

Alexander Jesacher

List of Publications by Year in descending order

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Version: 2024-02-01

75
papers

4,538
citations

159585

30
h-index

98798

67
g-index

79
all docs

79
docs citations

79
times ranked

3895
citing authors

#	ARTICLE	IF	CITATIONS
1	Spiral phase contrast imaging in microscopy. <i>Optics Express</i> , 2005, 13, 689.	3.4	534
2	Tailoring of arbitrary optical vector beams. <i>New Journal of Physics</i> , 2007, 9, 78-78.	2.9	498
3	What spatial light modulators can do for optical microscopy. <i>Laser and Photonics Reviews</i> , 2011, 5, 81-101.	8.7	364
4	Quantitative imaging of complex samples by spiral phase contrast microscopy. <i>Optics Express</i> , 2006, 14, 3792.	3.4	244
5	Spiral interferometry. <i>Optics Letters</i> , 2005, 30, 1953.	3.3	242
6	Shadow Effects in Spiral Phase Contrast Microscopy. <i>Physical Review Letters</i> , 2005, 94, 233902.	7.8	194
7	Wavefront correction of spatial light modulators using an optical vortex image. <i>Optics Express</i> , 2007, 15, 5801.	3.4	178
8	Parallel direct laser writing in three dimensions with spatially dependent aberration correction. <i>Optics Express</i> , 2010, 18, 21090.	3.4	165
9	Near-perfect hologram reconstruction with a spatial light modulator. <i>Optics Express</i> , 2008, 16, 2597.	3.4	146
10	Full phase and amplitude control of holographic optical tweezers with high efficiency. <i>Optics Express</i> , 2008, 16, 4479.	3.4	125
11	Size selective trapping with optical "cogwheel" tweezers. <i>Optics Express</i> , 2004, 12, 4129.	3.4	101
12	A new tool to ensure the fluorescent dye labeling stability of nanocarriers: A real challenge for fluorescence imaging. <i>Journal of Controlled Release</i> , 2013, 170, 334-342.	9.9	96
13	Four-dimensional light shaping: manipulating ultrafast spatiotemporal foci in space and time. <i>Light: Science and Applications</i> , 2018, 7, 17117-17117.	16.6	94
14	Three dimensional laser microfabrication in diamond using a dual adaptive optics system. <i>Optics Express</i> , 2011, 19, 24122.	3.4	78
15	Holographic optical tweezers for object manipulations at an air-liquid surface. <i>Optics Express</i> , 2006, 14, 6342.	3.4	75
16	Adaptive slit beam shaping for direct laser written waveguides. <i>Optics Letters</i> , 2012, 37, 470.	3.3	74
17	Diffraction optical tweezers in the Fresnel regime. <i>Optics Express</i> , 2004, 12, 2243.	3.4	72
18	Adaptive aberration compensation for three-dimensional micro-fabrication of photonic crystals in lithium niobate. <i>Optics Express</i> , 2011, 19, 9419.	3.4	70

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19	Spiral interferogram analysis. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2006, 23, 1400.	1.5	64
20	Colour hologram projection with an SLM by exploiting its full phase modulation range. <i>Optics Express</i> , 2014, 22, 20530.	3.4	61
21	Adaptive harmonic generation microscopy of mammalian embryos. <i>Optics Letters</i> , 2009, 34, 3154.	3.3	60
22	Phase contrast microscopy with full numerical aperture illumination. <i>Optics Express</i> , 2008, 16, 19821.	3.4	56
23	Axial super-localisation using rotating point spread functions shaped by polarisation-dependent phase modulation. <i>Optics Express</i> , 2014, 22, 4029.	3.4	50
24	Adaptive optics for direct laser writing with plasma emission aberration sensing. <i>Optics Express</i> , 2010, 18, 656.	3.4	47
25	Lensless imaging through thin diffusive media. <i>Optics Express</i> , 2014, 22, 22146.	3.4	46
26	Three-dimensional localization microscopy using deep learning. <i>Optics Express</i> , 2018, 26, 33166.	3.4	45
27	Upgrading a microscope with a spiral phase plate. <i>Journal of Microscopy</i> , 2008, 230, 134-142.	1.8	42
28	Position clamping in a holographic counterpropagating optical trap. <i>Optics Express</i> , 2011, 19, 9908.	3.4	38
29	Fast holographic scattering compensation for deep tissue biological imaging. <i>Nature Communications</i> , 2021, 12, 4340.	12.8	37
30	Three-dimensional information from two-dimensional scans: a scanning microscope with postacquisition refocusing capability. <i>Optica</i> , 2015, 2, 210.	9.3	36
31	High-resolution confocal Raman microscopy using pixel reassignment. <i>Optics Letters</i> , 2016, 41, 3825.	3.3	29
32	Axial birefringence induced focus splitting in lithium niobate. <i>Optics Express</i> , 2009, 17, 17970.	3.4	27
33	Refractive index profiling of direct laser written waveguides: tomographic phase imaging. <i>Optical Materials Express</i> , 2013, 3, 1223.	3.0	27
34	Spiral Phase Microscopy. <i>Advances in Imaging and Electron Physics</i> , 2007, 146, 1-59e.	0.2	26
35	Uniform Lying Helix Alignment on Periodic Surface Relief Structure Generated via Laser Scanning Lithography. <i>Molecular Crystals and Liquid Crystals</i> , 2011, 544, 37/[1025]-49/[1037].	0.9	26
36	Lensless digital holography with diffuse illumination through a pseudo-random phase mask. <i>Optics Express</i> , 2011, 19, 25113.	3.4	26

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37	Modified Alvarez lens for high-speed focusing. Optics Express, 2017, 25, 29847.	3.4	24
38	Combined holographic optical trapping and optical image processing using a single diffractive pattern displayed on a spatial light modulator. Optics Letters, 2014, 39, 5337.	3.3	23
39	How to use a phase-only spatial light modulator as a color display. Optics Letters, 2015, 40, 581.	3.3	23
40	Deconvolution approach for 3D scanning microscopy with helical phase engineering. Optics Express, 2016, 24, 15456.	3.4	23
41	3D image scanning microscopy with engineered excitation and detection. Optica, 2017, 4, 1373.	9.3	23
42	On-chip beam rotators, adiabatic mode converters, and waveplates through low-loss waveguides with variable cross-sections. Light: Science and Applications, 2022, 11, .	16.6	21
43	Enhancing diffractive multi-plane microscopy using colored illumination. Optics Express, 2013, 21, 11150.	3.4	20
44	Reverse orbiting of microparticles in optical vortices. Optics Letters, 2006, 31, 2824.	3.3	19
45	Three-dimensional imaging of direct-written photonic structures. Optics Letters, 2011, 36, 695.	3.3	19
46	Quantitative single-shot imaging of complex objects using phase retrieval with a designed periphery. Optics Express, 2012, 20, 5470.	3.4	18
47	Broadband suppression of the zero diffraction order of an SLM using its extended phase modulation range. Optics Express, 2014, 22, 17590.	3.4	18
48	Dispersion tuning with a varifocal diffractive-refractive hybrid lens. Optics Express, 2014, 22, 5260.	3.4	18
49	Wide-field vibrational phase imaging in an extremely folded box-CARS geometry. Optics Letters, 2013, 38, 709.	3.3	16
50	Two-photon PSF-engineered image scanning microscopy. Optics Letters, 2019, 44, 895.	3.3	15
51	Full spectrum filterless fluorescence microscopy. Journal of Microscopy, 2010, 237, 103-109.	1.8	13
52	Colored point spread function engineering for parallel confocal microscopy. Optics Express, 2016, 24, 27395.	3.4	13
53	Diffractive tunable lens for remote focusing in high-NA optical systems. Optics Express, 2020, 28, 26336.	3.4	13
54	Three-Dimensional Single Molecule Localization Microscopy Reveals the Topography of the Immunological Synapse at Isotropic Precision below 15 nm. Nano Letters, 2021, 21, 9247-9255.	9.1	13

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55	Defocused imaging exploits supercritical-angle fluorescence emission for precise axial single molecule localization microscopy. Biomedical Optics Express, 2020, 11, 775.	2.9	11
56	Optical tweezers of programmable shape with transverse scattering forces. Optics Communications, 2008, 281, 2207-2212.	2.1	9
57	Inverse design of gradient-index volume multimode converters. Optics Express, 2022, 30, 10573.	3.4	9
58	Remote focusing in confocal microscopy by means of a modified Alvarez lens. Journal of Microscopy, 2018, 271, 337-344.	1.8	8
59	Fast holographic scattering compensation for deep tissue biological imaging. , 2021, , .		8
60	Holographic beam shaping of partially coherent light. Optics Letters, 2022, 47, 425.	3.3	8
61	Synthetic holography in microscopy: opportunities arising from advanced wavefront shaping. Contemporary Physics, 2016, 57, 46-59.	1.8	7
62	Spectral image scanning microscopy. Biomedical Optics Express, 2019, 10, 2513.	2.9	7
63	Simultaneous scattering compensation at multiple points in multi-photon microscopy. Biomedical Optics Express, 2021, 12, 7377-7387.	2.9	7
64	Contrast enhancement in widefield CARS microscopy by tailored phase matching using a spatial light modulator. Optics Letters, 2011, 36, 2245.	3.3	6
65	Adaptive illumination for optimal image quality in phase contrast microscopy. Optics Communications, 2020, 459, 124972.	2.1	6
66	High-NA two-photon single cell imaging with remote focusing using a diffractive tunable lens. Biomedical Optics Express, 2020, 11, 7183.	2.9	5
67	Robust and bias-free localization of individual fixed dipole emitters achieving the Cram�r Rao bound for applications in cryo-single molecule localization microscopy. PLoS ONE, 2022, 17, e0263500.	2.5	5
68	Three-dimensional single molecule localization close to the coverslip: a comparison of methods exploiting supercritical angle fluorescence. Biomedical Optics Express, 2021, 12, 802.	2.9	4
69	Quantitative analysis of shape and volume changes in activated thrombocytes in real time by single-shot spatial light modulator-based differential interference contrast imaging. Journal of Biophotonics, 2011, 4, 600-609.	2.3	3
70	Tomographic refractive index profiling of direct laser written waveguides. Optics Express, 2021, 29, 35414.	3.4	3
71	Adaptive optics for direct laser writing with plasma emission aberration sensing: erratum. Optics Express, 2010, 18, 15399.	3.4	2
72	Sensorless Wavefront Correction in Two-Photon Microscopy Across Different Turbidity Scales. Frontiers in Physics, 2022, 10, .	2.1	2

#	ARTICLE	IF	CITATIONS
73	Multi-focal light microscopy using liquid crystal spatial light modulators. , 2012, , .		1
74	A double-SLM technique for designing arbitrary optical trapping patterns. , 2009, , .		0
75	3D Superresolution Fluorescence Microscopy on T-Cells. Biophysical Journal, 2020, 118, 145a.	0.5	0