

# Donald M Engelman

## List of Publications by Year in descending order

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96  
papers

13,627  
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31976  
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docs citations

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times ranked

11100  
citing authors

#	ARTICLE	IF	CITATIONS
1	pHLIP Peptides Target Acidity in Activated Macrophages. <i>Molecular Imaging and Biology</i> , 2022, 24, 874-885.	2.6	7
2	Tumor-selective, antigen-independent delivery of a pH sensitive peptide-topoisomerase inhibitor conjugate suppresses tumor growth without systemic toxicity. <i>NAR Cancer</i> , 2021, 3, zcab021.	3.1	16
3	MicroRNA function can be reversed by altering target gene expression levels. <i>IScience</i> , 2021, 24, 103208.	4.1	8
4	Pharmacokinetic modeling reveals parameters that govern tumor targeting and delivery by a pH-Low Insertion Peptide (pHLIP). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	9
5	Tumor-Targeted, Cytoplasmic Delivery of Large, Polar Molecules Using a pH-Low Insertion Peptide. <i>Molecular Pharmaceutics</i> , 2020, 17, 461-471.	4.6	15
6	pHLIP ICG for delineation of tumors and blood flow during fluorescence-guided surgery. <i>Scientific Reports</i> , 2020, 10, 18356.	3.3	19
7	Kinetics of pHLIP peptide insertion into and exit from a membrane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 12095-12100.	7.1	14
8	Ku80-Targeted pH-Sensitive Peptideâ€PNA Conjugates Are Tumor Selective and Sensitize Cancer Cells to Ionizing Radiation. <i>Molecular Cancer Research</i> , 2020, 18, 873-882.	3.4	18
9	Targeting Acidic Diseased Tissues by pH-Triggered Membrane-Associated Peptide Folding. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 335.	4.1	32
10	Mapping pH at Cancer Cell Surfaces. <i>Molecular Imaging and Biology</i> , 2019, 21, 1020-1025.	2.6	17
11	Peptides of pHLIP family for targeted intracellular and extracellular delivery of cargo molecules to tumors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E2811-E2818.	7.1	92
12	Bilayer Thickness and Curvature Influence Binding and Insertion of a pHLIP Peptide. <i>Biophysical Journal</i> , 2018, 114, 2107-2115.	0.5	24
13	Applications of pHLIP Technology for Cancer Imaging and Therapy. <i>Trends in Biotechnology</i> , 2017, 35, 653-664.	9.3	90
14	Two transmembrane dimers of the bovine papillomavirus E5 oncoprotein clamp the PDGF $\beta$ receptor in an active dimeric conformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E7262-E7271.	7.1	26
15	Probe for the measurement of cell surface pH in vivo and ex vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 8177-8181.	7.1	171
16	Targeted imaging of urothelium carcinoma in human bladders by an ICG pHLIP peptide ex vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 11829-11834.	7.1	54
17	PET Imaging of Extracellular pH in Tumors with <sup>64</sup> Cu- and <sup>18</sup> F-Labeled pHLIP Peptides: A Structureâ€Activity Optimization Study. <i>Bioconjugate Chemistry</i> , 2016, 27, 2014-2023.	3.6	52
18	OncomiR or Tumor Suppressor? The Duplicity of MicroRNAs in Cancer. <i>Cancer Research</i> , 2016, 76, 3666-3670.	0.9	589

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19	Membranes Do Not Tell Proteins How To Fold. <i>Biochemistry</i> , 2016, 55, 5-18.	2.5	49
20	The pH low insertion peptide pHLIP Variant 3 as a novel marker of acidic malignant lesions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 9710-9715.	7.1	54
21	Biologically active LIL proteins built with minimal chemical diversity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E4717-25.	7.1	32
22	Targeting acidity in diseased tissues: Mechanism and applications of the membrane-inserting peptide, pHLIP. <i>Archives of Biochemistry and Biophysics</i> , 2015, 565, 40-48.	3.0	55
23	MicroRNA silencing for cancer therapy targeted to the tumour microenvironment. <i>Nature</i> , 2015, 518, 107-110.	27.8	709
24	Targeting diseased tissues by pHLIP insertion at low cell surface pH. <i>Frontiers in Physiology</i> , 2014, 5, 97.	2.8	74
25	pHLIP-FIRE, a Cell Insertion-Triggered Fluorescent Probe for Imaging Tumors Demonstrates Targeted Cargo Delivery In Vivo. <i>ACS Chemical Biology</i> , 2014, 9, 2545-2553.	3.4	31
26	Understanding the pharmacological properties of a metabolic PET tracer in prostate cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 7254-7259.	7.1	40
27	Mapping the Homodimer Interface of an Optimized, Artificial, Transmembrane Protein Activator of the Human Erythropoietin Receptor. <i>PLoS ONE</i> , 2014, 9, e95593.	2.5	6
28	pH (low) insertion peptide (pHLIP) targets ischemic myocardium. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 82-86.	7.1	61
29	pHLIP peptide targets nanogold particles to tumors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 465-470.	7.1	135
30	Aspartate Embedding Depth Affects pHLIP's Insertion pKa. <i>Biochemistry</i> , 2013, 52, 4595-4604.	2.5	42
31	Peptide targeting and imaging of damaged lung tissue in influenza-infected mice. <i>Future Microbiology</i> , 2013, 8, 257-269.	2.0	20
32	Family of pH (low) insertion peptides for tumor targeting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 5834-5839.	7.1	172
33	Membrane physical properties influence transmembrane helix formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14422-14427.	7.1	65
34	In Vivo pH Imaging with <sup>99m</sup> Tc-pHLIP. <i>Molecular Imaging and Biology</i> , 2012, 14, 725-734.	2.6	60
35	Modulation of the pHLIP Transmembrane Helix Insertion Pathway. <i>Biophysical Journal</i> , 2012, 102, 1846-1855.	0.5	55
36	Tuning a Polar Molecule for Selective Cytoplasmic Delivery by a pH (Low) Insertion Peptide. <i>Biochemistry</i> , 2011, 50, 10215-10222.	2.5	43

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37	Roles of Carboxyl Groups in the Transmembrane Insertion of Peptides. <i>Journal of Molecular Biology</i> , 2011, 413, 359-371.	4.2	60
38	Measuring Tumor Aggressiveness and Targeting Metastatic Lesions with Fluorescent pHLP. <i>Molecular Imaging and Biology</i> , 2011, 13, 1146-1156.	2.6	94
39	Thrombopoietin receptor activation: transmembrane helix dimerization, rotation, and allosteric modulation. <i>FASEB Journal</i> , 2011, 25, 2234-2244.	0.5	70
40	Construction and genetic selection of small transmembrane proteins that activate the human erythropoietin receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 3447-3452.	7.1	37
41	pH-sensitive membrane peptides (pHLIPs) as a novel class of delivery agents. <i>Molecular Membrane Biology</i> , 2010, 27, 341-352.	2.0	113
42	pH-(low)-insertion-peptide (pHLIP) translocation of membrane impermeable phalloidin toxin inhibits cancer cell proliferation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 20246-20250.	7.1	129
43	pH (low) insertion peptide (pHLIP) inserts across a lipid bilayer as a helix and exits by a different path. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 4081-4086.	7.1	143
44	Tuning the insertion properties of pHLIP. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010, 1798, 1041-1046.	2.6	61
45	Artificial Transmembrane Oncoproteins Smaller than the Bovine Papillomavirus E5 Protein Redefine Sequence Requirements for Activation of the Platelet-Derived Growth Factor $\beta$ Receptor. <i>Journal of Virology</i> , 2009, 83, 9773-9785.	3.4	24
46	Accurate Analysis of Tumor Margins Using a Fluorescent pH Low Insertion Peptide (pHLIP). <i>International Journal of Molecular Sciences</i> , 2009, 10, 3478-3487.	4.1	28
47	A Novel Technology for the Imaging of Acidic Prostate Tumors by Positron Emission Tomography. <i>Cancer Research</i> , 2009, 69, 4510-4516.	0.9	154
48	Computational analysis of membrane proteins: the largest class of drug targets. <i>Drug Discovery Today</i> , 2009, 14, 1130-1135.	6.4	204
49	pHLIP-Mediated Translocation of Membrane-Impermeable Molecules into Cells. <i>Chemistry and Biology</i> , 2009, 16, 754-762.	6.0	69
50	Translocating cell-impermeable molecules through the plasma membrane of cancer cells. <i>FASEB Journal</i> , 2009, 23, 796.7.	0.5	0
51	Targeting acidic diseased tissue: New technology based on use of the pH (Low) Insertion Peptide (pHLIP). <i>Chimica Oggi</i> , 2009, 27, 34-37.	1.7	35
52	Bilayer Interactions of pHLIP, a Peptide that Can Deliver Drugs and Target Tumors. <i>Biophysical Journal</i> , 2008, 95, 225-235.	0.5	71
53	Protein area occupancy at the center of the red blood cell membrane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 2848-2852.	7.1	231
54	Energetics of peptide (pHLIP) binding to and folding across a lipid bilayer membrane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 15340-15345.	7.1	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.	7.1	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.	0.5	176
57	The Stability of Transmembrane Helix Interactions Measured in a Biological Membrane. Journal of Molecular Biology, 2006, 358, 1221-1228.	4.2	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.	7.1	209
59	pH-Triggered Transport of Molecules into Cells by Transmembrane Helix Insertion. FASEB Journal, 2006, 20, A457.	0.5	0
60	Membranes are more mosaic than fluid. Nature, 2005, 438, 578-580.	27.8	776
61	Transmembrane homodimerization of receptor-like protein tyrosine phosphatases. FEBS Letters, 2005, 579, 3855-3858.	2.8	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.	3.4	103
63	Selection and Characterization of Small Random Transmembrane Proteins that Bind and Activate the Platelet-derived Growth Factor $\beta$ Receptor. Journal of Molecular Biology, 2004, 338, 907-920.	4.2	54
64	Computational analysis of membrane proteins: genomic occurrence, structure prediction and helix interactions. Quarterly Reviews of Biophysics, 2004, 37, 121-146.	5.7	62
65	Membrane protein folding: beyond the two stage model. FEBS Letters, 2003, 555, 122-125.	2.8	273
66	Electrostatic Fasteners Hold the T Cell Receptor-CD3 Complex Together. Molecular Cell, 2003, 11, 5-6.	9.7	27
67	Computation and mutagenesis suggest a right-handed structure for the synaptobrevin transmembrane dimer. Proteins: Structure, Function and Bioinformatics, 2001, 45, 313-317.	2.6	52
68	Design of single-layer $\beta$ -sheets without a hydrophobic core. Nature, 2000, 403, 456-460.	27.8	57
69	Statistical analysis of amino acid patterns in transmembrane helices: the GxxxG motif occurs frequently and in association with $\beta$ -branched residues at neighboring positions. Journal of Molecular Biology, 2000, 296, 921-936.	4.2	567
70	The GxxxG motif: A framework for transmembrane helix-helix association. Journal of Molecular Biology, 2000, 296, 911-919.	4.2	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.	11.1	582

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73	Multistep Denaturation of <i>Borrelia burgdorferi</i> OspA, a Protein Containing a Single-Layer $\beta^2$ -Sheet. <i>Biochemistry</i> , 1999, 38, 4757-4767.	2.5	34
74	Models for the Transmembrane Region of the Phospholamban Pentamer: Which Is Correct? <i>a. Annals of the New York Academy of Sciences</i> , 1998, 853, 178-185.	3.8	9
75	A solution SAXS study of <i>Borrelia burgdorferi</i> OspA, a protein containing a single-layer $\beta^2$ -sheet. <i>Protein Science</i> , 1998, 7, 2681-2683.	7.6	20
76	STRUCTURAL PERSPECTIVES OF PHOSPHOLAMBAN, A HELICAL TRANSMEMBRANE PENTAMER. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 1997, 26, 157-179.	18.3	67
77	A Transmembrane Helix Dimer: Structure and Implications. <i>Science</i> , 1997, 276, 131-133.	12.6	963
78	The effect of point mutations on the free energy of transmembrane $\beta$ -helix dimerization. <i>Journal of Molecular Biology</i> , 1997, 272, 266-275.	4.2	237
79	Spontaneous, pH-Dependent Membrane Insertion of a Transbilayer $\beta$ -Helix. <i>Biochemistry</i> , 1997, 36, 15177-15192.	2.5	234
80	Dimerization of the p185neu transmembrane domain is necessary but not sufficient for transformation. <i>Oncogene</i> , 1997, 14, 687-696.	5.9	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. <i>Proteins: Structure, Function and Bioinformatics</i> , 1996, 26, 257-261.	2.6	149
83	Leucine side-chain rotamers in a glycophorin A transmembrane peptide as revealed by three-bond carbon-carbon couplings and $^{13}\text{C}$ chemical shifts. <i>Journal of Biomolecular NMR</i> , 1996, 7, 256-60.	2.8	34
84	Surface point mutations that significantly alter the structure and stability of a protein's denatured state. <i>Protein Science</i> , 1996, 5, 2009-2019.	7.6	46
85	Mapping the lipid-exposed surfaces of membrane proteins. <i>Nature Structural Biology</i> , 1996, 3, 240-243.	9.7	19
86	Computational searching and mutagenesis suggest a structure for the pentameric transmembrane domain of phospholamban. <i>Nature Structural and Molecular Biology</i> , 1995, 2, 154-162.	8.2	198
87	A dimerization motif for transmembrane $\beta$ -helices. <i>Nature Structural Biology</i> , 1994, 1, 157-163.	9.7	294
88	Specificity and promiscuity in membrane helix interactions. <i>Quarterly Reviews of Biophysics</i> , 1994, 27, 157-218.	5.7	182
89	Sequence specificity in the dimerization of transmembrane $\alpha$ -helices. <i>Biochemistry</i> , 1992, 31, 12719-12725.	2.5	520
90	Bacteriorhodopsin can be refolded from two independently stable transmembrane helices and the complementary five-helix fragment. <i>Biochemistry</i> , 1992, 31, 6144-6151.	2.5	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.	2.5	23
92	Refolding of bacteriorhodopsin in lipid bilayers. Journal of Molecular Biology, 1987, 198, 655-676.	4.2	286
93	Lipid bilayer thickness varies linearly with acyl chain length in fluid phosphatidylcholine vesicles. Journal of Molecular Biology, 1983, 166, 211-217.	4.2	779
94	Inelastic neutron scattering analysis of hexokinase dynamics and its modification on binding of glucose. Nature, 1982, 300, 84-86.	27.8	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