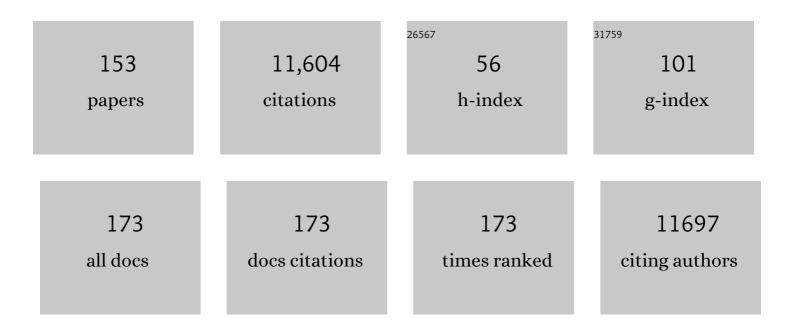
## **Klemens Rottner**

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	The lamellipodium: where motility begins. Trends in Cell Biology, 2002, 12, 112-120.	3.6	809
2	Interplay between Rac and Rho in the control of substrate contact dynamics. Current Biology, 1999, 9, 640-S1.	1.8	569
3	Sra-1 and Nap1 link Rac to actin assembly driving lamellipodia formation. EMBO Journal, 2004, 23, 749-759.	3.5	359
4	Targeting, Capture, and Stabilization of Microtubules at Early Focal Adhesions. Journal of Cell Biology, 1998, 142, 181-190.	2.3	299
5	VASP dynamics during lamellipodia protrusion. Nature Cell Biology, 1999, 1, 321-322.	4.6	298
6	The making of filopodia. Current Opinion in Cell Biology, 2006, 18, 18-25.	2.6	290
7	Arp2/3 complex interactions and actin network turnover in lamellipodia. EMBO Journal, 2008, 27, 982-992.	3.5	271
8	Regulation of actin dynamics by WASP and WAVE family proteins. Trends in Cell Biology, 2004, 14, 303-311.	3.6	265
9	Actin pedestal formation by enteropathogenicEscherichia coliand intracellular motility ofShigella flexneriare abolished in Nâ€WASPâ€defective cells. EMBO Reports, 2001, 2, 850-857.	2.0	241
10	Assembling an actin cytoskeleton for cell attachment and movement. Biochimica Et Biophysica Acta - Molecular Cell Research, 1998, 1404, 271-281.	1.9	236
11	Actin assembly mechanisms at a glance. Journal of Cell Science, 2017, 130, 3427-3435.	1.2	229
12	Filopodia Formation in the Absence of Functional WAVE- and Arp2/3-Complexes. Molecular Biology of the Cell, 2006, 17, 2581-2591.	0.9	212
13	Inhibitory signalling to the Arp2/3 complex steers cell migration. Nature, 2013, 503, 281-284.	13.7	208
14	Abi1 regulates the activity of N-WASP and WAVE in distinct actin-based processes. Nature Cell Biology, 2005, 7, 969-976.	4.6	201
15	Actin dynamics in cell migration. Essays in Biochemistry, 2019, 63, 483-495.	2.1	199
16	MT1-MMP-Dependent Invasion Is Regulated by TI-VAMP/VAMP7. Current Biology, 2008, 18, 926-931.	1.8	186
17	FMNL2 Drives Actin-Based Protrusion and Migration Downstream of Cdc42. Current Biology, 2012, 22, 1005-1012.	1.8	184
18	Differentially oriented populations of actin filaments generated in lamellipodia collaborate in pushing and pausing at the cell front. Nature Cell Biology, 2008, 10, 306-313.	4.6	180

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19	Actin dynamics and turnover in cell motility. Current Opinion in Cell Biology, 2011, 23, 569-578.	2.6	170
20	WASH, WHAMM and JMY: regulation of Arp2/3 complex and beyond. Trends in Cell Biology, 2010, 20, 650-661.	3.6	160
21	N-WASP deficiency impairs EGF internalization and actin assembly at clathrin-coated pits. Journal of Cell Science, 2005, 118, 3103-3115.	1.2	155
22	Functional design in the actin cytoskeleton. Current Opinion in Cell Biology, 1999, 11, 54-60.	2.6	154
23	Filopodia: Complex models for simple rods. International Journal of Biochemistry and Cell Biology, 2009, 41, 1656-1664.	1.2	151
24	Diversified actin protrusions promote environmental exploration but are dispensable for locomotion ofÂleukocytes. Nature Cell Biology, 2016, 18, 1253-1259.	4.6	150
25	Cofilin cooperates with fascin to disassemble filopodial actin filaments. Journal of Cell Science, 2011, 124, 3305-3318.	1.2	146
26	Cdc42 Is Not Essential for Filopodium Formation, Directed Migration, Cell Polarization, and Mitosis in Fibroblastoid Cells. Molecular Biology of the Cell, 2005, 16, 4473-4484.	0.9	143
27	Cortactin: Cell Functions of A Multifaceted Actin-Binding Protein. Trends in Cell Biology, 2018, 28, 79-98.	3.6	142
28	Rac function is critical for cell migration but not required for spreading and focal adhesion formation. Journal of Cell Science, 2013, 126, 4572-88.	1.2	139
29	The Abl interactor proteins localize to sites of actin polymerization at the tips of lamellipodia and filopodia. Current Biology, 2001, 11, 891-895.	1.8	138
30	Actin polymerization machinery: the finish line of signaling networks, the starting point of cellular movement. Cellular and Molecular Life Sciences, 2005, 62, 955-970.	2.4	138
31	Cortactin deficiency is associated with reduced neutrophil recruitment but increased vascular permeability in vivo. Journal of Experimental Medicine, 2011, 208, 1721-1735.	4.2	136
32	RhoA is dispensable for skin development, but crucial for contraction and directed migration of keratinocytes. Molecular Biology of the Cell, 2011, 22, 593-605.	0.9	133
33	Phosphatidylinositol 4,5-Biphosphate (PIP2)-induced Vesicle Movement Depends on N-WASP and Involves Nck, WIP, and Grb2. Journal of Biological Chemistry, 2002, 277, 37771-37776.	1.6	133
34	Visualising the actin cytoskeleton. , 1999, 47, 3-17.		128
35	Nanoscale segregation of actin nucleation and elongation factors determines dendritic spine protrusion. EMBO Journal, 2014, 33, 2745-2764.	3.5	128
36	Actin branching in the initiation and maintenance of lamellipodia. Journal of Cell Science, 2012, 125, 2775-85.	1.2	118

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37	FMNL formins boost lamellipodial force generation. Nature Communications, 2017, 8, 14832.	5.8	112
38	F- and G-Actin Concentrations in Lamellipodia of Moving Cells. PLoS ONE, 2009, 4, e4810.	1.1	111
39	Bacteria-Host-Cell Interactions at the Plasma Membrane: Stories on Actin Cytoskeleton Subversion. Developmental Cell, 2005, 9, 3-17.	3.1	108
40	Cortactin Promotes Migration and Platelet-derived Growth Factor-induced Actin Reorganization by Signaling to Rho-GTPases. Molecular Biology of the Cell, 2009, 20, 3209-3223.	0.9	102
41	Zyxin Is not Colocalized with Vasodilator-stimulated Phosphoprotein (VASP) at Lamellipodial Tips and Exhibits Different Dynamics to Vinculin, Paxillin, and VASP in Focal Adhesions. Molecular Biology of the Cell, 2001, 12, 3103-3113.	0.9	101
42	On the Rho'd: The regulation of membrane protrusions by Rhoâ€GTPases. FEBS Letters, 2008, 582, 2066-2074.	1.3	97
43	Kindlin-2 recruits paxillin and Arp2/3 to promote membrane protrusions during initial cell spreading. Journal of Cell Biology, 2017, 216, 3785-3798.	2.3	94
44	IRSp53 Links the Enterohemorrhagic E. coli Effectors Tir and EspFU for Actin Pedestal Formation. Cell Host and Microbe, 2009, 5, 244-258.	5.1	91
45	Molecular Basis for the Dual Function of Eps8 on Actin Dynamics: Bundling and Capping. PLoS Biology, 2010, 8, e1000387.	2.6	91
46	Filopodia formation induced by active mDia2/Drf3. Journal of Microscopy, 2008, 231, 506-517.	0.8	89
47	Xin repeats define a novel actin-binding motif. Journal of Cell Science, 2004, 117, 5257-5268.	1.2	83
48	Assembling actin filaments for protrusion. Current Opinion in Cell Biology, 2019, 56, 53-63.	2.6	80
49	Loss of Ena/VASP interferes with lamellipodium architecture, motility and integrin-dependent adhesion. ELife, 2020, 9, .	2.8	76
50	Distinct Interaction Sites of Rac GTPase with WAVE Regulatory Complex Have Non-redundant Functions inÂVivo. Current Biology, 2018, 28, 3674-3684.e6.	1.8	75
51	Actin-based motility of Burkholderia pseudomallei involves the Arp 2/3 complex, but not N-WASP and Ena/VASP proteins. Cellular Microbiology, 2003, 5, 385-393.	1.1	74
52	Cytoskeleton cross-talk during cell motility. FEBS Letters, 1999, 452, 96-99.	1.3	72
53	Activation of a RhoA/Myosin II-Dependent but Arp2/3 Complex-Independent Pathway Facilitates Salmonella Invasion. Cell Host and Microbe, 2011, 9, 273-285.	5.1	69
54	Arp2/3 complex is essential for actin network treadmilling as well as for targeting of capping protein and cofilin. Molecular Biology of the Cell, 2013, 24, 2861-2875.	0.9	68

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55	Actin and the coordination of protrusion, attachment and retraction in cell crawling. Bioscience Reports, 1996, 16, 351-368.	1.1	67
56	Enterohaemorrhagic and enteropathogenic Escherichia coli use different mechanisms for actin pedestal formation that converge on N-WASP. Cellular Microbiology, 2004, 6, 243-254.	1.1	65
57	The structure of FMNL2–Cdc42 yields insights into the mechanism of lamellipodia and filopodia formation. Nature Communications, 2015, 6, 7088.	5.8	63
58	How distinct Arp2/3 complex variants regulate actin filament assembly. Nature Cell Biology, 2016, 18, 1-3.	4.6	63
59	Essential role for Abi1 in embryonic survival and WAVE2 complex integrity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7022-7027.	3.3	62
60	WAVE regulatory complex. Current Biology, 2021, 31, R512-R517.	1.8	60
61	Role of the WASP family proteins for Mycobacterium marinum actin tail formation. Proceedings of the United States of America, 2005, 102, 14837-14842.	3.3	59
62	Cortactin deficiency causes increased RhoA/ROCK1-dependent actomyosin contractility, intestinal epithelial barrier dysfunction, and disproportionately severe DSS-induced colitis. Mucosal Immunology, 2017, 10, 1237-1247.	2.7	59
63	A barbed end interference mechanism reveals how capping protein promotes nucleation in branched actin networks. Nature Communications, 2021, 12, 5329.	5.8	57
64	The Small GTPase Rac1 Increases Cell Surface Stiffness and Enhances 3D Migration Into Extracellular Matrices. Scientific Reports, 2019, 9, 7675.	1.6	55
65	Molecular dissection of <i>Salmonella</i> -induced membrane ruffling versus invasion. Cellular Microbiology, 2010, 12, 84-98.	1.1	52
66	Serine-71 Phosphorylation of Rac1 Modulates Downstream Signaling. PLoS ONE, 2012, 7, e44358.	1.1	52
67	Prevention of the cytopathic effect induced by <i>Clostridium difficile</i> Toxin B by active Rac1. FEBS Letters, 2008, 582, 3751-3756.	1.3	49
68	Microtubule Dynamic Instability Controls Podosome Patterning in Osteoclasts through EB1, Cortactin, and Src. Molecular and Cellular Biology, 2014, 34, 16-29.	1.1	48
69	Cdc42 and Phosphoinositide 3-Kinase Drive Rac-Mediated Actin Polymerization Downstream of c-Met in Distinct and Common Pathways. Molecular and Cellular Biology, 2007, 27, 6615-6628.	1.1	47
70	Structure of Shigella IpgB2 in Complex with Human RhoA. Journal of Biological Chemistry, 2010, 285, 17197-17208.	1.6	47
71	Loss of cortactin causes endothelial barrier dysfunction via disturbed adrenomedullin secretion and actomyosin contractility. Scientific Reports, 2016, 6, 29003.	1.6	46
72	Diverse functions of myosin VI elucidated by an isoform-specific α-helix domain. Nature Structural and Molecular Biology, 2016, 23, 300-308.	3.6	42

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73	Pathogen-induced actin filament rearrangement in infectious diseases. Journal of Pathology, 2004, 204, 396-406.	2.1	41
74	Efficiency of lamellipodia protrusion is determined by the extent of cytosolic actin assembly. Molecular Biology of the Cell, 2017, 28, 1311-1325.	0.9	41
75	The Vinculin-ΔIn20/21 Mouse: Characteristics of a Constitutive, Actin-Binding Deficient Splice Variant of Vinculin. PLoS ONE, 2010, 5, e11530.	1.1	41
76	Global mapping of Salmonella enterica-host protein-protein interactions during infection. Cell Host and Microbe, 2021, 29, 1316-1332.e12.	5.1	39
77	Control of High Affinity Interactions in the Talin C Terminus. Journal of Biological Chemistry, 2009, 284, 13832-13842.	1.6	38
78	Transient Activations of Rac1 at the Lamellipodium Tip Trigger Membrane Protrusion. Current Biology, 2019, 29, 2852-2866.e5.	1.8	38
79	The cytoskeletal regulator HEM1 governs B cell development and prevents autoimmunity. Science Immunology, 2020, 5, .	5.6	37
80	Rac1-dependent recruitment of PAK2 to G <sub>2</sub> phase centrosomes and their roles in the regulation of mitotic entry. Cell Cycle, 2014, 13, 2210-2220.	1.3	34
81	Ena/VASP proteins in cell edge protrusion, migration and adhesion. Journal of Cell Science, 2022, 135, .	1.2	34
82	FMNL2 and -3 regulate Golgi architecture and anterograde transport downstream of Cdc42. Scientific Reports, 2017, 7, 9791.	1.6	33
83	EPLIN-α and -β Isoforms Modulate Endothelial Cell Dynamics through a Spatiotemporally Differentiated Interaction with Actin. Cell Reports, 2019, 29, 1010-1026.e6.	2.9	33
84	Functional integrity of the contractile actin cortex is safeguarded by multiple Diaphanous-related formins. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3594-3603.	3.3	33
85	Sex Steroid–Opioid Interactions Associated with the Temporal Component of Avian Calling Patterns. Hormones and Behavior, 1996, 30, 583-589.	1.0	32
86	Induced Arp2/3 Complex Depletion Increases FMNL2/3 Formin Expression and Filopodia Formation. Frontiers in Cell and Developmental Biology, 2021, 9, 634708.	1.8	32
87	Intima-like smooth muscle cells: developmental link between endothelium and media?. Anatomy and Embryology, 1999, 200, 313-323.	1.5	31
88	Live imaging of glioblastoma cells in brain tissue shows requirement of actin bundles for migration. Neuron Glia Biology, 2006, 2, 105-114.	2.0	30
89	Cytotoxic Necrotizing Factor-Y Boosts Yersinia Effector Translocation by Activating Rac Protein. Journal of Biological Chemistry, 2013, 288, 23543-23553.	1.6	30
90	Forces generated by lamellipodial actin filament elongation regulate the WAVE complex during cell migration. Nature Cell Biology, 2021, 23, 1148-1162.	4.6	30

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91	Differential functions of WAVE regulatory complex subunits in the regulation of actin-driven processes. European Journal of Cell Biology, 2017, 96, 715-727.	1.6	28
92	Lamellipodin tunes cell migration by stabilizing protrusions and promoting adhesion formation. Journal of Cell Science, 2020, 133, .	1.2	28
93	Monomeric red fluorescent protein variants used for imaging studies in different species. European Journal of Cell Biology, 2006, 85, 1119-1129.	1.6	27
94	Requirements for and consequences of Rac-dependent protrusion. European Journal of Cell Biology, 2014, 93, 184-193.	1.6	25
95	Role of Src and Cortactin in Pemphigus Skin Blistering. Frontiers in Immunology, 2019, 10, 626.	2.2	25
96	Dendritic cell actin dynamics control contact duration and priming efficiency at the immunological synapse. Journal of Cell Biology, 2021, 220, .	2.3	25
97	On the relation between filament density, force generation, and protrusion rate in mesenchymal cell motility. Molecular Biology of the Cell, 2018, 29, 2674-2686.	0.9	24
98	High cortactin expression in B-cell acute lymphoblastic leukemia is associated with increased transendothelial migration and bone marrow relapse. Leukemia, 2019, 33, 1337-1348.	3.3	24
99	WAVE1 and WAVE2 have distinct and overlapping roles in controlling actin assembly at the leading edge. Molecular Biology of the Cell, 2020, 31, 2168-2178.	0.9	23
100	RhoA, Rac1, and Cdc42 differentially regulate αSMA and collagen I expression in mesenchymal stem cells. Journal of Biological Chemistry, 2018, 293, 9358-9369.	1.6	22
101	Cell–substrate adhesion drives Scar/WAVE activation and phosphorylation by a Ste20-family kinase, which controls pseudopod lifetime. PLoS Biology, 2020, 18, e3000774.	2.6	22
102	Signalling Pathways Controlling Cellular Actin Organization. Handbook of Experimental Pharmacology, 2016, 235, 153-178.	0.9	17
103	Loss of Hem1 disrupts macrophage function and impacts migration, phagocytosis, and integrin-mediated adhesion. Current Biology, 2021, 31, 2051-2064.e8.	1.8	17
104	A Genome-Wide siRNA Screen Implicates Spire1/2 in SipA-Driven Salmonella Typhimurium Host Cell Invasion. PLoS ONE, 2016, 11, e0161965.	1.1	16
105	Molecular Dissection of Neurodevelopmental Disorder-Causing Mutations in CYFIP2. Cells, 2020, 9, 1355.	1.8	15
106	Cortactin regulates the activity of small GTPases and ICAM-1 clustering in endothelium. Tissue Barriers, 2013, 1, e23862.	1.6	13
107	Diversely Functionalised Cytochalasins through Mutasynthesis and Semi ynthesis. Chemistry - A European Journal, 2020, 26, 13578-13583.	1.7	13
108	Introduction to <i>Small GTPases</i> . Small GTPases, 2010, 1, 1-1.	0.7	12

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109	Early cell death induced by <i>Clostridium difficile</i> TcdB: Uptake and Rac1-glucosylation kinetics are decisive for cell fate. Cellular Microbiology, 2018, 20, e12865.	1.1	12
110	RhoG and Cdc42 can contribute to Rac-dependent lamellipodia formation through WAVE regulatory complex-binding. Small GTPases, 2021, 12, 122-132.	0.7	12
111	Parallel kinase pathways stimulate actin polymerization at depolarized mitochondria. Current Biology, 2022, 32, 1577-1592.e8.	1.8	11
112	Microtubules as Platforms for Assaying Actin Polymerization In Vivo. PLoS ONE, 2011, 6, e19931.	1.1	10
113	A novel contractility pathway operating in Salmonella invasion. Virulence, 2012, 3, 81-86.	1.8	10
114	ForC lacks canonical formin activity but bundles actin filaments and is required for multicellular development of Dictyostelium cells. European Journal of Cell Biology, 2013, 92, 201-212.	1.6	9
115	The Arp2/3 complex is critical for colonisation of the mouse skin by melanoblasts. Development (Cambridge), 2020, 147, .	1.2	9
116	Helicobacter pylori CagA Induces Cortactin Y-470 Phosphorylation-Dependent Gastric Epithelial Cell Scattering via Abl, Vav2 and Rac1 Activation. Cancers, 2021, 13, 4241.	1.7	9
117	Poxviruses Taking a Ride on Actin: New Users of Known Hardware. Cell Host and Microbe, 2009, 6, 497-499.	5.1	8
118	Micromanipulation Techniques Allowing Analysis of Morphogenetic Dynamics and Turnover of Cytoskeletal Regulators. Journal of Visualized Experiments, 2018, , .	0.2	8
119	Actin-Binding Protein Cortactin Promotes Pathogenesis of Experimental Autoimmune Encephalomyelitis by Supporting Leukocyte Infiltration into the Central Nervous System. Journal of Neuroscience, 2020, 40, 1389-1404.	1.7	8
120	Metavinculin: New insights into functional properties of a muscle adhesion protein. Biochemical and Biophysical Research Communications, 2013, 430, 7-13.	1.0	7
121	SMER28 Attenuates PI3K/mTOR Signaling by Direct Inhibition of PI3K p110 Delta. Cells, 2022, 11, 1648.	1.8	7
122	Expression and cytoprotective activity of the small GTPase RhoB induced by the Escherichia coli cytotoxic necrotizing factor 1. International Journal of Biochemistry and Cell Biology, 2013, 45, 1767-1775.	1.2	6
123	Imaging the Molecular Machines That Power Cell Migration. Methods in Molecular Biology, 2018, 1749, 257-277.	0.4	6
124	Cortactin Is Required for Efficient FAK, Src and Abl Tyrosine Kinase Activation and Phosphorylation of Helicobacter pylori CagA. International Journal of Molecular Sciences, 2021, 22, 6045.	1.8	6
125	A JAM-A–tetraspanin–αvβ5 integrin complex regulates contact inhibition of locomotion. Journal of Cell Biology, 2022, 221, .	2.3	6
126	Cortactin Contributes to Activity-Dependent Modulation of Spine Actin Dynamics and Spatial Memory Formation. Cells, 2021, 10, 1835.	1.8	5

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127	The Actin-Binding Protein Cortactin Promotes Sepsis Severity by Supporting Excessive Neutrophil Infiltration into the Lung. Biomedicines, 2022, 10, 1019.	1.4	5
128	Actin Networks: Adapting to Load through Geometry. Current Biology, 2017, 27, R1274-R1277.	1.8	4
129	Biomedical Research Publication System. Science, 2004, 303, 1974c-1976c.	6.0	3
130	Visualising the actin cytoskeleton. , 1999, 47, 3.		3
131	Distinct Interaction Sites of Rac GTPase with WAVE Regulatory Complex Have Nonnredundant Functions in Vivo. SSRN Electronic Journal, 0, , .	0.4	3
132	The Essential Role of Rac1 Glucosylation in Clostridioides difficile Toxin B-Induced Arrest of G1-S Transition. Frontiers in Microbiology, 2022, 13, 846215.	1.5	3
133	N-WASP Guides Cancer Cells toward LPA. Developmental Cell, 2019, 51, 415-417.	3.1	2
134	WASP stings into matrix to lead immune cell migration. Journal of Cell Biology, 2022, 221, .	2.3	2
135	Elementary Cellular Processes Driven by Actin Assembly: Lamellipodia and Filopodia. , 2010, , 3-33.		1
136	Host-Pathogen Interactions and Cell Motility: Learning from Bacteria. , 2005, , 205-236.		0
137	Formin' filaments at a faster CLIP. Science, 2016, 352, 894-895.	6.0	0
138	European Journal of Cell Biology – Editorial. European Journal of Cell Biology, 2021, 100, 151163.	1.6	0
139	Cortactin deficiency is associated with reduced leukocyte recruitment but increased vascular permeability in vivo. FASEB Journal, 2011, 25, 116.1.	0.2	0
140	Cortactin deficiency is associated with reduced neutrophil recruitment but increased vascular permeability in vivo. Journal of Cell Biology, 2011, 194, i7-i7.	2.3	0
141	Cortactin deficiency causes increased ROCK1â€mediated actinâ€contractility and decreased adrenomedullin secretion leading to enhanced endothelial permeability (278.2). FASEB Journal, 2014, 28, 278.2.	0.2	0
142	Cortactin regulates intestinal epithelial permeability by stabilizing tight junctions (650.6). FASEB Journal, 2014, 28, 650.6.	0.2	0
143	Loss of Cortactin is Associated with Intestinal Epithelial Barrier Dysfunction and Development of Colitis. FASEB Journal, 2015, 29, 282.1.	0.2	0
144	Mechanical Regulation of the WAVE Complex by Actin Elongation in the Lamellipodium. SSRN Electronic Journal, 0, , .	0.4	0

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145	EPLIN-α and -β Isoforms Modulate Endothelial Cell Dynamics Through a Spatio-Temporally Differentiated Interaction with Actin. SSRN Electronic Journal, 0, , .	0.4	0
146	Loss of Ena/VASP Interferes with Lamellipodium Architecture, Motility and Integrin-Dependent Adhesion. SSRN Electronic Journal, 0, , .	0.4	0
147	Src and cortactin are involved in pemphigus skin blistering. FASEB Journal, 2019, 33, 802.12.	0.2	0
148	Title is missing!. , 2020, 18, e3000774.		0
149	Title is missing!. , 2020, 18, e3000774.		0
150	Title is missing!. , 2020, 18, e3000774.		0
151	Title is missing!. , 2020, 18, e3000774.		0
152	Title is missing!. , 2020, 18, e3000774.		0
153	Title is missing!. , 2020, 18, e3000774.		Ο