Cecile Fradin

List of Publications by Year
in descending order

76 papers	2,898 citations	236925 25 h-index	175258 52 g-index
83 all docs	83 docs citations	83 times ranked	3670 citing authors

#	Article	IF	Citations
1	Inducing Microscale Structural Order in Phage Nanofilament Hydrogels with Globular Proteins. ACS Biomaterials Science and Engineering, 2022, 8, 340-347.	5.2	9
2	Using FCS to accurately measure protein concentration in the presence of noise and photobleaching. Biophysical Journal, 2021, 120, 4230-4241.	0.5	2
3	Direct Measurement of the Affinity between tBid and Bax in a Mitochondria-Like Membrane. International Journal of Molecular Sciences, 2021, 22, 8240.	4.1	4
4	Capicua is a fast-acting transcriptional brake. Current Biology, 2021, 31, 3639-3647.e5.	3.9	8
5	Self-organisation and convection of confined magnetotactic bacteria. Scientific Reports, 2020, 10, 13578.	3.3	9
6	Allosteric Regulation of BH3 Proteins in Bcl-xL Complexes Enables Switch-like Activation of Bax. Molecular Cell, 2020, 77, 901-912.e9.	9.7	32
7	Magnetite magnetosome biomineralization in Magnetospirillum magneticum strain AMB-1: A time course study. Chemical Geology, 2019, 530, 119348.	3.3	22
8	Misalignment between the magnetic dipole moment and the cell axis in the magnetotactic bacteriumMagnetospirillum magneticumAMB-1. Physical Biology, 2019, 16, 066008.	1.8	4
9	Shaping LED Beams with Radially Distributed Waveguideâ€Encoded Lattices. Advanced Optical Materials, 2019, 7, 1801487.	7.3	3
10	Excipient selection for thermally stable enveloped and non-enveloped viral vaccine platforms in dry powders. International Journal of Pharmaceutics, 2019, 561, 66-73.	5.2	22
11	Membrane charge and lipid packing determine polymyxin-induced membrane damage. Communications Biology, 2019, 2, 67.	4.4	37
12	Anomalous Diffusion in Inverted Variable-Lengthscale Fluorescence Correlation Spectroscopy. Biophysical Journal, 2019, 116, 791-806.	0.5	14
13	Measuring the Effective Temperature of Single Magnetotactic Bacteria as a Tool to Study Non-Thermal Biological Noise. Biophysical Journal, 2018, 114, 328a-329a.	0.5	0
14	Precision in a rush: Trade-offs between reproducibility and steepness of the hunchback expression pattern. PLoS Computational Biology, 2018, 14, e1006513.	3.2	32
15	Anomalous Diffusion as Seen through the Lens of Inverted Variable Length Scale FCS. Biophysical Journal, 2018, 114, 528a.	0.5	0
16	3 minutes to precisely measure morphogen concentration. PLoS Genetics, 2018, 14, e1007676.	3.5	35
17	Live Imaging of mRNA Transcription in Drosophila Embryos. Methods in Molecular Biology, 2018, 1863, 165-182.	0.9	5
18	Growing Magnetotactic Bacteria of the Genus Magnetospirillum: Strains MSR-1, AMB-1 and MS-1. Journal of Visualized Experiments, 2018, , .	0.3	6

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19	LiveFly: A Toolbox for the Analysis of Transcription Dynamics in Live Drosophila Embryos. Methods in Molecular Biology, 2018, 1863, 183-195.	0.9	4
20	Zooming in on Anomalous Diffusion with Variable-Lengthscale Fluorescence Correlation Spectroscopy. Biophysical Journal, 2017, 112, 476a.	0.5	0
21	On the importance of protein diffusion in biological systems: The example of the Bicoid morphogen gradient. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 1676-1686.	2.3	26
22	Characterizing anomalous diffusion in crowded polymer solutions and gels over five decades in time with variable-lengthscale fluorescence correlation spectroscopy. Soft Matter, 2016, 12, 4190-4203.	2.7	53
23	Precision of Readout at the hunchback Gene: Analyzing Short Transcription Time Traces in Living Fly Embryos. PLoS Computational Biology, 2016, 12, e1005256.	3.2	48
24	Single-Molecule Fluorescence Microscopy and Tracking of Lipids in Mitochondrial-Like Supported Lipid Bilayers. Biophysical Journal, 2015, 108, 162a.	0.5	0
25	Effect of Cholesterol on the Structure of a Five-Component Mitochondria-Like Phospholipid Membrane. Membranes, 2015, 5, 664-684.	3.0	15
26	Lipid Diffusion in Supported Lipid Bilayers: A Comparison between Line-Scanning Fluorescence Correlation Spectroscopy and Single-Particle Tracking. Membranes, 2015, 5, 702-721.	3.0	28
27	Distinct lipid effects on tBid and Bim activation of membrane permeabilization by pro-apoptotic Bax. Biochemical Journal, 2015, 467, 495-505.	3.7	54
28	Coincidence Measurements in Dual-Color Confocal Microscopy: A Combined Single-Particle and Fluorescence Correlation Approach. Biophysical Reviews and Letters, 2014, 09, 249-271.	0.8	2
29	Multiple partners can kiss-and-run: Bax transfers between multiple membranes and permeabilizes those primed by tBid. Cell Death and Disease, 2014, 5, e1277-e1277.	6.3	34
30	Fluorescence correlation spectroscopy with a doughnut-shaped excitation profile as a characterization tool in STED microscopy. Optics Express, 2014, 22, 31154.	3.4	9
31	The Proapoptotic Protein tBid Forms Both Superficially Bound and Membrane-Inserted Oligomers. Biophysical Journal, 2014, 106, 2085-2095.	0.5	20
32	Binding and Oligomerization of Bcl-2 Family Proteins on Supported Lipid Bilayers with Single Molecule Resolution. Biophysical Journal, 2013, 104, 222a.	0.5	0
33	tBid Undergoes Multiple Conformational Changes at the Membrane Required for Bax Activation. Journal of Biological Chemistry, 2013, 288, 22111-22127.	3.4	79
34	Optimizing the Acquisition and Analysis of Confocal Images for Quantitative Singleâ€Mobileâ€Particle Detection. ChemPhysChem, 2013, 14, 2476-2490.	2.1	6
35	A Comparison of Methods to Measure the Magnetic Moment of Magnetotactic Bacteria through Analysis of Their Trajectories in External Magnetic Fields. PLoS ONE, 2013, 8, e82064.	2.5	38
36	A Supported Bilayer Model to Study the Effect of Membrane Composition on Bcl-2 Family Proteins. Biophysical Journal, 2012, 102, 647a.	0.5	0

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37	tBid Conformational Changes at the Membrane for the Regulation of Apoptosis. Biophysical Journal, 2012, 102, 625a.	0.5	0
38	Interaction of the full-length Bax protein with biomimetic mitochondrial liposomes: A small-angle neutron scattering and fluorescence study. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 384-401.	2.6	24
39	Quantification of Protein Distribution on Liposomes using Confocal Microscopy: A Single Mobile Fluorescent Particle Detection Method. Biophysical Journal, 2012, 102, 51a-52a.	0.5	0
40	Characterizing Bax and Bid Binding to Liposomes and Planar Membranes with Single Molecule Resolution. Biophysical Journal, 2012, 102, 628a.	0.5	0
41	Detection of Mobile Single Fluorescent Particles by Confocal Microscopy: A Comparison with Fluorescence Correlation Techniques. Biophysical Journal, 2011, 100, 476a.	0.5	0
42	Simultaneous pH and Temperature Measurements Using Pyranine as a Molecular Probe. Journal of Fluorescence, 2011, 21, 299-312.	2.5	15
43	The time to measure positional information: maternal Hunchback is required for the synchrony of the Bicoid transcriptional response at the onset of zygotic transcription. Development (Cambridge), 2010, 137, 2795-2804.	2.5	82
44	(Invited) Investigation into the Photophysics and Diffusion Properties of Water Soluble Quantum Dots Using Fluorescence Correlation Spectroscopy. ECS Transactions, 2010, 28, 243-255.	0.5	1
45	Bax Pore Formation: From Activation to Oligomerization. Biophysical Journal, 2010, 98, 464a.	0.5	0
46	High Mobility of Bicoid Captured by Fluorescence Correlation Spectroscopy: Implication for the Rapid Establishment of Its Gradient. Biophysical Journal, 2010, 99, L33-L35.	0.5	96
47	Squeezing and Detachment of Living Cells. Biophysical Journal, 2010, 99, 3555-3562.	0.5	18
48	Near-field optical probes provide subdiffraction-limited excitation areas for fluorescence correlation spectroscopy on membranes. Pure and Applied Chemistry, 2009, 81, 1645-1653.	1.9	5
49	Adhesion and membrane tension of single vesicles and living cells using a micropipette-based technique. European Physical Journal E, 2009, 30, 117-21.	1.6	38
50	Fluorescence Correlation Spectroscopy with Sub-Diffraction-Limited Resolution Using Near-field Optical Probes. Biophysical Journal, 2009, 96, 26a.	0.5	0
51	The Toxic Effects of Quantum Dots on Embryogenesis in Caenorhabditis elegans. Biophysical Journal, 2009, 96, 48a.	0.5	0
52	Spatial Distribution and Mobility of the Ran GTPase in Live Interphase Cells. Biophysical Journal, 2009, 97, 2164-2178.	0.5	20
53	Punching Holes in Membranes: How Oligomeric Pore-Forming Proteins and Lipids Cooperate to Form Aqueous Channels in Membranes. , 2009, , 223-262.		4
54	The Bcd Morphogenetic Concentration Gradient is Formed by Diffusion. Biophysical Journal, 2009, 96, 378a.	0.5	0

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55	Combined pH and Temperature Measurements Using Pyranine as a Probe. Biophysical Journal, 2009, 96, 401a-402a.	0.5	0
56	Multiple Quantum Well AlGaAs Nanowires. Nano Letters, 2008, 8, 495-499.	9.1	25
57	Membrane Binding by tBid Initiates an Ordered Series of Events Culminating in Membrane Permeabilization by Bax. Cell, 2008, 135, 1074-1084.	28.9	511
58	Fluorescence correlation spectroscopy with sub-diffraction-limited resolution using near-field optical probes. Applied Physics Letters, 2008, 93, 163904.	3.3	59
59	Self-Directed Growth of AlGaAs Coreâ^'Shell Nanowires for Visible Light Applications. Nano Letters, 2007, 7, 2584-2589.	9.1	71
60	A Molecular Thermometer Based on Fluorescent Protein Blinking. Journal of the American Chemical Society, 2007, 129, 10302-10303.	13.7	64
61	Circumvention of Fluorophore Photobleaching in Fluorescence Fluctuation Experiments: a Beam Scanning Approach. ChemPhysChem, 2007, 8, 834-848.	2.1	26
62	Localized photodamage of the human erythrocyte membrane causes an invagination as a precursor of photohaemolysis. Journal of Microscopy, 2007, 226, 6-17.	1.8	2
63	Layer-by-layer and step-flow growth mechanisms in GaAsP/GaP nanowire heterostructures. Journal of Materials Research, 2006, 21, 2801-2809.	2.6	47
64	Dissociation of nuclear import cargo complexes by the protein Ran: a fluorescence correlation spectroscopy study. Comptes Rendus - Biologies, 2005, 328, 1073-1082.	0.2	11
65	Anomalous Diffusion of Proteins Due to Molecular Crowding. Biophysical Journal, 2005, 89, 2960-2971.	0.5	666
66	Characterization of the conformational changes of a tripartite molecular beacon. , 2004, 5323, 184.		1
67	Fluorescence Correlation Spectroscopy Close to a Fluctuating Membrane. Biophysical Journal, 2003, 84, 2005-2020.	0.5	55
68	In vivo mobility of proteins involved in nuclear transport studied by fluorescence correlation spectroscopy. , 2003, , .		0
69	Structure and fluctuations of liquid surfaces and interfaces. Applied Surface Science, 2001, 182, 223-230.	6.1	9
70	Reduction in the surface energy of liquid interfaces at short length scales. Nature, 2000, 403, 871-874.	27.8	231
71	A Novel Route to Defect Turbulence in Nematics. Molecular Crystals and Liquid Crystals, 1999, 328, 513-521.	0.3	1
72	Microscopic measurement of the linear compressibilities of two-dimensional fatty acid mesophases. European Physical Journal B, 1998, 1, 57-69.	1.5	41

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73	Investigating liquid surfaces down to the nanometer scale using grazing incidence X-ray scattering. Physica B: Condensed Matter, 1998, 248, 310-315.	2.7	20
74	X-ray Study of the Fluctuations and the Interfacial Structure of a Phospholipid Monolayer at an Alkaneâ"Water Interface. Langmuir, 1998, 14, 7327-7330.	3.5	31
75	Wavelength Doubling Cascade to MÃ¶bius Defect Turbulence in a 3D Anisotropic Liquid. Physical Review Letters, 1998, 81, 2902-2905.	7.8	10
76	Electroconvection in nematic liquid crystals: comparison between experimental results and the hydrodynamic model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 235, 508-514.	2.1	44