

# Louis Hodgson

## List of Publications by Year in descending order

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64  
papers

5,992  
citations

117625  
34  
h-index

106344  
65  
g-index

67  
all docs

67  
docs citations

67  
times ranked

8365  
citing authors

#	ARTICLE	IF	CITATIONS
1	Coordination of Rho GTPase activities during cell protrusion. <i>Nature</i> , 2009, 461, 99-103.	27.8	898
2	Spatiotemporal dynamics of RhoA activity in migrating cells. <i>Nature</i> , 2006, 440, 1069-1072.	27.8	734
3	Directed cell invasion and migration during metastasis. <i>Current Opinion in Cell Biology</i> , 2012, 24, 277-283.	5.4	391
4	Functions of cofilin in cell locomotion and invasion. <i>Nature Reviews Molecular Cell Biology</i> , 2013, 14, 405-415.	37.0	388
5	Activation of Endogenous Cdc42 Visualized in Living Cells. <i>Science</i> , 2004, 305, 1615-1619.	12.6	370
6	Dynamics of the Rho-family small GTPases in actin regulation and motility. <i>Cell Adhesion and Migration</i> , 2011, 5, 170-180.	2.7	338
7	Matrix mechanical plasticity regulates cancer cell migration through confining microenvironments. <i>Nature Communications</i> , 2018, 9, 4144.	12.8	263
8	Correcting mitochondrial fusion by manipulating mitofusin conformations. <i>Nature</i> , 2016, 540, 74-79.	27.8	190
9	A Novel Spatiotemporal RhoC Activation Pathway Locally Regulates Cofilin Activity at Invadopodia. <i>Current Biology</i> , 2011, 21, 635-644.	3.9	166
10	A Trio-Rac1-Pak1 signalling axis drives invadopodia disassembly. <i>Nature Cell Biology</i> , 2014, 16, 571-583.	10.3	139
11	Induction of entosis by epithelial cadherin expression. <i>Cell Research</i> , 2014, 24, 1288-1298.	12.0	118
12	DLC-1 suppresses non-small cell lung cancer growth and invasion by RhoGAP-dependent and independent mechanisms. <i>Molecular Carcinogenesis</i> , 2008, 47, 326-337.	2.7	115
13	Direct multiplex imaging and optogenetics of Rho GTPases enabled by near-infrared FRET. <i>Nature Chemical Biology</i> , 2018, 14, 591-600.	8.0	107
14	The Role of Rho-GTPases and actin polymerization during Macrophage Tunneling Nanotube Biogenesis. <i>Scientific Reports</i> , 2017, 7, 8547.	3.3	99
15	Biosensors for Characterizing the Dynamics of Rho Family GTPases in Living Cells. <i>Current Protocols in Cell Biology</i> , 2010, 46, Unit 14.11.1-26.	2.3	98
16	Talin regulates moesin-NHE-1 recruitment to invadopodia and promotes mammary tumor metastasis. <i>Journal of Cell Biology</i> , 2014, 205, 737-751.	5.2	96
17	Macropinosome formation by tent pole ruffling in macrophages. <i>Journal of Cell Biology</i> , 2018, 217, 3873-3885.	5.2	90
18	Synonymous modification results in high-fidelity gene expression of repetitive protein and nucleotide sequences. <i>Genes and Development</i> , 2015, 29, 876-886.	5.9	87

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19	DENND2B activates Rab13 at the leading edge of migrating cells and promotes metastatic behavior. <i>Journal of Cell Biology</i> , 2015, 208, 629-648.	5.2	78
20	Macrophage-dependent tumor cell transendothelial migration is mediated by Notch1/MenaINV-initiated invadopodium formation. <i>Scientific Reports</i> , 2016, 6, 37874.	3.3	74
21	A Biosensor of S100A4 Metastasis Factor Activation: Inhibitor Screening and Cellular Activation Dynamics. <i>Biochemistry</i> , 2008, 47, 986-996.	2.5	72
22	Mesenchymal Cell Invasion Requires Cooperative Regulation of Persistent Microtubule Growth by SLAIN2 and CLASP1. <i>Developmental Cell</i> , 2016, 39, 708-723.	7.0	69
23	Rac3 regulates breast cancer invasion and metastasis by controlling adhesion and matrix degradation. <i>Journal of Cell Biology</i> , 2017, 216, 4331-4349.	5.2	66
24	Design and Optimization of Genetically Encoded Fluorescent Biosensors: GTPase Biosensors. <i>Methods in Cell Biology</i> , 2008, 85, 63-81.	1.1	53
25	Quantitative Ratiometric Imaging of FRET-Biosensors in Living Cells. <i>Methods in Cell Biology</i> , 2013, 114, 593-609.	1.1	53
26	Spatial regulation of RhoC activity defines protrusion formation in migrating cells. <i>Journal of Cell Science</i> , 2013, 126, 3356-69.	2.0	53
27	Control of mitochondrial function and cell growth by the atypical cadherin Fat1. <i>Nature</i> , 2016, 539, 575-578.	27.8	52
28	Imaging and Photobleach Correction of Mero-CBD, Sensor of Endogenous Cdc42 Activation. <i>Methods in Enzymology</i> , 2006, 406, 140-156.	1.0	46
29	FRET binding antenna reports spatiotemporal dynamics of GDI-Cdc42 GTPase interactions. <i>Nature Chemical Biology</i> , 2016, 12, 802-809.	8.0	45
30	A New Genetically Encoded Single-Chain Biosensor for Cdc42 Based on FRET, Useful for Live-Cell Imaging. <i>PLoS ONE</i> , 2014, 9, e96469.	2.5	45
31	Melanoma cell migration to type IV collagen requires activation of NF- $\kappa$ B. <i>Oncogene</i> , 2003, 22, 98-108.	5.9	42
32	Combining Surface Chemistry with a FRET-Based Biosensor to Study the Dynamics of RhoA GTPase Activation in Cells on Patterned Substrates. <i>Journal of the American Chemical Society</i> , 2007, 129, 9264-9265.	13.7	40
33	A RhoC Biosensor Reveals Differences in the Activation Kinetics of RhoA and RhoC in Migrating Cells. <i>PLoS ONE</i> , 2013, 8, e79877.	2.5	40
34	Optogenetic regulation of endogenous proteins. <i>Nature Communications</i> , 2020, 11, 605.	12.8	39
35	Par1b links lumen polarity with LGN-NuMA positioning for distinct epithelial cell division phenotypes. <i>Journal of Cell Biology</i> , 2013, 203, 251-264.	5.2	36
36	Digital Autofocus Methods for Automated Microscopy. <i>Methods in Enzymology</i> , 2006, 414, 620-632.	1.0	33

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37	Spatial regulation of tumor cell protrusions by RhoC. <i>Cell Adhesion and Migration</i> , 2014, 8, 263-267.	2.7	32
38	Rho GTPase isoforms in cell motility: Don't fret, we have FRET. <i>Cell Adhesion and Migration</i> , 2014, 8, 526-534.	2.7	31
39	Functional proteometrics for cell migration. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2006, 69A, 563-572.	1.5	30
40	Involvement of phospholipase C signaling in melanoma cell-induced endothelial junction disassembly. <i>Frontiers in Bioscience - Landmark</i> , 2005, 10, 1597.	3.0	29
41	Intracellular Calcium Changes in Rat Aortic Smooth Muscle Cells in Response to Fluid Flow. <i>Annals of Biomedical Engineering</i> , 2002, 30, 371-378.	2.5	28
42	Multiplex Imaging of Rho Family GTPase Activities in Living Cells. <i>Methods in Molecular Biology</i> , 2012, 827, 215-234.	0.9	23
43	Optical Tools To Study the Isoform-Specific Roles of Small GTPases in Immune Cells. <i>Journal of Immunology</i> , 2016, 196, 3479-3493.	0.8	21
44	Novel phospho-switch function of delta-catenin in dendrite development. <i>Journal of Cell Biology</i> , 2020, 219, .	5.2	20
45	$[Ca^{2+}]_i$ as a potential downregulator of $\beta_2$ -integrin-mediated A2058 tumor cell migration to type IV collagen. <i>American Journal of Physiology - Cell Physiology</i> , 2001, 281, C106-C113.	4.6	18
46	Differential regulation of rho GTPases during lung adenocarcinoma migration and invasion reveals a novel role of the tumor suppressor StarD13 in invadopodia regulation. <i>Cell Communication and Signaling</i> , 2020, 18, 144.	6.5	18
47	Asymmetric localization of DLC1 defines avian trunk neural crest polarity for directional delamination and migration. <i>Nature Communications</i> , 2017, 8, 1185.	12.8	16
48	Live Cell Imaging of RhoGTPase Biosensors in Tumor Cells. <i>Methods in Molecular Biology</i> , 2013, 1046, 359-370.	0.9	14
49	Solute Transport to the Endothelial Intercellular Cleft: The Effect of Wall Shear Stress. <i>Annals of Biomedical Engineering</i> , 2002, 30, 936-945.	2.5	13
50	Metalloprotease ADAMTS-1 decreases cell migration and invasion modulating the spatiotemporal dynamics of Cdc42 activity. <i>Cellular Signalling</i> , 2021, 77, 109827.	3.6	11
51	Use of Green Fluorescent Protein-Conjugated $\beta$ -Actin as a Novel Molecular Marker for in Vitro Tumor Cell Chemotaxis Assay. <i>Biotechnology Progress</i> , 2000, 16, 1106-1114.	2.6	10
52	Using Fluorescence Resonance Energy Transfer-Based Biosensors to Probe Rho GTPase Activation During Phagocytosis. <i>Methods in Molecular Biology</i> , 2017, 1519, 125-143.	0.9	8
53	Digital differential interference contrast autofocus for high-resolution oil-immersion microscopy. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2008, 73A, 658-666.	1.5	7
54	Extracellular lipid-mediated signaling in tumor-cell activation and pseudopod protrusion. <i>International Journal of Cancer</i> , 2000, 88, 593-600.	5.1	5

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55	Multiplex Imaging of Rho GTPase Activities in Living Cells. <i>Methods in Molecular Biology</i> , 2021, 2350, 43-68.	0.9	5
56	TC10 regulates breast cancer invasion and metastasis by controlling membrane type-1 matrix metalloproteinase at invadopodia. <i>Communications Biology</i> , 2021, 4, 1091.	4.4	5
57	Characterization of Genetically Encoded FRET Biosensors for Rho-Family GTPases. <i>Methods in Molecular Biology</i> , 2018, 1821, 87-106.	0.9	4
58	Kalirin/Trio Rho GDP/GTP exchange factors regulate proinsulin and insulin secretion. <i>Journal of Molecular Endocrinology</i> , 2019, 62, 47-65.	2.5	4
59	Spatial and temporal dynamics of RhoA activities of single breast tumor cells in a 3D environment revealed by a machine learning-assisted FRET technique. <i>Experimental Cell Research</i> , 2022, 410, 112939.	2.6	4
60	New Approaches to In-Cell Detection of Protein Activity: Genetically Encoded Chemiluminescence Probes Pave the Way to Robust HTS Assays. <i>ACS Chemical Biology</i> , 2008, 3, 335-337.	3.4	3
61	Optogenetics: Rho GTPases Activated by Light in Living Macrophages. <i>Methods in Molecular Biology</i> , 2020, 2108, 281-293.	0.9	3
62	StarD13 negatively regulates invadopodia formation and invasion in high-grade serous (HGS) ovarian adenocarcinoma cells by inhibiting Cdc42. <i>European Journal of Cell Biology</i> , 2022, 101, 151197.	3.6	3
63	Regulation of RhoGTPases in motility: A fine balancing act. <i>Cell Adhesion and Migration</i> , 2014, 8, 525-525.	2.7	2
64	A Mix-and-Measure Assay for Determining the Activation Status of Endogenous Cdc42 in Cytokine-stimulated Macrophage Cell Lysates. <i>Methods in Molecular Biology</i> , 2014, 1172, 173-184.	0.9	1