Ralf Langen

List of Publications by Citations

82 papers	6,689 citations	41 h-index	81 g-index
83 ext. papers	7,424 ext. citations	6.9 avg, IF	5.72 L-index

#	Paper	IF	Citations
82	Recent advances in site-directed spin labeling of proteins. *Current Opinion in Structural Biology*, **1998**, 8, 649-56	8.1	513
81	Mechanism of endophilin N-BAR domain-mediated membrane curvature. *EMBO Journal*, **2006**, 25, 2898-910	11.4	437
80	Structure of membrane-bound alpha-synuclein from site-directed spin labeling and computational refinement. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 19666-71	11.5	380
79	Structure of membrane-bound alpha-synuclein studied by site-directed spin labeling. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 8331-6	11.5	311
78	Structural organization of alpha-synuclein fibrils studied by site-directed spin labeling. *Journal of Biological Chemistry*, **2003**, 278, 37530-5	5.4	282
77	Membrane curvature induction and tubulation are common features of synucleins and apolipoproteins. *Journal of Biological Chemistry*, **2010**, 285, 32486-93	5.4	231
76	Crystal structures of spin labeled T4 lysozyme mutants: implications for the interpretation of EPR spectra in terms of structure. *Biochemistry*, **2000**, 39, 8396-405	3.2	231
75	Structure and analysis of FCHo2 F-BAR domain: a dimerizing and membrane recruitment module that effects membrane curvature. *Structure*, **2007**, 15, 839-52	5.2	225
74	Lipid membranes modulate the structure of islet amyloid polypeptide. *Biochemistry*, **2005**, 44, 12113-9	3.2	225
73	Template-assisted filament growth by parallel stacking of tau. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 10278-83	11.5	223
72	Pericyte degeneration causes white matter dysfunction in the mouse central nervous system. *Nature Medicine*, **2018**, 24, 326-337	50.5	211
71	Investigation of alpha-synuclein fibril structure by site-directed spin labeling. *Journal of Biological Chemistry*, **2007**, 282, 24970-9	5.4	200
70	Structure of alpha-helical membrane-bound human islet amyloid polypeptide and its implications for membrane-mediated misfolding. *Journal of Biological Chemistry*, **2008**, 283, 17205-10	5.4	153
69	O-GlcNAc modification blocks the aggregation and toxicity of the protein α-synuclein associated with Parkinson's disease. *Nature Chemistry*, **2015**, 7, 913-20	17.6	146
68	Membrane interaction of islet amyloid polypeptide. *Biochimica Et Biophysica Acta - Biomembranes*, **2007**, 1768, 2002-9	3.8	144
67	Fibrils with parallel in-register structure constitute a major class of amyloid fibrils: molecular insights from electron paramagnetic resonance spectroscopy. *Quarterly Reviews of Biophysics*, **2008**, 41, 265-97	7	142
66	Drusen deposits associated with aging and age-related macular degeneration contain nonfibrillar amyloid oligomers. *Journal of Clinical Investigation*, **2006**, 116, 378-85	15.9	135

65	Identifying structural features of fibrillar islet amyloid polypeptide using site-directed spin labeling. *Journal of Biological Chemistry*, **2004**, 279, 48420-5	5.4	126
64	Fibril structure of human islet amyloid polypeptide. *Journal of Biological Chemistry*, **2012**, 287, 5235-41	5.4	122
63	Soluble and mature amyloid fibrils in drusen deposits **2010**, 51, 1304-10		112
62	A combinatorial NMR and EPR approach for evaluating the structural ensemble of partially folded proteins. *Journal of the American Chemical Society*, **2010**, 132, 8657-68	16.4	109
61	Structure and dynamics of a helical hairpin and loop region in annexin 12: a site-directed spin labeling study. *Biochemistry*, **2002**, 41, 1464-73	3.2	103
60	Structural features of the C-terminal domain of bovine rhodopsin: a site-directed spin-labeling study. *Biochemistry*, **1999**, 38, 7918-24	3.2	97
59	Membrane curvature sensing by amphipathic helices: a single liposome study using □synuclein and annexin B12. *Journal of Biological Chemistry*, **2011**, 286, 42603-42614	5.4	89
58	Remodeling of lipid vesicles into cylindrical micelles by □synuclein in an extended □helical conformation. *Journal of Biological Chemistry*, **2012**, 287, 29301-11	5.4	86
57	Membrane-mediated assembly of annexins studied by site-directed spin labeling. *Journal of Biological Chemistry*, **1998**, 273, 22453-7	5.4	82
56	The effect of curcumin on human islet amyloid polypeptide misfolding and toxicity. *Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis*, **2010**, 17, 118-28	2.7	76
55	Annexins V and XII insert into bilayers at mildly acidic pH and form ion channels. *Biochemistry*, **2000**, 39, 3015-22	3.2	76
54	Endophilin A1 induces different membrane shapes using a conformational switch that is regulated by phosphorylation. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 6982-7	11.5	69
53	Structural features and domain organization of huntingtin fibrils. *Journal of Biological Chemistry*, **2012**, 287, 31739-46	5.4	68
52	Engineering a polarity-sensitive biosensor for time-lapse imaging of apoptotic processes and degeneration. *Nature Methods*, **2010**, 7, 67-73	21.6	62
51	Hydration dynamics as an intrinsic ruler for refining protein structure at lipid membrane interfaces. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 16838-43	11.5	60
50	Roles of amphipathic helices and the bin/amphiphysin/rvs (BAR) domain of endophilin in membrane curvature generation. *Journal of Biological Chemistry*, **2010**, 285, 20164-70	5.4	58
49	□Synuclein oligomers with broken helical conformation form lipoprotein nanoparticles. *Journal of Biological Chemistry*, **2013**, 288, 17620-30	5.4	54
48	Stacked sets of parallel, in-register beta-strands of beta2-microglobulin in amyloid fibrils revealed by site-directed spin labeling and chemical labeling. *Journal of Biological Chemistry*, **2010**, 285, 17137-47	5.4	54

47	Computer modeling of nitroxide spin labels on proteins. *Biopolymers*, **2012**, 97, 35-44	2.2	50
46	Solid-State Nuclear Magnetic Resonance on the Static and Dynamic Domains of Huntingtin Exon-1 Fibrils. *Biochemistry*, **2015**, 54, 3942-9	3.2	47
45	A compact beta model of huntingtin toxicity. *Journal of Biological Chemistry*, **2011**, 286, 8188-8196	5.4	47
44	Membrane binding and self-association of the epsin N-terminal homology domain. *Journal of Molecular Biology*, **2012**, 423, 800-17	6.5	44
43	Formation of soluble amyloid oligomers and amyloid fibrils by the multifunctional protein vitronectin. *Molecular Neurodegeneration*, **2008**, 3, 16	19	42
42	The conserved core domains of annexins A1, A2, A5, and B12 can be divided into two groups with different Ca2+-dependent membrane-binding properties. *Biochemistry*, **2005**, 44, 2833-44	3.2	42
41	Synuclein Amyloid Fibrils with Two Entwined, Asymmetrically Associated Protofibrils. *Journal of Biological Chemistry*, **2016**, 291, 2310-8	5.4	41
40	Multiple modes of endophilin-mediated conversion of lipid vesicles into coated tubes: implications for synaptic endocytosis. *Journal of Biological Chemistry*, **2010**, 285, 23351-8	5.4	41
39	Hydration Dynamics of a Peripheral Membrane Protein. *Journal of the American Chemical Society*, **2016**, 138, 11526-35	16.4	40
38	Tubulation by amphiphysin requires concentration-dependent switching from wedging to scaffolding. *Structure*, **2015**, 23, 873-881	5.2	39
37	The 17-residue-long N terminus in huntingtin controls stepwise aggregation in solution and on membranes via different mechanisms. *Journal of Biological Chemistry*, **2018**, 293, 2597-2605	5.4	37
36	Spin labeling analysis of amyloids and other protein aggregates. *Methods in Enzymology*, **2006**, 413, 122-39	1.7	37
35	The Habc domain and the SNARE core complex are connected by a highly flexible linker. *Biochemistry*, **2003**, 42, 4009-14	3.2	34
34	Structural insights into membrane interaction and caveolar targeting of dynamin-like EHD2. *Structure*, **2014**, 22, 409-420	5.2	30
33	The Mitochondrial-Derived Peptides, HumaninS14G and Small Humanin-like Peptide 2, Exhibit Chaperone-like Activity. *Scientific Reports*, **2017**, 7, 7802	4.9	29
32	Membrane Curvature-sensing and Curvature-inducing Activity of Islet Amyloid Polypeptide and Its Implications for Membrane Disruption. *Journal of Biological Chemistry*, **2015**, 290, 25782-93	5.4	28
31	Polyglutamine- and temperature-dependent conformational rigidity in mutant huntingtin revealed by immunoassays and circular dichroism spectroscopy. *PLoS ONE*, **2014**, 9, e112262	3.7	28
30	Membranes as modulators of amyloid protein misfolding and target of toxicity. *Biochimica Et Biophysica Acta - Biomembranes*, **2018**, 1860, 1863-1875	3.8	26

29	Structural insights into the activation mechanism of dynamin-like EHD ATPases. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 5629-5634	11.5	25
28	Structural Mechanisms of Mutant Huntingtin Aggregation Suppression by the Synthetic Chaperonin-like CCT5 Complex Explained by Cryoelectron Tomography. *Journal of Biological Chemistry*, **2015**, 290, 17451-61	5.4	25
27	Heterotetrameric annexin A2/S100A10 (A2t) is essential for oncogenic human papillomavirus trafficking and capsid disassembly, and protects virions from lysosomal degradation. *Scientific Reports*, **2018**, 8, 11642	4.9	24
26	Identification and Structural Characterization of the N-terminal Amyloid Core of Orb2 isoform A. *Scientific Reports*, **2016**, 6, 38265	4.9	23
25	Annexin B12 is a sensor of membrane curvature and undergoes major curvature-dependent structural changes. *Journal of Biological Chemistry*, **2007**, 282, 9996-10004	5.4	20
24	The folding equilibrium of huntingtin exon 1 monomer depends on its polyglutamine tract. *Journal of Biological Chemistry*, **2018**, 293, 19613-19623	5.4	19
23	A novel calcium-independent peripheral membrane-bound form of annexin B12. *Biochemistry*, **2006** , 45, 934-42	3.2	18
22	Structure and dynamics of a helical hairpin that mediates calcium-dependent membrane binding of annexin B12. *Journal of Biological Chemistry*, **2004**, 279, 32492-8	5.4	18
21	A helical hairpin region of soluble annexin B12 refolds and forms a continuous transmembrane helix at mildly acidic pH. *Journal of Biological Chemistry*, **2005**, 280, 32398-404	5.4	18
20	Global structural changes in annexin 12. The roles of phospholipid, Ca2+, and pH. *Journal of Biological Chemistry*, **2003**, 278, 30227-34	5.4	16
19	The Mitochondrial Peptide Humanin Targets but Does Not Denature Amyloid Oligomers in Type II Diabetes. *Journal of the American Chemical Society*, **2019**, 141, 14168-14179	16.4	13
18	Lipid-modulation of membrane insertion and refolding of the apoptotic inhibitor Bcl-xL. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2019**, 1867, 691-700	4	13
17	Identification of distinct conformations associated with monomers and fibril assemblies of mutant huntingtin. *Human Molecular Genetics*, **2018**, 27, 2330-2343	5.6	12
16	Structure of Membrane-Bound Huntingtin Exon 1 Reveals Membrane Interaction and Aggregation Mechanisms. *Structure*, **2019**, 27, 1570-1580.e4	5.2	11
15	Computer Modeling of Spin Labels: NASNOX, PRONOX, and ALLNOX. *Methods in Enzymology*, **2015**, 563, 569-93	1.7	9
14	Calcium- and membrane-induced changes in the structure and dynamics of three helical hairpins in annexin B12. *Biochemistry*, **2005**, 44, 16435-44	3.2	9
13	Membrane remodeling by amyloidogenic and non-amyloidogenic proteins studied by EPR. *Journal of Magnetic Resonance*, **2017**, 280, 127-139	3	8
12	Diabetic Risk Factors Promote Islet Amyloid Polypeptide Misfolding by a Common, Membrane-mediated Mechanism. *Scientific Reports*, **2016**, 6, 31094	4.9	8

11	Discovery of Small Molecule Inhibitors of Huntingtin Exon 1 Aggregation by FRET-Based High-Throughput Screening in Living Cells. *ACS Chemical Neuroscience*, **2020**, 11, 2286-2295	5.7	7
10	Structural Model of the Proline-Rich Domain of Huntingtin Exon-1 Fibrils. *Biophysical Journal*, **2020**, 119, 2019-2028	2.9	4
9	Annexin B12 Trimer Formation is Governed by a Network of Protein-Protein and Protein-Lipid Interactions. *Scientific Reports*, **2020**, 10, 5301	4.9	3
8	Directed Supramolecular Organization of N-BAR Proteins through Regulation of H0 Membrane Immersion Depth. *Scientific Reports*, **2018**, 8, 16383	4.9	3
7	An Amphipathic Alpha-Helix Domain from Poliovirus 2C Protein Tubulate Lipid Vesicles. *Viruses*, **2020**, 12,	6.2	2
6	Structural Characterization of Membrane-Curving Proteins: Site-Directed Spin Labeling, EPR, and Computational Refinement. *Methods in Enzymology*, **2015**, 564, 259-88	1.7	2
5	Lysine acetylation regulates the interaction between proteins and membranes. *Nature Communications*, **2021**, 12, 6466	17.4	2
4	Huntingtin fibrils with different toxicity, structure, and seeding potential can be interconverted. *Nature Communications*, **2021**, 12, 4272	17.4	2
3	Huntingtin fibrils with different toxicity, structure, and seeding potential can be reversibly interconverted		1
2	Amplification of neurotoxic HTTex1 assemblies in human neurons. *Neurobiology of Disease*, **2021**, 159, 105517	7.5	0
1	A new biochemical method for ultra-purification of amyloids from Alzheimer's disease brain tissues.. *Alzheimer's and Dementia*, **2021**, 17 Suppl 3, e054185	1.2	