Dmitri S Kudryashov

List of Publications by Year
in descending order

53	1,988	236925 25	265206 42
papers	citations	h-index	g-index

55	55	55	2537
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Remodeling of actin filaments by ADF/cofilin proteins. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20568-20572.	7.1	194
2	Trim32 is a Ubiquitin Ligase Mutated in Limb Girdle Muscular Dystrophy Type 2H that Binds to Skeletal Muscle Myosin and Ubiquitinates Actin. Journal of Molecular Biology, 2005, 354, 413-424.	4.2	178
3	Opposing activities of IFITM proteins in SARSâ€CoVâ€2 infection. EMBO Journal, 2021, 40, e106501.	7.8	172
4	The Actin Cross-linking Domain of the Vibrio cholerae RTX Toxin Directly Catalyzes the Covalent Cross-linking of Actin. Journal of Biological Chemistry, 2006, 281, 32366-32374.	3.4	77
5	Actin-destabilizing factors disrupt filaments by means of a time reversal of polymerization. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17664-17668.	7.1	72
6	Human Defensins Facilitate Local Unfolding of Thermodynamically Unstable Regions of Bacterial Protein Toxins. Immunity, 2014, 41, 709-721.	14.3	71
7	Connecting actin monomers by iso-peptide bond is a toxicity mechanism of the Vibrio cholerae MARTX toxin. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18537-18542.	7.1	68
8	Persistent nuclear actin filaments inhibit transcription by RNA polymerase II. Journal of Cell Science, 2016, 129, 3412-25.	2.0	60
9	The crystal structure of a cross-linked actin dimer suggests a detailed molecular interface in F-actin. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13105-13110.	7.1	54
10	DeActs: genetically encoded tools for perturbing the actin cytoskeleton in single cells. Nature Methods, 2017, 14, 479-482.	19.0	49
11	Cofilin Induced Conformational Changes in F-actin Expose Subdomain 2 to Proteolysis. Journal of Molecular Biology, 2004, 342, 1559-1567.	4.2	48
12	Mapping of Drebrin Binding Site on F-Actin. Journal of Molecular Biology, 2010, 398, 542-554.	4.2	48
13	ATP and ADP actin states. Biopolymers, 2013, 99, 245-256.	2.4	46
14	Calcium binding is essential for plastin 3 function in Smn-deficient motoneurons. Human Molecular Genetics, 2014, 23, 1990-2004.	2.9	46
15	ACD toxinâ€“produced actin oligomers poison formin-controlled actin polymerization. Science, 2015, 349, 535-539.	12.6	46
16	Cryo-EM reveals different coronin binding modes for ADPâ€“ and ADPâ€“BeFx actin filaments. Nature Structural and Molecular Biology, 2014, 21, 1075-1081.	8.2	45
17	F-Actin Structure Destabilization and DNase I Binding Loop Fluctuations. Journal of Molecular Biology, 2010, 395, 544-557.	4.2	42
18	Structural States and Dynamics of the D-Loop in Actin. Biophysical Journal, 2012, 103, 930-939.	0.5	42

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19	Characterization of the Enzymatic Activity of the Actin Cross-linking Domain from the Vibrio cholerae MARTX Toxin. Journal of Biological Chemistry, 2008, 283, 445-452.	3.4	38
20	Cofilin Cross-bridges Adjacent Actin Protomers and Replaces part of the Longitudinal F-actin Interface. Journal of Molecular Biology, 2006, 358, 785-797.	4.2	37
21	The Roles of Actin-Binding Domains 1 and 2 in the Calcium-Dependent Regulation of Actin Filament Bundling by Human Plastins. Journal of Molecular Biology, 2017, 429, 2490-2508.	4.2	37
22	Unique sequence of a high molecular weight myosin light chain kinase is involved in interaction with actin cytoskeleton. FEBS Letters, 1999, 463, 67-71.	2.8	35
23	Solution Properties of Tetramethylrhodamine-Modified G-Actin. Biophysical Journal, 2003, 85, 2466-2475.	0.5	33
24	Myosin light chain kinase (210 kDa) is a potential cytoskeleton integrator through its unique N-terminal domain. Experimental Cell Research, 2004, 298, 407-417.	2.6	32
25	Osteogenesis imperfecta mutations in plastin 3 lead to impaired calcium regulation of actin bundling. Bone Research, 2020, 8, 21.	11.4	32
26	Formation and Destabilization of Actin Filaments with Tetramethylrhodamine-Modified Actin. Biophysical Journal, 2004, 87, 1136-1145.	0.5	31
27	The Rho-GEF Gef3 interacts with the septin complex and activates the GTPase Rho4 during fission yeast cytokinesis. Molecular Biology of the Cell, 2015, 26, 238-255.	2.1	29
28	A Nucleotide State-sensing Region on Actin. Journal of Biological Chemistry, 2010, 285, 25591-25601.	3.4	28
29	Thermodynamic properties of the effector domains of <scp>MARTX</scp> toxins suggest their unfolding for translocation across the host membrane. Molecular Microbiology, 2014, 92, 1056-1071.	2.5	27
30	Oligomerization Affects the Ability of Human Cyclase-Associated Proteins 1 and 2 to Promote Actin Severing by Cofilins. International Journal of Molecular Sciences, 2019, 20, 5647.	4.1	27
31	Targeting and inactivation of bacterial toxins by human defensins. Biological Chemistry, 2017, 398, 1069-1085.	2.5	22
32	Phosphorylation of kinase-related protein (telokin) in tonic and phasic smooth muscles. Journal of Muscle Research and Cell Motility, 2001, 22, 425-437.	2.0	20
33	Actin Cross-Linking Toxin Is a Universal Inhibitor of Tandem-Organized and Oligomeric G-Actin Binding Proteins. Current Biology, 2018, 28, 1536-1547.e9.	3.9	20
34	Structural Analysis of Human Cofilin 2/Filamentous Actin Assemblies: Atomic-Resolution Insights from Magic Angle Spinning NMR Spectroscopy. Scientific Reports, 2017, 7, 44506.	3.3	19
35	Inhibition of SARS-CoV-2 Infection by Human Defensin HNP1 and Retrocyclin RC-101. Journal of Molecular Biology, 2022, 434, 167225.	4.2	19
36	Multiple crystal structures of actin dimers and their implications for interactions in the actin filament. Acta Crystallographica Section D: Biological Crystallography, 2008, 64, 454-465.	2.5	18

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37	Smooth muscle myosin filament assembly under control of a kinase-related protein (KRP) and caldesmon. Journal of Muscle Research and Cell Motility, 2002, 23, 341-351.	2.0	14
38	Glutamyl Phosphate Is an Activated Intermediate in Actin Crosslinking by Actin Crosslinking Domain (ACD) Toxin. PLoS ONE, 2012, 7, e45721.	2.5	14
39	Retrocyclins neutralize bacterial toxins by potentiating their unfolding. Biochemical Journal, 2015, 467, 311-320.	3.7	14
40	Intein-mediated cytoplasmic reconstitution of a split toxin enables selective cell ablation in mixed populations and tumor xenografts. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22090-22100.	7.1	11
41	Allosteric regulation controls actin-bundling properties of human plastins. Nature Structural and Molecular Biology, 2022, 29, 519-528.	8.2	11
42	Pathogenic Mechanisms of Actin Cross-Linking Toxins: Peeling Away the Layers. Current Topics in Microbiology and Immunology, 2016, 399, 87-112.	1.1	10
43	Thermodynamic instability of viral proteins is a pathogen-associated molecular pattern targeted by human defensins. Scientific Reports, 2016, 6, 32499.	3.3	10
44	Magic angle spinning NMR structure of human cofilin-2 assembled on actin filaments reveals isoform-specific conformation and binding mode. Nature Communications, 2022, 13, 2114.	12.8	9
45	Plastin 3 in X-Linked Osteoporosis: Imbalance of Ca2+-Dependent Regulation Is Equivalent to Protein Loss. Frontiers in Cell and Developmental Biology, 2020, 8, 635783.	3.7	7
46	Defensins versus pathogens: an unfolding story. Oncotarget, 2015, 6, 28533-28534.	1.8	7
47	Rounding Out the Understanding of ACD Toxicity with the Discovery of Cyclic Forms of Actin Oligomers. International Journal of Molecular Sciences, 2021, 22, 718.	4.1	6
48	Phosphorylation regulates interaction of 210-kDa myosin light chain kinase N-terminal domain with actin cytoskeleton. Biochemistry (Moscow), 2015, 80, 1288-1297.	1.5	4
49	Photorhabdus luminescens TccC3 Toxin Targets the Dynamic Population of F-Actin and Impairs Cell Cortex Integrity. International Journal of Molecular Sciences, 2022, 23, 7026.	4.1	4
50	Fast Magic Angle Sample Spinning NMR Yields a View of the F-actin - Cofilin Complex with Atomic Resolution. Biophysical Journal, 2011, 100, 300a.	0.5	0
51	Remodeling of Actin Filaments by Cofilin. Biophysical Journal, 2012, 102, 238a.	0.5	0
52	Nuclear Actin Dynamics Regulate Nuclear Organization and Transcription. Biophysical Journal, 2015, 108, 536a.	0.5	0
53	Investigations into the Structure and Intermolecular Interface of Human Cofilin-2 Assembled on Actin Filaments by Magic Angle Spinning NMR. Biophysical Journal, 2019, 116, 456a.	0.5	0