

Bernd Rieger

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2019811/publications.pdf>

Version: 2024-02-01

43
papers

3,722
citations

279798

23
h-index

289244

40
g-index

51
all docs

51
docs citations

51
times ranked

3981
citing authors

#	ARTICLE	IF	CITATIONS
1	Photon efficient orientation estimation using polarization modulation in single-molecule localization microscopy. Biomedical Optics Express, 2022, 13, 2835.	2.9	5
2	Joint registration of multiple point clouds for fast particle fusion in localization microscopy. Bioinformatics, 2022, 38, 3281-3287.	4.1	6
3	High-speed multicolor structured illumination microscopy using a hexagonal single mode fiber array. Biomedical Optics Express, 2021, 12, 1181.	2.9	16
4	3D particle averaging and detection of macromolecular symmetry in localization microscopy. Nature Communications, 2021, 12, 2847.	12.8	32
5	Detecting structural heterogeneity in single-molecule localization microscopy data. Nature Communications, 2021, 12, 3791.	12.8	14
6	Simultaneous orientation and 3D localization microscopy with a Vortex point spread function. Nature Communications, 2021, 12, 5934.	12.8	39
7	Polarized stimulated-emission depletion and dark-state lifetime at vacuum and cryogenic temperature conditions. Physical Review A, 2021, 104, .	2.5	0
8	Localization microscopy at doubled precision with patterned illumination. Nature Methods, 2020, 17, 59-63.	19.0	138
9	Super-resolution fight club: assessment of 2D and 3D single-molecule localization microscopy software. Nature Methods, 2019, 16, 387-395.	19.0	251
10	A Multichannel Cross-Modal Fusion Framework for Electron Tomography. IEEE Transactions on Image Processing, 2019, 28, 4206-4218.	9.8	4
11	Phasor based single-molecule localization microscopy in 3D (pSMLM-3D): An algorithm for MHz localization rates using standard CPUs. Journal of Chemical Physics, 2018, 148, 123311.	3.0	50
12	Photon Yield Enhancement of Red Fluorophores at Cryogenic Temperatures. ChemPhysChem, 2018, 19, 1774-1780.	2.1	27
13	Automatic correction of nonlinear damping effects in HAADFâ€“STEM tomography for nanomaterials of discrete compositions. Ultramicroscopy, 2018, 184, 57-65.	1.9	8
14	No-Reference Weighting Factor Selection for Bimodal Tomography. , 2018, , .		1
15	Single-Molecule Switching: Fluorescence Polarization Control for On-Off Switching of Single Molecules at Cryogenic Temperatures (Small Methods 9/2018). Small Methods, 2018, 2, 1800044.	8.6	0
16	Impact of optical aberrations on axial position determination by photometry. Nature Methods, 2018, 15, 989-990.	19.0	13
17	Template-free 2D particle fusion in localization microscopy. Nature Methods, 2018, 15, 781-784.	19.0	63
18	Image Fusion of X-Ray and Electron Tomograms. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
19	Fluorescence Polarization Control for On-Off Switching of Single Molecules at Cryogenic Temperatures. <i>Small Methods</i> , 2018, 2, 1700323.	8.6	6
20	Adaptive illumination reduces photobleaching in structured illumination microscopy. <i>Biomedical Optics Express</i> , 2016, 7, 4263.	2.9	25
21	Co-Orientation: Quantifying Simultaneous Co-Localization and Orientational Alignment of Filaments in Light Microscopy. <i>PLoS ONE</i> , 2015, 10, e0131756.	2.5	21
22	Quantitative Localization Microscopy: Effects of Photophysics and Labeling Stoichiometry. <i>PLoS ONE</i> , 2015, 10, e0127989.	2.5	50
23	Nuclear accessibility of β -actin mRNA is measured by 3D single-molecule real-time tracking. <i>Journal of Cell Biology</i> , 2015, 209, 609-619.	5.2	48
24	Resolution improvement by 3D particle averaging in localization microscopy. <i>Methods and Applications in Fluorescence</i> , 2015, 3, 014003.	2.3	56
25	Probability-based particle detection that enables threshold-free and robust in vivo single-molecule tracking. <i>Molecular Biology of the Cell</i> , 2015, 26, 4057-4062.	2.1	30
26	Fully automatic evaluation of the corneal endothelium from in vivo confocal microscopy. <i>BMC Medical Imaging</i> , 2015, 15, 13.	2.7	46
27	The Lateral and Axial Localization Uncertainty in Super-Resolution Light Microscopy. <i>ChemPhysChem</i> , 2014, 15, 664-670.	2.1	109
28	Quantifying resolution limiting factors in subtomogram averaged cryo-electron tomography using simulations. <i>Journal of Structural Biology</i> , 2014, 187, 103-111.	2.8	19
29	When to use the projection assumption and the weak-phase object approximation in phase contrast cryo-EM. <i>Ultramicroscopy</i> , 2014, 136, 61-66.	1.9	42
30	Image formation modeling in cryo-electron microscopy. <i>Journal of Structural Biology</i> , 2013, 183, 19-32.	2.8	90
31	Measuring image resolution in optical nanoscopy. <i>Nature Methods</i> , 2013, 10, 557-562.	19.0	650
32	Super-resolution imaging visualizes the eightfold symmetry of gp210 proteins around the nuclear pore complex and resolves the central channel with nanometer resolution. <i>Journal of Cell Science</i> , 2012, 125, 570-575.	2.0	285
33	Position and orientation estimation of fixed dipole emitters using an effective Hermite point spread function model. <i>Optics Express</i> , 2012, 20, 5896.	3.4	48
34	Fast, spatially varying CTF correction in TEM. <i>Ultramicroscopy</i> , 2012, 118, 26-34.	1.9	21
35	Precise and unbiased estimation of astigmatism and defocus in transmission electron microscopy. <i>Ultramicroscopy</i> , 2012, 116, 115-134.	1.9	22
36	A fast algorithm for computing and correcting the CTF for tilted, thick specimens in TEM. <i>Ultramicroscopy</i> , 2011, 111, 1029-1036.	1.9	37

#	ARTICLE	IF	CITATIONS
37	ERK Nuclear Translocation Is Dimerization-independent but Controlled by the Rate of Phosphorylation. Journal of Biological Chemistry, 2010, 285, 3092-3102.	3.4	92
38	Accuracy of the Gaussian Point Spread Function model in 2D localization microscopy. Optics Express, 2010, 18, 24461.	3.4	183
39	Fast, single-molecule localization that achieves theoretically minimum uncertainty. Nature Methods, 2010, 7, 373-375.	19.0	470
40	Reaching out for signals. Journal of Cell Biology, 2005, 170, 619-626.	5.2	220
41	The role of photon statistics in fluorescence anisotropy imaging. IEEE Transactions on Image Processing, 2005, 14, 1237-1245.	9.8	54
42	Superresolution by localization of quantum dots using blinking statistics. Optics Express, 2005, 13, 7052.	3.4	332
43	One- and two-photon photoactivation of a paGFP-fusion protein in liveDrosophilaembryos. FEBS Letters, 2005, 579, 325-330.	2.8	76