Tomasz S Tkaczyk

List of Publications by Year
in descending order

86	2,219	218677	233421
papers	citations	26 h-index	45 g-index

87	87	87	2085
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ruggedized, field-ready snapshot light-guide-based imaging spectrometer for environmental and remote sensing applications. Optics Express, 2022, 30, 10614.	3.4	9
2	Evaluation of the LeukoScope for Point-of-Care Measurement of White Blood Cell and Neutrophil Counts in Malawi. Annals of Biomedical Engineering, 2021, 49, 2566-2578.	2.5	1
3	Development of a miniature objective based on calcium fluoride and zinc sulfide lenses for ultrafast laser microsurgery applications. Optical Engineering, 2021, 60, .	1.0	2
4	Ultrafast laser surgery probe with a calcium fluoride miniaturized objective for bone ablation. Biomedical Optics Express, 2021, 12, 4779.	2.9	6
5	Radiometric and design model for the tunable light-guide image processing snapshot spectrometer (TuLIPSS). Optics Express, 2021, 29, 30174.	3.4	4
6	A Dye-Free Analog to Retinal Angiography Using Hyperspectral Unmixing to Retrieve Oxyhemoglobin Abundance. Translational Vision Science and Technology, 2019, 8, 44.	2.2	2
7	Clinical training and validation of the LeukoScope: a low-cost, point-of-care device to perform white blood cell and neutrophil counts. RSC Advances, 2019, 9, 27324-27333.	3.6	4
8	Simple ultraviolet microscope using off-the-shelf components for point-of-care diagnostics. PLoS ONE, 2019, 14, e0214090.	2.5	7
9	High-resolution endomicroscopy with a spectrally encoded miniature objective. Biomedical Optics Express, 2019, 10, 1432.	2.9	3
10	Toward development of a large field-of-view cancer screening patch (CASP) to detect cervical intraepithelial neoplasia. Biomedical Optics Express, 2019, 10, 6145.	2.9	3
11	High performance image mapping spectrometer (IMS) for snapshot hyperspectral imaging applications. Optics Express, 2019, 27, 1597.	3.4	23
12	Light-guide snapshot imaging spectrometer for remote sensing applications. Optics Express, 2019, 27, 15701.	3.4	17
13	Fabrication of optical components using a consumer-grade lithographic printer. Optics Express, 2019, 27, 30405.	3.4	28
14	Development of a universal, tunable, miniature fluorescence microscope for use at the point of care. Biomedical Optics Express, 2018, 9, 1041.	2.9	8
15	Biophotonics feature: introduction. Biomedical Optics Express, 2018, 9, 1229.	2.9	2
16	3D printed fiber optic faceplates by custom controlled fused deposition modeling. Optics Express, 2018, 26, 15362.	3.4	27
17	Compact snapshot image mapping spectrometer for unmanned aerial vehicle hyperspectral imaging. Journal of Applied Remote Sensing, 2018, 12, 1.	1.3	9
18	Recent Progress in Hyperspectral Imaging Spectrometry. , 2018, , .		0

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19	Compact Integral Filed Snapshot Imaging Spectrometers for Environmental Imaging Applications. , 2018, , .		0
20	Compact snapshot image mapping spectrometer (SNAP-IMS) for hyperspectral data cube acquisition using unmanned aerial vehicle (UAV) environmental imaging. , 2018, , .		3
21	High spatial sampling light-guide snapshot spectrometer. Optical Engineering, 2017, 56, 081803.	1.0	14
22	Development of a multimodal foveated endomicroscope for the detection of oral cancer. Biomedical Optics Express, 2017, 8, 1525.	2.9	16
23	Lenslet array tunable snapshot imaging spectrometer (LATIS) for hyperspectral fluorescence microscopy. Biomedical Optics Express, 2017, 8, 1950.	2.9	42
24	Quantitative evaluation of performance of three-dimensional printed lenses. Optical Engineering, 2017, 56, 1.	1.0	25
25	High Speed Image Mapping Spectrometer for Biomedical Applications. , 2017, , .		3
26	Hyperspectral imaging for simultaneous measurements of two FRET biosensors in pancreatic Î²-cells. PLoS ONE, 2017, 12, e0188789.	2.5	7
27	Special Section Guest Editorial: Translational Biophotonics. Journal of Biomedical Optics, 2017, 22, 034000.	2.6	1
28	Kagome fiber based ultrafast laser microsurgery probe delivering micro-Joule pulse energies. Biomedical Optics Express, 2016, 7, 4639.	2.9	21
29	Differentiating between live and dead Mycobacterium smegmatis using autofluorescence. Tuberculosis, 2016, 101, S119-S123.	1.9	9
30	Snapshot Hyperspectral Light-Sheet Imaging of Signal Transduction in Live Pancreatic Islets. Biophysical Journal, 2016, 111, 409-417.	0.5	29
31	Hyperspectral Image Mapping Spectrometry for Retinal Oximetry Measurements in Four Diseased Eyes. International Ophthalmology Clinics, 2016, 56, 25-38.	0.7	20
32	Development of tunable miniature piezoelectric-based scanners validated by the combination of two scanners in a direct image relay technique. Optical Engineering, 2016, 55, 1.	1.0	5
33	Design and fabrication of a miniature objective consisting of high refractive index zinc sulfide lenses for laser surgery. Optical Engineering, 2016, 55, 025107.	1.0	7
34	Introduction to the bio-optics: design and application. Biomedical Optics Express, 2015, 6, 4899.	2.9	2
35	All-plastic, miniature, digital fluorescence microscope for three part white blood cell differential measurements at the point of care. Biomedical Optics Express, 2015, 6, 4433.	2.9	27
36	Hyperspectral optical tomography of intrinsic signals in the rat cortex. Neurophotonics, 2015, 2, 045003.	3.3	14

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37	All-plastic miniature fluorescence microscope for point-of-care readout of bead-based bioassays. Journal of Biomedical Optics, 2015, 20, 105010.	2.6	9
38	Miniature, minimally invasive, tunable endoscope for investigation of the middle ear. Biomedical Optics Express, 2015, 6, 2246.	2.9	23
39	Confocal foveated endomicroscope for the detection of esophageal carcinoma. Biomedical Optics Express, 2015, 6, 2311.	2.9	7
40	Src Inhibition Blocks c-Myc Translation and Glucose Metabolism to Prevent the Development of Breast Cancer. Cancer Research, 2015, 75, 4863-4875.	0.9	44
41	Evaluation of a Miniature Microscope Objective Designed for Fluorescence Array Microscopy Detection of Mycobacterium tuberculosis. Archives of Pathology and Laboratory Medicine, 2014, 138, 379-389.	2.5	6
42	Optically-sectioned two-shot structured illumination microscopy with Hilbert-Huang processing. Optics Express, 2014, 22, 9517.	3.4	36
43	Low-cost disposable cartridge for performing a white blood cell count and partial differential at the point-of-care. , 2014, 2014, 10-13.		12
44	Optical Systems for Point-of-care Diagnostic Instrumentation: Analysis of Imaging Performance and Cost. Annals of Biomedical Engineering, 2014, 42, 231-240.	2.5	20
45	Chromatography paper as a low-cost medium for accurate spectrophotometric assessment of blood hemoglobin concentration. Lab on A Chip, 2013, 13, 2381.	6.0	36
46	Achromatized endomicroscope objective for optical biopsy. Biomedical Optics Express, 2013, 4, 287.	2.9	23
47	Multimodal snapshot spectral imaging for oral cancer diagnostics: a pilot study. Biomedical Optics Express, 2013, 4, 938.	2.9	49
48	Rapid fabrication of miniature lens arrays by four-axis single point diamond machining. Optics Express, 2013, 21, 3557.	3.4	28
49	Snapshot 3D optical coherence tomography system using image mapping spectrometry. Optics Express, 2013, 21, 13758.	3.4	23
50	Real-time hyperspectral fluorescence imaging of pancreatic Î²-cell dynamics with the image mapping spectrometer (IMS). Journal of Cell Science, 2012, 125, 4833-40.	2.0	48
51	Correction of vignetting and distortion errors induced by two-axis light beam steering. Optical Engineering, 2012, 51, 043203.	1.0	13
52	Image mapping spectrometry: calibration and characterization. Optical Engineering, 2012, 51, 1.	1.0	41
53	Snapshot hyperspectral retinal camera with the Image Mapping Spectrometer (IMS). Biomedical Optics Express, 2012, 3, 48.	2.9	70
54	Real-time video mosaicing with a high-resolution microendoscope. Biomedical Optics Express, 2012, 3, 2428.	2.9	57

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55	Quantitative sectioning and noise analysis for structured illumination microscopy: errata. Optics Express, 2012, 20, 5343.	3.4	2
56	Real-time in vivo visualization of tissue oxygenation and autofluorescence with a snapshot hyperspectral camera for detection of precancerous lesions. , 2012, , .		0
57	Quantitative sectioning and noise analysis for structured illumination microscopy. Optics Express, 2012, 20, 403.	3.4	49
58	Snapshot advantage: a review of the light collection improvement for parallel high-dimensional measurement systems. Optical Engineering, 2012, 51, 111702.	1.0	109
59	Snapshot 3D Optical Coherence Tomography System using Image Mapping Spectrometer. , 2012, , .		1
60	Real-time snapshot hyperspectral imaging endoscope. Journal of Biomedical Optics, 2011, 16, 056005.	2.6	142
61	Ultra-slim plastic endomicroscope objective for non-linear microscopy. Optics Express, 2011, 19, 7603.	3.4	28
62	Depth-resolved image mapping spectrometer (IMS) with structured illumination. Optics Express, 2011, 19, 17439.	3.4	36
63	Toward a low-cost compact array microscopy platform for detection of tuberculosis. Tuberculosis, 2011, 91, S54-S60.	1.9	21
64	Image mapping spectrometry: a novel hyperspectral platform for rapid snapshot imaging. , 2011, , .		7
65	Spectrally-resolved imaging of dynamic turbid media. Proceedings of SPIE, 2011, , .	0.8	5
66	Full-spectrum hyperspectral fluorescence microscopy with the Image Mapping Spectrometer (IMS). , 2011, , .		0
67	Real time hyperspectral imaging of pancreatic Î² cell dynamics with Image Mapping Spectrometer (IMS). , 2011, , .		0
68	4-D Image Mapping Spectrometer (IMS) with structured illumination. , 2011, , .		0
69	Fabrication of plastic microlens array for array microscopy by three-dimensional diamond micromilling. Optical Engineering, 2010, 49, 103401.	1.0	18
70	Real-time hyperspectral endoscope for early cancer diagnostics. , 2010, , .		11
71	Development of image mappers for hyperspectral biomedical imaging applications. Applied Optics, 2010, 49, 1886.	2.1	43
72	Design and evaluation of an ultra-slim objective for in-vivo deep optical biopsy. Optics Express, 2010, 18, 4758.	3.4	17

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73	Snapshot Image Mapping Spectrometer (IMS) with high sampling density for hyperspectral microscopy. Optics Express, 2010, 18, 14330.	3.4	224
74	Snapshot Image-Mapping Spectrometer for Hyperspectral Fluorescence Microscopy. Optics and Photonics News, 2010, 21, 50.	0.5	5
75	Compact Image Slicing Spectrometer (ISS) for hyperspectral fluorescence microscopy. Optics Express, 2009, 17, 12293.	3.4	123
76	Low cost, high performance, self-aligning miniature optical systems. Applied Optics, 2009, 48, 3375.	2.1	23
77	High numerical aperture microendoscope objective for a fiber confocal reflectance microscope. Optics Express, 2007, 15, 2409.	3.4	48
78	Removal of ghost images by using tilted element optical systems with polynomial surfaces for aberration compensation. Optics Letters, 2006, 31, 504.	3.3	10
79	Optical imaging of cervical pre-cancers with structured illumination: An integrated approach. Gynecologic Oncology, 2005, 99, S112-S115.	1.4	29
80	Realization of refractive microoptics through grayscale lithographic patterning of photosensitive hybrid glass. Optics Express, 2004, 12, 1294.	3.4	70
81	Application of the Alvarez-Humphrey concept to the design of a miniaturized scanning microscope. Optics Express, 2004, 12, 2574.	3.4	34
82	High resolution, molecular-specific, reflectance imaging in optically dense tissue phantoms with structured-illumination. Optics Express, 2004, 12, 3745.	3.4	31
83	Texture analysis of optical coherence tomography images: feasibility for tissue classification. Journal of Biomedical Optics, 2003, 8, 570.	2.6	168
84	Full-field heterodyne interferometer for shape measurement: experimental characteristics of the system. Optical Engineering, 2003, 42, 2391.	1.0	14
85	Influence of optical imaging on phase measurements in fringe projection coherent systems. Optical Engineering, 2002, 41, 811.	1.0	5
86	Opto-electronic displacement gauge based on speckle interferometer. Optics and Lasers in Engineering, 1999, 32, 65-77.	3.8	1