

1: Soni K, Horvath A, Dybkov O, Schwan M, Trakansuebkul S, Flemming D, Wild K, Urlaub H, Fischer T, Sinning I. Structures of aberrant spliceosome intermediates on their way to disassembly. *Nat Struct Mol Biol.* 2025 Jan 20. doi: 10.1038/s41594-024-01480-7. Epub ahead of print. PMID: 39833470.

2: Zheng A, Vermeulen BJA, Würtz M, Neuner A, Lübbekhusen N, Mayer MP, Schiebel E, Pfeffer S. Structural insights into the interplay between microtubule polymerases, γ -tubulin complexes and their receptors. *Nat Commun.* 2025 Jan 5;16(1):402. doi: 10.1038/s41467-024-55778-7. PMID: 39757296; PMCID: PMC11701102.

3: Vallbracht M, Bodmer BS, Fischer K, Makroczyova J, Winter SL, Wendt L, Wachsmuth-Melm M, Hoenen T, Chlanda P. Nucleocapsid assembly drives Ebola viral factory maturation and dispersion. *Cell.* 2024 Dec 14:S0092-8674(24)01340-0. doi: 10.1016/j.cell.2024.11.024. Epub ahead of print. PMID: 39742805.

4: Kämper L, Kuhl I, Vallbracht M, Hoenen T, Linne U, Weber A, Chlanda P, Kracht M, Biedenkopf N. To be or not to be phosphorylated: understanding the role of Ebola virus nucleoprotein in the dynamic interplay with the transcriptional activator VP30 and the host phosphatase PP2A-B56. *Emerg Microbes Infect.* 2025 Dec;14(1):2447612. doi: 10.1080/22221751.2024.2447612. Epub 2025 Jan 12. PMID: 39726359; PMCID: PMC11727051.

5: Klein M, Wild K, Sinning I. Multi-protein assemblies orchestrate co-translational enzymatic processing on the human ribosome. *Nat Commun.* 2024 Sep 3;15(1):7681. doi: 10.1038/s41467-024-51964-9. PMID: 39227397; PMCID: PMC11372111.

6: Demircan MB, Zinser LJ, Michels A, Guaza-Lasheras M, John F, Gorol JM, Theuerkauf SA, Günther DM, Grimm D, Greten FR, Chlanda P, Thalheimer FB, Buchholz CJ. T-cell specific in vivo gene delivery with DART-AAVs targeted to CD8. *Mol Ther*. 2024 Oct 2;32(10):3470-3484. doi: 10.1016/j.ymthe.2024.08.002. Epub 2024 Aug 8. PMID: 39113357; PMCID: PMC11489536.

7: Vermeulen BJ, Böhler A, Gao Q, Neuner A, Župa E, Chu Z, Würtz M, Jäkle U, Gruss OJ, Pfeffer S, Schiebel E. γ -TuRC asymmetry induces local protofilament mismatch at the RanGTP-stimulated microtubule minus end. *EMBO J*. 2024 May;43(10):2062-2085. doi: 10.1038/s44318-024-00087-4. Epub 2024 Apr 10. PMID: 38600243; PMCID: PMC11099078.

8: Bohl V, Hollmann NM, Melzer T, Katikaridis P, Meins L, Simon B, Flemming D, Sinning I, Hennig J, Mogk A. The *Listeria monocytogenes* persistence factor ClpL is a potent stand-alone disaggregase. *Elife*. 2024 Apr 10;12:RP92746. doi: 10.7554/eLife.92746. PMID: 38598269; PMCID: PMC11006417.

9: Uckeley ZM, Duboeuf M, Gu Y, Erny A, Mazelier M, Lüchtenborg C, Winter SL, Schad P, Mathieu C, Koch J, Boulant S, Chlanda P, Maise C, Brügger B, Lozach PY. Glucosylceramide in bunyavirus particles is essential for virus binding to host cells. *Cell Mol Life Sci*. 2024 Feb 1;81(1):71. doi: 10.1007/s00018-023-05103-0. PMID: 38300320; PMCID: PMC10834583.

10: Klein MA, Wild K, Kišonaitė M, Sinning I. Methionine aminopeptidase 2 and its autoproteolysis product have different binding sites on the ribosome. *Nat Commun*. 2024 Jan 24;15(1):716. doi: 10.1038/s41467-024-44862-7. PMID: 38267453; PMCID: PMC10808355.

11: Lolicato F, Steringer JP, Saleppico R, Beyer D, Fernandez-Sobaberas J, Unger S, Klein S, Riegerová P, Wegehangel S, Müller HM, Schmitt XJ, Kaptan S, Freund C, Hof M, Šachl R, Chlanda P, Vattulainen I, Nickel W. Disulfide bridge-dependent dimerization triggers FGF2 membrane translocation into the extracellular space. *Elife*. 2024 Jan 22;12:RP88579. doi: 10.7554/eLife.88579. PMID: 38252473; PMCID: PMC10945597.

12: Winter SL, Chlanda P. The Art of Viral Membrane Fusion and Penetration. *Subcell Biochem*. 2023;106:113-152. doi: 10.1007/978-3-031-40086-5_4. PMID: 38159225.

13: Zimmermann L, Zhao X, Makroczyova J, Wachsmuth-Melm M, Prasad V, Hensel Z, Bartenschlager R, Chlanda P. SARS-CoV-2 nsp3 and nsp4 are minimal constituents of a pore spanning replication organelle. *Nat Commun*. 2023 Nov 30;14(1):7894. doi: 10.1038/s41467-023-43666-5. PMID: 38036567; PMCID: PMC10689437.

14: Theuerkauf SA, Herrera-Carrillo E, John F, Zinser LJ, Molina MA, Riechert V, Thalheimer FB, Börner K, Grimm D, Chlanda P, Berkhout B, Buchholz CJ. AAV vectors displaying bispecific DARPins enable dual-control targeted gene delivery. *Biomaterials*. 2023 Dec;303:122399. doi: 10.1016/j.biomaterials.2023.122399. Epub 2023 Nov 16. PMID: 37992599; PMCID: PMC10721713.

15: McDowell MA, Heimes M, Enkavi G, Farkas Á, Saar D, Wild K, Schwappach B, Vattulainen I, Sinning I. The GET insertase exhibits conformational plasticity and induces membrane thinning. *Nat Commun*. 2023 Nov 14;14(1):7355. doi: 10.1038/s41467-023-42867-2. PMID: 37963916; PMCID: PMC10646013.

16: Schmidt N, Ganskih S, Wei Y, Gabel A, Zielinski S, Keshishian H, Lareau CA, Zimmermann L, Makroczyova J, Pearce C, Krey K, Hennig T, Stegmaier S, Moyon L, Horlacher M, Werner S, Aydin J, Olguin-Nava M, Potabattula R, Kibe A, Dölken L, Smyth RP, Caliskan N, Marsico A, Kreml C, Bodem J, Pichlmair A, Carr SA, Chlanda P, Erhard F, Munschauer M. SND1 binds SARS-CoV-2 negative-sense RNA and promotes viral RNA synthesis through NSP9. *Cell*. 2023 Oct 26;186(22):4834-4850.e23. doi: 10.1016/j.cell.2023.09.002. Epub 2023 Oct 3. PMID: 37794589; PMCID: PMC10617981.

17: Castillo Duque de Estrada NM, Thoms M, Flemming D, Hammaren HM, Buschauer R, Ameismeier M, Baßler J, Beck M, Beckmann R, Hurt E. Structure of nascent 5S RNPs at the crossroad between ribosome assembly and MDM2-p53 pathways. *Nat Struct Mol Biol*. 2023 Aug;30(8):1119-1131. doi: 10.1038/s41594-023-01006-7. Epub 2023 Jun 8. PMID: 37291423; PMCID: PMC10442235.

18: Winter SL, Golani G, Lolicato F, Vallbracht M, Thiyagarajah K, Ahmed SS, Luchtenborg C, Fackler OT, Brügger B, Hoenen T, Nickel W, Schwarz US, Chlanda P. The Ebola virus VP40 matrix layer undergoes endosomal disassembly essential for membrane fusion. *EMBO J*. 2023 Jun 1;42(11):e113578. doi: 10.15252/embj.2023113578. Epub 2023 Apr 21. PMID: 37082863; PMCID: PMC10233383.

19: Kišonaitė M, Wild K, Lapouge K, Gesé GV, Kellner N, Hurt E, Sinning I. Structural inventory of cotranslational protein folding by the eukaryotic RAC complex. *Nat Struct Mol Biol*. 2023 May;30(5):670-677. doi: 10.1038/s41594-023-00973-1. Epub 2023 Apr 20. PMID: 37081320; PMCID: PMC10191838.

20: Klein S, Golani G, Lolicato F, Lahr C, Beyer D, Herrmann A, Wachsmuth-Melm M, Reddmann N, Brecht R, Hosseinzadeh M, Kolovou A, Makroczyova J, Peterl S, Schorb M, Schwab Y, Brügger B, Nickel W, Schwarz US, Chlanda P. IFITM3 blocks influenza virus entry by sorting lipids and stabilizing hemifusion. *Cell Host Microbe*. 2023 Apr 12;31(4):616-633.e20. doi: 10.1016/j.chom.2023.03.005. Epub 2023 Mar 31. PMID: 37003257.

21: Bodmer BS, Breithaupt A, Heung M, Brunetti JE, Henkel C, Müller-Guhl J, Rodríguez E, Wendt L, Winter SL, Vallbracht M, Müller A, Römer S, Chlanda P, Muñoz-Fontela C, Hoenen T, Escudero-Pérez B. *In vivo* characterization of the novel ebolavirus Bombali virus suggests a low pathogenic potential for humans. *Emerg Microbes Infect*. 2023 Dec;12(1):2164216. doi: 10.1080/22221751.2022.2164216. Epub 2023 Jan 18. PMID: 36580440; PMCID: PMC9858441.

22: Zupa E, Würtz M, Neuner A, Hoffmann T, Rettel M, Böhler A, Vermeulen BJA, Eustermann S, Schiebel E, Pfeffer S. The augmin complex architecture reveals structural insights into microtubule branching. *Nat Commun*. 2022 Sep 26;13(1):5635. doi: 10.1038/s41467-022-33228-6. PMID: 36163468; PMCID: PMC9512787.

23: Sinning I, McDowell MA. Cryo-EM insights into tail-anchored membrane protein biogenesis in eukaryotes. *Curr Opin Struct Biol*. 2022 Aug;75:102428. doi: 10.1016/j.sbi.2022.102428. Epub 2022 Jul 16. PMID: 35850079.

24: Ismail S, Flemming D, Thoms M, Gomes-Filho JV, Randau L, Beckmann R, Hurt E. Emergence of the primordial pre-60S from the 90S pre-ribosome. *Cell Rep*. 2022 Apr 5;39(1):110640. doi: 10.1016/j.celrep.2022.110640. PMID: 35385737; PMCID: PMC8994135.

25: Cerullo F, Filbeck S, Patil PR, Hung HC, Xu H, Vornberger J, Hofer FW, Schmitt J, Kramer G, Bukau B, Hofmann K, Pfeffer S, Joazeiro CAP. Bacterial ribosome collision sensing by a MutS DNA repair ATPase paralogue. *Nature*. 2022 Mar;603(7901):509-514. doi: 10.1038/s41586-022-04487-6. Epub 2022 Mar 9. PMID: 35264791; PMCID: PMC9041291.

26: Kišonaitė M, Wild K, Lapouge K, Ruppert T, Sinning I. High-resolution structures of a thermophilic eukaryotic 80S ribosome reveal atomistic details of translocation. *Nat Commun*. 2022 Jan 25;13(1):476. doi: 10.1038/s41467-022-27967-9. PMID: 35079002; PMCID: PMC8789840.

27: Würtz M, Zupa E, Atorino ES, Neuner A, Böhler A, Rahadian AS, Vermeulen BJA, Tonon G, Eustermann S, Schiebel E, Pfeffer S. Modular assembly of the principal microtubule nucleator γ -TuRC. *Nat Commun*. 2022 Jan 25;13(1):473. doi: 10.1038/s41467-022-28079-0. PMID: 35078983; PMCID: PMC8789826.

28: Soni K, Kempf G, Manalastas-Cantos K, Hendricks A, Flemming D, Guizetti J, Simon B, Frischknecht F, Svergun DI, Wild K, Sinning I. Structural analysis of the SRP Alu domain from *Plasmodium falciparum* reveals a non-canonical open conformation. *Commun Biol*. 2021 May 20;4(1):600. doi: 10.1038/s42003-021-02132-y. PMID: 34017052; PMCID: PMC8137916.

29: Winter SL, Chlanda P. Dual-axis Volta phase plate cryo-electron tomography of Ebola virus-like particles reveals actin-VP40 interactions. *J Struct Biol*. 2021 Jun;213(2):107742. doi: 10.1016/j.jsb.2021.107742. Epub 2021 May 8. PMID: 33971285.

30: Klein S, Wachsmuth-Melm M, Winter SL, Kolovou A, Chlanda P. Cryo-correlative

light and electron microscopy workflow for cryo-focused ion beam milled adherent cells. *Methods Cell Biol.* 2021;162:273-302. doi: 10.1016/bs.mcb.2020.12.009. Epub 2021 Feb 17. PMID: 33707016.

31: Würtz M, Böhler A, Neuner A, Zupa E, Rohland L, Liu P, Vermeulen BJA, Pfeffer S, Eustermann S, Schiebel E. Reconstitution of the recombinant human γ -tubulin ring complex. *Open Biol.* 2021 Feb;11(2):200325. doi: 10.1098/rsob.200325. Epub 2021 Feb 3. PMID: 33529551; PMCID: PMC8061689.

32: Klein S, Wimmer BH, Winter SL, Kolovou A, Laketa V, Chlanda P. Post-correlation on-lamella cryo-CLEM reveals the membrane architecture of lamellar bodies. *Commun Biol.* 2021 Jan 29;4(1):137. doi: 10.1038/s42003-020-01567-z. PMID: 33514845; PMCID: PMC7846596.

33: Lau B, Cheng J, Flemming D, La Venuta G, Berninghausen O, Beckmann R, Hurt E. Structure of the Maturing 90S Pre-ribosome in Association with the RNA Exosome. *Mol Cell.* 2021 Jan 21;81(2):293-303.e4. doi: 10.1016/j.molcel.2020.11.009. Epub 2020 Dec 15. PMID: 33326748.

34: Filbeck S, Cerullo F, Paternoga H, Tsaprailis G, Joazeiro CAP, Pfeffer S. Mimicry of Canonical Translation Elongation Underlies Alanine Tail Synthesis in RQC. *Mol Cell.* 2021 Jan 7;81(1):104-114.e6. doi: 10.1016/j.molcel.2020.11.001. Epub 2020 Nov 30. PMID: 33259811; PMCID: PMC7796892.

35: Klein S, Cortese M, Winter SL, Wachsmuth-Melm M, Neufeldt CJ, Cerikan B, Stanifer ML, Boulant S, Bartenschlager R, Chlanda P. SARS-CoV-2 structure and replication characterized by in situ cryo-electron tomography. *Nat Commun.* 2020 Nov 18;11(1):5885. doi: 10.1038/s41467-020-19619-7. PMID: 33208793; PMCID: PMC7676268.

36: Devant JM, Hansman GS. Structural heterogeneity of a human norovirus vaccine candidate. *Virology*. 2021 Jan 15;553:23-34. doi: 10.1016/j.virol.2020.10.005. Epub 2020 Oct 28. PMID: 33202318.

37: Zupa E, Zheng A, Neuner A, Würtz M, Liu P, Böhler A, Schiebel E, Pfeffer S. The cryo-EM structure of a γ -TuSC elucidates architecture and regulation of minimal microtubule nucleation systems. *Nat Commun*. 2020 Nov 11;11(1):5705. doi: 10.1038/s41467-020-19456-8. PMID: 33177498; PMCID: PMC7658347.

38: McDowell MA, Heimes M, Fiorentino F, Mehmood S, Farkas Á, Coy-Vergara J, Wu D, Bolla JR, Schmid V, Heinze R, Wild K, Flemming D, Pfeffer S, Schwappach B, Robinson CV, Sinning I. Structural Basis of Tail-Anchored Membrane Protein Biogenesis by the GET Insertase Complex. *Mol Cell*. 2020 Oct 1;80(1):72-86.e7. doi: 10.1016/j.molcel.2020.08.012. Epub 2020 Sep 9. PMID: 32910895.

39: Wild K, Aleksić M, Lapouge K, Juaire KD, Flemming D, Pfeffer S, Sinning I. MetAP-like Ebp1 occupies the human ribosomal tunnel exit and recruits flexible rRNA expansion segments. *Nat Commun*. 2020 Feb 7;11(1):776. doi: 10.1038/s41467-020-14603-7. PMID: 32034140; PMCID: PMC7005732.

40: Liu P, Zupa E, Neuner A, Böhler A, Loerke J, Flemming D, Ruppert T, Rudack T, Peter C, Spahn C, Gruss OJ, Pfeffer S, Schiebel E. Insights into the assembly and activation of the microtubule nucleator γ -TuRC. *Nature*. 2020 Feb;578(7795):467-471. doi: 10.1038/s41586-019-1896-6. Epub 2019 Dec 19. PMID: 31856152.

41: Devant JM, Hofhaus G, Bhella D, Hansman GS. Heterologous expression of human norovirus GII.4 VP1 leads to assembly of T=4 virus-like particles. *Antiviral*

Res. 2019 Aug;168:175-182. doi: 10.1016/j.antiviral.2019.05.010. Epub 2019 May

27. PMID: 31145925.

.