Arjan Kortholt

List of Publications by Year
in descending order

65	2,145	201674 27	254184 43
papers	citations	h-index	g-index

67	67	67	1981
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The beneficial effect of salubrinal on neuroinflammation and neuronal loss in intranigral LPS-induced hemi-Parkinson disease model in rats. Immunopharmacology and Immunotoxicology, 2022, 44, 168-177.	2.4	8
2	The Roc domain of LRRK2 as a hub for protein-protein interactions: a focus on PAK6 and its impact on RAB phosphorylation. Brain Research, 2022, 1778, 147781.	2.2	7
3	Nanobodies as allosteric modulators of Parkinsonâ€™s diseaseâ€“associated LRRK2. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	15
4	A Phosphosite Mutant Approach on LRRK2 Links Phosphorylation and Dephosphorylation to Protective and Deleterious Markers, Respectively. Cells, 2022, 11, 1018.	4.1	4
5	Editorial: LRRK2â€"Fifteen Years From Cloning to the Clinic. Frontiers in Neuroscience, 2022, 16, 880914.	2.8	0
6	The tale of proteolysis targeting chimeras (PROTACs) for Leucineâ€Rich Repeat Kinase 2 (LRRK2). ChemMedChem, 2021, 16, 959-965.	3.2	23
7	LRRK2 Targeting Strategies as Potential Treatment of Parkinsonâ€™s Disease. Biomolecules, 2021, 11, 1101.	4.0	19
8	Combined FCS and PCH Analysis to Quantify Protein Dimerization in Living Cells. International Journal of Molecular Sciences, 2021, 22, 7300.	4.1	3
9	Membrane Targeting of C2GAP1 Enables Dictyostelium discoideum to Sense Chemoattractant Gradient at a Higher Concentration Range. Frontiers in Cell and Developmental Biology, 2021, 9, 725073.	3.7	4
10	A Conserved Role for LRRK2 and Roco Proteins in the Regulation of Mitochondrial Activity. Frontiers in Cell and Developmental Biology, 2021, 9, 734554.	3.7	6
11	Allosteric Inhibition of Parkinsonâ€™s-Linked LRRK2 by Constrained Peptides. ACS Chemical Biology, 2021, 16, 2326-2338.	3.4	15
12	Forty-five years of cGMP research in <i>Dictyostelium</i>: 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
13	Coordinated Ras and Rac Activity Shapes Macropinocytic Cups and Enables Phagocytosis of Geometrically Diverse Bacteria. Current Biology, 2020, 30, 2912-2926.e5.	3.9	33
14	The neuroprotective action of lenalidomide on rotenone model of Parkinson's Disease: Neurotrophic and supportive actions in the substantia nigra pars compacta. Neuroscience Letters, 2020, 738, 135308.	2.1	7
15	Allosteric modulation of the GTPase activity of a bacterial LRRK2 homolog by conformation-specific Nanobodies. Biochemical Journal, 2020, 477, 1203-1218.	3.7	12
16	Allosteric inhibition of LRRK2, where are we now. Biochemical Society Transactions, 2020, 48, 2185-2194.	3.4	10
17	Linalool attenuates oxidative stress and mitochondrial dysfunction mediated by glutamate and NMDA toxicity. Biomedicine and Pharmacotherapy, 2019, 118, 109295.	5.6	91
18	Roco Proteins: GTPases with a Baroque Structure and Mechanism. International Journal of Molecular Sciences, 2019, 20, 147.	4.1	31

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19	Structure and nucleotide-induced conformational dynamics of the Chlorobium tepidum Roco protein. Biochemical Journal, 2019, 476, 51-66.	3.7	21
20	Role of the small GTPase Rap1 in signal transduction, cell dynamics and bacterial infection. Small GTPases, 2019, 10, 336-342.	1.6	13
21	The cytoskeleton regulates symmetry transitions in moving amoeboid cells. Journal of Cell Science, 2018, 131, .	2.0	7
22	The role of (auto)-phosphorylation in the complex activation mechanism of LRRK2. Biological Chemistry, 2018, 399, 643-647.	2.5	7
23	Connecting G protein signaling to chemoattractant-mediated cell polarity and cytoskeletal reorganization. Small GTPases, 2018, 9, 360-364.	1.6	12
24	Biochemical and kinetic properties of the complex Roco G-protein cycle. Biological Chemistry, 2018, 399, 1447-1456.	2.5	14
25	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
26	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
27	The LRR-Roc-COR module of the<i>Chlorobium tepidum</i>Roco protein: crystallization and X-ray crystallographic analysis. Acta Crystallographica Section F, Structural Biology Communications, 2017, 73, 520-524.	0.8	5
28	GPCR-controlled membrane recruitment of negative regulator C2GAP1 locally inhibits Ras signaling for adaptation and long-range chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10092-E10101.	7.1	26
29	Activation Mechanism of LRRK2 and Its Cellular Functions in Parkinsonâ€™s Disease. Parkinson's Disease, 2016, 2016, 1-8.	1.1	25
30	Function and Regulation of Heterotrimeric G Proteins during Chemotaxis. International Journal of Molecular Sciences, 2016, 17, 90.	4.1	24
31	The unconventional G-protein cycle of LRRK2 and Roco proteins. Biochemical Society Transactions, 2016, 44, 1611-1616.	3.4	11
32	A GÎ±-Stimulated RapGEF Is a Receptor-Proximal Regulator of Dictyostelium Chemotaxis. Developmental Cell, 2016, 37, 458-472.	7.0	16
33	The small GTPases Ras and Rap1 bind to and control TORC2 activity. Scientific Reports, 2016, 6, 25823.	3.3	47
34	Direct Interaction between TalinB and Rap1 is necessary for adhesion of Dictyostelium cells. BMC Cell Biology, 2016, 17, 1.	3.0	49
35	Structural model of the dimeric Parkinsonâ€™s protein LRRK2 reveals a compact architecture involving distant interdomain contacts. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4357-E4366.	7.1	130
36	A Worldwide Competition to Compare the Speed and Chemotactic Accuracy of Neutrophil-Like Cells. PLoS ONE, 2016, 11, e0154491.	2.5	16

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37	Conformational heterogeneity of the Roc domains in <i>C. tepidum</i> Rocâ€"COR and implications for human LRRK2 Parkinson mutations. Bioscience Reports, 2015, 35, .	2.4	17
38	Homer3 regulates the establishment of neutrophil polarity. Molecular Biology of the Cell, 2015, 26, 1629-1639.	2.1	19
39	Revisiting the Roco G-protein cycle. Biochemical Journal, 2015, 465, 139-147.	3.7	30
40	Structural Characterization of LRRK2 Inhibitors. Journal of Medicinal Chemistry, 2015, 58, 3751-3756.	6.4	34
41	Structural biology of the LRRK2 GTPase and kinase domains: implications for regulation. Frontiers in Molecular Neuroscience, 2014, 7, 32.	2.9	67
42	Rap1-dependent pathways coordinate cytokinesis in<i>Dictyostelium</i>. Molecular Biology of the Cell, 2014, 25, 4195-4204.	2.1	17
43	GxcC connects Rap and Rac signaling during Dictyostelium development. BMC Cell Biology, 2013, 14, 6.	3.0	13
44	Simple system â€" substantial share: The use of Dictyostelium in cell biology and molecular medicine. European Journal of Cell Biology, 2013, 92, 45-53.	3.6	88
45	Ras activation and symmetry breaking during<i>Dictyostelium</i>chemotaxis. Journal of Cell Science, 2013, 126, 4502-4513.	2.0	42
46	Daydreamer, a Ras effector and GSK-3 substrate, is important for directional sensing and cell motility. Molecular Biology of the Cell, 2013, 24, 100-114.	2.1	19
47	Reply to Tall et al.:DictyosteliumRic8 does not have a chaperoning function during development and chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3149-E3149.	7.1	1
48	<i>Dictyostelium</i> 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
49	Multiple Regulatory Mechanisms for the Dictyostelium Roco Protein GbpC. Journal of Biological Chemistry, 2012, 287, 2749-2758.	3.4	11
50	Roco kinase structures give insights into the mechanism of Parkinson disease-related leucine-rich-repeat kinase 2 mutations. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10322-10327.	7.1	91
51	Dictyostelium chemotaxis: essential Ras activation and accessory signalling pathways for amplification. EMBO Reports, 2011, 12, 1273-1279.	4.5	51
52	A Rap/Phosphatidylinositol 3-Kinase Pathway Controls Pseudopod Formation. Molecular Biology of the Cell, 2010, 21, 936-945.	2.1	38
53	Structure of the Rocâ€"COR domain tandem of C. tepidum, a prokaryotic homologue of the human LRRK2 Parkinson kinase. EMBO Journal, 2008, 27, 2239-2249.	7.8	130
54	Structure of the Rocâ€"COR domain tandem of C. tepidum, a prokaryotic homologue of the human LRRK2 Parkinson kinase. EMBO Journal, 2008, 27, 2352-2352.	7.8	30

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55	Highlighting the role of Ras and Rap during Dictyostelium chemotaxis. Cellular Signalling, 2008, 20, 1415-1422.	3.6	64
56	Intramolecular Activation Mechanism of the Dictyostelium LRRK2 Homolog Roco Protein GbpC. Journal of Biological Chemistry, 2008, 283, 30412-30420.	3.4	36
57	Chemoattractants and chemorepellents act by inducing opposite polarity in phospholipase C and PI3-kinase signaling. Journal of Cell Biology, 2007, 177, 579-585.	5.2	45
58	Phospholipase C Regulation of Phosphatidylinositol 3,4,5-trisphosphate-mediated Chemotaxis. Molecular Biology of the Cell, 2007, 18, 4772-4779.	2.1	66
59	Essential role of PI3-kinase and phospholipase A2 in Dictyostelium discoideum chemotaxis. Journal of Cell Biology, 2007, 177, 809-816.	5.2	101
60	Seven Dictyostelium discoideum phosphodiesterases degrade three pools of cAMP and cGMP. Biochemical Journal, 2007, 402, 153-161.	3.7	57
61	Cyclic AMP signalling in Dictyostelium: Gâ€proteins activate separate Ras pathways using specific RasGEFs. EMBO Reports, 2007, 8, 477-482.	4.5	36
62	Regulation of Phagocytosis in Dictyostelium by the Inositol 5-Phosphatase OCRL Homolog Dd5P4. Traffic, 2007, 8, 618-628.	2.7	61
63	DdPDE4, a Novel cAMP-specific Phosphodiesterase at the Surface of Dictyostelium Cells. Journal of Biological Chemistry, 2006, 281, 20018-20026.	3.4	19
64	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
65	Phosducin-like proteins in Dictyostelium discoideum: implications for the phosducin family of proteins. EMBO Journal, 2003, 22, 5047-5057.	7.8	54