Guillaume Romet-Lemonne

List of Publications by Year
in descending order

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48 papers	2,706 citations	279798 23 h-index	223800 46 g-index
69 all docs	69 docs citations	69 times ranked	2953 citing authors

#	Article	IF	Citations
1	Cortical Dynein Controls Microtubule Dynamics to Generate Pulling Forces that Position Microtubule Asters. Cell, 2012, 148, 502-514.	28.9	362
2	Force generation by dynamic microtubules. Current Opinion in Cell Biology, 2005, 17, 67-74.	5.4	228
3	Cellular Control of Cortical Actin Nucleation. Current Biology, 2014, 24, 1628-1635.	3.9	219
4	Formin mDia1 senses and generates mechanical forces on actin filaments. Nature Communications, 2013, 4, 1883.	12.8	190
5	ADF/Cofilin Accelerates Actin Dynamics by Severing Filaments and Promoting Their Depolymerization at Both Ends. Current Biology, 2017, 27, 1956-1967.e7.	3.9	179
6	Individual Actin Filaments in a Microfluidic Flow Reveal the Mechanism of ATP Hydrolysis and Give Insight Into the Properties of Profilin. PLoS Biology, 2011, 9, e1001161.	5.6	138
7	Oxidation of F-actin controls the terminal steps of cytokinesis. Nature Communications, 2017, 8, 14528.	12.8	130
8	CDC42 switches IRSp53 from inhibition of actin growth to elongation by clustering of VASP. EMBO Journal, 2013, 32, 2735-2750.	7.8	116
9	Formin and capping protein together embrace the actin filament in a mÃ©nage Ã trois. Nature Communications, 2015, 6, 8730.	12.8	80
10	Mycolactone activation of Wiskott-Aldrich syndrome proteins underpins Buruli ulcer formation. Journal of Clinical Investigation, 2013, 123, 1501-1512.	8.2	79
11	Torsional stress generated by ADF/cofilin on cross-linked actin filaments boosts their severing. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2595-2602.	7.1	78
12	Spire and Formin 2 Synergize and Antagonize in Regulating Actin Assembly in Meiosis by a Ping-Pong Mechanism. PLoS Biology, 2014, 12, e1001795.	5.6	76
13	Mechanism of synergistic actin filament pointed end depolymerization by cyclase-associated protein and cofilin. Nature Communications, 2019, 10, 5320.	12.8	76
14	Emerging roles of MICAL family proteins â€“ from actin oxidation to membrane trafficking during cytokinesis. Journal of Cell Science, 2017, 130, 1509-1517.	2.0	63
15	Mechanotransduction down to individual actin filaments. European Journal of Cell Biology, 2013, 92, 333-338.	3.6	51
16	Arp2/3 Controls the Motile Behavior of N-WASP-Functionalized GUVs and Modulates N-WASP Surface Distribution by Mediating Transient Links with Actin Filaments. Biophysical Journal, 2008, 94, 4890-4905.	0.5	50
17	SPIN90 associates with mDia1 and the Arp2/3 complex to regulate cortical actin organization. Nature Cell Biology, 2020, 22, 803-814.	10.3	48
18	Twinfilin uncaps filament barbed ends to promote turnover of lamellipodial actin networks. Nature Cell Biology, 2021, 23, 147-159.	10.3	47

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19	Dimeric WH2 domains in VibrioÂVopF promote actin filament barbed-end uncapping and assisted elongation. Nature Structural and Molecular Biology, 2013, 20, 1069-1076.	8.2	44
20	Modulation of formin processivity by profilin and mechanical tension. ELife, 2018, 7, .	6.0	43
21	Intermittent depolymerization of actin filaments is caused by photo-induced dimerization of actin protomers. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10769-10774.	7.1	36
22	Quantitative Variations with pH of Actin Depolymerizing Factor/Cofilinâ€™s Multiple Actions on Actin Filaments. Biochemistry, 2019, 58, 40-47.	2.5	36
23	Actin reduction by MsrB2 is a key component of the cytokinetic abscission checkpoint and prevents tetraploidy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4169-4179.	7.1	32
24	The many implications of actin filament helicity. Seminars in Cell and Developmental Biology, 2020, 102, 65-72.	5.0	28
25	Mechanically tuning actin filaments to modulate the action of actin-binding proteins. Current Opinion in Cell Biology, 2021, 68, 72-80.	5.4	28
26	The Arp1/11 minifilament of dynactin primes the endosomal Arp2/3 complex. Science Advances, 2021, 7, .	10.3	23
27	Actin filament oxidation by MICAL1 suppresses protections from cofilinâ€induced disassembly. EMBO Reports, 2021, 22, e50965.	4.5	23
28	Three-Dimensional Control of Protein Patterning in Microfabricated Devices. Nano Letters, 2005, 5, 2350-2354.	9.1	22
29	Single Filaments to Reveal the Multiple Flavors of Actin. Biophysical Journal, 2016, 110, 2138-2146.	0.5	21
30	Geometrical Constraints Greatly Hinder Formin mDia1 Activity. Nano Letters, 2020, 20, 22-32.	9.1	20
31	Actin Filament Dynamics Using Microfluidics. Methods in Enzymology, 2014, 540, 3-17.	1.0	19
32	Microfluidics pushes forward microscopy analysis of actin dynamics. Bioarchitecture, 2011, 1, 271-276.	1.5	17
33	How do in vitro reconstituted actinâ€based motility assays provide insight into in vivo behavior?. FEBS Letters, 2008, 582, 2086-2092.	2.8	14
34	Actin-based propulsion of functionalized hard versus fluid spherical objects. New Journal of Physics, 2008, 10, 025001.	2.9	11
35	InÂVitro Reconstitution of Dynein Force Exertion in a Bulk Viscous Medium. Current Biology, 2020, 30, 4534-4540.e7.	3.9	11
36	The advantages of microfluidics to study actin biochemistry and biomechanics. Journal of Muscle Research and Cell Motility, 2020, 41, 175-188.	2.0	9

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37	The dynamic instability of actin filament barbed ends. Journal of Cell Biology, 2021, 220, .	5.2	9
38	Using Microfluidics Single Filament Assay to Study Formin Control of Actin Assembly. Methods in Molecular Biology, 2018, 1805, 75-92.	0.9	8
39	Dynamics of Tpm1.8 domains on actin filaments with single-molecule resolution. Molecular Biology of the Cell, 2020, 31, 2452-2462.	2.1	8
40	Structural basis of rapid actin dynamics in the evolutionarily divergent Leishmania parasite. Nature Communications, 2022, 13, .	12.8	8
41	Supramolecular Assemblies of Lipid-Coated Polyelectrolytes. Langmuir, 2012, 28, 5743-5752.	3.5	6
42	On Phosphate Release in Actin Filaments. Biophysical Journal, 2013, 104, 2778-2779.	0.5	4
43	Celebrating 20 years of live single-actin-filament studies with five golden rules. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	3
44	Using Microfluidics and Fluorescence Microscopy to Study the Assembly Dynamics of Single Actin Filaments and Bundles. Journal of Visualized Experiments, 2022, , .	0.3	3
45	BIOMIMETIC SYSTEMS SHED LIGHT ON ACTIN-BASED MOTILITY DOWN TO THE MOLECULAR SCALE. Biophysical Reviews and Letters, 2009, 04, 5-15.	0.8	1
46	Direct measurement of nearâ€nanoâ€Newton forces developed by selfâ€organizing actomyosin fibers bound Î±â€catenin. Biology of the Cell, 2021, 113, 441-449.	2.0	1
47	Interplay of Stochastic Processes during Actin Depolymerization. Biophysical Journal, 2013, 104, 645a.	0.5	0
48	Modulating Formin Processivity with Mechanical and Biochemical Factors. Biophysical Journal, 2017, 112, 560a-561a.	0.5	0