# Charles V Sindelar

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 32 papers | 1,076 citations | 20 h-index | 32 g-index |
| 38 ext. papers | 1,375 ext. citations | 8 avg, IF | 4.54 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 32 | 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, | 11.5 | 3 |
| 31 | Structural basis of fast- and slow-severing actin-cofilactin boundaries. *Journal of Biological Chemistry*, **2021**, 296, 100337 | 5.4 | 3 |
| 30 | 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 | 11.5 | 20 |
| 29 | The kinesin-5 tail domain directly modulates the mechanochemical cycle of the motor domain for anti-parallel microtubule sliding. *ELife*, **2020**, 9, | 8.9 | 8 |
| 28 | An asymmetric sheath controls flagellar supercoiling and motility in the leptospira spirochete. *ELife* , **2020**, 9, | 8.9 | 12 |
| 27 | 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 |
| 26 | Structural basis for the clamping and Ca activation of SNARE-mediated fusion by synaptotagmin. *Nature Communications*, **2019**, 10, 2413 | 17.4 | 20 |
| 25 | 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 | |
| 24 | 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 |
| 23 | 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 | 11.5 | 72 |
| 22 | FcpB Is a Surface Filament Protein of the Endoflagellum Required for the Motility of the Spirochete. *Frontiers in Cellular and Infection Microbiology*, **2018**, 8, 130 | 5.9 | 10 |
| 21 | Structural basis of the filamin A actin-binding domain interaction with F-actin. *Nature Structural and Molecular Biology*, **2018**, 25, 918-927 | 17.6 | 36 |
| 20 | Tracking Down Kinesinâs Achilles Heel with Balls of Gold. *Biophysical Journal*, **2017**, 112, 2454-2456 | 2.9 | 2 |
| 19 | Phosphomimetic S3D cofilin binds but only weakly severs actin filaments. *Journal of Biological Chemistry*, **2017**, 292, 19565-19579 | 5.4 | 20 |
| 18 | The yeast kinesin-5 Cin8 interacts with the microtubule in a noncanonical manner. *Journal of Biological Chemistry*, **2017**, 292, 14680-14694 | 5.4 | 12 |
| 17 | Circular oligomerization is an intrinsic property of synaptotagmin. *ELife*, **2017**, 6, | 8.9 | 35 |
| 16 | Structural basis of cooperativity in kinesin revealed by 3D reconstruction of a two-head-bound state on microtubules. *ELife*, **2017**, 6, | 8.9 | 19 |

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| 15 | The myosin X motor is optimized for movement on actin bundles. *Nature Communications*, **2016**, 7, 12456 | 17.4 | 43 |
| 14 | Vinculin: An Unfolding Tale. *Journal of Molecular Biology*, **2016**, 428, 1-4 | 6.5 | |
| 13 | Ring-like oligomers of Synaptotagmins and related C2 domain proteins. *ELife*, **2016**, 5, | 8.9 | 41 |
| 12 | 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, 2116-21 | 11.5 | 33 |
| 11 | 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 |
| 10 | Calcium sensitive ring-like oligomers formed by synaptotagmin. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 13966-71 | 11.5 | 59 |
| 9 | High-resolution structures of kinesin on microtubules provide a basis for nucleotide-gated force-generation. *ELife*, **2014**, 3, e04686 | 8.9 | 93 |
| 8 | The structural basis of force generation by the mitotic motor kinesin-5. *Journal of Biological Chemistry*, **2012**, 287, 44654-66 | 5.4 | 54 |
| 7 | Optimal noise reduction in 3D reconstructions of single particles using a volume-normalized filter. *Journal of Structural Biology*, **2012**, 180, 26-38 | 3.4 | 27 |
| 6 | An adaptation of the Wiener filter suitable for analyzing images of isolated single particles. *Journal of Structural Biology*, **2011**, 176, 60-74 | 3.4 | 22 |
| 5 | A seesaw model for intermolecular gating in the kinesin motor protein. *Biophysical Reviews*, **2011**, 3, 85-100 | 3.7 | 33 |
| 4 | 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, 4111-6 | 11.5 | 129 |
| 3 | The beginning of kinesinâs force-generating cycle visualized at 9-A resolution. *Journal of Cell Biology* , **2007**, 177, 377-85 | 7.3 | 124 |
| 2 | Two conformations in the human kinesin power stroke defined by X-ray crystallography and EPR spectroscopy. *Nature Structural Biology*, **2002**, 9, 844-8 | | 64 |
| 1 | Structural basis of flagellar filament asymmetry and supercoil templating by Leptospira spirochete sheath proteins | | 1 |