

Peng Xi

List of Publications by Year in descending order

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177
papers

5,777
citations

136740

32
h-index

79541

73
g-index

184
all docs

184
docs citations

184
times ranked

6891
citing authors

#	ARTICLE	IF	CITATIONS
1	Polarization modulation with optical lock-in detection reveals universal fluorescence anisotropy of subcellular structures in live cells. <i>Light: Science and Applications</i> , 2022, 11, 4.	7.7	14
2	Ratiometric 4Pi single-molecule localization with optimal resolution and color assignment. <i>Optics Letters</i> , 2022, 47, 325.	1.7	4
3	Two-photon MINFLUX with doubled localization precision. <i>ELight</i> , 2022, 2, .	11.9	28
4	Glucose increases the length and spacing of the lattice structure of the axon initial segment. <i>Microscopy Research and Technique</i> , 2022, , .	1.2	2
5	Novel Analysis of Coronary Angiography in Predicting the Formation of Ventricular Aneurysm in Patients With Acute Myocardial Infarction After Percutaneous Coronary Intervention. <i>Frontiers in Cardiovascular Medicine</i> , 2022, 9, 880289.	1.1	2
6	Shedding light on biology and healthcare—preface to the special issue on Biomedical Optics. <i>Light: Science and Applications</i> , 2022, 11, .	7.7	3
7	Rare nanoparticles shine colors with low-power STED. <i>Light: Science and Applications</i> , 2022, 11, .	7.7	0
8	Stimulated emission depletion microscopy for biological imaging in four dimensions: A review. <i>Microscopy Research and Technique</i> , 2021, 84, 1947-1958.	1.2	13
9	Axial localization and tracking of self-interference nanoparticles by lateral point spread functions. <i>Nature Communications</i> , 2021, 12, 2019.	5.8	13
10	Organic Nanoparticles-Assisted Low-Power STED Nanoscopy. <i>Nano Letters</i> , 2021, 21, 3487-3494.	4.5	15
11	Axially overlapped multi-focus light sheet with enlarged field of view. <i>Applied Physics Letters</i> , 2021, 118, 223701.	1.5	5
12	Iterative tomography with digital adaptive optics permits hour-long intravital observation of 3D subcellular dynamics at millisecond scale. <i>Cell</i> , 2021, 184, 3318-3332.e17.	13.5	115
13	A protocol for single-source dual-pulse stimulated emission depletion setup with Bessel modulation. <i>Microscopy Research and Technique</i> , 2021, , .	1.2	1
14	Synthesis and properties of multi-layer core-shell Tb(BAO)3(NO3)2@SiO2@(PSPEA-PMMA) microsphere with photoluminescence and photochromic functions. <i>Dyes and Pigments</i> , 2021, 195, 109654.	2.0	3
15	The largest isoform of Ankyrin-G is required for lattice structure of the axon initial segment. <i>Biochemical and Biophysical Research Communications</i> , 2021, 578, 28-34.	1.0	5
16	Polarized structured illumination microscopy. , 2021, , .		0
17	Super-resolution fluorescence polarization microscopy and its biological applications. , 2021, , .		0
18	Construction of Molecular Model and Adsorption of Collectors on Bulianta Coal. <i>Molecules</i> , 2020, 25, 4030.	1.7	16

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19	Plasmonics meets super-resolution microscopy in biology. <i>Micron</i> , 2020, 137, 102916.	1.1	10
20	High-dimensional super-resolution imaging reveals heterogeneity and dynamics of subcellular lipid membranes. <i>Nature Communications</i> , 2020, 11, 5890.	5.8	56
21	Use of high-resolution full-field optical coherence tomography and dynamic cell imaging for rapid intraoperative diagnosis during breast cancer surgery. <i>Cancer</i> , 2020, 126, 3847-3856.	2.0	23
22	Mitochondrial dynamics quantitatively revealed by STED nanoscopy with an enhanced squaraine variant probe. <i>Nature Communications</i> , 2020, 11, 3699.	5.8	78
23	Research on the Hydrophilicity of Non-Coal Kaolinite and Coal Kaolinite from the Viewpoint of Experiments and DFT Simulations. <i>Symmetry</i> , 2020, 12, 1199.	1.1	4
24	Study on the Crystal Structure of Coal Kaolinite and Non-Coal Kaolinite: Insights from Experiments and DFT Simulations. <i>Symmetry</i> , 2020, 12, 1125.	1.1	7
25	Advances of super-resolution fluorescence polarization microscopy and its applications in life sciences. <i>Computational and Structural Biotechnology Journal</i> , 2020, 18, 2209-2216.	1.9	22
26	Structured illumination microscopy using digital micro-mirror device and coherent light source. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	39
27	Frequency-domain diagonal extension imaging. <i>Advanced Photonics</i> , 2020, 2, 1.	6.2	14
28	Enhanced reconstruction of structured illumination microscopy on a polarized specimen. <i>Optics Express</i> , 2020, 28, 25642.	1.7	8
29	MUTE-SIM: multiphoton up-conversion time-encoded structured illumination microscopy. <i>OSA Continuum</i> , 2020, 3, 594.	1.8	6
30	A mode generator and multiplexer at visible wavelength based on all-fiber mode selective coupler. <i>Nanophotonics</i> , 2020, 9, 973-981.	2.9	25
31	Research on the Effect of Carbon Defects on the Hydrophilicity of Coal Pyrite Surface from the Insight of Quantum Chemistry. <i>Molecules</i> , 2019, 24, 2285.	1.7	7
32	Super-resolution imaging of fluorescent dipoles via polarized structured illumination microscopy. <i>Nature Communications</i> , 2019, 10, 4694.	5.8	88
33	Design, experiment and adsorption mechanism analysis of bionic sucker based on octopus sucker. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2019, 233, 1250-1261.	1.0	7
34	DFT Study into the Influence of Carbon Material on the Hydrophobicity of a Coal Pyrite Surface. <i>Molecules</i> , 2019, 24, 3534.	1.7	4
35	Structure and Properties of PET Nano-Porous Luminescence Fibers for Fluorescence-Indicating to Acid Gases. <i>Macromolecular Materials and Engineering</i> , 2019, 304, 1900467.	1.7	5
36	Complex vectorial optics through gradient index lens cascades. <i>Nature Communications</i> , 2019, 10, 4264.	5.8	79

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37	Group-Sparsity-Based Super-Resolution Dipole Orientation Mapping. IEEE Transactions on Medical Imaging, 2019, 38, 2687-2694.	5.4	6
38	The MEDEA FAR-EAST Study: Conceptual framework, methods and first findings of a multicenter cross-sectional observational study. BMC Emergency Medicine, 2019, 19, 31.	0.7	5
39	Preparation and Properties of PMMA Nanofibers with Photochromic and Photoluminescent Functions. Springer Proceedings in Physics, 2019, , 213-226.	0.1	1
40	Schlieren two-photon microscopy for phase-contrast imaging. Applied Optics, 2019, 58, A26.	0.9	1
41	Schlieren two-photon microscopy for phase-contrast imaging: publisher's note. Applied Optics, 2019, 58, 2137.	0.9	0
42	Joint tagging assisted fluctuation nanoscopy enables fast high-density super-resolution imaging. Journal of Biophotonics, 2018, 11, e201800020.	1.1	5
43	Fast, long-term, super-resolution imaging with Hessian structured illumination microscopy. Nature Biotechnology, 2018, 36, 451-459.	9.4	411
44	Morphologies and Properties of PET Nano Porous Luminescence Fiber: Oil Absorption and Fluorescence-Indicating Functions. ACS Applied Materials & Interfaces, 2018, 10, 2828-2836.	4.0	27
45	We are thrilled to introduce our new column: News and Views. Light: Science and Applications, 2018, 7, 17128-17128.	7.7	0
46	Developing novel methods to image and visualize 3D genomes. Cell Biology and Toxicology, 2018, 34, 367-380.	2.4	24
47	Super-resolution fluorescence polarization microscopy. Journal of Innovative Optical Health Sciences, 2018, 11, 1730002.	0.5	19
48	Effect of nano-silver hydrogel coating film on deep partial thickness scald model of rabbit. Saudi Journal of Biological Sciences, 2018, 25, 797-800.	1.8	5
49	Synthesis and characterization of bright green terbium coordination complex derived from 1,4-bis(carbonylmethyl)terephthalate: Structure and luminescence properties. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 190, 68-75.	2.0	8
50	High Resolution Centroid Hirschman Descriptor For Moving Object Detection. , 2018, , .		1
51	Polarization-based super-resolution imaging of surface-enhanced Raman scattering nanoparticles with orientational information. Nanoscale, 2018, 10, 19757-19765.	2.8	17
52	Nanoparticles for super-resolution microscopy and single-molecule tracking. Nature Methods, 2018, 15, 415-423.	9.0	208
53	Microscopy: looking into the mirror. Light: Science and Applications, 2018, 7, 4.	7.7	1
54	Multi-photon near-infrared emission saturation nanoscopy using upconversion nanoparticles. Nature Communications, 2018, 9, 3290.	5.8	136

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55	A Frequency Domain SIM Reconstruction Algorithm Using Reduced Number of Images. IEEE Transactions on Image Processing, 2018, 27, 4555-4570.	6.0	27
56	Semiconductor Polymer Dots: Small Photoblinking Semiconductor Polymer Dots for Fluorescence Nanoscopy (Adv. Mater. 5/2017). Advanced Materials, 2017, 29, .	11.1	3
57	The influence of stachydrine hydrochloride on the reperfusion model of mice with repetitive cerebral ischemia. Saudi Journal of Biological Sciences, 2017, 24, 658-663.	1.8	20
58	Amplified stimulated emission in upconversion nanoparticles for super-resolution nanoscopy. Nature, 2017, 543, 229-233.	13.7	643
59	Effect of Total Alkali in Leonuri Herba on rat ear acne model of serum IL-6 level, Thymus and Spleen Tissue Morphology. Saudi Journal of Biological Sciences, 2017, 24, 718-723.	1.8	5
60	Computational methods in super-resolution microscopy. Frontiers of Information Technology and Electronic Engineering, 2017, 18, 1222-1235.	1.5	16
61	Effects of Fuzheng Paidu tablet immunization on AIDS BALB/c mice. Saudi Pharmaceutical Journal, 2017, 25, 644-648.	1.2	0
62	Multicolor Super-resolution Fluorescence Microscopy with Blue and Carmine Small Photoblinking Polymer Dots. ACS Nano, 2017, 11, 8084-8091.	7.3	74
63	Small Photoblinking Semiconductor Polymer Dots for Fluorescence Nanoscopy. Advanced Materials, 2017, 29, 1604850.	11.1	78
64	Mirror Enhanced STED Super-resolution Microscopy. , 2017, , .		0
65	Super-resolution: better, deeper, and richer information. , 2017, , .		0
66	Long-term ultra-low-level power STED nanoscopy. , 2017, , .		0
67	Hardware implementation of a series of transform matrices based on discrete hirschman transform. , 2016, , .		3
68	Mirror reflective interference axial-narrowing super-resolution microscopy. , 2016, , .		0
69	Two-photon light-sheet nanoscopy by fluorescence fluctuation correlation analysis. Nanoscale, 2016, 8, 9982-9987.	2.8	27
70	Super-resolution deep imaging with hollow Bessel beam STED microscopy. Laser and Photonics Reviews, 2016, 10, 147-152.	4.4	151
71	Versatile Application of Fluorescent Quantum Dot Labels in Super-resolution Fluorescence Microscopy. ACS Photonics, 2016, 3, 1611-1618.	3.2	52
72	Advances in three-dimensional super-resolution nanoscopy. Microscopy Research and Technique, 2016, 79, 893-898.	1.2	8

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73	A frequency domain reconstruction of SIM image using four raw images. , 2016, , .		3
74	Super-resolution dipole orientation mapping via polarization demodulation. Light: Science and Applications, 2016, 5, e16166-e16166.	7.7	93
75	Developing bioimaging and quantitative methods to study 3D genome. Quantitative Biology, 2016, 4, 129-147.	0.3	9
76	Mirror-enhanced super-resolution microscopy. Light: Science and Applications, 2016, 5, e16134-e16134.	7.7	74
77	Superior performance with sCMOS over EMCCD in super-resolution optical fluctuation imaging. Journal of Biomedical Optics, 2016, 21, 066007.	1.4	5
78	Structured Illumination Microscopy Image Reconstruction Algorithm. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 50-63.	1.9	161
79	Study of RNA Polymerase II Clustering inside Live-Cell Nuclei Using Bayesian Nanoscopy. ACS Nano, 2016, 10, 2447-2454.	7.3	38
80	Super-resolution Deep Imaging with Gauss-Bessel STED Microscopy. , 2016, , .		0
81	Hundredâ€thousand light holes push nanoscopy to go parallel. Microscopy Research and Technique, 2015, 78, 8-10.	1.2	2
82	Analyzing the Experimental Data of the Total Flavonoids of Mao Dongqing in the Treatment of Cerebral Ischemic Tolerance in Mice. , 2015, , .		0
83	Symmetric and Asymmetric Meniscus Collapse in Wetting Transition on Submerged Structured Surfaces. Langmuir, 2015, 31, 1248-1254.	1.6	55
84	Development of a Reversibly Switchable Fluorescent Protein for Super-Resolution Optical Fluctuation Imaging (SOFI). ACS Nano, 2015, 9, 2659-2667.	7.3	91
85	Fast Super-Resolution Imaging with Ultra-High Labeling Density Achieved by Joint Tagging Super-Resolution Optical Fluctuation Imaging. Scientific Reports, 2015, 5, 8359.	1.6	55
86	Three-dimensional multimodal sub-diffraction imaging with spinning-disk confocal microscopy using blinking/fluctuating probes. Nano Research, 2015, 8, 2251-2260.	5.8	29
87	Virtual-OCT: A simulated optical coherence tomography instrument. Journal of Innovative Optical Health Sciences, 2014, 07, 1450030.	0.5	1
88	Biocompatible hyaluronic acid polymer-coated quantum dots for CD44+ cancer cell-targeted imaging. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	15
89	Optical nanoscopy with inorganic fluorescent nanoparticles. , 2014, , .		0
90	Schlieren confocal microscopy for phase-relief imaging. Optics Letters, 2014, 39, 1238.	1.7	3

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91	Synthesis, characterization, and thermal energy storage properties of a novel thermoplastic polyurethane phase change material. <i>Materials Letters</i> , 2014, 121, 15-18.	1.3	29
92	Tunable lifetime multiplexing using luminescent nanocrystals. <i>Nature Photonics</i> , 2014, 8, 32-36.	15.6	652
93	Optimal design apply to orthogonal test in piston with bionic groove. , 2014, , .		2
94	Sub-diffraction imaging of nitrogen-vacancy centers in diamond by stimulated emission depletion and structured illumination. <i>RSC Advances</i> , 2014, 4, 11305.	1.7	39
95	The putative tumor suppressor C53 interacts with the human telomerase reverse transcriptase hTERT and regulates telomerase activity. <i>Science Bulletin</i> , 2014, 59, 2324-2330.	1.7	1
96	Dual-channel spectral-domain optical-coherence tomography system based on 3 Å— 3 fiber coupler for extended imaging range. <i>Applied Optics</i> , 2014, 53, 5375.	0.9	6
97	Complexity reduction in compressive sensing using Hirschman uncertainty structured random matrices. , 2014, , .		5
98	The effect of PPARC gene polymorphisms on the risk of coronary heart disease: a meta-analysis. <i>Molecular Biology Reports</i> , 2013, 40, 875-884.	1.0	15
99	Human telomerase reverse transcriptase regulates MMP expression independently of telomerase activity <i>via</i> NF–dependent transcription. <i>FASEB Journal</i> , 2013, 27, 4375-4383.	0.2	114
100	Single-nanocrystal sensitivity achieved by enhanced upconversion luminescence. <i>Nature Nanotechnology</i> , 2013, 8, 729-734.	15.6	569
101	Serine/threonine–protein phosphatase 2A physically interacts–with human telomerase reverse transcriptase hTERT and regulates its subcellular distribution. <i>Journal of Cellular Biochemistry</i> , 2013, 114, 409-417.	1.2	13
102	Observation of mesenteric microcirculatory disturbance in rat by laser oblique scanning optical microscopy. <i>Scientific Reports</i> , 2013, 3, 1762.	1.6	4
103	Orthogonal Scanning Automated Microscopy Speeds Up Time-Gated Luminescence Detection. , 2013, , .		0
104	Two-color CW STED nanoscopy. <i>Proceedings of SPIE</i> , 2013, , .	0.8	0
105	Analytical description of high-aperture STED resolution with 0–2ï€ vortex phase modulation. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2013, 30, 1640.	0.8	20
106	STED imaging of nitrogen vacancy centers in diamond. , 2013, , .		0
107	Phase relief imaging with confocal laser scanning system. , 2013, , .		0
108	DDRKG1 Regulates NF-Î–Activity by Modulating Î–Stability. <i>PLoS ONE</i> , 2013, 8, e64231.	1.1	38

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109	STED optical super-resolution microscopy with fluorescent NV-centers. , 2013, , .		0
110	Laser Oblique Scanning Optical Microscopy: theory, instrumentation, and applications. , 2013, , .		0
111	Stimulated emission depletion point spread function generation with vector solution. , 2013, , .		0
112	Design of a real-time portable confocal scanning laser microscope. , 2012, , .		2
113	Confocal Reflectance/Auto-Fluorescence Tomography (CRAFT) for Early Skin Cancer Diagnosis. , 2012, , .		0
114	Laser oblique scanning optical microscopy (LOSOM) for phase relief imaging. Optics Express, 2012, 20, 14100.	1.7	12
115	Time-Gated Orthogonal Scanning Automated Microscopy (OSAM) for High-speed Cell Detection and Analysis. Scientific Reports, 2012, 2, 837.	1.6	25
116	Problem-driven learning on two continents: Lessons in pedagogic innovation across cultural divides. , 2012, , .		2
117	CW STED nanoscopy with a Ti:Sapphire oscillator. , 2012, , .		0
118	Achieving $\lambda/10$ Resolution CW STED Nanoscopy with a Ti:Sapphire Oscillator. PLoS ONE, 2012, 7, e40003.	1.1	37
119	CRAFT: Multimodality confocal skin imaging for early cancer diagnosis. Journal of Biophotonics, 2012, 5, 469-476.	1.1	8
120	Optical Devices in Communication and Computation. , 2012, , .		0
121	LOSOM: phase relief imaging can be achieved with confocal system. Proceedings of SPIE, 2012, , .	0.8	0
122	Evaluation of spectrometric parameters in spectral-domain optical coherence tomography. Applied Optics, 2011, 50, 366.	2.1	16
123	Systematic design of a cross-polarized dermoscope for visual inspection and digital imaging. IEEE Instrumentation and Measurement Magazine, 2011, 14, 26-31.	1.2	3
124	Hacking the optical diffraction limit: Review on recent developments of fluorescence nanoscopy. Science Bulletin, 2011, 56, 1857-1876.	1.7	18
125	In-vivo full depth of eye imaging spectral domain optical coherence tomography. , 2011, , .		1
126	RGD-Conjugated Dendrimer-Modified Gold Nanorods for <i>in Vivo</i> Tumor Targeting and Photothermal Therapy. Molecular Pharmaceutics, 2010, 7, 94-104.	2.3	294

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145	Depth-resolved fluorescence of human ectocervical tissue. , 2005, , .		0
146	Depth-resolved fluorescence spectroscopy of normal and dysplastic cervical tissue. Optics Express, 2005, 13, 382.	1.7	55
147	Fluorescence spectroscopy of biological tissue: single- and two-photon excitation. , 2004, , .		0
148	Depth-resolved fluorescence spectroscopy reveals layered structure of tissue. Optics Express, 2004, 12, 3218.	1.7	64
149	Multifunctional double-layered diffractive optical element. Optics Letters, 2003, 28, 1513.	1.7	20
150	Etching quartz with inductively coupled plasma etching equipment. , 2003, , .		2
151	Fabrication of optical elements with femtosecond doubled-frequency Ti:sapphire laser. , 2003, , .		0
152	Near-field detection of the quality of high-density gratings with nanotechnology. , 2003, , .		7
153	Symmetric color separation grating. , 2003, , .		0
154	Fast and effective algorithm for synthesizing computer-generated holograms. , 2002, 4768, 164.		0
155	Space-multiplexed diffractive optical device based on Talbot effect. , 2002, 4924, 26.		0
156	Laser beam scanning based on the Talbot phase-encoding method. , 2002, , .		0
157	Superresolution technology for small diffraction spot size in the far field. , 2002, , .		0
158	<title>Ultrafast study of near-field hexagonal array illumination</title>. , 2002, 4929, 328.		0
159	Generation of near-field hexagonal array illumination with a phase grating. Optics Letters, 2002, 27, 228.	1.7	45
160	Novel method for ultrashort laser pulse-width measurement based on the self-diffraction effect. Optics Express, 2002, 10, 1099.	1.7	19
161	New pulse-width measurement for ultrashort laser pulse. , 2002, , .		0
162	Pulse-width measurement of ultrashort laser pulse based on Talbot effect. , 2001, , .		1

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163	Number of phase levels of a Talbot array illuminator. Applied Optics, 2001, 40, 607.	2.1	10
164	Number of phase levels in a two-dimensional separable Talbot array illuminator. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2001, 18, 103.	0.8	3
165	<title>Initial phase assignment method for synthesizing computer-generated hologram</title>. , 2001, , .		1
166	Decomposing rule of two-dimensional separable Talbot array illuminator. , 2001, , .		0
167	<title>Phase gratings made with inductively coupled plasma technology</title>. , 2001, , .		1
168	<title>Possibility of phase-contrast pickup head for two-layered optical disk</title>. , 2001, 4470, 225.		0
169	Phase-contrast hexagonal array illumination. Optics Communications, 2001, 192, 193-197.	1.0	5
170	Simple equations for π -phase-modulated Talbot illuminator. Microwave and Optical Technology Letters, 2001, 29, 49-52.	0.9	0
171	The temporal Fresnel diffractive field of a grating illuminated by an ultrashort pulsed-laser beam. Journal of Optics, 2001, 3, 159-163.	1.5	8
172	Arbitrary-phase-modulated Talbot illuminator. , 2000, , .		0
173	Time dependence of Talbot effect under ultrashort laser illumination. , 2000, , .		0
174	<title>Fuzzy control method for lateral control of autonomous land vehicle</title>. , 1995, , .		3
175	<title>Threshold decomposition of soft-morphological filters into function and set processing (FSP) morphological filters and order-statistic filters</title>. , 1994, 2300, 279.		0
176	<title>Fuzzy morphology induced by threshold decomposition</title>. , 1994, 2300, 268.		0
177	Scanning and Image Reconstruction Techniques in Confocal Laser Scanning Microscopy. , 0, , .		3