Enrique M De La Cruz

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/9478488/enrique-m-de-la-cruz-publications-by-year.pdf
Version: 2024-04-18

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

108 papers	5,011 citations	44 h-index	69 g-index
114 ext. papers	5,756 ext. citations	6.8 avg, IF	5.68 L-index

#	Paper	IF	Citations
108	Clusters of a Few Bound Cofilins Sever Actin Filaments. *Journal of Molecular Biology*, **2021**, 433, 166833	6.5	4
107	Improving the Pharmacodynamics and In Vivo Activity of ENPP1-Fc Through Protein and Glycosylation Engineering. *Clinical and Translational Science*, **2021**, 14, 362-372	4.9	3
106	Structural basis of fast- and slow-severing actin-cofilactin boundaries. *Journal of Biological Chemistry*, **2021**, 296, 100337	5.4	3
105	Rab34 GTPase mediates ciliary membrane formation in the intracellular ciliogenesis pathway. *Current Biology*, **2021**, 31, 2895-2905.e7	6.3	5
104	Force and phosphate release from Arp2/3 complex promote dissociation of actin filament branches. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 13519-13528	11.5	12
103	Directional allosteric regulation of protein filament length. *Physical Review E*, **2020**, 101, 032409	2.4	2
102	Thermal fracture kinetics of heterogeneous semiflexible polymers. *Soft Matter*, **2020**, 16, 2017-2024	3.6	2
101	Structures of cofilin-induced structural changes reveal local and asymmetric perturbations of actin filaments. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 1478-1484	11.5	18
100	Active cargo positioning in antiparallel transport networks. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 14835-14842	11.5	2
99	Regulation of axon growth by myosin II-dependent mechanocatalysis of cofilin activity. *Journal of Cell Biology*, **2019**, 218, 2329-2349	7.3	10
98	Plastic Deformation and Fragmentation of Strained Actin Filaments. *Biophysical Journal*, **2019**, 117, 453-463	2.9	6
97	Severed Actin and Microtubules with Motors Walking All Over Them: Cryo-EM Studies of Seriously Perturbed Helical Assemblies. *Microscopy and Microanalysis*, **2019**, 25, 1362-1363	0.5	
96	The actin filament twist changes abruptly at boundaries between bare and cofilin-decorated segments. *Journal of Biological Chemistry*, **2018**, 293, 5377-5383	5.4	30
95	Insights into the Cooperative Nature of ATP Hydrolysis in Actin Filaments. *Biophysical Journal*, **2018** , 115, 1589-1602	2.9	20
94	14-3-3 proteins activate Pseudomonas exotoxins-S and -T by chaperoning a hydrophobic surface. *Nature Communications*, **2018**, 9, 3785	17.4	22
93	Nup159 Weakens Gle1 Binding to Dbp5 But Does Not Accelerate ADP Release. *Journal of Molecular Biology*, **2018**, 430, 2080-2095	6.5	4
92	Mechanoregulated inhibition of formin facilitates contractile actomyosin ring assembly. *Nature Communications*, **2017**, 8, 703	17.4	44

91	Phosphomimetic S3D cofilin binds but only weakly severs actin filaments. *Journal of Biological Chemistry*, **2017**, 292, 19565-19579	5.4	20
90	Actin Filament Strain Promotes Severing and Cofilin Dissociation. *Biophysical Journal*, **2017**, 112, 2624-2633	2.9	30
89	Cations Stiffen Actin Filaments by Adhering a Key Structural Element to Adjacent Subunits. *Journal of Physical Chemistry B*, **2016**, 120, 4558-67	3.4	25
88	P(I) Release Limits the Intrinsic and RNA-Stimulated ATPase Cycles of DEAD-Box Protein 5 (Dbp5). *Journal of Molecular Biology*, **2016**, 428, 492-508	6.5	9
87	Architecture and Connectivity Govern Actin Network Contractility. *Current Biology*, **2016**, 26, 616-26	6.3	131
86	Neuronal Calcium Sensor 1 Has Two Variants with Distinct Calcium Binding Characteristics. *PLoS ONE*, **2016**, 11, e0161414	3.7	4
85	Actin Mechanics and Fragmentation. *Journal of Biological Chemistry*, **2015**, 290, 17137-44	5.4	54
84	Metavinculin Tunes the Flexibility and the Architecture of Vinculin-Induced Bundles of Actin Filaments. *Journal of Molecular Biology*, **2015**, 427, 2782-98	6.5	11
83	Mechanical heterogeneity favors fragmentation of strained actin filaments. *Biophysical Journal*, **2015**, 108, 2270-81	2.9	34
82	ENPP1-Fc prevents mortality and vascular calcifications in rodent model of generalized arterial calcification of infancy. *Nature Communications*, **2015**, 6, 10006	17.4	71
81	Multi-platform compatible software for analysis of polymer bending mechanics. *PLoS ONE*, **2014**, 9, e94766	3.7	27
80	Site-specific cation release drives actin filament severing by vertebrate cofilin. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 17821-6	11.5	32
79	Competitive displacement of cofilin can promote actin filament severing. *Biochemical and Biophysical Research Communications*, **2013**, 438, 728-31	3.4	31
78	Biophysics of actin filament severing by cofilin. *FEBS Letters*, **2013**, 587, 1215-9	3.8	72
77	Regulation of actin by ion-linked equilibria. *Biophysical Journal*, **2013**, 105, 2621-8	2.9	26
76	Quantitative full time course analysis of nonlinear enzyme cycling kinetics. *Scientific Reports*, **2013**, 3, 2658	4.9	30
75	Molecular origins of cofilin-linked changes in actin filament mechanics. *Journal of Molecular Biology*, **2013**, 425, 1225-40	6.5	36
74	Alteration in the cavity size adjacent to the active site of RB69 DNA polymerase changes its conformational dynamics. *Nucleic Acids Research*, **2013**, 41, 9077-89	20.1	12

73	Take advantage of time in your experiments: a guide to simple, informative kinetics assays. *Molecular Biology of the Cell*, **2013**, 24, 1103-10	3.5	32
72	ATPase coupling in the processive RNA helicase NS3 from hepatitis C virus. *FASEB Journal*, **2013**, 27, 999.2	0.9	
71	ATP utilization by DExD/H-box RNA helicases molecular motor proteins that couple ATPase activity with RNA rearrangement.. *FASEB Journal*, **2013**, 27, 454.1	0.9	
70	Plus-end directed myosins accelerate actin filament sliding by single-headed myosin VI. *Cytoskeleton*, **2012**, 69, 59-69	2.4	2
69	ATP utilization and RNA conformational rearrangement by DEAD-box proteins. *Annual Review of Biophysics*, **2012**, 41, 247-67	21.1	67
68	Actin network architecture can determine myosin motor activity. *Science*, **2012**, 336, 1310-4	33.3	225
67	Analyzing ATP utilization by DEAD-Box RNA helicases using kinetic and equilibrium methods. *Methods in Enzymology*, **2012**, 511, 29-63	1.7	14
66	Identification of cation-binding sites on actin that drive polymerization and modulate bending stiffness. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 16923-7	11.5	53
65	Cofilin-linked changes in actin filament flexibility promote severing. *Biophysical Journal*, **2011**, 101, 151-9	2.9	109
64	Mechanism of Mss116 ATPase reveals functional diversity of DEAD-Box proteins. *Journal of Molecular Biology*, **2011**, 409, 399-414	6.5	54
63	Actin filament dynamics in the actomyosin VI complex is regulated allosterically by calcium-calmodulin light chain. *Journal of Molecular Biology*, **2011**, 413, 584-92	6.5	8
62	Cofilin tunes the nucleotide state of actin filaments and severs at bare and decorated segment boundaries. *Current Biology*, **2011**, 21, 862-8	6.3	146
61	Kinetic analysis of autotaxin reveals substrate-specific catalytic pathways and a mechanism for lysophosphatidic acid distribution. *Journal of Biological Chemistry*, **2011**, 286, 30130-41	5.4	27
60	Insights regarding guanine nucleotide exchange from the structure of a DENN-domain protein complexed with its Rab GTPase substrate. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 18672-7	11.5	72
59	Direct observation of the myosin Va recovery stroke that contributes to unidirectional stepping along actin. *PLoS Biology*, **2011**, 9, e1001031	9.7	21
58	The ATPase cycle of the RNA helicase protein NS3 from hepatitis C virus. *FASEB Journal*, **2011**, 25, 911.1	0.9	
57	Molecular Structure and Biological Activity of NPP-4, An Endothelial Cell Surface Pyrophosphatase/ Phosphodiesterase That Stimulates Platelet Aggregation and Secretion Via Liberation of ADP Upon Hydrolysis of Diadenosine Triphosphate. *Blood*, **2011**, 118, 701-701	2.2	
56	Robust processivity of myosin V under off-axis loads. *Nature Chemical Biology*, **2010**, 6, 300-5	11.7	21

55	3P159 Impact of the off-axis loads on the processivity of myosin VI(Molecular motor,The 48th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2010**, 50, S172-S173	0	
54	Actin filament remodeling by actin depolymerization factor/cofilin. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 7299-304	11.5	81
53	Pathway of ATP utilization and duplex rRNA unwinding by the DEAD-box helicase, DbpA. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 4046-50	11.5	70
52	The kinetics of cooperative cofilin binding reveals two states of the cofilin-actin filament. *Biophysical Journal*, **2010**, 98, 1893-901	2.9	47
51	Origin of twist-bend coupling in actin filaments. *Biophysical Journal*, **2010**, 99, 1852-60	2.9	49
50	Myosin isoform determines the conformational dynamics and cooperativity of actin filaments in the strongly bound actomyosin complex. *Journal of Molecular Biology*, **2010**, 396, 501-9	6.5	37
49	Structure-based analysis of Toxoplasma gondii profilin: a parasite-specific motif is required for recognition by Toll-like receptor 11. *Journal of Molecular Biology*, **2010**, 403, 616-29	6.5	45
48	A myosin V inhibitor based on privileged chemical scaffolds. *Angewandte Chemie - International Edition*, **2010**, 49, 8484-8	16.4	33
47	Watching the walk: observing chemo-mechanical coupling in a processive myosin motor. *HFSP Journal*, **2009**, 3, 67-70		2
46	Kinetic and equilibrium analysis of the myosin ATPase. *Methods in Enzymology*, **2009**, 455, 157-92	1.7	105
45	How cofilin severs an actin filament. *Biophysical Reviews*, **2009**, 1, 51-59	3.7	96
44	Kinetic analysis of the guanine nucleotide exchange activity of TRAPP, a multimeric Ypt1p exchange factor. *Journal of Molecular Biology*, **2009**, 389, 275-88	6.5	20
43	1P-124 Versatility of the unbinding force measurements at the single-molecule level adapted to different molecular motors(Molecular motor, The 47th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2009**, 49, S83	0	
42	1P-138 Role of the lever arm in the subunit coordination in myosin V(Molecular motor, The 47th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2009**, 49, S84	0	
41	1TA4-06 Role of the lever arm in the subunit coordination in myosin V(The 47th Annual Meeting of the Biophysical Society of Japan). *Seibutsu Butsuri*, **2009**, 49, S30	0	
40	The ATPase cycle mechanism of the DEAD-box rRNA helicase, DbpA. *Journal of Molecular Biology*, **2008**, 377, 193-205	6.5	95
39	Effects of solution crowding on actin polymerization reveal the energetic basis for nucleotide-dependent filament stability. *Journal of Molecular Biology*, **2008**, 378, 540-50	6.5	25
38	Cofilin increases the bending flexibility of actin filaments: implications for severing and cell mechanics. *Journal of Molecular Biology*, **2008**, 381, 550-8	6.5	159

37	Structural and energetic analysis of activation by a cyclic nucleotide binding domain. *Journal of Molecular Biology*, **2008**, 381, 655-69	6.5	28
36	The structural basis for activation of the Rab Ypt1p by the TRAPP membrane-tethering complexes. *Cell*, **2008**, 133, 1202-13	56.2	140
35	Load-dependent ADP binding to myosins V and VI: implications for subunit coordination and function. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 7714-9	11.5	83
34	Identification of small-molecule inhibitors of autotaxin that inhibit melanoma cell migration and invasion. *Molecular Cancer Therapeutics*, **2008**, 7, 3352-62	6.1	64
33	How the Load and the Nucleotide State Affect the Actin Filament Binding Mode of the Molecular Motor Myosin V. *Journal of the Korean Physical Society*, **2008**, 53, 1726-1730	0.6	3
32	Contributions from all over: widely distributed residues in thymosin beta-4 affect the kinetics and stability of actin binding. *Annals of the New York Academy of Sciences*, **2007**, 1112, 38-44	6.5	1
31	2P132 Angular dependence of ADP dissociation kinetics in myosin V under directional loading(Molecular motors,Oral Presentations). *Seibutsu Butsuri*, **2007**, 47, S146	0	
30	The tail domain of myosin Va modulates actin binding to one head. *Journal of Biological Chemistry*, **2006**, 281, 31326-36	5.4	33
29	Thymosin beta4 induces a conformational change in actin monomers. *Biophysical Journal*, **2006**, 90, 985-92	4.9	39
28	Hydrodynamic characterization of the DEAD-box RNA helicase DbpA. *Journal of Molecular Biology*, **2006**, 355, 697-707	6.5	18
27	Energetics and kinetics of cooperative cofilin-actin filament interactions. *Journal of Molecular Biology*, **2006**, 361, 257-67	6.5	82
26	1P534 Loading direction controls the ADP affinity of myosin V.(26. Single molecule biophysics,Poster Session,Abstract,Meeting Program of EABS & BSJ 2006). *Seibutsu Butsuri*, **2006**, 46, S280	0	
25	The Tail Domain of Myosin Va Modulates Actin Binding to One Head. *Journal of Biological Chemistry* , **2006**, 281, 31326-31336	5.4	7
24	Equilibrium and kinetic analysis of nucleotide binding to the DEAD-box RNA helicase DbpA. *Biochemistry*, **2005**, 44, 959-70	3.2	41
23	Magnesium, ADP, and actin binding linkage of myosin V: evidence for multiple myosin V-ADP and actomyosin V-ADP states. *Biochemistry*, **2005**, 44, 8826-40	3.2	77
22	Thermodynamics of nucleotide binding to actomyosin V and VI: a positive heat capacity change accompanies strong ADP binding. *Biochemistry*, **2005**, 44, 10238-49	3.2	48
21	Cofilin binding to muscle and non-muscle actin filaments: isoform-dependent cooperative interactions. *Journal of Molecular Biology*, **2005**, 346, 557-64	6.5	124
20	Cofilin increases the torsional flexibility and dynamics of actin filaments. *Journal of Molecular Biology*, **2005**, 353, 990-1000	6.5	123

19	Vertebrate myosin VIIb is a high duty ratio motor adapted for generating and maintaining tension. *Journal of Biological Chemistry*, **2005**, 280, 39665-76	5.4	59
18	Holding the reins on myosin V. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 13719-20	11.5	8
17	Mechanism of nucleotide binding to actomyosin VI: evidence for allosteric head-head communication. *Journal of Biological Chemistry*, **2004**, 279, 38608-17	5.4	49
16	Mechanochemical coupling of two substeps in a single myosin V motor. *Nature Structural and Molecular Biology*, **2004**, 11, 877-83	17.6	151
15	Relating biochemistry and function in the myosin superfamily. *Current Opinion in Cell Biology*, **2004**, 16, 61-7	9	231
14	Actin-induced closure of the actin-binding cleft of smooth muscle myosin. *Journal of Biological Chemistry*, **2002**, 277, 24114-9	5.4	43
13	Kinetic characterization of the weak binding states of myosin V. *Biochemistry*, **2002**, 41, 8508-17	3.2	70
12	Kinetic mechanism and regulation of myosin VI. *Journal of Biological Chemistry*, **2001**, 276, 32373-81	5.4	198
11	Structural biology. ActinSup. *Science*, **2001**, 293, 616-8	33.3	13
10	Actin-binding proteins: an overview. *Results and Problems in Cell Differentiation*, **2001**, 32, 123-34	1.4	1
9	Polymerization and structure of nucleotide-free actin filaments. *Journal of Molecular Biology*, **2000**, 295, 517-26	6.5	57
8	ADP inhibition of myosin V ATPase activity. *Biophysical Journal*, **2000**, 79, 1524-9	2.9	121
7	Thymosin-beta(4) changes the conformation and dynamics of actin monomers. *Biophysical Journal*, **2000**, 78, 2516-27	2.9	62
6	Actin and light chain isoform dependence of myosin V kinetics. *Biochemistry*, **2000**, 39, 14196-202	3.2	80
5	Interactions of Acanthamoeba profilin with actin and nucleotides bound to actin. *Biochemistry*, **1998**, 37, 10871-80	3.2	137
4	Regulation of G protein-coupled receptor kinase 5 (GRK5) by actin. *Journal of Biological Chemistry*, **1998**, 273, 20653-7	5.4	45
3	Kinetics and thermodynamics of phalloidin binding to actin filaments from three divergent species. *Biochemistry*, **1996**, 35, 14054-61	3.2	80
2	Nucleotide-free actin: stabilization by sucrose and nucleotide binding kinetics. *Biochemistry*, **1995**, 34, 5452-61	3.2	58

1 Transient kinetic analysis of rhodamine phalloidin binding to actin filaments. *Biochemistry*, **1994**, 33, 14387-92 79