Donald M Engelman

List of Publications by Year
in descending order

96
papers

13,627
citations

39113
52
h-index

45040
94
g-index

98
all docs

98
docs citations

98
times ranked

12453
citing authors

#	Article	IF	Citations
1	pHLIP Peptides Target Acidity in Activated Macrophages. Molecular Imaging and Biology, 2022, 24, 874-885.	1.3	7
2	Tumor-selective, antigen-independent delivery of a pH sensitive peptide-topoisomerase inhibitor conjugate suppresses tumor growth without systemic toxicity. NAR Cancer, 2021, 3, zcab021.	1.6	16
3	MicroRNA function can be reversed by altering target gene expression levels. IScience, 2021, 24, 103208.	1.9	8
4	Pharmacokinetic modeling reveals parameters that govern tumor targeting and delivery by a pH-Low Insertion Peptide (pHLIP). Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	9
5	Tumor-Targeted, Cytoplasmic Delivery of Large, Polar Molecules Using a pH-Low Insertion Peptide. Molecular Pharmaceutics, 2020, 17, 461-471.	2.3	15
6	pHLIP ICG for delineation of tumors and blood flow during fluorescence-guided surgery. Scientific Reports, 2020, 10, 18356.	1.6	19
7	Kinetics of pHLIP peptide insertion into and exit from a membrane. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12095-12100.	3.3	14
8	Ku80-Targeted pH-Sensitive Peptideâ€"PNA Conjugates Are Tumor Selective and Sensitize Cancer Cells to Ionizing Radiation. Molecular Cancer Research, 2020, 18, 873-882.	1.5	18
9	Targeting Acidic Diseased Tissues by pH-Triggered Membrane-Associated Peptide Folding. Frontiers in Bioengineering and Biotechnology, 2020, 8, 335.	2.0	32
10	Mapping pH at Cancer Cell Surfaces. Molecular Imaging and Biology, 2019, 21, 1020-1025.	1.3	17
11	Peptides of pHLIP family for targeted intracellular and extracellular delivery of cargo molecules to tumors. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2811-E2818.	3.3	92
12	Bilayer Thickness and Curvature Influence Binding and Insertion of a pHLIP Peptide. Biophysical Journal, 2018, 114, 2107-2115.	0.2	24
13	Applications of pHLIP Technology for Cancer Imaging and Therapy. Trends in Biotechnology, 2017, 35, 653-664.	4.9	90
14	Two transmembrane dimers of the bovine papillomavirus E5 oncoprotein clamp the PDGF Î² receptor in an active dimeric conformation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7262-E7271.	3.3	26
15	Probe for the measurement of cell surface pH in vivo and ex vivo. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8177-8181.	3.3	171
16	Targeted imaging of urothelium carcinoma in human bladders by an ICG pHLIP peptide ex vivo. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11829-11834.	3.3	54
17	PET Imaging of Extracellular pH in Tumors with ⁶⁴Cu- and ¹⁸F-Labeled pHLIP Peptides: A Structureâ€"Activity Optimization Study. Bioconjugate Chemistry, 2016, 27, 2014-2023.	1.8	52
18	OncomiR or Tumor Suppressor? The Duplicity of MicroRNAs in Cancer. Cancer Research, 2016, 76, 3666-3670.	0.4	589

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19	Membranes Do Not Tell Proteins How To Fold. Biochemistry, 2016, 55, 5-18.	1.2	49
20	The pH low insertion peptide pHLIP Variant 3 as a novel marker of acidic malignant lesions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9710-9715.	3.3	54
21	Biologically active LIL proteins built with minimal chemical diversity. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4717-25.	3.3	32
22	Targeting acidity in diseased tissues: Mechanism and applications of the membrane-inserting peptide, pHLIP. Archives of Biochemistry and Biophysics, 2015, 565, 40-48.	1.4	55
23	MicroRNA silencing for cancer therapy targeted to the tumour microenvironment. Nature, 2015, 518, 107-110.	13.7	709
24	Targeting diseased tissues by pHLIP insertion at low cell surface pH. Frontiers in Physiology, 2014, 5, 97.	1.3	74
25	pHLIP-FIRE, a Cell Insertion-Triggered Fluorescent Probe for Imaging Tumors Demonstrates Targeted Cargo Delivery In Vivo. ACS Chemical Biology, 2014, 9, 2545-2553.	1.6	31
26	Understanding the pharmacological properties of a metabolic PET tracer in prostate cancer. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7254-7259.	3.3	40
27	Mapping the Homodimer Interface of an Optimized, Artificial, Transmembrane Protein Activator of the Human Erythropoietin Receptor. PLoS ONE, 2014, 9, e95593.	1.1	6
28	pH (low) insertion peptide (pHLIP) targets ischemic myocardium. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 82-86.	3.3	61
29	pHLIP peptide targets nanogold particles to tumors. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 465-470.	3.3	135
30	Aspartate Embedding Depth Affects pHLIPâ€™s Insertion pKa. Biochemistry, 2013, 52, 4595-4604.	1.2	42
31	Peptide targeting and imaging of damaged lung tissue in influenza-infected mice. Future Microbiology, 2013, 8, 257-269.	1.0	20
32	Family of pH (low) insertion peptides for tumor targeting. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5834-5839.	3.3	172
33	Membrane physical properties influence transmembrane helix formation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14422-14427.	3.3	65
34	In Vivo pH Imaging with 99mTc-pHLIP. Molecular Imaging and Biology, 2012, 14, 725-734.	1.3	60
35	Modulation of the pHLIP Transmembrane Helix Insertion Pathway. Biophysical Journal, 2012, 102, 1846-1855.	0.2	55
36	Tuning a Polar Molecule for Selective Cytoplasmic Delivery by a pH (Low) Insertion Peptide. Biochemistry, 2011, 50, 10215-10222.	1.2	43

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37	Roles of Carboxyl Groups in the Transmembrane Insertion of Peptides. Journal of Molecular Biology, 2011, 413, 359-371.	2.0	60
38	Measuring Tumor Aggressiveness and Targeting Metastatic Lesions with Fluorescent pHLIP. Molecular Imaging and Biology, 2011, 13, 1146-1156.	1.3	94
39	Thrombopoietin receptor activation: transmembrane helix dimerization, rotation, and allosteric modulation. FASEB Journal, 2011, 25, 2234-2244.	0.2	70
40	Construction and genetic selection of small transmembrane proteins that activate the human erythropoietin receptor. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3447-3452.	3.3	37
41	pH-sensitive membrane peptides (pHLIPs) as a novel class of delivery agents. Molecular Membrane Biology, 2010, 27, 341-352.	2.0	113
42	pH-(low)-insertion-peptide (pHLIP) translocation of membrane impermeable phalloidin toxin inhibits cancer cell proliferation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20246-20250.	3.3	129
43	pH (low) insertion peptide (pHLIP) inserts across a lipid bilayer as a helix and exits by a different path. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4081-4086.	3.3	143
44	Tuning the insertion properties of pHLIP. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1041-1046.	1.4	61
45	Artificial Transmembrane Oncoproteins Smaller than the Bovine Papillomavirus E5 Protein Redefine Sequence Requirements for Activation of the Platelet-Derived Growth Factor Î² Receptor. Journal of Virology, 2009, 83, 9773-9785.	1.5	24
46	Accurate Analysis of Tumor Margins Using a Fluorescent pH Low Insertion Peptide (pHLIP). International Journal of Molecular Sciences, 2009, 10, 3478-3487.	1.8	28
47	A Novel Technology for the Imaging of Acidic Prostate Tumors by Positron Emission Tomography. Cancer Research, 2009, 69, 4510-4516.	0.4	154
48	Computational analysis of membrane proteins: the largest class of drug targets. Drug Discovery Today, 2009, 14, 1130-1135.	3.2	204
49	pHLIP-Mediated Translocation of Membrane-Impermeable Molecules into Cells. Chemistry and Biology, 2009, 16, 754-762.	6.2	69
50	Translocating cellâ€impermeable molecules through the plasma membrane of cancer cells. FASEB Journal, 2009, 23, 796.7.	0.2	0
51	Targeting acidic diseased tissue: New technology based on use of the pH (Low) Insertion Peptide (pHLIP). Chimica Oggi, 2009, 27, 34-37.	1.7	35
52	Bilayer Interactions of pHLIP, a Peptide that Can Deliver Drugs and Target Tumors. Biophysical Journal, 2008, 95, 225-235.	0.2	71
53	Protein area occupancy at the center of the red blood cell membrane. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2848-2852.	3.3	231
54	Energetics of peptide (pHLIP) binding to and folding across a lipid bilayer membrane. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15340-15345.	3.3	159

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55	Mechanism and uses of a membrane peptide that targets tumors and other acidic tissues in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7893-7898.	3.3	263
56	A Monomeric Membrane Peptide that Lives in Three Worlds: In Solution, Attached to, and Inserted across Lipid Bilayers. Biophysical Journal, 2007, 93, 2363-2372.	0.2	176
57	The Stability of Transmembrane Helix Interactions Measured in a Biological Membrane. Journal of Molecular Biology, 2006, 358, 1221-1228.	2.0	55
58	Translocation of molecules into cells by pH-dependent insertion of a transmembrane helix. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6460-6465.	3.3	209
59	phâ€Triggered Transport of Molecules into Cells by Transmembrane Helix Insertion. FASEB Journal, 2006, 20, A457.	0.2	0
60	Membranes are more mosaic than fluid. Nature, 2005, 438, 578-580.	13.7	776
61	Transmembrane homodimerization of receptor-like protein tyrosine phosphatases. FEBS Letters, 2005, 579, 3855-3858.	1.3	50
62	The Affinity of GXXXG Motifs in Transmembrane Helix-Helix Interactions Is Modulated by Long-range Communication. Journal of Biological Chemistry, 2004, 279, 16591-16597.	1.6	103
63	Selection and Characterization of Small Random Transmembrane Proteins that Bind and Activate the Platelet-derived Growth Factor Î² Receptor. Journal of Molecular Biology, 2004, 338, 907-920.	2.0	54
64	Computational analysis of membrane proteins: genomic occurrence, structure prediction and helix interactions. Quarterly Reviews of Biophysics, 2004, 37, 121-146.	2.4	62
65	Membrane protein folding: beyond the two stage model. FEBS Letters, 2003, 555, 122-125.	1.3	273
66	Electrostatic Fasteners Hold the T Cell Receptor-CD3 Complex Together. Molecular Cell, 2003, 11, 5-6.	4.5	27
67	Computation and mutagenesis suggest a right-handed structure for the synaptobrevin transmembrane dimer. Proteins: Structure, Function and Bioinformatics, 2001, 45, 313-317.	1.5	52
68	Design of single-layer Î²-sheets without a hydrophobic core. Nature, 2000, 403, 456-460.	13.7	57
69	Statistical analysis of amino acid patterns in transmembrane helices: the GxxxG motif occurs frequently and in association with Î²-branched residues at neighboring positions. Journal of Molecular Biology, 2000, 296, 921-936.	2.0	567
70	The GxxxG motif: A framework for transmembrane helix-helix association. Journal of Molecular Biology, 2000, 296, 911-919.	2.0	863
71	Interhelical hydrogen bonding drives strong interactions in membrane proteins. Nature Structural Biology, 2000, 7, 154-160.	9.7	226
72	Helical Membrane Protein Folding, Stability, and Evolution. Annual Review of Biochemistry, 2000, 69, 881-922.	5.0	582

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73	Multistep Denaturation ofBorrelia burgdorferiOspA, a Protein Containing a Single-Layer Î²-Sheetâ€. Biochemistry, 1999, 38, 4757-4767.	1.2	34
74	Models for the Transmembrane Region of the Phospholamban Pentamer: Which Is Correct? a. Annals of the New York Academy of Sciences, 1998, 853, 178-185.	1.8	9
75	A solution SAXS study of <i>borrelia burgdorferi</i> OspA, a protein containing a singleâ€layer Î²â€sheet. Protein Science, 1998, 7, 2681-2683.	3.1	20
76	STRUCTURAL PERSPECTIVES OF PHOSPHOLAMBAN, A HELICAL TRANSMEMBRANE PENTAMER. Annual Review of Biophysics and Biomolecular Structure, 1997, 26, 157-179.	18.3	67
77	A Transmembrane Helix Dimer: Structure and Implications. Science, 1997, 276, 131-133.	6.0	963
78	The effect of point mutations on the free energy of transmembrane Î±-helix dimerization. Journal of Molecular Biology, 1997, 272, 266-275.	2.0	237
79	Spontaneous, pH-Dependent Membrane Insertion of a Transbilayer Î±-Helixâ€. Biochemistry, 1997, 36, 15177-15192.	1.2	234
80	Dimerization of the p185neu transmembrane domain is necessary but not sufficient for transformation. Oncogene, 1997, 14, 687-696.	2.6	71
81	Are there dominant membrane protein families with a given number of helices?. , 1997, 28, 465-466.		58
82	Improved prediction for the structure of the dimeric transmembrane domain of glycophorin A obtained through global searching. , 1996, 26, 257-261.		149
83	Leucine side-chain rotamers in a glycophorin A transmembrane peptide as revealed by three-bond carbon?carbon couplings and 13C chemical shifts. Journal of Biomolecular NMR, 1996, 7, 256-60.	1.6	34
84	Surface point mutations that significantly alter the structure and stability of a protein's denatured state. Protein Science, 1996, 5, 2009-2019.	3.1	46
85	Mapping the lipid-exposed surfaces of membrane proteins. Nature Structural Biology, 1996, 3, 240-243.	9.7	19
86	Computational searching and mutagenesis suggest a structure for the pentameric transmembrane domain of phospholamban. Nature Structural and Molecular Biology, 1995, 2, 154-162.	3.6	198
87	A dimerization motif for transmembrane Î±â€“helices. Nature Structural Biology, 1994, 1, 157-163.	9.7	294
88	Specificity and promiscuity in membrane helix interactions. Quarterly Reviews of Biophysics, 1994, 27, 157-218.	2.4	182
89	Sequence specificity in the dimerization of transmembrane .alpha.-helixes. Biochemistry, 1992, 31, 12719-12725.	1.2	520
90	Bacteriorhodopsin can be refolded from two independently stable transmembrane helixes and the complementary five-helix fragment. Biochemistry, 1992, 31, 6144-6151.	1.2	158

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91	BACTERIORHODOPSIN RECONSTITUTED FROM TWO INDIVIDUAL HELICES AND THE COMPLEMENTARY FIVE-HELIX FRAGMENT IS PHOTOACTIVE. Photochemistry and Photobiology, 1992, 56, 895-901.	1.3	23
92	Refolding of bacteriorhodopsin in lipid bilayers. Journal of Molecular Biology, 1987, 198, 655-676.	2.0	286
93	Lipid bilayer thickness varies linearly with acyl chain length in fluid phosphatidylcholine vesicles. Journal of Molecular Biology, 1983, 166, 211-217.	2.0	779
94	Inelastic neutron scattering analysis of hexokinase dynamics and its modification on binding of glucose. Nature, 1982, 300, 84-86.	13.7	56
95	X-Ray and Neutron Small-Angle Scattering Studies of the Complex between Protein S1 and the 30-S Ribosomal Subunit. FEBS Journal, 1978, 85, 529-534.	0.2	7
96	Molecular Mechanism for the Interaction of Phospholipid with Cholesterol. Nature: New Biology, 1972, 237, 42-44.	4.5	140