Erik Strandberg

List of Publications by Year
in descending order

65 papers	3,297 citations	117625 34 h-index	144013 57 g-index
66 all docs	66 docs citations	66 times ranked	2609 citing authors

#	Article	IF	Citations
1	Snorkeling of lysine side chains in transmembrane helices: how easy can it get?. FEBS Letters, 2003, 544, 69-73.	2.8	181
2	Tilt Angles of Transmembrane Model Peptides in Oriented and Non-Oriented Lipid Bilayers as Determined by 2H Solid-State NMR. Biophysical Journal, 2004, 86, 3709-3721.	0.5	172
3	Geometry and Intrinsic Tilt of a Tryptophan-Anchored Transmembrane Î±-Helix Determined by 2H NMR. Biophysical Journal, 2002, 83, 1479-1488.	0.5	161
4	Concentration-Dependent Realignment of the Antimicrobial Peptide PGLa in Lipid Membranes Observed by Solid-State 19F-NMR. Biophysical Journal, 2005, 88, 3392-3397.	0.5	151
5	NMR methods for studying membrane-active antimicrobial peptides. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2004, 23A, 89-120.	0.5	128
6	2H-NMR Study and Molecular Dynamics Simulation of the Location, Alignment, and Mobility of Pyrene in POPC Bilayers. Biophysical Journal, 2005, 88, 1818-1827.	0.5	117
7	Solid-State NMR Analysis of the PGLa Peptide Orientation in DMPC Bilayers: Structural Fidelity of 2H-Labels versus High Sensitivity of 19F-NMR. Biophysical Journal, 2006, 90, 1676-1686.	0.5	110
8	Conformation and Membrane Orientation of Amphiphilic Helical Peptides by Oriented Circular Dichroism. Biophysical Journal, 2008, 95, 3872-3881.	0.5	109
9	Lipid Dependence of Membrane Anchoring Properties and Snorkeling Behavior of Aromatic and Charged Residues in Transmembrane Peptidesâ€. Biochemistry, 2002, 41, 7190-7198.	2.5	106
10	Orientation and Dynamics of Peptides in Membranes Calculated from 2H-NMR Data. Biophysical Journal, 2009, 96, 3223-3232.	0.5	99
11	Synergistic Insertion of Antimicrobial Magainin-Family Peptides inÂMembranes Depends on the Lipid Spontaneous Curvature. Biophysical Journal, 2013, 104, L9-L11.	0.5	99
12	Synergistic Transmembrane Alignment of the Antimicrobial Heterodimer PGLa/Magainin. Journal of Biological Chemistry, 2006, 281, 32089-32094.	3.4	97
13	Lipid shape is a key factor for membrane interactions of amphipathic helical peptides. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1764-1776.	2.6	96
14	Hydrophobic mismatch of mobile transmembrane helices: Merging theory and experiments. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1242-1249.	2.6	88
15	Conditions affecting the re-alignment of the antimicrobial peptide PGLa in membranes as monitored by solid state 2H-NMR. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1330-1342.	2.6	87
16	Influence of C-terminal amidation on the antimicrobial and hemolytic activities of cationic Î±-helical peptides. Pure and Applied Chemistry, 2007, 79, 717-728.	1.9	86
17	Molecular mechanism of synergy between the antimicrobial peptides PGLa and magainin 2. Scientific Reports, 2017, 7, 13153.	3.3	84
18	How reliable are molecular dynamics simulations of membrane active antimicrobial peptides?. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 2280-2288.	2.6	83

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19	Influence of the Length and Charge on the Activity of Î±-Helical Amphipathic Antimicrobial Peptides. Biochemistry, 2017, 56, 1680-1695.	2.5	83
20	Synergistic transmembrane insertion of the heterodimeric PGLa/magainin 2 complex studied by solid-state NMR. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 1667-1679.	2.6	79
21	Solid-State NMR Analysis Comparing the Designer-Made Antibiotic MSI-103 with Its Parent Peptide PGLa in Lipid Bilayers. Biochemistry, 2008, 47, 2601-2616.	2.5	77
22	Self-Assembly of Flexible Î²-Strands into Immobile Amyloid-Like Î²-Sheets in Membranes As Revealed by Solid-State 19F NMR. Journal of the American Chemical Society, 2012, 134, 6512-6515.	13.7	76
23	Using a Sterically Restrictive Amino Acid as a 19F NMR label To Monitor and To Control Peptide Aggregation in Membranes. Journal of the American Chemical Society, 2008, 130, 16515-16517.	13.7	70
24	3D Hydrophobic Moment Vectors as a Tool to Characterize the Surface Polarity of Amphiphilic Peptides. Biophysical Journal, 2014, 106, 2385-2394.	0.5	61
25	Hydrophobic mismatch demonstrated for membranolytic peptides and their use as molecular rulers to measure bilayer thickness in native cells. Scientific Reports, 2015, 5, 9388.	3.3	52
26	Reorientation and Dimerization of the Membrane-Bound Antimicrobial Peptide PGLa from Microsecond All-Atom MD Simulations. Biophysical Journal, 2012, 103, 472-482.	0.5	51
27	Dynamical structure of the short multifunctional peptide BP100 in membranes. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 940-949.	2.6	50
28	Influence of hydrophobic residues on the activity of the antimicrobial peptide magainin 2 and its synergy with PGLa. Journal of Peptide Science, 2015, 21, 436-445.	1.4	49
29	Structure Analysis and Conformational Transitions of the Cell Penetrating Peptide Transportan 10 in the Membrane-Bound State. PLoS ONE, 2014, 9, e99653.	2.5	46
30	AMPs and OMPs: Is the folding and bilayer insertion of Î²-stranded outer membrane proteins governed by the same biophysical principles as for Î±-helical antimicrobial peptides?. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 1944-1954.	2.6	44
31	Influence of Whole-Body Dynamics on 15N PISEMA NMR Spectra of Membrane Proteins: A Theoretical Analysis. Biophysical Journal, 2009, 96, 3233-3241.	0.5	40
32	Irregular structure of the HIV fusion peptide in membranes demonstrated by solid-state NMR and MD simulations. European Biophysics Journal, 2011, 40, 529-543.	2.2	38
33	Action of the multifunctional peptide BP100 on native biomembranes examined by solid-state NMR. Journal of Biomolecular NMR, 2015, 61, 287-298.	2.8	36
34	Homo- and heteromeric interaction strengths of the synergistic antimicrobial peptides PGLa and magainin 2 in membranes. European Biophysics Journal, 2016, 45, 535-547.	2.2	35
35	Stereochemical effects on the aggregation and biological properties of the fibril-forming peptide [KIGAKI]3 in membranes. Physical Chemistry Chemical Physics, 2013, 15, 8962.	2.8	33
36	Alanine scan and 2 H NMR analysis of the membrane-active peptide BP100 point to a distinct carpet mechanism of action. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 1328-1338.	2.6	32

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37	2H-NMR and MD Simulations Reveal Membrane-Bound Conformation of Magainin 2 and Its Synergy with PGLa. Biophysical Journal, 2016, 111, 2149-2161.	0.5	31
38	Extending the Hydrophobic Mismatch Concept to Amphiphilic Membranolytic Peptides. Journal of Physical Chemistry Letters, 2016, 7, 1116-1120.	4.6	30
39	Comparative analysis of the orientation of transmembrane peptides using solid-state 2H- and 15N-NMR: mobility matters. European Biophysics Journal, 2012, 41, 475-482.	2.2	22
40	Solid state NMR analysis of peptides in membranes: Influence of dynamics and labeling scheme. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 252-257.	2.6	20
41	Terminal charges modulate the pore forming activity of cationic amphipathic helices. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183243.	2.6	17
42	Micelleâ€Triggered Î²â€Hairpin to Î±â€Helix Transition in a 14â€Residue Peptide from a Cholineâ€Binding Repeat of the Pneumococcal Autolysin LytA. Chemistry - A European Journal, 2015, 21, 8076-8089.	3.3	16
43	Influence of transmembrane peptides on bilayers of phosphatidylcholines with different acyl chain lengths studied by solid-state NMR. Biochimica Et Biophysica Acta - Biomembranes, 2000, 1509, 335-345.	2.6	13
44	Phase diagrams of systems with cationic Î±-helical membrane-spanning model peptides and dioleoylphosphatidylcholine. Advances in Colloid and Interface Science, 2001, 89-90, 239-261.	14.7	12
45	Best of Two Worlds? How MD Simulations of Amphiphilic Helical Peptides in Membranes Can Complement Data from Oriented Solid-State NMR. Journal of Chemical Theory and Computation, 2018, 14, 6002-6014.	5.3	12
46	Helix Fraying and Lipid-Dependent Structure of a Short Amphipathic Membrane-Bound Peptide Revealed by Solid-State NMR. Journal of Physical Chemistry B, 2018, 122, 6236-6250.	2.6	12
47	Phosphate-dependent aggregation of [KL]n peptides affects their membranolytic activity. Scientific Reports, 2020, 10, 12300.	3.3	12
48	Using Fluorinated Amino Acids for Structure Analysis of Membrane-Active Peptides by Solid-State 19F-NMR. ACS Symposium Series, 2007, , 431-446.	0.5	11
49	Chiral supramolecular architecture of stable transmembrane pores formed by an Î±-helical antibiotic peptide in the presence of lyso-lipids. Scientific Reports, 2020, 10, 4710.	3.3	10
50	Structural and functional characterization of the pore-forming domain of pinholin S2168. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29637-29646.	7.1	9
51	Overlapping Properties of the Short Membrane-Active Peptide BP100 With (i) Polycationic TAT and (ii) Î±-helical Magainin Family Peptides. Frontiers in Cellular and Infection Microbiology, 2021, 11, 609542.	3.9	9
52	Î±-Methylene ordering of acyl chains differs in glucolipids and phosphatidylglycerol from Acholeplasma laidlawii membranes: 2H-NMR quadrupole splittings from individual lipids in mixed bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2000, 1468, 329-344.	2.6	7
53	Structure analysis of the membrane-bound dermcidin-derived peptide SSL-25 from human sweat. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 2308-2318.	2.6	7
54	Roles of Amphipathicity and Hydrophobicity in the Micelleâ€Driven Structural Switch of a 14â€mer Peptide Core from a Cholineâ€Binding Repeat. Chemistry - A European Journal, 2018, 24, 5825-5839.	3.3	7

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55	Membrane Interactions of Latarcins: Antimicrobial Peptides from Spider Venom. International Journal of Molecular Sciences, 2021, 22, 10156.	4.1	7
56	New insights into the influence of monofluorination on dimyristoylphosphatidylcholine membrane properties: A solid-state NMR study. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 654-663.	2.6	6
57	Canonical Azimuthal Rotations and Flanking Residues Constrain theÂOrientation of Transmembrane Helices. Biophysical Journal, 2013, 104, 1508-1516.	0.5	3
58	CHAPTER 16. Dynamic Structure Analysis of Peptides in Membranes by Solid-State NMR. New Developments in NMR, 2014, , 304-319.	0.1	3
59	Flow charts for the systematic solid-state 19F/2H-NMR structure analysis of membrane-bound peptides. Annual Reports on NMR Spectroscopy, 2020, , 79-118.	1.5	2
60	Solid-State NMR for Studying Peptide Structures and Peptide-Lipid Interactions in Membranes. , 2017, , 1-13.		2
61	Solid-State 19F-NMR Analysis of Peptides in Oriented Biomembranes. , 2017, , 1-18.		2
62	Length-Dependent Activity of Membrane-Bound Cationic Amphipathic Alpha-Helical Peptides. Biophysical Journal, 2014, 106, 292a.	0.5	1
63	Solid-State 19F-NMR Analysis of Peptides in Oriented Biomembranes. , 2018, , 651-667.		1
64	Antibiotic Potential and Biophysical Characterization of Amphipathic Î²-Stranded [XZ]n Peptides With Alternating Cationic and Hydrophobic Residues. Frontiers in Medical Technology, 2021, 3, 622096.	2.5	1
65	Solid-State NMR for Studying Peptide Structures and Peptide-Lipid Interactions in Membranes. , 2018, , 1985-1996.		1