Michael K Rosen

List of Publications by Year
in descending order

76 papers	19,573 citations	47006 47 h-index	76900 74 g-index
98 all docs	98 docs citations	98 times ranked	15055 citing authors

#	Article	IF	Citations
1	Synergistic phase separation of two pathways promotes integrin clustering and nascent adhesion formation. ELife, 2022, 11, .	6.0	44
2	Poly-glutamine-dependent self-association as a potential mechanism for regulation of androgen receptor activity. PLoS ONE, 2022, 17, e0258876.	2.5	7
3	Bound nucleotide can control the dynamic architecture of monomeric actin. Nature Structural and Molecular Biology, 2022, 29, 320-328.	8.2	5
4	A framework for understanding the functions of biomolecular condensates across scales. Nature Reviews Molecular Cell Biology, 2021, 22, 215-235.	37.0	450
5	Structureâ€"Function Properties in Disordered Condensates. Journal of Physical Chemistry B, 2021, 125, 467-476.	2.6	34
6	Inhibition of CRISPR-Cas12a DNA targeting by nucleosomes and chromatin. Science Advances, 2021, 7, .	10.3	30
7	Mechanistic dissection of increased enzymatic rate in a phase-separated compartment. Nature Chemical Biology, 2021, 17, 693-702.	8.0	149
8	The role of sigma 1 receptor in organization of endoplasmic reticulum signaling microdomains. ELife, 2021, 10, .	6.0	40
9	Beth Levine M.D. Prize in Autophagy Research. Autophagy, 2021, 17, 2053-2053.	9.1	0
10	Using quantitative reconstitution to investigate multi-component condensates. Rna, 2021, , rna.079008.121.	3.5	16
11	Karyopherins and condensates. Current Opinion in Cell Biology, 2020, 64, 112-123.	5.4	42
12	Dynamin regulates the dynamics and mechanical strength of the actin cytoskeleton as a multifilament actin-bundling protein. Nature Cell Biology, 2020, 22, 674-688.	10.3	70
13	A quantitative inventory of yeast P body proteins reveals principles of composition and specificity. ELife, 2020, 9, .	6.0	90
14	Phosphorylation of nephrin induces phase separated domains that move through actomyosin contraction. Molecular Biology of the Cell, 2019, 30, 2996-3012.	2.1	30
15	Organization of Chromatin by Intrinsic and Regulated Phase Separation. Cell, 2019, 179, 470-484.e21.	28.9	707
16	Improved strategy for isoleucine 1H/13C methyl labeling in Pichia pastoris. Journal of Biomolecular NMR, 2019, 73, 687-697.	2.8	10
17	Stoichiometry controls activity of phase-separated clusters of actin signaling proteins. Science, 2019, 363, 1093-1097.	12.6	360
18	Regulation of Transmembrane Signaling by Phase Separation. Annual Review of Biophysics, 2019, 48, 465-494.	10.0	213

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19	A composition-dependent molecular clutch between T cell signaling condensates and actin. ELife, 2019, 8, .	6.0	86
20	Nuclear Import Receptor Inhibits Phase Separation of FUS through Binding to Multiple Sites. Cell, 2018, 173, 693-705.e22.	28.9	253
21	Intrinsically Disordered Regions Can Contribute Promiscuous Interactions to RNP Granule Assembly. Cell Reports, 2018, 22, 1401-1412.	6.4	256
22	Who's In and Who's Outâ€"Compositional Control of Biomolecular Condensates. Journal of Molecular Biology, 2018, 430, 4666-4684.	4.2	255
23	Biomolecular condensates: organizers of cellular biochemistry. Nature Reviews Molecular Cell Biology, 2017, 18, 285-298.	37.0	3,771
24	Reconstitution of TCR Signaling Using Supported Lipid Bilayers. Methods in Molecular Biology, 2017, 1584, 65-76.	0.9	24
25	ATP controls the crowd. Science, 2017, 356, 701-702.	12.6	54
26	Intrinsically disordered sequences enable modulation of protein phase separation through distributed tyrosine motifs. Journal of Biological Chemistry, 2017, 292, 19110-19120.	3.4	288
27	Allosteric Modulation of Grb2 Recruitment to the Intrinsically Disordered Scaffold Protein, LAT, by Remote Site Phosphorylation. Journal of the American Chemical Society, 2017, 139, 18009-18015.	13.7	27
28	Rac1 GTPase activates the WAVE regulatory complex through two distinct binding sites. ELife, 2017, 6, .	6.0	129
29	Intrinsically disordered linkers determine the interplay between phase separation and gelation in multivalent proteins. ELife, 2017, 6, .	6.0	514
30	Compositional Control of Phase-Separated Cellular Bodies. Cell, 2016, 166, 651-663.	28.9	945
31	Sequence Determinants of Intracellular Phase Separation by Complex Coacervation of a Disordered Protein. Molecular Cell, 2016, 63, 72-85.	9.7	622
32	Phase separation of signaling molecules promotes T cell receptor signal transduction. Science, 2016, 352, 595-599.	12.6	941
33	Synthesis and Biological Evaluation of Kibdelone C and Its Simplified Derivatives. Journal of the American Chemical Society, 2016, 138, 10561-10570.	13.7	18
34	Structural and mechanistic insights into regulation of the retromer coat by TBC1d5. Nature Communications, 2016, 7, 13305.	12.8	88
35	Data publication with the structural biology data grid supports live analysis. Nature Communications, 2016, 7, 10882.	12.8	113
36	Fat2 acts through the WAVE regulatory complex to drive collective cell migration during tissue rotation. Journal of Cell Biology, 2016, 212, 591-603.	5.2	54

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37	Actin is an evolutionarily-conserved damage-associated molecular pattern that signals tissue injury in Drosophila melanogaster. ELife, 2016, 5, .	6.0	51
38	Formation and Maturation of Phase-Separated Liquid Droplets by RNA-Binding Proteins. Molecular Cell, 2015, 60, 208-219.	9.7	1,298
39	Methyl labeling and TROSY NMR spectroscopy of proteins expressed in the eukaryote Pichia pastoris. Journal of Biomolecular NMR, 2015, 62, 239-245.	2.8	42
40	Conserved interdomain linker promotes phase separation of the multivalent adaptor protein Nck. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6426-35.	7.1	162
41	Biochemical Reconstitution of the WAVE Regulatory Complex. Methods in Enzymology, 2014, 540, 55-72.	1.0	20
42	Local F-actin Network Links Synapse Formation and Axon Branching. Cell, 2014, 156, 208-220.	28.9	128
43	The WAVE Regulatory Complex Links Diverse Receptors to the Actin Cytoskeleton. Cell, 2014, 156, 195-207.	28.9	260
44	Ena/VASP Proteins Cooperate with the WAVE Complex to Regulate the Actin Cytoskeleton. Developmental Cell, 2014, 30, 569-584.	7.0	101
45	Retromer Binding to FAM21 and the WASH Complex Is Perturbed by the Parkinson Disease-Linked VPS35(D620N) Mutation. Current Biology, 2014, 24, 1670-1676.	3.9	162
46	Phase transitions of multivalent proteins can promote clustering of membrane receptors. ELife, 2014, 3, .	6.0	463
47	The Bacterial Effector VopL Organizes Actin into Filament-like Structures. Cell, 2013, 155, 423-434.	28.9	43
48	Regulation of WASH-Dependent Actin Polymerization and Protein Trafficking by Ubiquitination. Cell, 2013, 152, 1051-1064.	28.9	201
49	Three-color single molecule imaging shows WASP detachment from Arp2/3 complex triggers actin filament branch formation. ELife, 2013, 2, e01008.	6.0	101
50	Purification of Native Arp2/3 Complex from Bovine Thymus. Methods in Molecular Biology, 2013, 1046, 231-250.	0.9	15
51	Measurement and Analysis of In Vitro Actin Polymerization. Methods in Molecular Biology, 2013, 1046, 273-293.	0.9	80
52	Phase transitions in the assembly of multivalent signalling proteins. Nature, 2012, 483, 336-340.	27.8	1,938
53	Arp2/3 complex is bound and activated by two WASP proteins. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E472-9.	7.1	180
54	Determination of protein complex stoichiometry through multisignal sedimentation velocity experiments. Analytical Biochemistry, 2010, 407, 89-103.	2.4	39

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55	Crystal Structure of the Formin mDia1 in Autoinhibited Conformation. PLoS ONE, 2010, 5, e12896.	2.5	39
56	Physical Mechanisms of Signal Integration by WASP Family Proteins. Annual Review of Biochemistry, 2010, 79, 707-735.	11.1	245
57	Structure and control of the actin regulatory WAVE complex. Nature, 2010, 468, 533-538.	27.8	424
58	The WAVE regulatory complex is inhibited. Nature Structural and Molecular Biology, 2009, 16, 561-563.	8.2	135
59	Structural mechanism of WASP activation by the enterohaemorrhagic E. coli effector EspFU. Nature, 2008, 454, 1009-1013.	27.8	92
60	Hierarchical Regulation of WASP/WAVE Proteins. Molecular Cell, 2008, 32, 426-438.	9.7	188
61	Development of a Chemicalâ€•and Photoâ€Switchable Wiskottâ€Aldrich Syndrome Protein. FASEB Journal, 2007, 21, A994.	0.5	0
62	Litâ€structure in the dark: conformational dynamics of phototropin LOV2 domain by relaxation NMR. FASEB Journal, 2007, 21, A270.	0.5	0
63	Protein-tyrosine Kinase and GTPase Signals Cooperate to Phosphorylate and Activate Wiskott-Aldrich Syndrome Protein (WASP)/Neuronal WASP. Journal of Biological Chemistry, 2006, 281, 3513-3520.	3.4	79
64	A Two-State Allosteric Model for Autoinhibition Rationalizes WASP Signal Integration and Targeting. Journal of Molecular Biology, 2004, 338, 271-285.	4.2	51
65	Contingent Phosphorylation/Dephosphorylation Provides a Mechanism of Molecular Memory in WASP. Molecular Cell, 2003, 11, 1215-1227.	9.7	157
66	Uncoupling KapÎ²2 Substrate Dissociation and Ran Binding. Biochemistry, 2002, 41, 6955-6966.	2.5	50
67	WASP Recruitment to the T Cell:APC Contact Site Occurs Independently of Cdc42 Activation. Immunity, 2001, 15, 249-259.	14.3	144
68	Constitutively activating mutation in WASP causes X-linked severe congenital neutropenia. Nature Genetics, 2001, 27, 313-317.	21.4	401
69	STRUCTURAL BIOLOGY: Flipping a Switch. Science, 2001, 291, 2329-2330.	12.6	12
70	Autoinhibition and activation mechanisms of the Wiskottâ€"Aldrich syndrome protein. Nature, 2000, 404, 151-158.	27.8	680
71	Detection of very weak side chain-main chain hydrogen bonding interactions in medium-size 13C/15N-labeled proteins by sensitivity-enhanced NMR spectroscopy. Journal of Biomolecular NMR, 2000, 17, 79-82.	2.8	15
72	NMR detection of side chain-side chain hydrogen bonding interactions in 13C/15N-labeled proteins. Journal of Biomolecular NMR, 2000, 17, 305-310.	2.8	19

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73	Mechanistic Studies of Affinity Modulation. Journal of the American Chemical Society, 2000, 122, 11979-11982.	13.7	6
74	Structure of Cdc42 in complex with the GTPase-binding domain of the â€˜Wiskottâ€“Aldrich syndromeâ€™ protein. Nature, 1999, 399, 379-383.	27.8	320
75	Structure and mutagenesis of the Dbl homology domain. Nature Structural Biology, 1998, 5, 1098-1107.	9.7	127
76	Selective Methyl Group Protonation of Perdeuterated Proteins. Journal of Molecular Biology, 1996, 263, 627-636.	4.2	292