Peter J M Van Haastert

List of Publications by Year
in descending order

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59 papers	2,910 citations	172457 29 h-index	175258 52 g-index
59 all docs	59 docs citations	59 times ranked	2478 citing authors

#	Article	IF	Citations
1	Chemotaxis: signalling the way forward. Nature Reviews Molecular Cell Biology, 2004, 5, 626-634.	37.0	628
2	The Ordered Extension of Pseudopodia by Amoeboid Cells in the Absence of External Cues. PLoS ONE, 2009, 4, e5253.	2.5	144
3	Chemotaxis: A Feedback-Based Computational Model Robustly Predicts Multiple Aspects of Real Cell Behaviour. PLoS Biology, 2011, 9, e1000618.	5.6	141
4	A novel cGMP signalling pathway mediating myosin phosphorylation and chemotaxis in Dictyostelium. EMBO Journal, 2002, 21, 4560-4570.	7.8	140
5	Four key signaling pathways mediating chemotaxis in Dictyostelium discoideum . Journal of Cell Biology, 2008, 180, 747-753.	5.2	105
6	Essential role of PI3-kinase and phospholipase A2 in Dictyostelium discoideum chemotaxis. Journal of Cell Biology, 2007, 177, 809-816.	5.2	101
7	Biased Random Walk by Stochastic Fluctuations of Chemoattractant-Receptor Interactions at the Lower Limit of Detection. Biophysical Journal, 2007, 93, 1787-1796.	0.5	101
8	Navigation of Chemotactic Cells by Parallel Signaling to Pseudopod Persistence and Orientation. PLoS ONE, 2009, 4, e6842.	2.5	93
9	The regulation of myosin II in Dictyostelium. European Journal of Cell Biology, 2006, 85, 969-979.	3.6	91
10	Genes lost during evolution. Nature, 2001, 411, 1013-1014.	27.8	80
11	Switching direction in electric-signal-induced cell migration by cyclic guanosine monophosphate and phosphatidylinositol signaling. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6667-6672.	7.1	78
12	Highlighting the role of Ras and Rap during Dictyostelium chemotaxis. Cellular Signalling, 2008, 20, 1415-1422.	3.6	64
13	Regulation of Phagocytosis in Dictyostelium by the Inositol 5-Phosphatase OCRL Homolog Dd5P4. Traffic, 2007, 8, 618-628.	2.7	61
14	Coupled excitable Ras and F-actin activation mediates spontaneous pseudopod formation and directed cell movement. Molecular Biology of the Cell, 2017, 28, 922-934.	2.1	59
15	Sensory transduction in eukaryotes. A comparison between Dictyostelium and vertebrate cells. FEBS Journal, 1991, 195, 289-303.	0.2	58
16	A homologue of the Parkinsonâ€™s disease-associated protein LRRK2 undergoes a monomer-dimer transition during GTP turnover. Nature Communications, 2017, 8, 1008.	12.8	53
17	Direct Interaction between TalinB and Rap1 is necessary for adhesion of Dictyostelium cells. BMC Cell Biology, 2016, 17, 1.	3.0	49
18	Characterization of the GbpD-activated Rap1 Pathway Regulating Adhesion and Cell Polarity in Dictyostelium discoideum*. Journal of Biological Chemistry, 2006, 281, 23367-23376.	3.4	47

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19	Analysis of cell movement by simultaneous quantification of local membrane displacement and fluorescent intensities using Quimp2. Cytoskeleton, 2009, 66, 156-165.	4.4	47
20	The small GTPases Ras and Rap1 bind to and control TORC2 activity. Scientific Reports, 2016, 6, 25823.	3.3	47
21	Chemotaxis: insights from the extending pseudopod. Journal of Cell Science, 2010, 123, 3031-3037.	2.0	46
22	Guanylyl Cyclase Protein and cGMP Product Independently Control Front and Back of Chemotaxing Dictyostelium Cells. Molecular Biology of the Cell, 2006, 17, 3921-3929.	2.1	44
23	Chemotaxis: Navigating by Multiple Signaling Pathways. Science's STKE: Signal Transduction Knowledge Environment, 2007, 2007, pe40.	3.9	44
24	PI3-kinase signaling contributes to orientation in shallow gradients and enhances speed in steep chemoattractant gradients. Journal of Cell Science, 2008, 121, 3589-3597.	2.0	44
25	Amoeboid Cells Use Protrusions for Walking, Gliding and Swimming. PLoS ONE, 2011, 6, e27532.	2.5	42
26	Ras activation and symmetry breaking duringDictyosteliumchemotaxis. Journal of Cell Science, 2013, 126, 4502-4513.	2.0	42
27	A Rap/Phosphatidylinositol 3-Kinase Pathway Controls Pseudopod Formation. Molecular Biology of the Cell, 2010, 21, 936-945.	2.1	38
28	Food Searching Strategy of Amoeboid Cells by Starvation Induced Run Length Extension. PLoS ONE, 2009, 4, e6814.	2.5	37
29	Dictyostelium Ric8 is a nonreceptor guanine exchange factor for heterotrimeric G proteins and is important for development and chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6424-6429.	7.1	35
30	A Model for a Correlated Random Walk Based on the Ordered Extension of Pseudopodia. PLoS Computational Biology, 2010, 6, e1000874.	3.2	32
31	Quimp3, an automated pseudopod-tracking algorithm. Cell Adhesion and Migration, 2010, 4, 46-55.	2.7	30
32	A Stochastic Model for Chemotaxis Based on the Ordered Extension of Pseudopods. Biophysical Journal, 2010, 99, 3345-3354.	0.5	28
33	Expression of a bioactive, single-chain choriogonadotropin in Dictyostelium discoideum. FEBS Journal, 1998, 256, 359-363.	0.2	27
34	Activation of Soluble Guanylyl Cyclase at the Leading Edge during Dictyostelium Chemotaxis. Molecular Biology of the Cell, 2005, 16, 976-983.	2.1	25
35	The role of cGMP and the rear of the cell in Dictyostelium chemotaxis and cell streaming. Journal of Cell Science, 2008, 121, 120-127.	2.0	22
36	Phospholipase-C-Independent Inositol 1,4,5-Trisphosphate Formation in Dictyostelium Cells - Activation of a Plasma-Membrane-Bound Phosphatase by Receptor-Stimulated Ca2+ Influx. FEBS Journal, 1997, 244, 113-119.	0.2	20

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37	The local cell curvature guides pseudopodia towards chemoattractants. HFSP Journal, 2009, 3, 282-286.	2.5	17
38	How Cells Use Pseudopods for Persistent Movement and Navigation. Science Signaling, 2011, 4, pe6.	3.6	17
39	Rap1-dependent pathways coordinate cytokinesis inDictyostelium. Molecular Biology of the Cell, 2014, 25, 4195-4204.	2.1	17
40	A GÎ±-Stimulated RapGEF Is a Receptor-Proximal Regulator of Dictyostelium Chemotaxis. Developmental Cell, 2016, 37, 458-472.	7.0	16
41	A Worldwide Competition to Compare the Speed and Chemotactic Accuracy of Neutrophil-Like Cells. PLoS ONE, 2016, 11, e0154491.	2.5	16
42	Lithium, an inhibitor of cAMP-induced inositol 1,4,5-trisphosphate accumulation in Dictyostelium discoideum, inhibits activation of guanine-nucleotide-binding regulatory proteins, reduces activation of adenylylcyclase, but potentiates activation of guanylyl cyclase by cAMP. FEBS Journal, 1992, 209, 299-304.	0.2	11
43	Phosphorylation of Inositol 1,4,5-Trisphosphate Analogues by 3-Kinase and Dephosphorylation of Inositol 1,3,4,5-Tetrakisphosphate Analogues by 5-Phosphatase. FEBS Journal, 1994, 226, 561-566.	0.2	11
44	Analysis of Signal Transduction: Formation of cAMP, cGMP, and Ins(1,4,5)P₃ In Vivo and In Vitro. , 2006, 346, 369-392.		11
45	Activation of a pertussis-toxin-sensitive guanine-nucleotide-binding regulatory protein during desensitization of Dictyostelium discoideum cells to chemotactic signals. FEBS Journal, 1991, 195, 715-721.	0.2	9
46	Dynamics and function of the inositolcycle inDictyostelium discoideum. Genesis, 1991, 12, 19-24.	2.1	9
47	Short- and long-term memory of moving amoeboid cells. PLoS ONE, 2021, 16, e0246345.	2.5	8
48	The cytoskeleton regulates symmetry transitions in moving amoeboid cells. Journal of Cell Science, 2018, 131, .	2.0	7
49	Mathematics of Experimentally Generated Chemoattractant Gradients. Methods in Molecular Biology, 2016, 1407, 381-396.	0.9	6
50	Unified control of amoeboid pseudopod extension in multiple organisms by branched F-actin in the front and parallel F-actin/myosin in the cortex. PLoS ONE, 2020, 15, e0243442.	2.5	4
51	Combined FCS and PCH Analysis to Quantify Protein Dimerization in Living Cells. International Journal of Molecular Sciences, 2021, 22, 7300.	4.1	3
52	Forty-five years of cGMP research in Dictyostelium: understanding the regulation and function of the cGMP pathway for cell movement and chemotaxis. Molecular Biology of the Cell, 2021, 32, ar8.	2.1	3
53	Symmetry Breaking during Cell Movement in the Context of Excitability, Kinetic Fine-Tuning and Memory of Pseudopod Formation. Cells, 2020, 9, 1809.	4.1	2
54	Title is missing!. , 2020, 15, e0243442.		0

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55	Title is missing!. , 2020, 15, e0243442.		0
56	Title is missing!. , 2020, 15, e0243442.		0
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