Yuichi Kozawa

List of Publications by Year
in descending order

112 papers	3,377 citations	172207 29 h-index	143772 57 g-index
112 all docs	112 docs citations	112 times ranked	1824 citing authors

#	Article	IF	Citations
1	Generation of a radially polarized laser beam by use of a conical Brewster prism. Optics Letters, 2005, 30, 3063.	1.7	346
2	Optical trapping of micrometer-sized dielectric particles by cylindrical vector beams. Optics Express, 2010, 18, 10828.	1.7	236
3	Sharper focal spot formed by higher-order radially polarized laser beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, 1793.	0.8	200
4	Superresolution imaging via superoscillation focusing of a radially polarized beam. Optica, 2018, 5, 86.	4.8	194
5	Generation of a radially polarized laser beam by use of the birefringence of a c-cut Nd:YVO4 crystal. Optics Letters, 2006, 31, 2151.	1.7	187
6	Focusing property of a double-ring-shaped radially polarized beam. Optics Letters, 2006, 31, 820.	1.7	169
7	Calculation of optical trapping forces on a dielectric sphere in the ray optics regime produced by a radially polarized laser beam. Optics Letters, 2007, 32, 1839.	1.7	162
8	Generation of hollow scalar and vector beams using a spot-defect mirror. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 2072.	0.8	126
9	Visualizing hippocampal neurons with in vivo two-photon microscopy using a 1030 nm picosecond pulse laser. Scientific Reports, 2013, 3, 1014.	1.6	117
10	Lateral resolution enhancement of laser scanning microscopy by a higher-order radially polarized mode beam. Optics Express, 2011, 19, 15947.	1.7	105
11	Polarization singularities in superposition of vector beams. Optics Express, 2013, 21, 8972.	1.7	93
12	In vivo two-photon imaging of mouse hippocampal neurons in dentate gyrus using a light source based on a high-peak power gain-switched laser diode. Biomedical Optics Express, 2015, 6, 891.	1.5	80
13	Resolution enhancement of confocal microscopy by subtraction method with vector beams. Optics Letters, 2014, 39, 3118.	1.7	75
14	Self-healing of tightly focused scalar and vector Besselâ€“Gauss beams at the focal plane. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 837.	0.8	74
15	Hollow vortex beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 142.	0.8	62
16	Roadmap on Recent Progress in FINCH Technology. Journal of Imaging, 2021, 7, 197.	1.7	51
17	7-ps optical pulse generation from a 1064-nm gain-switched laser diode and its application for two-photon microscopy. Optics Express, 2014, 22, 5746.	1.7	45
18	Compact Laser with Radial Polarization Using Birefringent Laser Medium. Japanese Journal of Applied Physics, 2007, 46, 5160.	0.8	44

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19	Cylindrical Vector Laser Beam Generated by the Use of a Photonic Crystal Mirror. Applied Physics Express, 0, 1, 022008.	1.1	44
20	Subtraction imaging by the combination of higher-order vector beams for enhanced spatial resolution. Optics Letters, 2019, 44, 883.	1.7	43
21	Demonstration of subtraction imaging in confocal microscopy with vector beams. Optics Letters, 2014, 39, 4529.	1.7	42
22	Micro-hole drilling by tightly focused vector beams. Optics Letters, 2018, 43, 1542.	1.7	42
23	Simultaneous generation of helical beams with linear and radial polarization by use of a segmented half-wave plate. Optics Letters, 2008, 33, 399.	1.7	41
24	Focusing of higher-order radially polarized Laguerreâ€“Gaussian beam. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 2439.	0.8	41
25	Generation of a Purely Single Transverse Mode Vortex Beam from a He-Ne Laser Cavity with a Spot-Defect Mirror. International Journal of Optics, 2012, 2012, 1-6.	0.6	40
26	Numerical analysis of resolution enhancement in laser scanning microscopy using a radially polarized beam. Optics Express, 2015, 23, 2076.	1.7	39
27	Generation of a cylindrically symmetric, polarized laser beam with narrow linewidth and fine tunability. Optics Express, 2006, 14, 12839.	1.7	36
28	Selective oscillation of radially and azimuthally polarized laser beam induced by thermal birefringence and lensing. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 708.	0.9	36
29	Generation of radially polarized Besselâ€“Gaussian beams from c-cut Nd:YVO_4 laser. Optics Letters, 2014, 39, 1101.	1.7	35
30	Two-step phase-shifting interferometry for self-interference digital holography. Optics Letters, 2021, 46, 669.	1.7	35
31	Observation of the longitudinal field of a focused laser beam by second-harmonic generation. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 175.	0.9	30
32	Improvement of lateral resolution and extension of depth of field in two-photon microscopy by a higher-order radially polarized beam. Microscopy (Oxford, England), 2014, 63, 23-32.	0.7	28
33	Radially polarized laser beam from a Nd:YAG laser cavity with a c-cut YVO4 crystal. Applied Physics B: Lasers and Optics, 2007, 88, 43-46.	1.1	27
34	Dark-spot formation by vector beams. Optics Letters, 2008, 33, 2326.	1.7	27
35	Diffractive properties of obstructed vector Laguerreâ€“Gaussian beam under tight focusing condition. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 1387.	0.8	27
36	Laser microprocessing of metal surfaces using a tightly focused radially polarized beam. Optics Letters, 2020, 45, 6234.	1.7	23

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37	Single-path single-shot phase-shifting digital holographic microscopy without a laser light source. Optics Express, 2022, 30, 1182.	1.7	22
38	STED microscopyâ€"super-resolution bio-imaging utilizing a stimulated emission depletion. Microscopy (Oxford, England), 2015, 64, 227-236.	0.7	20
39	Calculation of second-harmonic wave pattern generated byÂfocused cylindrical vector beams. Applied Physics B: Lasers and Optics, 2010, 98, 851-855.	1.1	19
40	Generation of radially polarized Ti:sapphire laser beam using a c-cut crystal. Optics Letters, 2008, 33, 1984.	1.7	18
41	Focusing of radially and azimuthally polarized beams through a uniaxial crystal. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 469.	0.8	17
42	Radially polarized annular beam generated through a second-harmonic-generation process. Optics Letters, 2009, 34, 3166.	1.7	17
43	High-power and highly efficient amplification of a radially polarized beam using an Yb-doped double-clad fiber. Optics Letters, 2014, 39, 2857.	1.7	17
44	Two-photon excitation STED microscopy by utilizing transmissive liquid crystal devices. Optics Express, 2014, 22, 28215.	1.7	17
45	Single higher-order transverse mode operation of a radially polarized Nd:YAG laser using an annularly reflectivity-modulated photonic crystal coupler. Optics Letters, 2008, 33, 2278.	1.7	15
46	Transverse mode control by manipulating gain distribution in a Yb:YAG ceramic thin disk. Optics Letters, 2011, 36, 4137.	1.7	14
47	Imaging with a longitudinal electric field in confocal laser scanning microscopy to enhance spatial resolution. Optics Express, 2020, 28, 18418.	1.7	14
48	Demonstration and selection of a single-transverse higher-order-mode beam with radial polarization. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 399.	0.8	13
49	Generation of a vector doughnut beam from an internal mirror Heâ€"Ne laser. Optics Letters, 2014, 39, 2080.	1.7	12
50	Transverse-mode selective laser operation by unicursal fast-scanning pumping. Optics Letters, 2015, 40, 3245.	1.7	12
51	Adaptive Optical Two-Photon Microscopy for Surface-Profiled Living Biological Specimens. ACS Omega, 2021, 6, 438-447.	1.6	12
52	Creation of polarization gradients from superposition of counter propagating vector LG beams. Optics Express, 2015, 23, 33970.	1.7	11
53	Quantitative phase imaging with single-path phase-shifting digital holography using a light-emitting diode. OSA Continuum, 2021, 4, 2918.	1.8	10
54	Direct generation of the lowest-order vortex beam using a spot defect mirror in the ultraviolet region. Optics Letters, 2020, 45, 2115.	1.7	10

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55	Light needle microscopy with spatially transposed detection for axially resolved volumetric imaging. Scientific Reports, 2019, 9, 11687.	1.6	9
56	Fabrication of Novel Structures on Silicon with Femtosecond Laser Pulses. Journal of Laser Micro Nanoengineering, 2010, 5, 229-232.	0.4	9
57	Wavefront engineered light needle microscopy for axially resolved rapid volumetric imaging. Biomedical Optics Express, 2022, 13, 1702.	1.5	9
58	Chain of optical vortices synthesized by a Gaussian beam and the double-phase-ramp converter. OSA Continuum, 2019, 2, 320.	1.8	8
59	Vector beam generation from vertical cavity surface emitting lasers. Optics Letters, 2018, 43, 5659.	1.7	8
60	Amplification of a radially polarized laser beam using an Yb-doped double-clad fiber. Optics Letters, 2009, 34, 716.	1.7	6
61	Small focal spot formation by vector beams. Progress in Optics, 2021, , 35-90.	0.4	6
62	Twisted longitudinally polarized field in the focal region. Applied Physics B: Lasers and Optics, 2013, 110, 7-14.	1.1	5
63	Electron Round Lenses with Negative Spherical Aberration by a Tightly Focused Cylindrically Polarized Light Beam. Physical Review Applied, 2021, 16, .	1.5	5
64	Non-diffracting linear-shift point-spread function by focus-multiplexed computer-generated hologram. Optics Letters, 2018, 43, 5949.	1.7	5
65	Polarization coupling of vector Besselâ€“Gaussian beams. Journal of Optics (United Kingdom), 2013, 15, 075710.	1.0	4
66	Fabrication of Quasi-Phase-Matching Structure during Paraelectric Borate Crystal Growth. Applied Physics Express, 2013, 6, 015501.	1.1	4
67	Ultrafast laser ablation of 10-nm self-supporting membranes by two-beam interference processing. Optics Express, 2020, 28, 26200.	1.7	4
68	Single-scan volumetric imaging throughout thick tissue specimens by one-touch installable light-needle creating device. Scientific Reports, 2022, 12, .	1.6	4
69	Nanoprocessing of free-standing thin films by ultrafast laser ablation. , 2021, , .		3
70	Nonlinear optical properties of Rhâ€“Pd and Rhâ€“Pt solid-solution alloy nanoparticles prepared by a laser-induced nucleation method in aqueous solution. OSA Continuum, 2019, 2, 2891.	1.8	3
71	Observation of PDLCs by SHG laser scanning microscopy using a liquid crystal vector beam generator. , 2012, , .		2
72	Super-Oscillation by Higher-Order Radially Polarized Laguerre-Gaussian Beams. , 2016, , .		2

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73	72 fps incoherent two-color digital motion-picture holography system for fluorescence cell imaging. , 2021, , .		2
74	Generation of Cylindrical Vector Beams from a Nd:YAG Laser Cavity including a c-cut YVO<inf>4</inf> Crystal. , 2007, , .		1
75	Unfolding of optical singularities in vector Laguerre-Gaussian beams. , 2015, , .		1
76	Long Depth-of-Focus Imaging by a Non-Diffracting Optical Needle under Strong Aberration. , 2017, , .		1
77	Generation of Robust Doughnut Mode Beam from Internal Mirror He-Ne Laser. , 2012, , .		1
78	Phase-shifting interferometry for multidimensional incoherent digital holography and toward ultimately low light sensing. , 2021, , .		1
79	102 fps incoherent digital motion-picture holography system for sensing of moving fluorescence nanoparticles. , 2021, , .		1
80	Properties of electron lenses produced by ponderomotive potential with Bessel and Laguerreâ€“Gaussian beams. Journal of Optics (United Kingdom), 2022, 24, 054013.	1.0	1
81	Observing the Stimulated Raman Gain Spectra of Solutions Using an Infrared Pump Pulse with Narrow Linewidth and a Low-Noise CW Probe Laser. Journal of Infrared, Millimeter and Terahertz Waves, 2005, 26, 881-892.	0.6	0
82	Axial Symmetrically Polarized Beam from Vertical-cavity Surface-emitting Laser. , 0, , .		0
83	<title>Generation of a radially polarized Nd:YVO<formula><inf><roman>4</roman></inf></formula> laser beam</title>. Proceedings of SPIE, 2007, , .	0.8	0
84	TM01 mode operation of an Yb-doped double-clad fiber amplifier. , 2009, , .		0
85	Generation of Cylindrical Vector Beams of a Single Higher Order Transverse Mode. , 2010, , .		0
86	Super-resolution imaging of lateral distribution for the blue-light emission of an InGaN single-quantum-well structure utilizing the stimulated emission depletion effect. Optics Express, 2014, 22, 22575.	1.7	0
87	Enhanced Spatial Resolution in Confocal Laser Microscopy by Subtractive Imaging Using Vector Beams. , 2014, , .		0
88	Enhanced Detection of Longitudinal Field of a Radially Polarized Beam in Confocal Laser Microscopy. , 2015, , .		0
89	Acceleration of Micro-Hole Drilling by an Azimuthally Polarized Laser Beam under Tight Focusing Condition. , 2018, , .		0
90	Multidimensional incoherent digital holography with phase-shifting interferometry. , 2021, , .		0

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91	Generation of Ti: sapphire laser beam with radial polarization. , 2008, , .		0
92	Second harmonic generation using axially symmetric, polarized beams with spatial variation of ellipticity. , 2008, , .		0
93	Generation of beams with spiral phase shift using a divided half waveplate in a laser cavity. , 2008, , .		0
94	Spatial Resolution for Fluorescence Depletion Microscopy Using Axial Electric Field Generated by Focused Radially Polarized Beams. , 2009, , .		0
95	Optical Trapping Efficiency Measured for Dielectric Particles by Using Cylindrical Vector Beams. , 2009, , .		0
96	Selective generation of radially polarized Nd:YAG laser beams of higher-order transverse mode. , 2009, , .		0
97	The effect of the longitudinal electric field of a radially polarized laser beam for second harmonic generation. , 2010, , .		0
98	Generation of an Azimuthally Polarized Laser Beam from an End-pumped Laser Cavity with a c-cut Nd:YVO4 Crystal. , 2011, , .		0
99	Resolution Enhancement in Confocal Scanning Microscopy by a Radially Polarized Beam with Phase Modulation. , 2011, , .		0
100	Dark Spot Trapping using a Double-Ring-Shaped Radially Polarized Beam. , 2011, , .		0
101	Transverse Mode Control by a Crossing Pair of Linearly Pumped Regions in a Yb:YAG Ceramic Thin Disk. , 2011, , .		0
102	Enhanced Detection of a Longitudinal Electric Field for a Linearly Polarized Gaussian Beam. , 2011, , .		0
103	Vector Bessel-Gaussian Beam Generation from a c-cut Nd:YVO4 Crystal with an Annular-Shaped Gain. , 2012, , .		0
104	Analysis of Small Focal Spot Formation by a Higher-Order Radially Polarized Laguerre-Gaussian Beam. , 2013, , .		0
105	Direct Manipulation of Transverse Mode of a Yb:YAG Laser by a Scanning Pump Beam. , 2014, , .		0
106	Polarization singularities in superposition of counter-propagating vector Laguerre-Gaussian beams. , 2014, , .		0
107	Smaller Spot Formation by Vector Beam for Higher Resolution Microscopy. , 2015, , .		0
108	Generation of Cylindrical Vector Beams from Vertical-Cavity Surface-Emitting Laser with Optical Feedback. , 2018, , .		0

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109	Improvement of two-photon microscopic imaging in deep regions of living mouse brains by utilizing a light source based on an electrically controllable gain-switched laser diode. , 2018, , .		0
110	Spatial resolution enhancement in laser scanning microscopy using vector beams. , 2018, , .		0
111	Optimization of Higher-Order Transverse Modes of Cylindrical Vector Beams for Enhanced Spatial Resolution in Image Subtraction. , 2019, , .		0
112	Laser Microfabrication of Metal Surfaces by Tightly Focused Higher-Order Vector Beams. , 2020, , .		0