Charles V Sindelar

List of Publications by Year
in descending order

32	1,601	304368	433756
papers	citations	22 h-index	31 g-index

38	38	38	1566
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An atomic-level mechanism for activation of the kinesin molecular motors. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4111-4116.	3.3	148
2	The beginning of kinesin's force-generating cycle visualized at 9-ÀÌŠ resolution. Journal of Cell Biology, 2007, 177, 377-385.	2.3	135
3	High-resolution structures of kinesin on microtubules provide a basis for nucleotide-gated force-generation. ELife, 2014, 3, e04686.	2.8	131
4	High-resolution cryo-EM structures of actin-bound myosin states reveal the mechanism of myosin force sensing. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1292-1297.	3.3	109
5	Calcium sensitive ring-like oligomers formed by synaptotagmin. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13966-13971.	3.3	76
6	Two conformations in the human kinesin power stroke defined by X-ray crystallography and EPR spectroscopy. Nature Structural Biology, 2002, 9, 844-8.	9.7	75
7	The myosin X motor is optimized for movement on actin bundles. Nature Communications, 2016, 7, 12456.	5.8	75
8	The Structural Basis of Force Generation by the Mitotic Motor Kinesin-5. Journal of Biological Chemistry, 2012, 287, 44654-44666.	1.6	69
9	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.	3.3	64
10	Structural basis of the filamin A actin-binding domain interaction with F-actin. Nature Structural and Molecular Biology, 2018, 25, 918-927.	3.6	60
11	Ring-like oligomers of Synaptotagmins and related C2 domain proteins. ELife, 2016, 5, .	2.8	57
12	The actin filament twist changes abruptly at boundaries between bare and cofilin-decorated segments. Journal of Biological Chemistry, 2018, 293, 5377-5383.	1.6	50
13	Dynamic and asymmetric fluctuations in the microtubule wall captured by high-resolution cryoelectron microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16976-16984.	3.3	49
14	Circular oligomerization is an intrinsic property of synaptotagmin. ELife, 2017, 6, .	2.8	47
15	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, 17821-17826.	3.3	45
16	A vertebrate myosin-I structure reveals unique insights into myosin mechanochemical tuning. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2116-2121.	3.3	41
17	The kinesin-5 tail domain directly modulates the mechanochemical cycle of the motor domain for anti-parallel microtubule sliding. ELife, 2020, 9, .	2.8	40
18	Structural basis for the clamping and Ca2+ activation of SNARE-mediated fusion by synaptotagmin. Nature Communications, 2019, 10, 2413.	5.8	39

#	Article	IF	Citations
19	A seesaw model for intermolecular gating in the kinesin motor protein. Biophysical Reviews, 2011, 3, 85-100.	1.5	37
20	Phosphomimetic S3D cofilin binds but only weakly severs actin filaments. Journal of Biological Chemistry, 2017, 292, 19565-19579.	1.6	35
21	Munc13 structural transitions and oligomers that may choreograph successive stages in vesicle priming for neurotransmitter release. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	35
22	An adaptation of the Wiener filter suitable for analyzing images of isolated single particles. Journal of Structural Biology, 2011, 176, 60-74.	1.3	33
23	Optimal noise reduction in 3D reconstructions of single particles using a volume-normalized filter. Journal of Structural Biology, 2012, 180, 26-38.	1.3	33
24	Structural basis of cooperativity in kinesin revealed by 3D reconstruction of a two-head-bound state on microtubules. ELife, 2017, 6, .	2.8	26
25	An asymmetric sheath controls flagellar supercoiling and motility in the leptospira spirochete. ELife, 2020, 9, .	2.8	26
26	The yeast kinesin-5 Cin8 interacts with the microtubule in a noncanonical manner. Journal of Biological Chemistry, 2017, 292, 14680-14694.	1.6	23
27	FcpB Is a Surface Filament Protein of the Endoflagellum Required for the Motility of the Spirochete Leptospira. Frontiers in Cellular and Infection Microbiology, 2018, 8, 130.	1.8	20
28	Structural basis of fast- and slow-severing actinâ€“cofilactin boundaries. Journal of Biological Chemistry, 2021, 296, 100337.	1.6	15
29	Vinculin: An Unfolding Tale. Journal of Molecular Biology, 2016, 428, 1-4.	2.0	2
30	Tracking Down Kinesinâ€™s Achilles Heel with Balls ofÂGold. Biophysical Journal, 2017, 112, 2454-2456.	0.2	2
31	Cofilin Induces a Local Change in the Twist of Actin Filaments. Biophysical Journal, 2018, 114, 145a.	0.2	1
32	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.	0.2	0