Nicholas J Durr

List of Publications by Year
in descending order

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Version: 2024-02-01

88	2,827	377584	198040
papers	citations	21 h-index	52 g-index

90	90	90	4850
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A portable, dual-channel oblique back-illumination capillaroscope for in vivo human blood cell imaging in hematology clinics. , 2022, , .		0
2	A model for generating paired complete blood count and oblique back-illumination capillaroscopy data in tissue-realistic microfluidic chambers. , 2022, , .		0
3	A high-resolution reverse lens design for cell phone capillaroscopy blood analysis. , 2022, , .		0
4	Imaging phase-function contrast with masked aperture scattering oblique plane microscopy. , 2022, , .		0
5	Predicting subjective refraction with dynamic retinal image quality analysis. Scientific Reports, 2022, 12, 3714.	1.6	3
6	Non-invasive Blood Analysis with Deep Learning and Oblique Back-illumination Microscopy. , 2022, , .		0
7	A Deep Learning Bidirectional Temporal Tracking Algorithm for Automated Blood Cell Counting from Non-invasive Capillaroscopy Videos. Lecture Notes in Computer Science, 2021, , 415-424.	1.0	6
8	Speckle illumination SFDI for projector-free optical property mapping. Optics Letters, 2021, 46, 673.	1.7	6
9	Scattering oblique plane microscopy for in-vivo blood cell imaging. Biomedical Optics Express, 2021, 12, 2575.	1.5	7
10	Deep Learning in Biomedical Optics. Lasers in Surgery and Medicine, 2021, 53, 748-775.	1.1	32
11	VR-Caps: A Virtual Environment for Capsule Endoscopy. Medical Image Analysis, 2021, 70, 101990.	7.0	40
12	EndoSLAM dataset and an unsupervised monocular visual odometry and depth estimation approach for endoscopic videos. Medical Image Analysis, 2021, 71, 102058.	7.0	84
13	Improving Colonoscopy Lesion Classification Using Semi-Supervised Deep Learning. IEEE Access, 2021, 9, 631-640.	2.6	12
14	Establishing a Quantitative Endpoint for Transarterial Embolization From Real-Time Pressure Measurements. Journal of Medical Devices, Transactions of the ASME, 2021, 15, .	0.4	3
15	Diffuser-based computational funduscopy. , 2021, , .		0
16	Deep Adversarial Training for Multi-Organ Nuclei Segmentation in Histopathology Images. IEEE Transactions on Medical Imaging, 2020, 39, 3257-3267.	5.4	190
17	Curricular Advancement of Biomedical Engineering Undergraduate Design Projects Beyond 1ÂYear: A Pilot Study. Annals of Biomedical Engineering, 2020, 48, 1137-1146.	1.3	1
18	GANPOP: Generative Adversarial Network Prediction of Optical Properties From Single Snapshot Wide-Field Images. IEEE Transactions on Medical Imaging, 2020, 39, 1988-1999.	5.4	25

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19	EndoL2H: Deep Super-Resolution for Capsule Endoscopy. IEEE Transactions on Medical Imaging, 2020, 39, 4297-4309.	5.4	29
20	Rapid tissue oxygenation mapping from snapshot structured-light images with adversarial deep learning. Journal of Biomedical Optics, 2020, 25, .	1.4	14
21	Visualization of blood cell contrast in nailfold capillaries with high-speed reverse lens mobile phone microscopy. Biomedical Optics Express, 2020, 11, 2268.	1.5	21
22	Development of a low-cost imaging system for remote mosquito surveillance. Biomedical Optics Express, 2020, 11, 2560.	1.5	7
23	Imaging human blood cells in vivo with oblique back-illumination capillaroscopy. Biomedical Optics Express, 2020, 11, 2373.	1.5	18
24	Optical Technologies for Improving Healthcare in Low-Resource Settings: introduction to the feature issue. Biomedical Optics Express, 2020, 11, 3091.	1.5	4
25	Diffuser-based computational imaging funduscope. Optics Express, 2020, 28, 19641.	1.7	6
26	Optimizing white blood cell contrast in graded-field capillaroscopy using capillary tissue phantoms. , 2020, , .		2
27	A Cartilage Dicing Tool for Rapid Preparation of Rhinoplasty Grafts. Journal of Medical Devices, Transactions of the ASME, 2020, 14, .	0.4	0
28	Quantitative Tissue Property Measurements with Structured Illumination and Deep Learning. , 2020, , .		0
29	A Review of Options for Localization of Axillary Lymph Nodes in the Treatment of Invasive Breast Cancer. Academic Radiology, 2019, 26, 805-819.	1.3	43
30	Validation of a low-cost, carbon dioxide-based cryoablation system for percutaneous tumor ablation. PLoS ONE, 2019, 14, e0207107.	1.1	8
31	Learning to Navigate Endoscopic Capsule Robots. IEEE Robotics and Automation Letters, 2019, 4, 3075-3082.	3.3	16
32	Automated detection of neutropenia using noninvasive video microscopy of superficial capillaries. American Journal of Hematology, 2019, 94, E219-E222.	2.0	8
33	Wideâ€field optical property mapping and structured light imaging of the esophagus with spatial frequency domain imaging. Journal of Biophotonics, 2019, 12, e201900005.	1.1	8
34	Quality of eyeglass prescriptions from a low-cost wavefront autorefractor evaluated in rural India: results of a 708-participant field study. BMJ Open Ophthalmology, 2019, 4, e000225.	0.8	16
35	Validation of an Affordable Handheld Wavefront Autorefractor. Optometry and Vision Science, 2019, 96, 726-732.	0.6	18
36	Comparison of Tri-folded and Scroll-based Graft Viability in Preloaded Descemet Membrane Endothelial Keratoplasty. Cornea, 2019, 38, 392-396.	0.9	16

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37	A quantitative analysis of factors influencing lower lid retraction and involutional ectropion. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2019, 72, 137-171.	0.5	2
38	A Device for Preloaded, Trifolded Grafts to Facilitate Descemet Membrane Endothelial Keratoplasty. Journal of Medical Devices, Transactions of the ASME, 2019, 13, .	0.4	1
39	Large dynamic range autorefraction with a low-cost diffuser wavefront sensor. Biomedical Optics Express, 2019, 10, 1718.	1.5	10
40	DeepLSR: a deep learning approach for laser speckle reduction. Biomedical Optics Express, 2019, 10, 2869.	1.5	21
41	Registering large caustic distortions for high dynamic range diffuser wavefront sensing. , 2019, , .		0
42	An adaptive-coherence light source for hyperspectral, topographic, and flow-contrast imaging. , 2019, 10871, .		1
43	Polyp segmentation and classification using predicted depth from monocular endoscopy. , 2019, , .		11
44	Adversarial U-net with spectral normalization for multi-organ histopathology image segmentation. , 2019, , .		1
45	Speckle reduction in laser illuminated endoscopy using adversarial deep learning. , 2019, , .		1
46	High-speed imaging of scattering particles flowing through turbid media with confocally aligned, oblique plane illumination. , 2019, , .		0
47	Starting a Medical Technology Venture as a Young Academic Innovator or Student Entrepreneur. Annals of Biomedical Engineering, 2018, 46, 1-13.	1.3	13
48	Viability of Descemet Membrane Endothelial Keratoplasty Grafts Folded in the Eye Bank. Cornea, 2018, 37, 1474-1477.	0.9	10
49	Deep learning with cinematic rendering: fine-tuning deep neural networks using photorealistic medical images. Physics in Medicine and Biology, 2018, 63, 185012.	1.6	34
50	Unsupervised Reverse Domain Adaptation for Synthetic Medical Images via Adversarial Training. IEEE Transactions on Medical Imaging, 2018, 37, 2572-2581.	5.4	164
51	Deep learning and conditional random fields-based depth estimation and topographical reconstruction from conventional endoscopy. Medical Image Analysis, 2018, 48, 230-243.	7.0	97
52	Topographical reconstructions from monocular optical colonoscopy images via deep learning. , 2018, , .		5
53	Deep learning-based depth estimation from a synthetic endoscopy image training set. , 2018, , .		8
54	Single-Element Needle-Based Ultrasound Imaging of the Spine: An In Vivo Feasibility Study. Lecture Notes in Computer Science, 2018, , 82-89.	1.0	5

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55	Mapping optical properties of the esophagus using sub-diffuse spatial frequency domain imaging (Conference Presentation). , 2018, , .		0
56	Quantitative polyp size measurements with photometric stereo endoscopy enhanced by deep learning (Conference Presentation). , 2018, , .		0
57	Toward dynamic lumbar puncture guidance using needle-based single-element ultrasound imaging. Journal of Medical Imaging, 2018, 5, 1.	0.8	12
58	Annular Beam Shaping in Multiphoton Microscopy to Reduce Out-of-Focus Background. International Journal of Spectroscopy, 2017, 2017, 1-10.	1.4	7
59	Toward dynamic lumbar punctures guidance based on single element synthetic tracked aperture ultrasound imaging. Proceedings of SPIE, 2017, , .	0.8	2
60	Design and Clinical Evaluation of a Handheld Wavefront Autorefractor. Optometry and Vision Science, 2015, 92, 1140-1147.	0.6	24
61	Tripling the maximum imaging depth with third-harmonic generation microscopy. Journal of Biomedical Optics, 2015, 20, 096013.	1.4	21
62	System for clinical photometric stereo endoscopy. Proceedings of SPIE, 2014, , .	0.8	2
63	Improving multiphoton microscopy using annular beam shaping, focusing on imaging of human skin. , 2014, , .		1
64	3D imaging techniques for improved colonoscopy. Expert Review of Medical Devices, 2014, 11, 105-107.	1.4	13
65	Maximum imaging depth improvement with third-harmonic generation microscopy in turbid tissues. , 2014, , .		0
66	Mo1499 Imaging Colonic Surface Topography With Photometric Stereo Endoscopy. Gastrointestinal Endoscopy, 2014, 79, AB459.	0.5	4
67	From Unseen to Seen: Tackling the Global Burden of Uncorrected Refractive Errors. Annual Review of Biomedical Engineering, 2014, 16, 131-153.	5.7	32
68	Maximum imaging depth improvement with third harmonic generation microscopy in turbid tissues. , 2014, , .		0
69	Feature Space Optimization for Virtual Chromoendoscopy Augmented by Topography. Lecture Notes in Computer Science, 2014, 17, 642-649.	1.0	2
70	Photometric stereo endoscopy. Journal of Biomedical Optics, 2013, 18, 1.	1.4	36
71	A Novel Pilot Study Using Spatial Frequency Domain Imaging to Assess Oxygenation of Perforator Flaps During Reconstructive Breast Surgery. Annals of Plastic Surgery, 2013, 71, 308-315.	0.5	40
72	- Biomechanics-Based Microfluidic Biochip for the Effective Label-Free Isolation and Retrieval of Circulating Tumor Cells. , 2012, , 380-399.		0

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73	Preclinical and clinical validation of a novel oxygenation imaging system. , 2011, , .		2
74	Fast-updating and nonrepeating Lissajous image reconstruction method for capturing increased dynamic information. Applied Optics, 2011, 50, 2376.	2.1	37
75	Maximum imaging depth of two-photon autofluorescence microscopy in epithelial tissues. Journal of Biomedical Optics, 2011, 16, 026008.	1.4	58
76	First-in-human pilot study of a spatial frequency domain oxygenation imaging system. Journal of Biomedical Optics, 2011, 16, 1.	1.4	139
77	Femtosecond laser nanoaxotomy lab-on-a-chip for in vivo nerve regeneration studies. Nature Methods, 2008, 5, 531-533.	9.0	196
78	Thermal analysis of gold nanorods heated with femtosecond laser pulses. Journal Physics D: Applied Physics, 2008, 41, 185501.	1.3	196
79	Miniaturized probe for femtosecond laser microsurgery and two-photon imaging. Optics Express, 2008, 16, 9996.	1.7	119
80	Femtosecond laser nanosurgery in microfluidic devices and its emerging role in nerve regeneration studies. , 2008, , .		0
81	Two-photon luminescence imaging using a MEMS-based miniaturized probe. , 2008, , .		0
82	Two-photon luminescence imaging using gold nanorods as bright contrast agents. , 2008, , .		0
83	Two-photon luminescence imaging of cancerous tissue using gold nanorods as bright contrast agents. , 2007, , 6630_25.		0
84	Gold nanorods for optimized two-photon luminescence imaging of cancerous tissue. Proceedings of SPIE, 2007, , .	0.8	4
85	Two-photon luminescence imaging of cancerous tissue using gold nanorods as bright contrast agents. Proceedings of SPIE, 2007, , .	0.8	1
86	Two-Photon Luminescence Imaging of Cancer Cells Using Molecularly Targeted Gold Nanorods. Nano Letters, 2007, 7, 941-945.	4.5	851
87	Two-Photon Luminescence Imaging of Cancer Cells using Molecularly Targeted Gold Nanorods. , 2007, , .		1
88	A Miniature Microscope for Two-Photon Imaging and Femtosecond Laser Surgery. , 2007, , .		0