ZdeneËk PetrÃ¡Å¡ek

List of Publications by Year
in descending order

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47 papers	2,056 citations	361413 20 h-index	254184 43 g-index
48 all docs	48 docs citations	48 times ranked	3386 citing authors

#	Article	IF	Citations
1	Precise Measurement of Diffusion Coefficients using Scanning Fluorescence Correlation Spectroscopy. Biophysical Journal, 2008, 94, 1437-1448.	0.5	442
2	Fgf8 morphogen gradient forms by a source-sink mechanism with freely diffusing molecules. Nature, 2009, 461, 533-536.	27.8	335
3	High-resolution three-photon biomedical imaging using doped ZnS nanocrystals. Nature Materials, 2013, 12, 359-366.	27.5	240
4	Myosin motors fragment and compact membrane-bound actin filaments. ELife, 2013, 2, e00116.	6.0	115
5	Excitation Spectra and Brightness Optimization of Two-Photon Excited Probes. Biophysical Journal, 2012, 102, 934-944.	0.5	100
6	MinCDE exploits the dynamic nature of FtsZ filaments for its spatial regulation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1192-200.	7.1	66
7	Characterization of Protein Dynamics in Asymmetric Cell Division by Scanning Fluorescence Correlation Spectroscopy. Biophysical Journal, 2008, 95, 5476-5486.	0.5	52
8	Excitation energy transfer from phycobiliprotein to chlorophyll d in intact cells of Acaryochloris marina studied by time- and wavelength-resolved fluorescence spectroscopy. Photochemical and Photobiological Sciences, 2005, 4, 1016.	2.9	48
9	A comprehensive framework for fluorescence cross-correlation spectroscopy. New Journal of Physics, 2010, 12, 113009.	2.9	44
10	Correcting for Spectral Crossâ€Talk in Dualâ€Color Fluorescence Crossâ€Correlation Spectroscopy. ChemPhysChem, 2012, 13, 1221-1231.	2.1	43
11	A time-resolved study of concentration quenching of disulfonated aluminium phthalocyanine fluorescence. Photochemical and Photobiological Sciences, 2003, 2, 236-244.	2.9	41
12	Photobleaching in Twoâ€Photon Scanning Fluorescence Correlation Spectroscopy. ChemPhysChem, 2008, 9, 147-158.	2.1	35
13	Scanning FCS for the Characterization of Protein Dynamics in Live Cells. Methods in Enzymology, 2010, 472, 317-343.	1.0	35
14	FtsZ Polymers Tethered to the Membrane by ZipA Are Susceptible to Spatial Regulation by Min Waves. Biophysical Journal, 2015, 108, 2371-2383.	0.5	33
15	Let the substrate flow, not the enzyme: Practical immobilization of <scp>d</scp>â€amino acid oxidase in a glass microreactor for effective biocatalytic conversions. Biotechnology and Bioengineering, 2016, 113, 2342-2349.	3.3	33
16	Wide-field time-correlated single photon counting-based fluorescence lifetime imaging microscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 942, 162365.	1.6	26
17	Sub-Î¼s time resolution in wide-field time-correlated single photon counting microscopy obtained from the photon event phosphor decay. New Journal of Physics, 2015, 17, 023032.	2.9	24
18	Solvent effects on the photophysical and photochemical properties of (E,E,Eâ€Š)-1,6-bis(4-nitrophenyl)hexa-1,3,5-triene. Perkin Transactions II RSC, 2001, , 308-314.	1.1	22

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19	Wide-field photon counting fluorescence lifetime imaging microscopy: application to photosynthesizing systems. Photosynthesis Research, 2009, 102, 157-168.	2.9	22
20	Electrostatic Selfâ€Assembly of Charged Colloids and Macromolecules in a Fluidic Nanoslit. Small, 2008, 4, 1900-1906.	10.0	21
21	Propagation of <scp>M</scp>in<scp>CDE</scp> waves on freeâ€standing membranes. Environmental Microbiology, 2013, 15, 3319-3326.	3.8	20
22	Simultaneous two-photon fluorescence correlation spectroscopy and lifetime imaging of dye molecules in submicrometer fluidic structures. Microscopy Research and Technique, 2007, 70, 459-466.	2.2	18
23	Highly Rapid Amplification-Free and Quantitative DNA Imaging Assay. Scientific Reports, 2013, 3, 1852.	3.3	18
24	Biobased, Internally pH-Sensitive Materials: Immobilized Yellow Fluorescent Protein as an Optical Sensor for Spatiotemporal Mapping of pH Inside Porous Matrices. ACS Applied Materials & Interfaces, 2018, 10, 6858-6868.	8.0	18
25	Fluctuations as a source of information in fluorescence microscopy. Journal of the Royal Society Interface, 2009, 6, .	3.4	17
26	Circular scanning fluorescence correlation spectroscopy on membranes. Optics Express, 2011, 19, 25006.	3.4	17
27	Photon arrival timing with sub-camera exposure time resolution in wide-field time-resolved photon counting imaging. Optics Express, 2010, 18, 24888.	3.4	15
28	The micromorphology of Trichoderma reesei analyzed in cultivations on lactose and solid lignocellulosic substrate, and its relationship with cellulase production. Biotechnology for Biofuels, 2016, 9, 169.	6.2	15
29	The Dimerisation of Phthalocyanines. Progress in Reaction Kinetics and Mechanism, 2003, 28, 299-420.	2.1	13
30	Independence of Maximum Single Molecule Fluorescence Count Rate on the Temporal and Spectral Laser Pulse Width in Two-Photon FCS. Journal of Fluorescence, 2007, 17, 805-810.	2.5	13
31	Diffusion of Single-Pass Transmembrane Receptors: From the Plasma Membrane into Giant Liposomes. Journal of Membrane Biology, 2017, 250, 393-406.	2.1	13
32	<title>Influence of the refractive index on EGFP fluorescence lifetimes in mixtures of water and glycerol</title>. , 2001, 4259, 92.		12
33	Fluorescence lifetime images and correlation spectra obtained by multidimensional TCSPC. , 2005, 5700, 144.		12
34	Introducing a fluorescence-based standard to quantify protein partitioning into membranes. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 2932-2941.	2.6	11
35	Confocal Luminescence Lifetime Imaging with Variable Scan Velocity and Its Application to Oxygen Sensing. Analytical Chemistry, 2016, 88, 10736-10743.	6.5	11
36	Two-photon fluorescence imaging and correlation analysis applied to protein dynamics in C. elegans embryo. , 2008, , .		9

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37	Simple membrane-based model of the Min oscillator. New Journal of Physics, 2015, 17, 043023.	2.9	9
38	Diffusion coefficients and dissociation constants of enhanced green fluorescent protein binding to free standing membranes. Data in Brief, 2015, 5, 537-541.	1.0	7
39	Application of novel low-intensity nonscanning fluorescence lifetime imaging microscopy for monitoring excited state dynamics in individual chloroplasts and living cells of photosynthetic organisms. , 2006, , .		6
40	Wide-field time-correlated single photon counting (TCSPC) microscopy with time resolution below the frame exposure time. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 787, 1-5.	1.6	6
41	Modeling the activity burst in the initial phase of cellulose hydrolysis by the processive cellobiohydrolase Cel7A. Biotechnology and Bioengineering, 2019, 116, 515-525.	3.3	6
42	Microsecond wide-field TCSPC microscopy based on an ultra-fast CMOS camera. Proceedings of SPIE, 2015, , .	0.8	2
43	Wide-field single photon counting imaging with an ultrafast camera and an image intensifier. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 695, 306-308.	1.6	1
44	Optimal parameters in variableâ€velocity scanning luminescence lifetime microscopy. Microscopy Research and Technique, 2021, 84, 71-78.	2.2	1
45	In Vivo Fluorescence Correlation and Cross-Correlation Spectroscopy. Springer Series in Chemical Physics, 2010, , 139-154.	0.2	1
46	Intraparticle pH Sensing Within Immobilized Enzymes: Immobilized Yellow Fluorescent Protein as Optical Sensor for Spatiotemporal Mapping of pH Inside Porous Particles. Methods in Molecular Biology, 2020, 2100, 319-333.	0.9	1
47	Towards a spectrum-based bar code for identification of weakly fluorescent microparticles. Methods and Applications in Fluorescence, 2014, 2, 015004.	2.3	0