Adam K Glaser

List of Publications by Year in descending order

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214527 159358 2,424 64 30 47 citations h-index g-index papers 67 67 67 1727 docs citations times ranked citing authors all docs

#	Article	IF	Citations
1	Light-sheet microscopy for slide-free non-destructive pathology of large clinical specimens. Nature Biomedical Engineering, 2017, 1 , .	11.6	285
2	Multi-immersion open-top light-sheet microscope for high-throughput imaging of cleared tissues. Nature Communications, 2019, 10, 2781.	5.8	135
3	Optical dosimetry of radiotherapy beams using Cherenkov radiation: the relationship between light emission and dose. Physics in Medicine and Biology, 2014, 59, 3789-3811.	1.6	130
4	Cherenkov Video Imaging Allows for the First Visualization of Radiation Therapy in Real Time. International Journal of Radiation Oncology Biology Physics, 2014, 89, 615-622.	0.4	95
5	Projection imaging of photon beams by the ÄŒerenkov effect. Medical Physics, 2013, 40, 012101.	1.6	90
6	Three-dimensional ÄŒerenkov tomography of energy deposition from ionizing radiation beams. Optics Letters, 2013, 38, 634.	1.7	81
7	Projection imaging of photon beams using ÄŒerenkov-excited fluorescence. Physics in Medicine and Biology, 2013, 58, 601-619.	1.6	79
8	Raman-Encoded Molecular Imaging with Topically Applied SERS Nanoparticles for Intraoperative Guidance of Lumpectomy. Cancer Research, 2017, 77, 4506-4516.	0.4	75
9	Time-gated Cherenkov emission spectroscopy from linear accelerator irradiation of tissue phantoms. Optics Letters, 2012, 37, 1193.	1.7	74
10	Harnessing non-destructive 3D pathology. Nature Biomedical Engineering, 2021, 5, 203-218.	11.6	74
11	Cherenkov radiation fluence estimates in tissue for molecular imaging and therapy applications. Physics in Medicine and Biology, 2015, 60, 6701-6718.	1.6	70
12	Superficial dosimetry imaging based on ÄŒerenkov emission for external beam radiotherapy with megavoltage xâ€ray beam. Medical Physics, 2013, 40, 101914.	1.6	68
13	A GAMOS plug-in for GEANT4 based Monte Carlo simulation of radiation-induced light transport in biological media. Biomedical Optics Express, 2013, 4, 741.	1.5	66
14	Superficial dosimetry imaging of ÄŒerenkov emission in electron beam radiotherapy of phantoms. Physics in Medicine and Biology, 2013, 58, 5477-5493.	1.6	62
15	Feature-rich covalent stains for super-resolution and cleared tissue fluorescence microscopy. Science Advances, 2020, 6, eaba4542.	4.7	60
16	A hybrid open-top light-sheet microscope for versatile multi-scale imaging of cleared tissues. Nature Methods, 2022, 19, 613-619.	9.0	54
17	Rapid pathology of lumpectomy margins with open-top light-sheet (OTLS) microscopy. Biomedical Optics Express, 2019, 10, 1257.	1.5	51
18	Real-time in vivo Cherenkoscopy imaging during external beam radiation therapy. Journal of Biomedical Optics, 2013, 18, 1.	1.4	47

#	Article	IF	Citations
19	Cherenkov-excited luminescence scanned imaging. Optics Letters, 2015, 40, 827.	1.7	46
20	Multiplexed Optical Imaging of Tumor-Directed Nanoparticles: A Review of Imaging Systems and Approaches. Nanotheranostics, 2017, $1,369-388$.	2.7	46
21	Cherenkoscopy based patient positioning validation and movement tracking during post-lumpectomy whole breast radiation therapy. Physics in Medicine and Biology, 2015, 60, L1-L14.	1.6	45
22	Open-Top Light-Sheet Microscopy Image Atlas of Prostate Core Needle Biopsies. Archives of Pathology and Laboratory Medicine, 2019, 143, 1069-1075.	1.2	44
23	ÄŒerenkov radiation emission and excited luminescence (CREL) sensitivity during external beam radiation therapy: Monte Carlo and tissue oxygenation phantom studies. Biomedical Optics Express, 2012, 3, 2381.	1.5	42
24	Cherenkov imaging method for rapid optimization of clinical treatment geometry in total skin electron beam therapy. Medical Physics, 2016, 43, 993-1002.	1.6	42
25	Prostate Cancer Risk Stratification via Nondestructive 3D Pathology with Deep Learning–Assisted Gland Analysis. Cancer Research, 2022, 82, 334-345.	0.4	42
26	Microscopy with ultraviolet surface excitation for wide-area pathology of breast surgical margins. Journal of Biomedical Optics, 2019, 24, 1.	1.4	40
27	Video-rate optical dosimetry and dynamic visualization of IMRT and VMAT treatment plans in water using Cherenkov radiation. Medical Physics, 2014, 41, 062102.	1.6	39
28	Quantitative Cherenkov emission spectroscopy for tissue oxygenation assessment. Optics Express, 2012, 20, 5133.	1.7	36
29	Camera selection for realâ€time <i>in vivo</i> radiation treatment verification systems using Cherenkov imaging. Medical Physics, 2015, 42, 994-1004.	1.6	36
30	Multi-resolution open-top light-sheet microscopy to enable efficient 3D pathology workflows. Biomedical Optics Express, 2020, 11, 6605.	1.5	36
31	Oxygen tomography by ÄŒerenkov-excited phosphorescence during external beam irradiation. Journal of Biomedical Optics, 2013, 18, 050503.	1.4	34
32	Fractal propagation method enables realistic optical microscopy simulations in biological tissues. Optica, 2016, 3, 861.	4.8	30
33	Surgical Guidance via Multiplexed Molecular Imaging of Fresh Tissues Labeled With SERS-Coded Nanoparticles. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 154-164.	1.9	29
34	Beam and tissue factors affecting Cherenkov image intensity for quantitative entrance and exit dosimetry on human tissue. Journal of Biophotonics, 2017, 10, 645-656.	1.1	29
35	Cherenkov excited phosphorescence-based pO ₂ estimation during multi-beam radiation therapy: phantom and simulation studies. Physics in Medicine and Biology, 2014, 59, 5317-5328.	1.6	27
36	Optical cone beam tomography of Cherenkovâ€mediated signals for fast 3D dosimetry of xâ€ray photon beams in water. Medical Physics, 2015, 42, 4127-4136.	1.6	24

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37	FalseColor-Python: A rapid intensity-leveling and digital-staining package for fluorescence-based slide-free digital pathology. PLoS ONE, 2020, 15, e0233198.	1.1	23
38	Solid immersion meniscus lens (SIMlens) for open-top light-sheet microscopy. Optics Letters, 2019, 44, 4451.	1.7	23
39	Multidirectional digital scanned light-sheet microscopy enables uniform fluorescence excitation and contrast-enhanced imaging. Scientific Reports, 2018, 8, 13878.	1.6	22
40	Besselâ€beam illumination in dualâ€axis confocal microscopy mitigates resolution degradation caused by refractive heterogeneities. Journal of Biophotonics, 2017, 10, 68-74.	1.1	17
41	Diagnosing 12 prostate needle cores within an hour of biopsy via open-top light-sheet microscopy. Journal of Biomedical Optics, 2020, 25, .	1.4	15
42	Performance tradeoffs for single- and dual-objective open-top light-sheet microscope designs: a simulation-based analysis. Biomedical Optics Express, 2020, 11, 4627.	1.5	14
43	Fluorescent labeling of abundant reactive entities (FLARE) for cleared-tissue and super-resolution microscopy. Nature Protocols, 2022, 17, 819-846.	5.5	9
44	Multiresolution nondestructive 3D pathology of whole lymph nodes for breast cancer staging. Journal of Biomedical Optics, 2022, 27, .	1.4	9
45	Cherenkov radiation dosimetry in water tanks $\hat{a} \in \text{``}$ video rate imaging, tomography and IMRT & Lamp; VMAT plan verification. Journal of Physics: Conference Series, 2015, 573, 012013.	0.3	5
46	Realâ€time video mosaicking to guide handheld in vivo microscopy. Journal of Biophotonics, 2020, 13, e202000048.	1.1	5
47	Time-gated Cherenkov emission spectroscopy from linear accelerator irradiation of tissue phantoms. , 2012, , .		4
48	Cherenkov emission spectroscopy for tissue oxygen saturation assessment., 2012,,.		2
49	Assessment of biophysical tumor response to PDT in pancreatic cancer using localized reflectance spectroscopy. Proceedings of SPIE, 2011, , .	0.8	1
50	Using a reflectance-based correction on Cherenkov images to strengthen correlation with radiation surface dose in an anthropomorphic breast phantom. , $2016, , .$		1
51	In Vivo Cherenkov Video Imaging during External Beam Radiation Therapy. , 2014, , .		1
52	GEANT4 - a new and robust tool for biophotonics Monte Carlo simulations. , 2014, , .		0
53	Cherenkov radiation fluence estimates in tissue for molecular imaging and therapy applications. Proceedings of SPIE, 2016, , .	0.8	0
54	Cherenkov imaging during volumetric modulated arc therapy for real-time radiation beam tracking and treatment response monitoring. Proceedings of SPIE, $2016, \ldots$	0.8	0

#	Article	IF	CITATIONS
55	Numerical modeling of illumination and detection methods for light-sheet microscopy of optically clear biological tissues. , 2017 , , .		0
56	A Handheld MEMS-Scanned in Vivo Optical-Sectioning Microscope for Early Detection and Surgical Guidance. , $2018, \ldots$		0
57	An open-source software package to simulate Cerenkov-based optical measurements in biological media., 2013,,.		0
58	Video-rate optical dosimetry of dynamic radiotherapy plans by the Cherenkov effect., 2014,,.		0
59	Cherenkov imaging applications in radiation therapy dosimetry. Imaging in Medical Diagnosis and Therapy, 2016, , 385-402.	0.0	0
60	Multi-Resolution Open-Top Light Sheet Microscopy Enabled by a Solid Immersion Meniscus Lens (SIMlens). , 2020, , .		0
61	Light-sheet micro-dissection microscopy for improved molecular analysis of clinical specimens. , 2020, , .		0
62	Non-Orthogonal Dual-Objective (NODO) Open-Top Light-Sheet (OTLS) Microscopy for 3D Pathology of Cleared Clinical Specimens. , 2022, , .		0
63	Staging breast cancer metastases with multi-resolution 3D pathology of whole lymph nodes. , 2022, , .		0
64	Deep Learning-assisted 3D Segmentation and Analysis of Prostate Glands for Cancer Risk Stratification., 2022,,.		0