## Carsten Sachse

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2954317/publications.pdf

Version: 2024-02-01

62 papers 11,070 citations

36 h-index 62 g-index

74 all docs

74 docs citations

times ranked

74

20768 citing authors

| #  | Article   | IF         | Citations                |
|----|---|------------|--------------------------|
| 1  | Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.   | 4.3        | 4,701                    |
| 2  | Guidelines for the use and interpretation of assays for monitoring autophagy (4th) Tj ETQq0 0 0 rgBT /Overlock  | 10 Jf 50 7 | 702 Td (edition<br>1,430 |
| 3  | An atomic model of HIV-1 capsid-SP1 reveals structures regulating assembly and maturation. Science, 2016, 353, 506-508.   | 6.0        | 375                      |
| 4  | ${\rm A\hat{I}^2(1\text{-}40)}$ Fibril Polymorphism Implies Diverse Interaction Patterns in Amyloid Fibrils. Journal of Molecular Biology, 2009, 386, 869-877.  | 2.0        | 280                      |
| 5  | p62 filaments capture and present ubiquitinated cargos for autophagy. EMBO Journal, 2018, 37, .   | 3.5        | 254                      |
| 6  | Comparison of Alzheimer Aβ(1–40) and Aβ(1–42) amyloid fibrils reveals similar protofilament structures. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19813-19818.  | 3.3        | 251                      |
| 7  | High-resolution Electron Microscopy of Helical Specimens: A Fresh Look at Tobacco Mosaic Virus.<br>Journal of Molecular Biology, 2007, 371, 812-835.  | 2.0        | 231                      |
| 8  | Directed selection of a conformational antibody domain that prevents mature amyloid fibril formation by stabilizing $\hat{Al^2}$ protofibrils. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19232-19237. | 3.3        | 204                      |
| 9  | Model-based local density sharpening of cryo-EM maps. ELife, 2017, 6, .   | 2.8        | 200                      |
| 10 | Paired $\hat{l}^2$ -sheet structure of an A $\hat{l}^2$ (1-40) amyloid fibril revealed by electron microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7462-7466.                                   | 3.3        | 194                      |
| 11 | The Selective Autophagy Receptor p62 Forms a Flexible Filamentous Helical Scaffold. Cell Reports, 2015, 11, 748-758.  | 2.9        | 190                      |
| 12 | Molecular structures of unbound and transcribing RNA polymerase III. Nature, 2015, 528, 231-236.  | 13.7       | 167                      |
| 13 | Structure of a Bacterial Dynamin-like Protein Lipid Tube Provides a Mechanism For Assembly and Membrane Curving. Cell, 2009, 139, 1342-1352.  | 13.5       | 163                      |
| 14 | Structure of the immature retroviral capsid at 8 à resolution by cryo-electron microscopy. Nature, 2012, 487, 385-389.  | 13.7       | 152                      |
| 15 | Concentration-Dependent Realignment of the Antimicrobial Peptide PGLa in Lipid Membranes Observed by Solid-State 19F-NMR. Biophysical Journal, 2005, 88, 3392-3397.   | 0.2        | 151                      |
| 16 | Near-atomic cryo-EM structure of the helical measles virus nucleocapsid. Science, 2015, 348, 704-707.   | 6.0        | 131                      |
| 17 | The Small Non-coding Vault RNA1-1 Acts as a Riboregulator of Autophagy. Cell, 2019, 176, 1054-1067.e12.   | 13.5       | 125                      |
| 18 | Orientation of the antimicrobial peptide PGLa in lipid membranes determined from 19F-NMR dipolar couplings of 4-CF3-phenylglycine labels. Journal of Magnetic Resonance, 2004, 168, 153-163.  | 1.2        | 110                      |

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|----|--|------|-----------|
| 19 | SPRING – An image processing package for single-particle based helical reconstruction from electron cryomicrographs. Journal of Structural Biology, 2014, 185, 15-26.  | 1.3  | 106       |
| 20 | Three-Dimensional Structure of TspO by Electron Cryomicroscopy of Helical Crystals. Structure, 2010, 18, 677-687.  | 1.6  | 101       |
| 21 | Molecular Structures of Transcribing RNA Polymerase I. Molecular Cell, 2016, 64, 1135-1143.  | 4.5  | 85        |
| 22 | Cartwheel Architecture of <i>Trichonympha</i> Basal Body. Science, 2012, 337, 553-553.   | 6.0  | 84        |
| 23 | Seeing tobacco mosaic virus through direct electron detectors. Journal of Structural Biology, 2015, 189, 87-97.  | 1.3  | 82        |
| 24 | An Organized Co-assembly of Clathrin Adaptors Is Essential for Endocytosis. Developmental Cell, 2015, 33, 150-162.   | 3.1  | 75        |
| 25 | Architecture of the yeast Elongator complex. EMBO Reports, 2017, 18, 264-279.  | 2.0  | 75        |
| 26 | Structures of actin-like ParM filaments show architecture of plasmid-segregating spindles. Nature, 2015, 523, 106-110.   | 13.7 | 73        |
| 27 | Structural basis of p62/SQSTM1 helical filaments and their role in cellular cargo uptake. Nature Communications, 2020, $11$ , 440.                                     | 5.8  | 71        |
| 28 | Quaternary Structure of a Mature Amyloid Fibril from Alzheimer's Aβ(1-40) Peptide. Journal of Molecular Biology, 2006, 362, 347-354.                                   | 2.0  | 69        |
| 29 | Structural Differences Explain Diverse Functions of Plasmodium Actins. PLoS Pathogens, 2014, 10, e1004091.   | 2.1  | 66        |
| 30 | Nanoscale Flexibility Parameters of Alzheimer Amyloid Fibrils Determined by Electron Cryoâ€Microscopy. Angewandte Chemie - International Edition, 2010, 49, 1321-1323. | 7.2  | 65        |
| 31 | The dynamic conformational landscape of $\hat{I}^3$ -secretase. Journal of Cell Science, 2015, 128, 589-98.  | 1.2  | 63        |
| 32 | Structural insights into transcription initiation by yeast RNA polymerase I. EMBO Journal, 2017, 36, 2698-2709.  | 3.5  | 58        |
| 33 | RIP2 filament formation is required for NOD2 dependent NF-κB signalling. Nature Communications, 2018, 9, 4043.   | 5.8  | 55        |
| 34 | Characterization of Atg38 and NRBF2, a fifth subunit of the autophagic Vps34/PIK3C3 complex. Autophagy, 2016, 12, 2129-2144.   | 4.3  | 52        |
| 35 | PspA adopts an ESCRT-III-like fold and remodels bacterial membranes. Cell, 2021, 184, 3674-3688.e18.   | 13.5 | 51        |
| 36 | A dose-rate effect in single-particle electron microscopy. Journal of Structural Biology, 2008, 161, 92-100.   | 1.3  | 47        |

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|----|---|-----|-----------|
| 37 | Thresholding of cryo-EM density maps by false discovery rate control. IUCrJ, 2019, 6, 18-33.  | 1.0 | 34        |
| 38 | 19F NMR screening of unrelated antimicrobial peptides shows that membrane interactions are largely governed by lipids. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 2260-2268. | 1.4 | 33        |
| 39 | Cross-linker–mediated regulation of actin network organization controls tissue morphogenesis.<br>Journal of Cell Biology, 2019, 218, 2743-2761.   | 2.3 | 32        |
| 40 | Structure and assembly of ESCRT-III helical Vps24 filaments. Science Advances, 2020, 6, eaba4897.   | 4.7 | 32        |
| 41 | Structure and function of p62/SQSTM1 in the emerging framework of phase separation. FEBS Journal, 2021, 288, 6927-6941.   | 2.2 | 29        |
| 42 | GTP regulates the microtubule nucleation activity of $\hat{I}^3$ -tubulin. Nature Cell Biology, 2013, 15, 1317-1327.  | 4.6 | 28        |
| 43 | Higherâ€order assemblies of oligomeric cargo receptor complexes form the membrane scaffold of the Cvt vesicle. EMBO Reports, 2016, 17, 1044-1060.   | 2.0 | 26        |
| 44 | Elucidation of the viral disassembly switch of tobacco mosaic virus. EMBO Reports, 2019, 20, e48451.  | 2.0 | 26        |
| 45 | Single-particle based helical reconstruction—how to make the most of real and Fourier space. AIMS Biophysics, 2015, 2, 219-244.   | 0.3 | 24        |
| 46 | Phasing out the badâ€"How SQSTM1/p62 sequesters ubiquitinated proteins for degradation by autophagy, 2018, 14, 1280-1282.   | 4.3 | 20        |
| 47 | Characterization of the Mycobacterial Acyl-CoA Carboxylase Holo Complexes Reveals Their Functional Expansion into Amino Acid Catabolism. PLoS Pathogens, 2015, 11, e1004623.                | 2.1 | 19        |
| 48 | Automated tracing of helical assemblies from electron cryo-micrographs. Journal of Structural Biology, 2018, 202, 1-12.   | 1.3 | 19        |
| 49 | Transcribing <scp>RNA</scp> polymerase <scp>III</scp> observed by electron cryomicroscopy. FEBS Journal, 2016, 283, 2811-2819.  | 2.2 | 18        |
| 50 | Cryo-EM Structure Determination Using Segmented Helical Image Reconstruction. Methods in Enzymology, 2016, 579, 307-328.  | 0.4 | 18        |
| 51 | Permutation testing of Fourier shell correlation for resolution estimation of cryo-EM maps. Journal of Structural Biology, 2020, 212, 107579.   | 1.3 | 18        |
| 52 | Structural interpretation of cryo-EM image reconstructions. Progress in Biophysics and Molecular Biology, 2021, 160, 26-36.   | 1.4 | 11        |
| 53 | Vault RNA emerges as a regulator of selective autophagy. Autophagy, 2019, 15, 1463-1464.  | 4.3 | 10        |
| 54 | A new method for cryo-sectioning cell monolayers using a correlative workflow. Methods in Cell Biology, 2017, 140, 85-103.  | 0.5 | 7         |

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|----|--|-----|-----------|
| 55 | The higher-order molecular organization of p62/SQSTM1. Oncotarget, 2015, 6, 16796-16797.   | 0.8 | 4         |
| 56 | Recombinant Expression, Purification, and Assembly of p62 Filaments. Methods in Molecular Biology, 2019, 1880, 3-15.   | 0.4 | 2         |
| 57 | Binding and/or hydrolysis of purineâ€based nucleotides is not required for IM30 ring formation. FEBS Letters, 2021, 595, 1876-1885.  | 1.3 | 2         |
| 58 | Introduction to a special issue on Frontiers of Aberration Corrected Electron Microscopy in honour of Christian Colliex, Archie Howie and Hannes Lichte on the occasion of their 75th, 85th and 75th birthdays. Ultramicroscopy, 2019, 203, 1.                           | 0.8 | 1         |
| 59 | Confidence maps: statistical inference of cryo-EM maps. Acta Crystallographica Section D: Structural Biology, 2020, 76, 332-339.   | 1.1 | 1         |
| 60 | Introduction to a special issue on Frontiers of Aberration Corrected Electron Microscopy in honour of Wolfgang Baumeister, Colin Humphreys, John Spence and Knut Urban on the occasion of their 75th, 80th, 75th and 80th birthdays. Ultramicroscopy, 2021, 231, 113290. | 0.8 | 0         |
| 61 | Better maps for better models. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C1191-C1191.  | 0.0 | 0         |
| 62 | The ESCRT-III protein VPS24 forms double stranded filaments composed of domain-swapped dimers. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e153-e153.  | 0.0 | 0         |