Philippe I H Bastiaens

List of Publications by Year
in descending order

104	11,691	41323 49	32815 100
papers	citations	h-index	g-index

109	109	109	12431
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An Acylation Cycle Regulates Localization and Activity of Palmitoylated Ras Isoforms. Science, 2005, 307, 1746-1752.	6.0	761
2	Protein analysis on a proteomic scale. Nature, 2003, 422, 208-215.	13.7	610
3	Growth factor-induced MAPK network topology shapes Erk response determining PC-12 cell fate. Nature Cell Biology, 2007, 9, 324-330.	4.6	581
4	Small molecule inhibition of the KRASâ€“PDEÎ´ interaction impairs oncogenic KRAS signalling. Nature, 2013, 497, 638-642.	13.7	551
5	Imaging biochemistry inside cells. Trends in Cell Biology, 2001, 11, 203-211.	3.6	449
6	Imaging Sites of Receptor Dephosphorylation by PTP1B on the Surface of the Endoplasmic Reticulum. Science, 2002, 295, 1708-1711.	6.0	401
7	The Palmitoylation Machinery Is a Spatially Organizing System for Peripheral Membrane Proteins. Cell, 2010, 141, 458-471.	13.5	393
8	Small-molecule inhibition of APT1 affects Ras localization and signaling. Nature Chemical Biology, 2010, 6, 449-456.	3.9	353
9	Quantitative Imaging of Lateral ErbB1 Receptor Signal Propagation in the Plasma Membrane. , 2000, 290, 1567-1570.		319
10	PKCÎ± regulates Î²1 integrin-dependent cell motility through association and control of integrin traffic. EMBO Journal, 1999, 18, 3909-3923.	3.5	310
11	Imaging Protein Kinase C Activation in Cells. Science, 1999, 283, 2085-2089.	6.0	306
12	The GDI-like solubilizing factor PDEÎ´ sustains the spatial organization and signalling of Ras family proteins. Nature Cell Biology, 2012, 14, 148-158.	4.6	289
13	Spatial Coordination of Spindle Assembly by Chromosome-Mediated Signaling Gradients. Science, 2005, 309, 1373-1376.	6.0	268
14	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. Angewandte Chemie - International Edition, 2018, 57, 13382-13392.	7.2	234
15	Arl2-GTP and Arl3-GTP regulate a GDI-like transport system for farnesylated cargo. Nature Chemical Biology, 2011, 7, 942-949.	3.9	231
16	Global Analysis of Fluorescence Lifetime Imaging Microscopy Data. Biophysical Journal, 2000, 78, 2127-2137.	0.2	229
17	Simultaneous detection of multiple green fluorescent proteins in live cells by fluorescence lifetime imaging microscopy. Current Biology, 1999, 9, 269-274.	1.8	222
18	Spatial regulation of Fus3 MAP kinase activity through a reaction-diffusion mechanism in yeast pheromone signalling. Nature Cell Biology, 2007, 9, 1319-1326.	4.6	219

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19	EGFR activation coupled to inhibition of tyrosine phosphatases causes lateral signal propagation. Nature Cell Biology, 2003, 5, 447-453.	4.6	218
20	Signaling from the Living Plasma Membrane. Cell, 2011, 144, 897-909.	13.5	216
21	KRas Localizes to the Plasma Membrane by Spatial Cycles of Solubilization, Trapping and Vesicular Transport. Cell, 2014, 157, 459-471.	13.5	206
22	Imaging FRET between spectrally similar GFP molecules in single cells. Nature Biotechnology, 2001, 19, 167-169.	9.4	201
23	Stathmin-Tubulin Interaction Gradients in Motile and Mitotic Cells. Science, 2004, 303, 1862-1866.	6.0	186
24	Fluorescence lifetime imaging of receptor tyrosine kinase activity in cells. Current Biology, 1999, 9, 1127-S1.	1.8	180
25	RabGEFs are a major determinant for specific Rab membrane targeting. Journal of Cell Biology, 2013, 200, 287-300.	2.3	166
26	Fluorescence-Based Sensors to Monitor Localization and Functions of Linear and K63-Linked Ubiquitin Chains in Cells. Molecular Cell, 2012, 47, 797-809.	4.5	137
27	Identification of pyrazolopyridazinones as PDEÎ´ inhibitors. Nature Communications, 2016, 7, 11360.	5.8	137
28	Live-Cell Imaging of Enzyme-Substrate Interaction Reveals Spatial Regulation of PTP1B. Science, 2007, 315, 115-119.	6.0	135
29	Activation of the p75 Neurotrophin Receptor through Conformational Rearrangement of Disulphide-Linked Receptor Dimers. Neuron, 2009, 62, 72-83.	3.8	134
30	The Interdependence of Membrane Shape and Cellular Signal Processing. Cell, 2014, 156, 1132-1138.	13.5	125
31	Spatial organization of intracellular communication: insights from imaging. Nature Reviews Molecular Cell Biology, 2010, 11, 440-452.	16.1	124
32	Spatio-temporal segregation of Ras signals: one ship, three anchors, many harbors. Current Opinion in Cell Biology, 2006, 18, 351-357.	2.6	120
33	Recruitment of Eph receptors into signaling clusters does not require ephrin contact. Journal of Cell Biology, 2004, 164, 661-666.	2.3	119
34	Gradients in the self-organization of the mitotic spindle. Trends in Cell Biology, 2006, 16, 125-134.	3.6	102
35	Calcium-dependent Oligomerization of Synaptotagmins I and II. Journal of Biological Chemistry, 1999, 274, 59-66.	1.6	94
36	Imaging Phosphorylation Dynamics of the Epidermal Growth Factor Receptor. Journal of Biological Chemistry, 2004, 279, 36972-36981.	1.6	88

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37	Ras moves to stay in place. Trends in Cell Biology, 2015, 25, 190-197.	3.6	88
38	Red-edge anisotropy microscopy enables dynamic imaging of homo-FRET between green fluorescent proteins in cells. Journal of Structural Biology, 2004, 147, 62-69.	1.3	80
39	A PDE6Î´â€KRas Inhibitor Chemotype with up to Seven Hâ€Bonds and Picomolar Affinity that Prevents Efficient Inhibitor Release by Arl2. Angewandte Chemie - International Edition, 2017, 56, 2423-2428.	7.2	78
40	Discrete States of a Protein Interaction Network Govern Interphase and Mitotic Microtubule Dynamics. PLoS Biology, 2007, 5, e29.	2.6	73
41	The composition of EphB2 clusters determines the strength in the cellular repulsion response. Journal of Cell Biology, 2014, 204, 409-422.	2.3	73
42	Cell signaling as a cognitive process. EMBO Journal, 2017, 36, 568-582.	3.5	73
43	In situ analysis of tyrosine phosphorylation networks by FLIM on cell arrays. Nature Methods, 2010, 7, 467-472.	9.0	71
44	The Autodepalmitoylating Activity of APT Maintains the Spatial Organization of Palmitoylated Membrane Proteins. Biophysical Journal, 2014, 106, 93-105.	0.2	70
45	Cdt1 associates dynamically with chromatin throughout G1 and recruits Geminin onto chromatin. EMBO Journal, 2007, 26, 1303-1314.	3.5	69
46	siRNA cell arrays for high-content screening microscopy. BioTechniques, 2004, 37, 454-462.	0.8	68
47	Development of Highly Potent Inhibitors of the Rasâ€Targeting Human Acyl Protein Thioesterases Based on Substrate Similarity Design. Angewandte Chemie - International Edition, 2011, 50, 9832-9837.	7.2	67
48	Imaging in situ proteinâ€“DNA interactions in the cell nucleus using FRETâ€“FLIM. Experimental Cell Research, 2005, 309, 390-396.	1.2	63
49	Imaging Activation of Two Ras Isoforms Simultaneously in a Single Cell. ChemBioChem, 2005, 6, 78-85.	1.3	62
50	Selective Chemical Imaging of Static Actin in Live Cells. Journal of the American Chemical Society, 2012, 134, 8480-8486.	6.6	62
51	Single Particle Tracking Reveals that EGFR Signaling Activity Is Amplified in Clathrin-Coated Pits. PLoS ONE, 2015, 10, e0143162.	1.1	59
52	Ubiquitination switches EphA2 vesicular traffic from a continuous safeguard to a finite signalling mode. Nature Communications, 2015, 6, 8047.	5.8	55
53	EGF-dependent re-routing of vesicular recycling switches spontaneous phosphorylation suppression to EGFR signaling. ELife, 2015, 4, .	2.8	55
54	miRs-138 and -424 control palmitoylation-dependent CD95-mediated cell death by targeting acyl protein thioesterases 1 and 2 in CLL. Blood, 2015, 125, 2948-2957.	0.6	50

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55	Contact inhibitory Eph signaling suppresses EGF-promoted cell migration by decoupling EGFR activity from vesicular recycling. Science Signaling, 2018, 11, .	1.6	48
56	Direct Measurement of Water States in Cryopreserved Cells Reveals Tolerance toward Ice Crystallization. Biophysical Journal, 2016, 110, 840-849.	0.2	46
57	Regulation of Ras Localization by Acylation Enables a Mode of Intracellular Signal Propagation. Science Signaling, 2010, 3, ra68.	1.6	44
58	A Proteinâ€Interaction Array Inside a Living Cell. Angewandte Chemie - International Edition, 2013, 52, 4790-4794.	7.2	43
59	Assay to visualize specific protein oxidation reveals spatio-temporal regulation of SHP2. Nature Communications, 2017, 8, 466.	5.8	43
60	Quantitative microscopy and systems biology: seeing the whole picture. Histochemistry and Cell Biology, 2008, 130, 833-843.	0.8	39
61	Reverse engineering intracellular biochemical networks. Nature Chemical Biology, 2008, 4, 643-647.	3.9	39
62	Dynamic recruitment of licensing factor Cdt1 to sites of DNA damage. Journal of Cell Science, 2011, 124, 422-434.	1.2	39
63	Interdependence between EGFR and Phosphatases Spatially Established by Vesicular Dynamics Generates a Growth Factor Sensing and Responding Network. Cell Systems, 2018, 7, 295-309.e11.	2.9	38
64	Configurable Lowâ€Cost Plotter Device for Fabrication of Multiâ€Color Subâ€Cellular Scale Microarrays. Small, 2014, 10, 2870-2876.	5.2	37
65	Binding of a Diphosphotyrosine-containing Peptide That Mimics Activated Platelet-derived Growth Factor Receptor Î² Induces Oligomerization of Phosphatidylinositol 3-Kinase. Journal of Biological Chemistry, 1998, 273, 33379-33385.	1.6	34
66	Lateral phosphorylation propagation: an aspect of feedback signalling?. Nature Reviews Molecular Cell Biology, 2003, 4, 971-975.	16.1	33
67	Cdt1 Interactions in the Licensing Process: A Model for Dynamic Spatio-temporal Control of Licensing. Cell Cycle, 2007, 6, 1549-1552.	1.3	33
68	Spatial cycles in G-protein crowd control. EMBO Journal, 2010, 29, 2689-2699.	3.5	33
69	Spatial aspects of intracellular information processing. Current Opinion in Genetics and Development, 2010, 20, 31-40.	1.5	33
70	Multi-step Loading of Human Minichromosome Maintenance Proteins in Live Human Cells. Journal of Biological Chemistry, 2013, 288, 35852-35867.	1.6	31
71	Fluorescence fluctuations of quantum-dot sensors capture intracellular protein interaction dynamics. Nature Methods, 2010, 7, 295-298.	9.0	30
72	A conformational sensor based on genetic code expansion reveals an autocatalytic component in EGFR activation. Nature Communications, 2018, 9, 3847.	5.8	29

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73	Spatial cycles mediated by UNC119 solubilisation maintain Src family kinases plasma membrane localisation. Nature Communications, 2017, 8, 114.	5.8	27
74	MaxSynBio: Wege zur Synthese einer Zelle aus nicht lebenden Komponenten. Angewandte Chemie, 2018, 130, 13566-13577.	1.6	27
75	Reversible cryo-arrest for imaging molecules in living cells at high spatial resolution. Nature Methods, 2016, 13, 665-672.	9.0	25
76	Imaging Epidermal Growth Factor Receptor Phosphorylation in Human Colorectal Cancer Cells and Human Tissues. Journal of Biological Chemistry, 2005, 280, 27826-27831.	1.6	24
77	PDEÎ´ inhibition impedes the proliferation and survival of human colorectal cancer cell lines harboring oncogenic KRas. International Journal of Cancer, 2019, 144, 767-776.	2.3	24
78	Processing Temporal Growth Factor Patterns by an Epidermal Growth Factor Receptor Network Dynamically Established in Space. Annual Review of Cell and Developmental Biology, 2020, 36, 359-383.	4.0	24
79	When it is time to die. Nature, 2009, 459, 334-335.	13.7	22
80	Chemicalâ€Biological Exploration of the Limits of the Ras Deâ€•and Repalmitoylating Machinery. ChemBioChem, 2012, 13, 1017-1023.	1.3	22
81	Growth factorâ€“dependent ErbB vesicular dynamics couple receptor signaling to spatially and functionally distinct Erk pools. Science Signaling, 2021, 14, .	1.6	18
82	Cell Cycle-Dependent Binding Modes of the Ran Exchange Factor RCC1 to Chromatin. Biophysical Journal, 2013, 104, 1642-1651.	0.2	16
83	The Function of Embryonic Stem Cell-expressed RAS (E-RAS), a Unique RAS Family Member, Correlates with Its Additional Motifs and Its Structural Properties. Journal of Biological Chemistry, 2015, 290, 15892-15903.	1.6	15
84	Imaging Proteinâ€Protein Interactions by Fluorescence Resonance Energy Transfer (FRET) Microscopy. Current Protocols in Cell Biology, 2000, 7, Unit 17.1.	2.3	14
85	Silence on the relevant literature and errors in implementation. Nature Biotechnology, 2015, 33, 336-339.	9.4	14
86	Rotational resolution of methyl-group substitution and anisotropic rotation of flavins as revealed by picosecond-resolved fluorescence depolarization. Chemical Physics Letters, 1990, 165, 315-322.	1.2	12
87	Quantitative imaging of apoptosis commitment in colorectal tumor cells. Differentiation, 2007, 75, 809-818.	1.0	11
88	Adaptive responses of cell hydration to a low temperature arrest. Journal of Physiology, 2016, 594, 1663-1676.	1.3	10
89	Co-imaging extrinsic, intrinsic and effector caspase activity by fluorescence anisotropy microscopy. Redox Biology, 2018, 19, 210-217.	3.9	9
90	A self-organized synthetic morphogenic liposome responds with shape changes to local light cues. Nature Communications, 2021, 12, 1548.	5.8	9

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91	Imaging Proteinâ€Protein Interactions by Fluorescence Resonance Energy Transfer (FRET) Microscopy. Current Protocols in Protein Science, 2001, 23, Unit19.5.	2.8	8
92	Hypertonicityâ€induced cation channels in HepG2 cells: architecture and role in proliferation vs. apoptosis. Journal of Physiology, 2018, 596, 1227-1241.	1.3	8
93	The interaction of pyrene labeled diacylglycerol with protein kinase C in mixed micelles. Biophysical Chemistry, 1993, 48, 183-191.	1.5	7
94	Imaging Proteinâ€Protein Interactions by Fluorescence Resonance Energy Transfer (FRET) Microscopy. Current Protocols in Neuroscience, 2006, 34, Unit 5.22.	2.6	6
95	Optimizing cell arrays for accurate functional genomics. BMC Research Notes, 2012, 5, 358.	0.6	6
96	Small-Molecule Inhibition of the UNC-Src Interaction Impairs Dynamic Src Localization in Cells. Cell Chemical Biology, 2019, 26, 842-851.e7.	2.5	6
97	High-Throughput Quantification of Posttranslational Modifications In Situ by CA-FLIM. Methods in Enzymology, 2011, 500, 37-58.	0.4	5
98	Ultrarapid cryo-arrest of living cells on a microscope enables multiscale imaging of out-of-equilibrium molecular patterns. Science Advances, 2021, 7, eabk0882.	4.7	4
99	Pimp my cell. Molecular Systems Biology, 2007, 3, 120.	3.2	3
100	Reversible Cryo-arrests of Living Cells to Pause Molecular Movements for High-resolution Imaging. Bio-protocol, 2017, 7, .	0.2	2
101	Understanding Ras Spatial Cycles Through Reaction-Diffusion Simulations. Methods in Molecular Biology, 2021, 2262, 199-215.	0.4	0
102	A Complex Molecular Network Controls Palmitoylation-Dependant CD95 Sensitivity Of CLL Cells. Blood, 2013, 122, 4148-4148.	0.6	0
103	The localization and processing of fluorescent labeled rat brain protein kinase C in single cells. Bioimaging, 1996, 4, 25-37.	1.8	0
104	Mirs-138 and -424 Control Palmitoylation-Dependent CD95-Mediated Cell Death By Targeting Acyl Protein Thioesterases 1 and 2 in Chronic Lymphocytic Leukemia. Blood, 2014, 124, 1953-1953.	0.6	0