning fiber endoscopy: a novel platform for cholangioscopy. Gastrointestinal Endoscopy, 2014, 79, 1000-1001.	0.5	8
35	Pâ€251L: <i>Lateâ€News Poster</i>: Miniature Wideâ€Throwâ€Angle Scanning Fiber Projection Display. Digest of Technical Papers SID International Symposium, 2008, 39, 2102-2105.	0.1	7
36	Three-dimensional DNA image cytometry by optical projection tomographic microscopy for early cancer diagnosis. Journal of Medical Imaging, 2014, 1, 017501.	0.8	7

#	Article	IF	Citations
37	Near-Infrared Imaging of Artificial Enamel Caries Lesions with a Scanning Fiber Endoscope. Sensors, 2019, 19, 1419.	2.1	6
38	Letter to the Editor: Factors that Influence Quantification of Fluorescent Signal During the 5-ALA-Guided Surgery. World Neurosurgery, 2020, 139, 700-702.	0.7	6
39	Towards ARâ€assisted visualisation and guidance for imaging of dental decay. Healthcare Technology Letters, 2019, 6, 243-248.	1.9	6
40	Calibration of fluorescence imaging for tumor surgical margin delineation: multistep registration of fluorescence and histological images. Journal of Medical Imaging, 2019, 6, 1.	0.8	6
41	Pâ€197L: <i>Lateâ€News Poster: 0Â° to 100Â° in 33 ms: Electronicallyâ€Adjustable Throw Angle in a Scanning Fiber Pico Projector</i>. Digest of Technical Papers SID International Symposium, 2009, 40, 1783-1786.	0.1	5
42	37.1: <i>Invited Paper</i>: 1â€mm Diameter, Fullâ€color Scanning Fiber Pico Projector. Digest of Technical Papers SID International Symposium, 2009, 40, 522-525.	0.1	5
43	Image-guided intervention in the human bile duct using scanning fiber endoscope system. Proceedings of SPIE, 2012, , .	0.8	5
44	Mapping surgical fields by moving a laser-scanning multimodal scope attached to a robot arm. , 2014, 9036, .		5
45	Barrett's Esophagus Translational Research Network (BETRNet): The Pivotal Role of Multi-institutional Collaboration in Esophageal Adenocarcinoma Research. Gastroenterology, 2014, 146, 1586-1590.	0.6	5
46	Feature-Based Three-Dimensional Registration for Repetitive Geometry in Machine Vision. Journal of Information Technology & Software Engineering, 2016, 6, .	0.3	5
47	Method to Achieve High Frame Rates in a Scanning Fiber Endoscope. Journal of Medical Devices, Transactions of the ASME, 2011, 5, .	0.4	4
48	Toward real-time endoscopically-guided robotic navigation based on a 3D virtual surgical field model. , 2015, 9415, 94150C.		4
49	Nearâ€infrared multispectral endoscopic imaging of deep artificial interproximal lesions in extracted teeth. Lasers in Surgery and Medicine, 2019, 51, 459-465.	1.1	4
50	Implementation and evaluation of team science training for interdisciplinary teams in an engineering design program. Journal of Clinical and Translational Science, 2021, 5, e127.	0.3	4
51	54.3: Modeling and Control of the Resonant Fiber Scanner for Laser Scanning Display or Acquisition. Digest of Technical Papers SID International Symposium, 2003, 34, 1455.	0.1	3
52	Intensity-Mosaic: automatic panorama mosaicking of disordered images with insufficient features. Journal of Medical Imaging, 2021, 8, 054002.	0.8	3
53	Toward real-time tumor margin identification in image-guided robotic brain tumor resection. Proceedings of SPIE, 2017, 10135, .	0.8	3
54	Beyond isolated cells: microfluidic transport of large tissue for pancreatic cancer diagnosis. Proceedings of SPIE, 2015, 9320, .	0.8	2

#	Article	IF	Citations
55	Ultrathin and flexible 4-channel scope for guiding surgical resections using a near-infrared fluorescence molecular probe for cancer. , 2018, , .		2
56	Cost-Efficient Video Synthesis and Evaluation for Development of Virtual 3D Endoscopy. IEEE Journal of Translational Engineering in Health and Medicine, 2021, 9, 1-11.	2.2	2
57	Synergistic Network Learning and Label Correction for Noise-Robust Image Classification. , 2022, , .		2
58	Prototype Development of a Temperature-Sensitive High-Adhesion Medical Tape to Reduce Medical-Adhesive-Related Skin Injury and Improve Quality of Care. International Journal of Molecular Sciences, 2022, 23, 7164.	1.8	2
59	64.1: Display Technologies for Therapeutic Applications of Virtual Reality. Digest of Technical Papers SID International Symposium, 2010, 41, 949-952.	0.1	1
60	Computer simulations driving improved implementation of Optical Projection Tomographic Microscopy. , 2014, , .		1
61	Intraductal Tissue Sampling Device Designed for the Biliary Tract. IEEE Journal of Translational Engineering in Health and Medicine, 2021, 9, 1-12.	2.2	1
62	Optimization Study of the Hemodynamics of Saline Flushing in Endoscopic Imaging of Chronic Total Occlusions (CTOs). Cardiovascular Engineering and Technology, 2021, 12, 541-555.	0.7	1
63	Custom bile duct phantom for first-in-human multiplexed NIR fluorescence peptide imaging. , 2019, , .		1
64	Real-Time Camera Localization during Robot-Assisted Telecystoscopy for Bladder Cancer Surveillance. Journal of Medical Robotics Research, 2022, 07, .	1.0	1
65	Axial-Stereo 3D Optical Metrology of Internally Machined Parts Using High-Quality Imaging from a Scanning Laser Endoscope. , 2014, , .		0
66	Run-to-Run Optimization Control Within Exact Inverse Framework for Scan Tracking. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, 0910111-9101112.	0.9	0