Denise V Greathouse

List of Publications by Year
in descending order

74 papers	3,105 citations	186265 28 h-index	155660 55 g-index
77 all docs	77 docs citations	77 times ranked	2415 citing authors

#	Article	IF	Citations
1	Different Membrane Anchoring Positions of Tryptophan and Lysine in Synthetic Transmembrane Î±-Helical Peptides. Journal of Biological Chemistry, 1999, 274, 20839-20846.	3.4	298
2	Induction of Nonbilayer Structures in Diacylphosphatidylcholine Model Membranes by Transmembrane Î±-Helical Peptides:Â Importance of Hydrophobic Mismatch and Proposed Role of Tryptophansâ€. Biochemistry, 1996, 35, 1037-1045.	2.5	286
3	Interfacial Anchor Properties of Tryptophan Residues in Transmembrane Peptides Can Dominate over Hydrophobic Matching Effects in Peptideâ^'Lipid Interactionsâ€. Biochemistry, 2003, 42, 5341-5348.	2.5	251
4	Influence of Lipid/Peptide Hydrophobic Mismatch on the Thickness of Diacylphosphatidylcholine Bilayers. A 2H NMR and ESR Study Using Designed Transmembrane Î±-Helical Peptides and Gramicidin A. Biochemistry, 1998, 37, 9333-9345.	2.5	248
5	Sensitivity of Single Membrane-Spanning Î±-Helical Peptides to Hydrophobic Mismatch with a Lipid Bilayer:â€‰ Effects on Backbone Structure, Orientation, and Extent of Membrane Incorporation. Biochemistry, 2001, 40, 5000-5010.	2.5	171
6	Amino acid sequence modulation of gramicidin channel function: effects of tryptophan-to-phenylalanine substitutions on the single-channel conductance and duration. Biochemistry, 1991, 30, 8830-8839.	2.5	161
7	The Effects of Hydrophobic Mismatch between Phosphatidylcholine Bilayers and Transmembrane Î±-Helical Peptides Depend on the Nature of Interfacially Exposed Aromatic and Charged Residuesâ€. Biochemistry, 2002, 41, 8396-8404.	2.5	94
8	The Preference of Tryptophan for Membrane Interfaces. Journal of Biological Chemistry, 2008, 283, 22233-22243.	3.4	93
9	Buried lysine, but not arginine, titrates and alters transmembrane helix tilt. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1692-1695.	7.1	86
10	Hydrophobic Coupling of Lipid Bilayer Energetics to Channel Function. Journal of General Physiology, 2003, 121, 477-493.	1.9	85
11	Changes in Transmembrane Helix Alignment by Arginine Residues Revealed by Solid-State NMR Experiments and Coarse-Grained MD Simulations. Journal of the American Chemical Society, 2010, 132, 5803-5811.	13.7	78
12	Gramicidin A/Short-Chain Phospholipid Dispersions: Chain Length Dependence of Gramicidin Conformation and Lipid Organization. Biochemistry, 1994, 33, 4291-4299.	2.5	66
13	[28] Design and characterization of gramicidin channels. Methods in Enzymology, 1999, 294, 525-550.	1.0	66
14	Interfacial Positioning and Stability of Transmembrane Peptides in Lipid Bilayers Studied by Combining Hydrogen/Deuterium Exchange and Mass Spectrometry. Journal of Biological Chemistry, 2001, 276, 34501-34508.	3.4	66
15	On the helix sense of gramicidin A single channels. Proteins: Structure, Function and Bioinformatics, 1992, 12, 49-62.	2.6	64
16	Charged or Aromatic Anchor Residue Dependence of Transmembrane Peptide Tilt. Journal of Biological Chemistry, 2010, 285, 31723-31730.	3.4	62
17	Lipid bilayer thickness determines cholesterol's location in model membranes. Soft Matter, 2016, 12, 9417-9428.	2.7	61
18	Tryptophan-Anchored Transmembrane Peptides Promote Formation of Nonlamellar Phases in Phosphatidylethanolamine Model Membranes in a Mismatch-Dependent Mannerâ€. Biochemistry, 2000, 39, 3124-3133.	2.5	58

#	Article	IF	Citations
19	A general method for the preparation of mixed micelles of hydrophobic peptides and sodium dodecyl sulphate. FEBS Letters, 1994, 348, 161-165.	2.8	51
20	Orientation and Motion of Tryptophan Interfacial Anchors in Membrane-Spanning Peptides. Biochemistry, 2007, 46, 7514-7524.	2.5	48
21	Thiazolidinedione insulin sensitizers alter lipid bilayer properties and voltage-dependent sodium channel function: implications for drug discovery. Journal of General Physiology, 2011, 138, 249-270.	1.9	48
22	Tyrosine Replacing Tryptophan as an Anchor in GWALP Peptides. Biochemistry, 2012, 51, 2044-2053.	2.5	48
23	Helix formation and stability in membranes. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 2108-2117.	2.6	47
24	Helical Distortion in Tryptophan- and Lysine-Anchored Membrane-Spanning Î±-Helices as a Function of Hydrophobic Mismatch: A Solid-State Deuterium NMR Investigation Using the Geometric Analysis of Labeled Alanines Method. Biophysical Journal, 2008, 94, 480-491.	0.5	40
25	Role of Tryptophan Residues in Gramicidin Channel Organization and Function. Biophysical Journal, 2008, 95, 166-175.	0.5	39
26	Comparisons of Interfacial Phe, Tyr, and Trp Residues as Determinants of Orientation and Dynamics for GWALP Transmembrane Peptides. Biochemistry, 2014, 53, 3637-3645.	2.5	39
27	Palmitoylation-Induced Conformational Changes of Specific Side Chains in the Gramicidin Transmembrane Channel. Biochemistry, 1995, 34, 9299-9306.	2.5	37
28	Membrane binding of an acyl-lactoferricin B antimicrobial peptide from solid-state NMR experiments and molecular dynamics simulations. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 2019-2030.	2.6	29
29	Influence of Proline upon the Folding and Geometry of the WALP19 Transmembrane Peptide. Biochemistry, 2009, 48, 11883-11891.	2.5	28
30	Conformation of the Acylation Site of Palmitoylgramicidin in Lipid Bilayers of Dimyristoylphosphatidylcholineâ€. Biochemistry, 1996, 35, 3641-3648.	2.5	26
31	Ionization Properties of Histidine Residues in the Lipid Bilayer Membrane Environment. Journal of Biological Chemistry, 2016, 291, 19146-19156.	3.4	26
32	Combined Experimental/Theoretical Refinement of Indole Ring Geometry Using Deuterium Magnetic Resonance and ab Initio Calculations. Journal of the American Chemical Society, 2003, 125, 12268-12276.	13.7	24
33	Fluorinated Alcoholsâ€™ Effects on Lipid Bilayer Properties. Biophysical Journal, 2018, 115, 679-689.	0.5	23
34	Membrane Bending Moduli of Coexisting Liquid Phases Containing Transmembrane Peptide. Biophysical Journal, 2018, 114, 2152-2164.	0.5	22
35	Modulation of Gramicidin Channel Structure and Function by the Aliphatic â€œSpacerâ€•Residues 10, 12, and 14 between the Tryptophans. Biochemistry, 1999, 38, 1030-1039.	2.5	20
36	Modulation of membrane structure and function by hydrophobic mismatch between proteins and lipids. Pure and Applied Chemistry, 1998, 70, 75-82.	1.9	20

#	Article	IF	Citations
37	The Membrane Interface Dictates Different Anchor Roles for â€œInner Pairâ€•and â€œOuter Pairâ€•Tryptophan Indole Rings in Gramicidin A Channels. Biochemistry, 2011, 50, 4855-4866.	2.5	17
38	Juxtaâ€terminal Helix Unwinding as a Stabilizing Factor to Modulate the Dynamics of Transmembrane Helices. ChemBioChem, 2016, 17, 462-465.	2.6	16
39	Dynamic regulation of lipidâ€“protein interactions. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 1849-1859.	2.6	15
40	Neighboring Aliphatic/Aromatic Side Chain Interactions between Residues 9 and 10 in Gramicidin Channelsâ€. Biochemistry, 2000, 39, 2235-2242.	2.5	14
41	Influence of High pH and Cholesterol on Single Arginine-Containing Transmembrane Peptide Helices. Biochemistry, 2016, 55, 6337-6343.	2.5	13
42	Single Tryptophan and Tyrosine Comparisons in the N-Terminal and C-Terminal Interface Regions of Transmembrane GWALP Peptides. Journal of Physical Chemistry B, 2013, 117, 13786-13794.	2.6	12
43	Influence of glutamic acid residues and pH on the properties of transmembrane helices. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 484-492.	2.6	12
44	Control of Transmembrane Helix Dynamics by Interfacial Tryptophan Residues. Biophysical Journal, 2018, 114, 2617-2629.	0.5	12
45	Proline Kink Angle Distributions for GWALP23 in Lipid Bilayers of Different Thicknesses. Biochemistry, 2012, 51, 3554-3564.	2.5	11
46	Peptide Backbone Chemistry and Membrane Channel Function:Â Effects of a Single Amide-to-Ester Replacement on Gramicidin Channel Structure and Functionâ€. Biochemistry, 2001, 40, 1460-1472.	2.5	10
47	Transmembrane Helix Integrity versus Fraying To Expose Hydrogen Bonds at a Membraneâ€“Water Interface. Biochemistry, 2019, 58, 633-645.	2.5	10
48	Steric Interactions of Valines 1, 5, and 7 in [Valine 5, d-Alanine 8] Gramicidin A Channels. Biophysical Journal, 1999, 77, 1927-1935.	0.5	7
49	Properties of Membrane-Incorporated WALP Peptides That Are Anchored on Only One End. Biochemistry, 2012, 51, 10066-10074.	2.5	7
50	Breaking the Backbone: Central Arginine Residues Induce Membrane Exit and Helix Distortions within a Dynamic Membrane Peptide. Journal of Physical Chemistry B, 2019, 123, 8034-8047.	2.6	7
51	Lipid interactions of acylated tryptophanâ€methylated lactoferricin peptides by solidâ€state NMR. Journal of Peptide Science, 2008, 14, 1103-1110.	1.4	6
52	Polar Groups in Membrane Channels: Consequences of Replacing Alanines with Serines in Membrane-Spanning Gramicidin Channels. Biochemistry, 2010, 49, 6856-6865.	2.5	6
53	Influence of Lipid Saturation, Hydrophobic Length and Cholesterol on Doubleâ€Arginineâ€Containing Helical Peptides in Bilayer Membranes. ChemBioChem, 2019, 20, 2784-2792.	2.6	5
54	Examination of pH dependency and orientation differences of membrane spanning alpha helices carrying a single or pair of buried histidine residues. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183501.	2.6	3

#	Article	IF	Citations
55	Lipid-Dependent Titration of Glutamic Acid at a Bilayer Membrane Interface. ACS Omega, 2021, 6, 8488-8494.	3.5	3
56	Heptapeptide Mimic of Ohmefentanyl Binding in the Discontinuous Î¼-Opiod Receptorâ€. Organic Letters, 2005, 7, 2953-2956.	4.6	2
57	Using Tyrosine to Anchor a Transmembrane Peptide. Biophysical Journal, 2011, 100, 635a-636a.	0.5	2
58	Design and Characterization of Gramicidin Channels with Side Chain or Backbone Mutations. Novartis Foundation Symposium, 1999, 225, 44-61.	1.1	2
59	Characterization of Transmembrane Peptide-Anchored Lactoferricin in Mixed Lipids. Biophysical Journal, 2009, 96, 609a.	0.5	1
60	Influence of Cholesterol on Single Arginine-Containing Transmembrane Helical Peptides. Biophysical Journal, 2015, 108, 553a.	0.5	1
61	Flanking aromatic residue competition influences transmembrane peptide helix dynamics. FEBS Letters, 2020, 594, 4280-4291.	2.8	1
62	Illuminating Disorder Induced by Glu in a Stable Arg-Anchored Transmembrane Helix. ACS Omega, 2021, 6, 20611-20618.	3.5	1
63	Importance of Aromatic Anchor Residue Identity and Location for the Tilt and Dynamics of Transmembrane Peptides. Biophysical Journal, 2012, 102, 76a.	0.5	0
64	Characterization of Antimicrobial Methylated Tryptophan Retro Lactoferricin Peptides by Solid State NMR and Fluorescence Spectroscopy. Biophysical Journal, 2013, 104, 95a.	0.5	0
65	Influence of pH and Side-Chain Negative Charge on the Behavior of Designed Transmembrane Peptides in Lipid Bilayers. Biophysical Journal, 2013, 104, 92a.	0.5	0
66	Solid-State NMR and Fluorescence Spectroscopy of Antimicrobial Methylated-Tryptophan Lactoferricin Peptides with Gln, Gly or Pro as the Central Residue. Biophysical Journal, 2013, 104, 430a.	0.5	0
67	Influence of Histidine Residues on Transmembrane Helix Alignment. Biophysical Journal, 2013, 104, 597a.	0.5	0
68	Influence of pH and Histidine Residues on Membrane-Spanning Helical Peptides. Biophysical Journal, 2014, 106, 712a.	0.5	0
69	Influence of Glutamic Acid Residues on the Properties of Model Membrane-Spanning Helices. Biophysical Journal, 2014, 106, 711a-712a.	0.5	0
70	Influence of a Central Tryptophan and of Cholesterol on the Properties ofÂDefined Transmembrane Helical Peptides. Biophysical Journal, 2014, 106, 711a.	0.5	0
71	Characterizing Moderately Short Antimicrobial Tryptophan/Arginine-Rich Peptides. Biophysical Journal, 2014, 106, 96a-97a.	0.5	0
72	Disorderly Polyunsaturated Fatty Acids and Orderly Cholesterol: Just How do they get along in a Membrane?. Biophysical Journal, 2015, 108, 412a.	0.5	0

#	Article	IF	Citations
73	Influence of interfacial tryptophan residues on an arginine-flanked transmembrane helix. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183134.	2.6	0
74	Peptide Influences on Lipids. Novartis Foundation Symposium, 1999, 225, 170-187.	1.1	0