Keith Burridge

List of Publications by Year
in descending order

120 papers	30,993 citations	7568 77 h-index	17592 121 g-index
122 all docs	122 docs citations	122 times ranked	24781 citing authors

#	Article	IF	Citations
1	Cell Migration: Integrating Signals from Front to Back. Science, 2003, 302, 1704-1709.	12.6	4,337
2	Focal Adhesions: Transmembrane Junctions Between the Extracellular Matrix and the Cytoskeleton. Annual Review of Cell Biology, 1988, 4, 487-525.	26.1	2,045
3	FOCAL ADHESIONS, CONTRACTILITY, AND SIGNALING. Annual Review of Cell and Developmental Biology, 1996, 12, 463-519.	9.4	1,756
4	Rho and Rac Take Center Stage. Cell, 2004, 116, 167-179.	28.9	1,634
5	Interaction of plasma membrane fibronectin receptor with talinâ€”a transmembrane linkage. Nature, 1986, 320, 531-533.	27.8	1,188
6	Bidirectional signaling between the cytoskeleton and integrins. Current Opinion in Cell Biology, 1999, 11, 274-286.	5.4	715
7	Î±-Actinin: Immunofluorescent localization of a muscle structural protein in nonmuscle cells. Cell, 1975, 6, 289-298.	28.9	603
8	Rho-mediated Contractility Exposes a Cryptic Site in Fibronectin and Induces Fibronectin Matrix Assembly. Journal of Cell Biology, 1998, 141, 539-551.	5.2	575
9	P120 Catenin Regulates the Actin Cytoskeleton via Rho Family Gtpases. Journal of Cell Biology, 2000, 150, 567-580.	5.2	515
10	Regulation of vinculin binding to talin and actin by phosphatidyl-inositol-4-5-bisphosphate. Nature, 1996, 381, 531-535.	27.8	508
11	Isolated nuclei adapt to force and reveal a mechanotransduction pathway in the nucleus. Nature Cell Biology, 2014, 16, 376-381.	10.3	495
12	Focal Adhesions: A Nexus for Intracellular Signaling and Cytoskeletal Dynamics. Experimental Cell Research, 2000, 261, 25-36.	2.6	470
13	The 'invisible hand': regulation of RHO GTPases by RHOGDIs. Nature Reviews Molecular Cell Biology, 2011, 12, 493-504.	37.0	470
14	RhoA is required for monocyte tail retraction during transendothelial migration. Journal of Cell Biology, 2001, 154, 147-160.	5.2	453
15	Integrin signaling to the actin cytoskeleton. Current Opinion in Cell Biology, 2003, 15, 572-582.	5.4	450
16	Microtubule growth activates Rac1 to promote lamellipodial protrusion in fibroblasts. Nature Cell Biology, 1999, 1, 45-50.	10.3	449
17	An interaction between vinculin and talin. Nature, 1984, 308, 744-746.	27.8	434
18	Coupling membrane protrusion and cell adhesion. Journal of Cell Science, 2003, 116, 2389-2397.	2.0	421

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19	Integrin engagement suppresses RhoA activity via a c-Src-dependent mechanism. Current Biology, 2000, 10, 719-722.	3.9	398
20	RhoA Inactivation by p190RhoGAP Regulates Cell Spreading and Migration by Promoting Membrane Protrusion and Polarity. Molecular Biology of the Cell, 2001, 12, 2711-2720.	2.1	398
21	Cadherin Engagement Regulates Rho family GTPases. Journal of Biological Chemistry, 2001, 276, 33305-33308.	3.4	383
22	Recruitment of the Arp2/3 complex to vinculin. Journal of Cell Biology, 2002, 159, 881-891.	5.2	370
23	The Rho GEFs LARG and GEF-H1 regulate the mechanical response to force on integrins. Nature Cell Biology, 2011, 13, 722-727.	10.3	324
24	Regulation of Rho GTPase crosstalk, degradation and activity by RhoGDI1. Nature Cell Biology, 2010, 12, 477-483.	10.3	309
25	Focal adhesions, stress fibers and mechanical tension. Experimental Cell Research, 2016, 343, 14-20.	2.6	308
26	Rho protein crosstalk: another social network?. Trends in Cell Biology, 2011, 21, 718-726.	7.9	303
27	The 180-kD component of the neural cell adhesion molecule N-CAM is involved in cell-cell contacts and cytoskeleton-membrane interactions. Cell and Tissue Research, 1987, 250, 227-236.	2.9	298
28	Serine Phosphorylation Negatively Regulates RhoA in Vivo. Journal of Biological Chemistry, 2003, 278, 19023-19031.	3.4	277
29	ICAM-1-Mediated, Src- and Pyk2-Dependent Vascular Endothelial Cadherin Tyrosine Phosphorylation Is Required for Leukocyte Transendothelial Migration. Journal of Immunology, 2007, 179, 4053-4064.	0.8	277
30	RhoA is required for cortical retraction and rigidity during mitotic cell rounding. Journal of Cell Biology, 2003, 160, 255-265.	5.2	275
31	The tension mounts: Stress fibers as force-generating mechanotransducers. Journal of Cell Biology, 2013, 200, 9-19.	5.2	274
32	Colocalization of calcium-dependent protease II and one of its substrates at sites of cell adhesion. Cell, 1987, 51, 569-577.	28.9	271
33	Leukocyte transendothelial migration: orchestrating the underlying molecular machinery. Current Opinion in Cell Biology, 2001, 13, 569-577.	5.4	263
34	RhoA and ROCK Promote Migration by Limiting Membrane Protrusions. Journal of Biological Chemistry, 2003, 278, 13578-13584.	3.4	258
35	Non-muscle Î±-actinins are calcium-sensitive actin-binding proteins. Nature, 1981, 294, 565-567.	27.8	249
36	The on-off relationship of Rho and Rac during integrin-mediated adhesion and cell migration. Small GTPases, 2014, 5, e27958.	1.6	245

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37	Transmembrane molecular assemblies in cell-extracellular matrix interactions. Current Opinion in Cell Biology, 1991, 3, 849-853.	5.4	226
38	Vav2 Is an Activator of Cdc42, Rac1, and RhoA. Journal of Biological Chemistry, 2000, 275, 10141-10149.	3.4	226
39	Rnd Proteins Function as RhoA Antagonists by Activating p190 RhoGAP. Current Biology, 2003, 13, 1106-1115.	3.9	222
40	Are stress fibres contractile?. Nature, 1981, 294, 691-692.	27.8	213
41	Purification and structural analysis of myosins from brain and other non-muscle tissues. Journal of Molecular Biology, 1975, 99, 1-14.	4.2	209
42	[5] Direct identification of specific glycoproteins and antigens in sodium dodecyl sulfate gels. Methods in Enzymology, 1978, 50, 54-64.	1.0	195
43	From Mechanical Force to RhoA Activation. Biochemistry, 2012, 51, 7420-7432.	2.5	193
44	RhoG regulates endothelial apical cup assembly downstream from ICAM1 engagement and is involved in leukocyte trans-endothelial migration. Journal of Cell Biology, 2007, 178, 1279-1293.	5.2	192
45	Focal adhesions: a personal perspective on a half century of progress. FEBS Journal, 2017, 284, 3355-3361.	4.7	184
46	Microtubule Depolymerization Induces Stress Fibers, Focal Adhesions, and DNA Synthesis via the GTP-Binding Protein Rho. Cell Adhesion and Communication, 1998, 5, 249-255.	1.7	182
47	The Regulation of Vascular Endothelial Growth Factor-induced Microvascular Permeability Requires Rac and Reactive Oxygen Species. Journal of Biological Chemistry, 2009, 284, 25602-25611.	3.4	182
48	Vav2 Activates Rac1, Cdc42, and RhoA Downstream from Growth Factor Receptors but Not Î²1 Integrins. Molecular and Cellular Biology, 2000, 20, 7160-7169.	2.3	181
49	Focal contacts: Transmembrane links between the extracellular matrix and the cytoskeleton. BioEssays, 1989, 10, 104-108.	2.5	179
50	Analysis of Activated GAPs and GEFs in Cell Lysates. Methods in Enzymology, 2006, 406, 425-437.	1.0	179
51	Simultaneous Stretching and Contraction of Stress Fibers In Vivo. Molecular Biology of the Cell, 2004, 15, 3497-3508.	2.1	176
52	Direct Activation of RhoA by Reactive Oxygen Species Requires a Redox-Sensitive Motif. PLoS ONE, 2009, 4, e8045.	2.5	176
53	Talin: A cytoskeletal component concentrated in adhesion plaques and other sites of actinâ€membrane interaction. Cell Motility, 1983, 3, 405-417.	1.8	172
54	Rho Kinase Differentially Regulates Phosphorylation of Nonmuscle Myosin II Isoforms A and B during Cell Rounding and Migration*. Journal of Biological Chemistry, 2006, 281, 35873-35883.	3.4	161

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55	Localized Tensional Forces on PECAM-1 Elicit a Global Mechanotransduction Response via the Integrin-RhoA Pathway. Current Biology, 2012, 22, 2087-2094.	3.9	153
56	Rap1 GTPase Inhibits Leukocyte Transmigration by Promoting Endothelial Barrier Function. Journal of Biological Chemistry, 2005, 280, 11675-11682.	3.4	152
57	Characterization of the intermediate (10 nm) filaments of cultured cells using an autoimmune rabbit antiserum. Cell, 1978, 13, 249-261.	28.9	150
58	Cadherin Engagement Inhibits RhoA via p190RhoGAP. Journal of Biological Chemistry, 2003, 278, 13615-13618.	3.4	149
59	Catching a GEF by its tail. Trends in Cell Biology, 2007, 17, 36-43.	7.9	149
60	VEGF-induced Rac1 activation in endothelial cells is regulated by the guanine nucleotide exchange factor Vav2. Experimental Cell Research, 2007, 313, 3285-3297.	2.6	145
61	Vinculin phosphorylation differentially regulates mechanotransduction at cellâ€“cell and cellâ€“matrix adhesions. Journal of Cell Biology, 2014, 205, 251-263.	5.2	135
62	A novel role for Lsc/p115 RhoGEF and LARG in regulating RhoA activity downstream of adhesion to fibronectin. Journal of Cell Science, 2007, 120, 3989-3998.	2.0	132
63	Regulation of Rho Family GTPases by Cell-Cell and Cell-Matrix Adhesion. Biological Research, 2002, 35, 239-46.	3.4	131
64	The protein tyrosine phosphatase Shp-2 regulates RhoA activity. Current Biology, 2000, 10, 1523-1526.	3.9	130
65	Muscle Î²1D Integrin Reinforces the Cytoskeletonâ€“Matrix Link: Modulation of Integrin Adhesive Function by Alternative Splicing. Journal of Cell Biology, 1997, 139, 1583-1595.	5.2	126
66	Actinâ€”membrane interaction in focal adhesions. Cell Differentiation and Development, 1990, 32, 337-342.	0.4	125
67	Cell Mechanosensitivity to Extremely Low-Magnitude Signals Is Enabled by a LINCed Nucleus. Stem Cells, 2015, 33, 2063-2076.	3.2	122
68	XPLN, a Guanine Nucleotide Exchange Factor for RhoA and RhoB, But Not RhoC. Journal of Biological Chemistry, 2002, 277, 42964-42972.	3.4	121
69	Identification of talin as a major cytoplasmic protein implicated in platelet activation. Nature, 1985, 317, 449-451.	27.8	117
70	Proline-rich Tyrosine Kinase 2 (Pyk2) Mediates Vascular Endothelial-Cadherin-based Cell-Cell Adhesion by Regulating Î²-Catenin Tyrosine Phosphorylation*. Journal of Biological Chemistry, 2005, 280, 21129-21136.	3.4	106
71	SGEF, a RhoG Guanine Nucleotide Exchange Factor that Stimulates Macropinocytosis. Molecular Biology of the Cell, 2004, 15, 3309-3319.	2.1	97
72	Haemodynamic and extracellular matrix cues regulate the mechanical phenotype and stiffness of aortic endothelial cells. Nature Communications, 2014, 5, 3984.	12.8	95

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73	Î±-Actinin: a direct link between actin and integrins. Biochemical Society Transactions, 1991, 19, 1065-1069.	3.4	94
74	Enucleated cells reveal differential roles of the nucleus in cell migration, polarity, and mechanotransduction. Journal of Cell Biology, 2018, 217, 895-914.	5.2	93
75	RhoG Signals in Parallel with Rac1 and Cdc42. Journal of Biological Chemistry, 2002, 277, 47810-47817.	3.4	91
76	PTP-PEST controls motility through regulation of Rac1. Journal of Cell Science, 2002, 115, 4305-4316.	2.0	89
77	The Small GTPase RhoA Localizes to the Nucleus and Is Activated by Net1 and DNA Damage Signals. PLoS ONE, 2011, 6, e17380.	2.5	89
78	Mechanotransduction and nuclear function. Current Opinion in Cell Biology, 2016, 40, 98-105.	5.4	86
79	Molecular shape and self-association of vinculin and metavinculin. Journal of Cellular Biochemistry, 1985, 29, 31-36.	2.6	84
80	Regulation of Cell Adhesion by Protein-tyrosine Phosphatases. Journal of Biological Chemistry, 2006, 281, 16189-16192.	3.4	81
81	Mechanotransduction: from the cell surface to the nucleus via RhoA. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180229.	4.0	73
82	Mechanically Induced Focal Adhesion Assembly Amplifies Anti-Adipogenic Pathways in Mesenchymal Stem Cells. Stem Cells, 2011, 29, 1829-1836.	3.2	71
83	Trading spaces: Rap, Rac, and Rho as architects of transendothelial migration. Current Opinion in Hematology, 2005, 12, 14-21.	2.5	69
84	Demonstration of a relationship between talin and P235, a major substrate of the calcium-dependent protease in platelets. Journal of Cellular Biochemistry, 1986, 30, 259-270.	2.6	66
85	Aggregation of Integrins and RhoA Activation Are Required for Thy-1-induced Morphological Changes in Astrocytes. Journal of Biological Chemistry, 2004, 279, 39139-39145.	3.4	66
86	Mechanically activated fyn utilizes mTORC2 to regulate RhoA and adipogenesis in mesenchymal stem cells. Stem Cells, 2013, 31, 2528-2537.	3.2	64
87	An Examination of Focal Adhesion Formation and Tyrosine Phosphorylation in Fibroblasts Isolated from srcÂ¯, fynÂ¯, and yesÂ¯ Mice. Cell Adhesion and Communication, 1995, 3, 91-100.	1.7	60
88	Rho GTPase Transcriptome Analysis Reveals Oncogenic Roles for Rho GTPase-Activating Proteins in Basal-like Breast Cancers. Cancer Research, 2016, 76, 3826-3837.	0.9	60
89	Tumor Endothelial Cells with Distinct Patterns of TGFÎ²-Driven Endothelial-to-Mesenchymal Transition. Cancer Research, 2015, 75, 1244-1254.	0.9	59
90	PTP-PEST Couples Membrane Protrusion and Tail Retraction via VAV2 and p190RhoGAP. Journal of Biological Chemistry, 2006, 281, 11627-11636.	3.4	56

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91	Regulation of Cell Adhesion by Protein-tyrosine Phosphatases. Journal of Biological Chemistry, 2006, 281, 15593-15596.	3.4	54
92	The RhoA Guanine Nucleotide Exchange Factor, LARG, Mediates ICAM-1â€“Dependent Mechanotransduction in Endothelial Cells To Stimulate Transendothelial Migration. Journal of Immunology, 2014, 192, 3390-3398.	0.8	54
93	MLK3 Limits Activated GÎ±q Signaling to Rho by Binding to p63RhoGEF. Molecular Cell, 2008, 32, 43-56.	9.7	50
94	Identification of an Actin Binding Surface on Vinculin that Mediates Mechanical Cell and Focal Adhesion Properties. Structure, 2014, 22, 697-706.	3.3	49
95	Thy-1-mediated cellâ€“cell contact induces astrocyte migration through the engagement of Î±VÎ²3 integrin and syndecan-4. Biochimica Et Biophysica Acta - Molecular Cell Research, 2013, 1833, 1409-1420.	4.1	48
96	The Role of Vascular Endothelial Growth Factor-Induced Activation of NADPH Oxidase in Choroidal Endothelial Cells and Choroidal Neovascularization. American Journal of Pathology, 2010, 177, 2091-2102.	3.8	45
97	The Nuclear RhoA Exchange Factor Net1 Interacts with Proteins of the Dlg Family, Affects Their Localization, and Influences Their Tumor Suppressor Activity. Molecular and Cellular Biology, 2007, 27, 8683-8697.	2.3	43
98	Latent KSHV infection increases the vascular permeability of human endothelial cells. Blood, 2011, 118, 5344-5354.	1.4	38
99	Tension on JAM-A activates RhoA via GEF-H1 and p115 RhoGEF. Molecular Biology of the Cell, 2016, 27, 1420-1430.	2.1	38
100	E-Cadherin Engagement Stimulates Tyrosine Phosphorylation. Cell Adhesion and Communication, 1997, 4, 425-437.	1.7	37
101	Heterotypic RPE-choroidal endothelial cell contact increases choroidal endothelial cell transmigration via PI 3-kinase and Rac1. Experimental Eye Research, 2007, 84, 737-744.	2.6	36
102	Endogenous RhoG Is Rapidly Activated after Epidermal Growth Factor Stimulation through Multiple Guanine-Nucleotide Exchange Factors. Molecular Biology of the Cell, 2010, 21, 1629-1642.	2.1	36
103	Software for lattice light-sheet imaging of FRET biosensors, illustrated with a new Rap1 biosensor. Journal of Cell Biology, 2019, 218, 3153-3160.	5.2	32
104	LARG GEF and ARHGAP18 orchestrate RhoA activity to control mesenchymal stem cell lineage. Bone, 2018, 107, 172-180.	2.9	31
105	The Guanine-Nucleotide Exchange Factor SGEF Plays a Crucial Role in the Formation of Atherosclerosis. PLoS ONE, 2013, 8, e55202.	2.5	28
106	N-glycosylation controls the function of junctional adhesion molecule-A. Molecular Biology of the Cell, 2015, 26, 3205-3214.	2.1	26
107	Small GTPase Rap1A/B Is Required for Lymphatic Development and Adrenomedullin-Induced Stabilization of Lymphatic Endothelial Junctions. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 2410-2422.	2.4	23
108	What the papers say. Rho, rac and the actin cytoskeleton. BioEssays, 1992, 14, 777-778.	2.5	22

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109	Cryptic sites in vinculin. Nature, 1995, 373, 197-197.	27.8	22
110	Cellâ€Cycleâ€Dependent Regulation of Cell Adhesions: Adhering to the Schedule. BioEssays, 2019, 41, e1800165.	2.5	22
111	A Rnd3/p190RhoGAP pathway regulates RhoA activity in idiopathic pulmonary fibrosis fibroblasts. Molecular Biology of the Cell, 2018, 29, 2165-2175.	2.1	20
112	Binding of hela spectrin to a specific hela membrane fraction. Cell Motility, 1983, 3, 657-669.	1.8	19
113	Vinculin and metavinculin exhibit distinct effects on focal adhesion properties, cell migration, and mechanotransduction. PLoS ONE, 2019, 14, e0221962.	2.5	19
114	Microinjection of Protein Tyrosine Phosphatases into Fibroblasts Disrupts Focal Adhesions and Stress Fibers. Cell Adhesion and Communication, 1998, 5, 207-219.	1.7	16
115	Syndecan-4/PAR-3 signaling regulates focal adhesion dynamics in mesenchymal cells. Cell Communication and Signaling, 2020, 18, 129.	6.5	16
116	Chapter 14 Analysis of Low Molecular Weight GTPase Activity in Endothelial Cell Cultures. Methods in Enzymology, 2008, 443, 285-298.	1.0	15
117	The role of endothelial MERTK during the inflammatory response in lungs. PLoS ONE, 2019, 14, e0225051.	2.5	13
118	Talin: a protein designed for mechanotransduction. Emerging Topics in Life Sciences, 2018, 2, 673-675.	2.6	4
119	Stress Fibers Get a Makeover. Biophysical Journal, 2012, 103, 2045-2046.	0.5	2
120	CB2 receptorâ€mediated Regulation of Prostate Cancer Cell Migration: Involvement of RhoA and Stress fiber formation. FASEB Journal, 2012, 26, 782.11.	0.5	2