Ernst H K Stelzer

List of Publications by Year
in descending order

200	23,954	13827 67	8138 148
papers	citations	h-index	g-index

215	215	215	25313
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The third dimension bridges the gap between cell culture and live tissue. Nature Reviews Molecular Cell Biology, 2007, 8, 839-845.	16.1	2,276
2	Optical Sectioning Deep Inside Live Embryos by Selective Plane Illumination Microscopy. Science, 2004, 305, 1007-1009.	6.0	2,103
3	Reconstruction of Zebrafish Early Embryonic Development by Scanned Light Sheet Microscopy. Science, 2008, 322, 1065-1069.	6.0	1,397
4	Recent advances in 2D and 3D in vitro systems using primary hepatocytes, alternative hepatocyte sources and non-parenchymal liver cells and their use in investigating mechanisms of hepatotoxicity, cell signaling and ADME. Archives of Toxicology, 2013, 87, 1315-1530.	1.9	1,089
5	Aberrations in confocal fluorescence microscopy induced by mismatches in refractive index. Journal of Microscopy, 1993, 169, 391-405.	0.8	557
6	Fast, high-contrast imaging of animal development with scanned light sheetâ€“based structured-illumination microscopy. Nature Methods, 2010, 7, 637-642.	9.0	515
7	Polarity controls forces governing asymmetric spindle positioning in the Caenorhabditis elegans embryo. Nature, 2001, 409, 630-633.	13.7	484
8	The subcellular organization of Madin-Darby canine kidney cells during the formation of a polarized epithelium.. Journal of Cell Biology, 1989, 109, 2817-2832.	2.3	475
9	Properties of a 4Pi confocal fluorescence microscope. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1992, 9, 2159.	0.8	469
10	Sorting of sphingolipids in epithelial (Madin-Darby canine kidney) cells.. Journal of Cell Biology, 1987, 105, 1623-1635.	2.3	430
11	Control of microtubule dynamics and length by cyclin A- and cyclin B-dependent kinases in Xenopus egg extracts.. Journal of Cell Biology, 1992, 118, 1097-1108.	2.3	405
12	Hypervariable C-termmal domain of rab proteins acts as a targeting signal. Nature, 1991, 353, 769-772.	13.7	386
13	Rab6 Coordinates a Novel Golgi to ER Retrograde Transport Pathway in Live Cells. Journal of Cell Biology, 1999, 147, 743-760.	2.3	384
14	Fundamental improvement of resolution with a 4Pi-confocal fluorescence microscope using two-photon excitation. Optics Communications, 1992, 93, 277-282.	1.0	383
15	A macrodomain-containing histone rearranges chromatin upon sensing PARP1 activation. Nature Structural and Molecular Biology, 2009, 16, 923-929.	3.6	382
16	The Distribution of Active Force Generators Controls Mitotic Spindle Position. Science, 2003, 301, 518-521.	6.0	351
17	Recycling of Golgi-resident Glycosyltransferases through the ER Reveals a Novel Pathway and Provides an Explanation for Nocodazole-induced Golgi Scattering. Journal of Cell Biology, 1998, 143, 1505-1521.	2.3	345
18	High-resolution three-dimensional imaging of large specimens with light sheetâ€“based microscopy. Nature Methods, 2007, 4, 311-313.	9.0	322

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19	Structure and dynamics of human interphase chromosome territories in vivo. Human Genetics, 1998, 102, 241-251.	1.8	315
20	Three-dimensional high-resolution particle tracking for optical tweezers by forward scattered light. , 1999, 44, 378-386.		298
21	A Spatial Accommodation by Neighboring Cells Is Required for Organ Initiation in Arabidopsis. Science, 2014, 343, 178-183.	6.0	262
22	Mechanism of phototaxis in marine zooplankton. Nature, 2008, 456, 395-399.	13.7	254
23	Light-sheet fluorescence microscopy for quantitative biology. Nature Methods, 2015, 12, 23-26.	9.0	251
24	Photobleaching GFP reveals protein dynamics inside live cells. Trends in Cell Biology, 1999, 9, 61-65.	3.6	245
25	Mechanosensing in actin stress fibers revealed by a close correlation between force and protein localization. Journal of Cell Science, 2009, 122, 1665-1679.	1.2	235
26	Lateral root morphogenesis is dependent on the mechanical properties of the overlaying tissues. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5229-5234.	3.3	233
27	3D high-content screening for the identification of compounds that target cells in dormant tumor spheroid regions. Experimental Cell Research, 2014, 323, 131-143.	1.2	219
28	Filopodia act as phagocytic tentacles and pull with discrete steps and a load-dependent velocity. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11633-11638.	3.3	215
29	Photonic force microscope calibration by thermal noise analysis. Applied Physics A: Materials Science and Processing, 1998, 66, S75-S78.	1.1	209
30	Multi-view image fusion improves resolution in three-dimensional microscopy. Optics Express, 2007, 15, 8029.	1.7	205
31	Albumin-Based Drug Delivery as Novel Therapeutic Approach for Rheumatoid Arthritis. Journal of Immunology, 2003, 170, 4793-4801.	0.4	196
32	Contrast, resolution, pixelation, dynamic range and signalâ€toâ€noise ratio: fundamental limits to resolution in fluorescence light microscopy. Journal of Microscopy, 1998, 189, 15-24.	0.8	195
33	Resolution enhancement in a light-sheet-based microscope (SPIM). Optics Letters, 2006, 31, 1477.	1.7	183
34	Light sheetâ€based fluorescence microscopy: More dimensions, more photons, and less photodamage. HFSP Journal, 2008, 2, 266-275.	2.5	180
35	Trapping forces, force constants, and potential depths for dielectric spheres in the presence of spherical aberrations. Applied Optics, 2002, 41, 2494.	2.1	171
36	Highâ€resolution live imaging of plant growth in near physiological bright conditions using light sheet fluorescence microscopy. Plant Journal, 2011, 68, 377-385.	2.8	169

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37	Three-dimensional position detection of optically trapped dielectric particles. Journal of Applied Physics, 2002, 91, 5474-5488.	1.1	162
38	Fundamental reduction of the observation volume in far-field light microscopy by detection orthogonal to the illumination axis: confocal theta microscopy. Optics Communications, 1994, 111, 536-547.	1.0	161
39	Quantitative in vivo imaging of entire embryos with Digital Scanned Laser Light Sheet Fluorescence Microscopy. Current Opinion in Neurobiology, 2008, 18, 624-632.	2.0	159
40	Photonic Force Microscope Based on Optical Tweezers and Two-Photon Excitation for Biological Applications. Journal of Structural Biology, 1997, 119, 202-211.	1.3	153
41	Optical trapping of dielectric particles in arbitrary fields. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2001, 18, 839.	0.8	150
42	Rules and Self-Organizing Properties of Post-embryonic Plant Organ Cell Division Patterns. Current Biology, 2016, 26, 439-449.	1.8	150
43	Trapping and tracking a local probe with a photonic force microscope. Review of Scientific Instruments, 2004, 75, 2197-2210.	0.6	148
44	Targeting of Rough Endoplasmic Reticulum Membrane Proteins and Ribosomes in Invertebrate Neurons. Molecular Biology of the Cell, 2002, 13, 1778-1791.	0.9	144
45	High-resolution deep imaging of live cellular spheroids with light-sheet-based fluorescence microscopy. Cell and Tissue Research, 2013, 352, 161-177.	1.5	144
46	Confocal microscopy with an increased detection aperture: type-B 4Pi confocal microscopy. Optics Letters, 1994, 19, 222.	1.7	142
47	Measurement of the 4Piâ€confocal point spread function proves 75 nm axial resolution. Applied Physics Letters, 1994, 64, 1335-1337.	1.5	141
48	An Auxin Transport Mechanism Restricts Positive Orthogravitropism in Lateral Roots. Current Biology, 2013, 23, 817-822.	1.8	134
49	Single Plane Illumination Fluorescence Correlation Spectroscopy (SPIM-FCS) probes inhomogeneous three-dimensional environments. Optics Express, 2010, 18, 10627.	1.7	133
50	An antibody against secretogranin I (chromogranin B) is packaged into secretory granules.. Journal of Cell Biology, 1989, 109, 17-34.	2.3	126
51	Nonlinear absorption extends confocal fluorescence microscopy into the ultra-violet regime and confines the illumination volume. Optics Communications, 1994, 104, 223-228.	1.0	115
52	Oocyte DNA damage quality control requires consecutive interplay of CHK2 and CK1 to activate p63. Nature Structural and Molecular Biology, 2018, 25, 261-269.	3.6	112
53	Regulation of microtubule dynamics and nucleation during polarization in MDCK II cells.. Journal of Cell Biology, 1990, 111, 3013-3021.	2.3	106
54	Light sheet fluorescence microscopy. Nature Reviews Methods Primers, 2021, 1, .	11.8	105

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55	Local viscosity probed by photonic force microscopy. Applied Physics A: Materials Science and Processing, 1998, 66, S71-S73.	1.1	102
56	Life sciences require the third dimension. Current Opinion in Cell Biology, 2006, 18, 117-124.	2.6	99
57	Membrane Invaginations Reveal Cortical Sites that Pull on Mitotic Spindles in One-Cell C. elegans Embryos. PLoS ONE, 2010, 5, e12301.	1.1	96
58	Stable chromosomal units determine the spatial and temporal organization of DNA replication. Journal of Cell Science, 2004, 117, 5353-5365.	1.2	89
59	Three-Dimensional Tissue Models for Drug Discovery and Toxicology. Recent Patents on Biotechnology, 2009, 3, 103-117.	0.4	85
60	Tailoring the axial shape of the point spread function using the Toraldo concept. Optics Express, 2002, 10, 98.	1.7	82
61	Enhancing the Axial Resolution in Far-field Light Microscopy: Two-photon 4Pi Confocal Fluorescence Microscopy. Journal of Modern Optics, 1994, 41, 675-681.	0.6	81
62	Visualizing chromatin and chromosomes in living cells. Methods, 2003, 29, 42-50.	1.9	79
63	Lateral modulation boosts image quality in single plane illumination fluorescence microscopy. Optics Letters, 2007, 32, 1938.	1.7	79
64	Biglycan evokes autophagy in macrophages via aÂnovel CD44/Toll-like receptor 4 signaling axisÂinÂischemia/reperfusion injury. Kidney International, 2019, 95, 540-562.	2.6	78
65	Beyond the diffraction limit?. Nature, 2002, 417, 806-807.	13.7	77
66	Cytotoxicity and infiltration of human NK cells in in vivo-like tumor spheroids. BMC Cancer, 2015, 15, 351.	1.1	74
67	Spore number control and breeding in Saccharomyces cerevisiae. Journal of Cell Biology, 2005, 171, 627-640.	2.3	73
68	Three-dimensional tracking of small spheres in focused laser beams: influence of the detection angular aperture. Optics Letters, 2003, 28, 411.	1.7	71
69	Distribution of chromosome 18 and X centric heterochromatin in the interphase nucleus of cultured human cells. Experimental Cell Research, 1990, 189, 1-12.	1.2	70
70	Ultraviolet diffraction limited nanosurgery of live biological tissues. Review of Scientific Instruments, 2004, 75, 472-478.	0.6	70
71	Highâ€resolution axial and lateral position sensing using twoâ€photon excitation of fluorophores by a continuousâ€wave Nd:YAG laser. Applied Physics Letters, 1996, 69, 446-448.	1.5	68
72	Three-Dimensional Cell Cultures in Toxicology. Biotechnology and Genetic Engineering Reviews, 2009, 26, 117-138.	2.4	68

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73	Three-dimensional thermal noise imaging. Applied Physics Letters, 2001, 79, 3878-3880.	1.5	66
74	Live Imaging of Whole Mouse Embryos during Gastrulation: Migration Analyses of Epiblast and Mesodermal Cells. PLoS ONE, 2013, 8, e64506.	1.1	66
75	LightÂsheet-based fluorescence microscopy (LSFM) for the quantitative imaging of cells and tissues. Cell and Tissue Research, 2015, 360, 129-141.	1.5	66
76	ImFCS: A software for Imaging FCS data analysis and visualization. Optics Express, 2010, 18, 25468.	1.7	65
77	Mechanical Properties of Single Motor Molecules Studied by Three-Dimensional Thermal Force Probing in Optical Tweezers. ChemPhysChem, 2004, 5, 1150-1158.	1.0	63
78	In vivo Selective Cytoskeleton Dynamics Quantification in Interphase Cells Induced by Pulsed Ultraviolet Laser Nanosurgery. Traffic, 2005, 6, 1093-1102.	1.3	63
79	Multiple imaging axis microscopy improves resolution for thick-sample applications. Optics Letters, 2003, 28, 1654.	1.7	60
80	Multiscale image analysis reveals structural heterogeneity of the cell microenvironment in homotypic spheroids. Scientific Reports, 2017, 7, 43693.	1.6	59
81	Dynein-mediated pulling forces drive rapid mitotic spindle elongation in Ustilago maydis. EMBO Journal, 2006, 25, 4897-4908.	3.5	58
82	Optimal 2D-SIM reconstruction by two filtering steps with Richardson-Lucy deconvolution. Scientific Reports, 2016, 6, 37149.	1.6	58
83	Quantitative three-dimensional evaluation of immunofluorescence staining for large whole mount spheroids with light sheet microscopy. Biomedical Optics Express, 2017, 8, 484.	1.5	58
84	Three-dimensional laser microsurgery in light-sheet based microscopy (SPIM). Optics Express, 2007, 15, 6420.	1.7	55
85	The molecular recognition of phosphatidic acid by an amphipathic helix in Opi1. Journal of Cell Biology, 2018, 217, 3109-3126.	2.3	55
86	Optical scanning holography as a technique for high-resolution three-dimensional biological microscopy. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2002, 19, 1910.	0.8	54
87	In Vivo Imaging of the Inflammatory Receptor CD40 After Cerebral Ischemia Using a Fluorescent Antibody. Stroke, 2008, 39, 2845-2852.	1.0	54
88	Non-invasive long-term fluorescence live imaging of Tribolium castaneum embryos. Development (Cambridge), 2014, 141, 2331-2338.	1.2	54
89	E-cadherin, actin, microtubules and FAK dominate different spheroid formation phases and important elements of tissue integrity. Biology Open, 2019, 8, .	0.6	54
90	Long-term live imaging and multiscale analysis identify heterogeneity and core principles of epithelial organoid morphogenesis. BMC Biology, 2021, 19, 37.	1.7	54

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91	Identification of autophagy as a longevity-assurance mechanism in the aging modelPodospora anserina. Autophagy, 2014, 10, 822-834.	4.3	53
92	Trans-Golgi network localized small GTPase RabA1d is involved in cell plate formation and oscillatory root hair growth. BMC Plant Biology, 2014, 14, 252.	1.6	52
93	csiLSFM combines light-sheet fluorescence microscopy and coherent structured illumination for a lateral resolution below 100 nm. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4869-4874.	3.3	52
94	Chapter 20 Preservation of Biological Specimens for Observation in a Confocal Fluorescence Microscope and Operational Principles of Confocal Fluorescence Microscopy. Methods in Cell Biology, 1989, 31, 437-452.	0.5	51
95	Optical levitation of absorbing particles with a nominally Gaussian laser beam. Optics Letters, 2002, 27, 1223.	1.7	48
96	Digital Scanned Laser Light-Sheet Fluorescence Microscopy (DSLM) of Zebrafish and Drosophila Embryonic Development. Cold Spring Harbor Protocols, 2011, 2011, pdb.prot065839.	0.2	48
97	Live imaging and quantitative analysis of gastrulation in mouse embryos using light-sheet microscopy and 3D tracking tools. Nature Protocols, 2014, 9, 575-585.	5.5	48
98	Changes in the allocation of endogenous strigolactone improve plant biomass production on phosphateâ€poor soils. New Phytologist, 2018, 217, 784-798.	3.5	48
99	Control of relative radiation pressure in optical traps: Application to phagocytic membrane binding studies. Physical Review E, 2005, 71, 061927.	0.8	46
100	Nlcam modulates midline convergence during anterior neural plate morphogenesis. Developmental Biology, 2010, 339, 14-25.	0.9	46
101	Three-dimensional Fluorescence Lifetime Imaging with a Single Plane Illumination Microscope provides an improved Signal to Noise Ratio. Optics Express, 2011, 19, 20743.	1.7	44
102	Robust and automated three-dimensional segmentation of densely packed cell nuclei in different biological specimens with Lines-of-Sight decomposition. BMC Bioinformatics, 2015, 16, 187.	1.2	43
103	Dynamic organization of the actin system in the motile cells of Dictyostelium. Journal of Muscle Research and Cell Motility, 2002, 23, 639-649.	0.9	42
104	Application of confocal laser microscopy and threeâ€dimensional Voronoi diagrams for volume and surface estimates of interphase chromosomes. Journal of Microscopy, 1995, 177, 150-161.	0.8	40
105	The BioImage Database Project: Organizing Multidimensional Biological Images in an Object-Relational Database. Journal of Structural Biology, 1999, 125, 97-102.	1.3	40
106	Digital Scanned Laser Light Sheet Fluorescence Microscopy. Cold Spring Harbor Protocols, 2010, 2010, pdb.top78.	0.2	40
107	Dynamic Organization of the Actin Cytoskeleton During Meiosis and Spore Formation in Budding Yeast. Traffic, 2006, 7, 1628-1642.	1.3	39
108	Three-dimensional preparation and imaging reveal intrinsic microtubule properties. Nature Methods, 2007, 4, 843-846.	9.0	39

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109	Tissue-culture light sheet fluorescence microscopy (TC-LSFM) allows long-term imaging of three-dimensional cell cultures under controlled conditions. Integrative Biology (United Kingdom), 2014, 6, 988-998.	0.6	39
110	A GABAergic and peptidergic sleep neuron as a locomotion stop neuron with compartmentalized Ca2+ dynamics. Nature Communications, 2019, 10, 4095.	5.8	39
111	Differences of size and shape of active and inactive X-chromosome domains in human amniotic fluid cell nuclei. Microscopy Research and Technique, 1993, 25, 68-77.	1.2	37
112	A Photorhabdus Natural Product Inhibits Insect Juvenile Hormone Epoxide Hydrolase. ChemBioChem, 2015, 16, 766-771.	1.3	36
113	Lens Aberrations in Confocal Fluorescence Microscopy. , 1995, , 347-354.		35
114	Confocal theta microscope with three objective lenses. Review of Scientific Instruments, 1994, 65, 3367-3372.	0.6	31
115	Mouse ICM Organoids Reveal Three-Dimensional Cell Fate Clustering. Biophysical Journal, 2019, 116, 127-141.	0.2	31
116	Confocal theta fluorescence microscopy with annular apertures. Applied Optics, 1996, 35, 126.	2.1	29
117	Quantitative ER â†" Golgi Transport Kinetics and Protein Separation upon Golgi Exit Revealed by Vesicular Integral Membrane Protein 36 Dynamics in Live Cells. Molecular Biology of the Cell, 2001, 12, 1481-1498.	0.9	28
118	Interferometric tracking of optically trapped probes behind structured surfaces: a phase correction method. Applied Optics, 2006, 45, 7309.	2.1	28
119	Nud1p, the yeast homolog of Centriolin, regulates spindle pole body inheritance in meiosis. EMBO Journal, 2006, 25, 3856-3868.	3.5	28
120	Quantitative 3D Cell-Based Assay Performed with Cellular Spheroids and Fluorescence Microscopy. Methods in Cell Biology, 2013, 113, 295-309.	0.5	28
121	p63 uses a switch-like mechanism to set the threshold for induction of apoptosis. Nature Chemical Biology, 2020, 16, 1078-1086.	3.9	28
122	[18] Resolution in optical microscopy. Methods in Enzymology, 2003, 360, 416-446.	0.4	27
123	A novel laser nanosurgery approach supports de novo Golgi biogenesis in mammalian cells. Journal of Cell Science, 2011, 124, 978-987.	1.2	27
124	Three-Dimensional Microtubule Behavior in Xenopus Egg Extracts Reveals Four Dynamic States and State-Dependent Elastic Properties. Biophysical Journal, 2008, 95, 1474-1486.	0.2	26
125	Improving your four-dimensional image: traveling through a decade of light-sheet-based fluorescence microscopy research. Nature Protocols, 2017, 12, 1103-1109.	5.5	26
126	Viscoelastic response of contractile filament bundles. Physical Review E, 2011, 83, 051902.	0.8	25

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127	Investigating Relaxation Processes in Cells and Developing Organisms: From Cell Ablation to Cytoskeleton Nanosurgery. Methods in Cell Biology, 2007, 82, 267-291.	0.5	24
128	Invited Review Article: Advanced light microscopy for biological space research. Review of Scientific Instruments, 2014, 85, 101101.	0.6	24
129	Large-scale chromatin fibers of living cells display a discontinuous functional organization. Chromosoma, 2001, 110, 39-51.	1.0	23
130	The Intermediate Optical System of Laser-Scanning Confocal Microscopes. , 2006, , 207-220.		23
131	Light-Sheet-Based Fluorescence Microscopy for Three-Dimensional Imaging of Biological Samples. Cold Spring Harbor Protocols, 2014, 2014, pdb.top080168.	0.2	23
132	Identifying the necrotic zone boundary in tumour spheroids with pair-correlation functions. Journal of the Royal Society Interface, 2016, 13, 20160649.	1.5	23
133	A 3-D cell culture system to study epithelia functions using microcarriers. Cytotechnology, 2016, 68, 1813-1825.	0.7	23
134	Early developmental plasticity of lateral roots in response to asymmetric water availability. Nature Plants, 2020, 6, 73-77.	4.7	23
135	An ancestral apical brain region contributes to the central complex under the control of foxQ2 in the beetle Tribolium. ELife, 2019, 8, .	2.8	23
136	Live imaging of Tribolium castaneum embryonic development using light-sheetâ€“based fluorescence microscopy. Nature Protocols, 2015, 10, 1486-1507.	5.5	22
137	Photonic Force Microscopy: A New Tool Providing New Methods to Study Membranes at the Molecular Level. Single Molecules, 2000, 1, 129-133.	1.7	21
138	Spatial partitioning of secretory cargo from Golgi resident proteins in live cells. BMC Cell Biology, 2001, 2, 19.	3.0	21
139	The SpoMBe pathway drives membrane bending necessary for cytokinesis and spore formation in yeast meiosis. EMBO Journal, 2008, 27, 2363-2374.	3.5	21
140	Hsp90 Is Involved in the Regulation of Cytosolic Precursor Protein Abundance in Tomato. Molecular Plant, 2015, 8, 228-241.	3.9	21
141	The three-dimensional architecture of the mitotic spindle, analyzed by confocal fluorescence and electron microscopy. Journal of Electron Microscopy Technique, 1991, 18, 61-73.	1.1	20
142	Ultra-thin fluorocarbon foils optimise multiscale imaging of three-dimensional native and optically cleared specimens. Scientific Reports, 2019, 9, 17292.	1.6	20
143	Optical transfer functions for confocal theta fluorescence microscopy. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 479.	0.8	19
144	Mechanosensing in actin stress fibers revealed by a close correlation between force and protein localization. Journal of Cell Science, 2009, 122, 1928-1928.	1.2	19

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145	Role of N-Cadherin cis and trans Interfaces inÂthe Dynamics of Adherens Junctions in Living Cells. PLoS ONE, 2013, 8, e81517.	1.1	19
146	Live Spheroid Formation Recorded with Light Sheet-Based Fluorescence Microscopy. Methods in Molecular Biology, 2015, 1251, 43-57.	0.4	18
147	A Correlative Light and Electron Microscopy Method Based on Laser Micropatterning and Etching. Methods in Molecular Biology, 2008, 457, 203-213.	0.4	17
148	The transition from local to global patterns governs the differentiation of mouse blastocysts. PLoS ONE, 2020, 15, e0233030.	1.1	17
149	Subcellular nanosurgery with a pulsed subnanosecond UV-A laser. Medical Laser Application: International Journal for Laser Treatment and Research, 2005, 20, 217-222.	0.4	15
150	Madinâ€“Darby canine kidney cells are increased in aerobic glycolysis when cultured on flat and stiff collagenâ€coated surfaces rather than in physiological 3â€Ð cultures. Proteomics, 2010, 10, 3394-3413.	1.3	15
151	Tilt angle dependent three-dimensional-position detection of a trapped cylindrical particle in a focused laser beam. Applied Physics Letters, 2004, 84, 4271-4273.	1.5	14
152	Three-dimensional bead position histograms reveal single-molecule nanomechanics. Physical Review E, 2005, 71, 021907.	0.8	14
153	Live Imaging of Arabidopsis Development. Methods in Molecular Biology, 2014, 1062, 539-550.	0.4	14
154	A Novel Cellular Spheroid-Based Autophagy Screen Applying Live Fluorescence Microscopy Identifies Nonactin as a Strong Inducer of Autophagosomal Turnover. SLAS Discovery, 2017, 22, 558-570.	1.4	13
155	Light Sheet-based Fluorescence Microscopy of Living or Fixed and Stained Tribolium castaneum Embryos. Journal of Visualized Experiments, 2017, , .	0.2	13
156	A universal vector concept for a direct genotyping of transgenic organisms and a systematic creation of homozygous lines. ELife, 2018, 7, .	2.8	13
157	Two New High-Resolution Confocal Fluorescence Microscopies (4Pi, Theta) with One- and Two-Photon Excitation. , 1995, , 417-430.		13
158	Single-lens theta microscopy: Resolution, efficiency and working distance. Journal of Modern Optics, 1999, 46, 843-858.	0.6	12
159	Three-dimensional optical manipulation using four collimated intersecting laser beams. Optics Express, 2007, 15, 4921.	1.7	12
160	Long-term fluorescence live imaging of Tribolium castaneum embryos: principles, resources, scientific challenges and the comparative approach. Current Opinion in Insect Science, 2016, 18, 17-26.	2.2	12
161	Imaging Cellular Spheroids with a Single (Selective) Plane Illumination Microscope. Cold Spring Harbor Protocols, 2014, 2014, pdb.prot080176.	0.2	11
162	Lateral assembly of N-cadherin drives tissue integrity by stabilizing adherens junctions. Journal of the Royal Society Interface, 2015, 12, 20141055.	1.5	11

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163	The Intermediate Optical System of Laser-Scanning Confocal Microscopes. , 1995, , 139-154.		11
164	Imaging MDCK Cysts with a Single (Selective) Plane Illumination Microscope. Cold Spring Harbor Protocols, 2014, 2014, pdb.prot080184.	0.2	8
165	Better Imaging through Chemistry. Cell, 2014, 159, 1243-1246.	13.5	8
166	Non-invasive analysis of pancreas organoids in synthetic hydrogels defines material-cell interactions and luminal composition. Biomaterials Science, 2021, 9, 5415-5426.	2.6	8
167	The Intermediate Optical System of Laser-scanning Confocal Microscopes. , 1990, , 93-103.		8
168	Cell fate clusters in ICM organoids arise from cell fate heredity and division: a modelling approach. Scientific Reports, 2020, 10, 22405.	1.6	8
169	Endogenous AJAP1 associates with the cytoskeleton and attenuates angiogenesis in endothelial cells. Biology Open, 2017, 6, 723-731.	0.6	7
170	Measuring Stepwise Binding of Thermally Fluctuating Particles to Cell Membranes without Fluorescence. Biophysical Journal, 2020, 118, 1850-1860.	0.2	7
171	Quantifying the Autophagy-Triggering Effects of Drugs in Cell Spheroids with Live Fluorescence Microscopy. Methods in Molecular Biology, 2014, 1165, 19-29.	0.4	7
172	Reply to comment on â€œTrapping force, force constant, and potential depths for dielectric spheres in the presence of spherical aberrationsâ€• Applied Optics, 2004, 43, 1827.	2.1	6
173	Three-Dimensional Live Imaging of Filamentous Fungi with Light Sheet-Based Fluorescence Microscopy (LSFM). Methods in Molecular Biology, 2017, 1563, 19-31.	0.4	5
174	In toto light sheet fluorescence microscopy live imaging datasets of Ceratitis capitata embryonic development. Scientific Data, 2022, 9, .	2.4	5
175	A confocal fiber-coupled single-lens theta microscope. Review of Scientific Instruments, 1998, 69, 2956-2963.	0.6	4
176	Selective Plane Illumination Microscopy. , 2006, , 672-679.		3
177	Light sheet-based fluorescence microscopy (LSFM) reduces phototoxic effects and provides new means for the modern life sciences. Proceedings of SPIE, 2011, , .	0.8	3
178	Non-lethal genotyping of Tribolium castaneum adults using genomic DNA extracted from wing tissue. PLoS ONE, 2017, 12, e0182564.	1.1	3
179	QuickPIV: Efficient 3D particle image velocimetry software applied to quantifying cellular migration during embryogenesis. BMC Bioinformatics, 2021, 22, 579.	1.2	3
180	Designing a Confocal Fluorescence Microscope. , 1994, , 33-51.		2

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181	Non-invasive long-term fluorescence live imaging of Tribolium castaneum embryos. Development (Cambridge), 2014, 141, 2361-2361.	1.2	2
182	A deterministic genotyping workflow reduces waste of transgenic individuals by two-thirds. Scientific Reports, 2021, 11, 15325.	1.6	2
183	Optical Trapping of Small Particles. Springer Series in Optical Sciences, 2003, , 357-388.	0.5	2
184	Retrograde Analysis of Calcium Signaling by CaMPARI2 Shows Cytosolic Calcium in Chondrocytes Is Unaffected by Parabolic Flights. Biomedicines, 2022, 10, 138.	1.4	2
185	Nonlinear filtering in improving the image quality of confocal fluorescent images. Machine Vision and Applications, 1991, 4, 243-253.	1.7	1
186	Active particle manipulation with four laser beams. , 2004, 5322, 114.		1
187	The zebrafish digital embryo: in toto reconstruction of zebrafish early embryonic development with digital scanned laser light sheet fluorescence microscopy. , 2009, , .		1
188	Alternative exon usage creates novel transcript variants of tumor suppressor SHREW-1 gene with differential tissue expression profile. Biology Open, 2016, 5, 1607-1619.	0.6	1
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