Jeremy H Lakey

List of Publications by Year
in descending order

132 papers	5,259 citations	87888 38 h-index	95266 68 g-index
140 all docs	140 docs citations	140 times ranked	6071 citing authors

#	Article	IF	Citations
1	Unraveling the molecular determinants of the anti-phagocytic protein cloak of plague bacteria. PLoS Pathogens, 2022, 18, e1010447.	4.7	6
2	An oomycete NLP cytolysin forms transient small pores in lipid membranes. Science Advances, 2022, 8, eabj9406.	10.3	11
3	Exploiting neutron scattering contrast variation in biological membrane studies. Biophysics Reviews, 2022, 3, .	2.7	5
4	Exploiting Meltable Protein Hydrogels to Encapsulate and Culture Cells in 3D. Macromolecular Bioscience, 2022, 22, .	4.1	3
5	Hydrogels of engineered bacterial fimbriae can finely tune 2D human cell culture. Biomaterials Science, 2021, 9, 2542-2552.	5.4	5
6	Probing the oligomeric re-assembling of bacterial fimbriae in vitro: a small-angle X-ray scattering and analytical ultracentrifugation study. European Biophysics Journal, 2021, 50, 597-611.	2.2	3
7	Investigation of mutations (L41F, F17M, N57E, Y99F_Y134W) effects on the TolAIII-UnaG fluorescence protein's unconjugated bilirubin (UC-BR) binding ability and thermal stability properties. Preparative Biochemistry and Biotechnology, 2021, , 1-10.	1.9	1
8	A Thermally Reformable Protein Polymer. CheM, 2020, 6, 3132-3151.	11.7	9
9	Outer membrane protein size and LPS O-antigen define protective antibody targeting to the Salmonella surface. Nature Communications, 2020, 11, 851.	12.8	49
10	Studying the surfaces of bacteria using neutron scattering: finding new openings for antibiotics. Biochemical Society Transactions, 2020, 48, 2139-2149.	3.4	5
11	Helix N-Cap Residues Drive the Acid Unfolding That Is Essential in the Action of the Toxin Colicin A. Biochemistry, 2019, 58, 4882-4892.	2.5	1
12	Self-Assembled Fluid Phase Floating Membranes with Tunable Water Interlayers. Langmuir, 2019, 35, 13735-13744.	3.5	18
13	Structural Investigations of Proteinâ€"Lipid Complexes Using Neutron Scattering. Methods in Molecular Biology, 2019, 2003, 201-251.	0.9	17
14	Engineered mosaic protein polymers; a simple route to multifunctional biomaterials. Journal of Biological Engineering, 2019, 13, 54.	4.7	7
15	Induction of the immunoprotective coat of Yersinia pestis at body temperature is mediated by the Caf1R transcription factor. BMC Microbiology, 2019, 19, 68.	3.3	7
16	Recent advances in neutron reflectivity studies of biological membranes. Current Opinion in Colloid and Interface Science, 2019, 42, 33-40.	7.4	17
17	Membrane-Disrupting Proteins. , 2019, , 729-739.		0
18	Insight into Interface Engineering at TiO2/Dye through Molecularly Functionalized Caf1 Biopolymer. ACS Sustainable Chemistry and Engineering, 2018, 6, 1825-1836.	6.7	14

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19	Human Miro Proteins Act as NTP Hydrolases through a Novel, Non-Canonical Catalytic Mechanism. International Journal of Molecular Sciences, 2018, 19, 3839.	4.1	13
20	Distribution of mechanical stress in the Escherichia coli cell envelope. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 2566-2575.	2.6	66
21	Modular Protein Engineering Approach to the Functionalization of Gold Nanoparticles for Use in Clinical Diagnostics. ACS Applied Nano Materials, 2018, 1, 3590-3599.	5.0	9
22	Tuneable hydrogels of Caf1 protein fibers. Materials Science and Engineering C, 2018, 93, 88-95.	7.3	9
23	Liquid crystalline bacterial outer membranes are critical for antibiotic susceptibility. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7587-E7594.	7.1	67
24	Determining the amphipol distribution within membrane-protein fibre samples using small-angle neutron scattering. Acta Crystallographica Section D: Structural Biology, 2018, 74, 1192-1199.	2.3	4
25	Recombinant anthrax protective antigen: Observation of aggregation phenomena by TEM reveals specific effects of sterols. Micron, 2017, 93, 1-8.	2.2	1
26	The Two-State Prehensile Tail of the Antibacterial Toxin Colicin N. Biophysical Journal, 2017, 113, 1673-1684.	0.5	18
27	Thermal stability and rheological properties of the â€˜non-stickâ€™ Caf1 biomaterial. Biomedical Materials (Bristol), 2017, 12, 051001.	3.3	16
28	Deuterium Labeling Strategies for Creating Contrast in Structureâ€“Function Studies of Model Bacterial Outer Membranes Using Neutron Reflectometry. Methods in Enzymology, 2016, 566, 231-252.	1.0	10
29	Gram-negative trimeric porins have specific LPS binding sites that are essential for porin biogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5034-43.	7.1	103
30	Cl-out is a novel cooperative optogenetic tool for extruding chloride from neurons. Nature Communications, 2016, 7, 13495.	12.8	31
31	The Effect of Lipopolysaccharide Core Oligosaccharide Size on the Electrostatic Binding of Antimicrobial Proteins to Models of the Gram Negative Bacterial Outer Membrane. Langmuir, 2016, 32, 3485-3494.	3.5	74
32	Membrane-Disrupting Proteins. , 2016, , 1-11.		0
33	An Accurate In Vitro Model of the <i>E.â€…coli</i> Envelope. Angewandte Chemie, 2015, 127, 12120-12123.	2.0	7
34	An Accurate In Vitro Model of the <i>E.â€…coli</i> Envelope. Angewandte Chemie - International Edition, 2015, 54, 11952-11955.	13.8	91
35	Engineered self-assembling monolayers for label free detection of influenza nucleoprotein. Biomedical Microdevices, 2015, 17, 9951.	2.8	17
36	Antibacterial toxin colicin N and phage protein G3p compete with TolB for a binding site on TolA. Microbiology (United Kingdom), 2015, 161, 503-515.	1.8	14

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37	Effect of Divalent Cation Removal on the Structure of Gram-Negative Bacterial Outer Membrane Models. Langmuir, 2015, 31, 404-412.	3.5	271
38	Pore-Forming Colicins: Unusual Ion Channels â€" Unusually Regulated. Springer Series in Biophysics, 2015, , 185-208.	0.4	0
39	High coverage fluid-phase floating lipid bilayers supported by Ï‰-thiolipid self-assembled monolayers. Journal of the Royal Society Interface, 2014, 11, 20140447.	3.4	22
40	Dual Proteolytic Pathways Govern Glycolysis and Immune Competence. Cell, 2014, 159, 1578-1590.	28.9	54
41	The antibacterial toxin colicin <scp>N</scp> binds to the inner core of lipopolysaccharide and close to its translocator protein. Molecular Microbiology, 2014, 92, 440-452.	2.5	40
42	Outer Membrane Protein F Stabilised with Minimal Amphipol Forms Linear Arrays and LPS-Dependent 2D Crystals. Journal of Membrane Biology, 2014, 247, 949-956.	2.1	23
43	Reversible Nonâ€Stick Behaviour of a Bacterial Protein Polymer Provides a Tuneable Molecular Mimic for Cell and Tissue Engineering. Advanced Materials, 2014, 26, 2704-2709.	21.0	17
44	One and Two Dimensional Arrays of Membrane Proteins Stabilized by Amphipol. Microscopy and Microanalysis, 2014, 20, 1208-1209.	0.4	0
45	The unstructured domain of colicin N kills E scherichia coli. Molecular Microbiology, 2013, 89, 84-95.	2.5	15
46	Examining Proteinâ€"Lipid Complexes Using Neutron Scattering. Methods in Molecular Biology, 2013, 974, 119-150.	0.9	24
47	Structural Characterization of a Model Gram-Negative Bacterial Surface Using Lipopolysaccharides from Rough Strains of <i>Escherichia coli</i>. Biomacromolecules, 2013, 14, 2014-2022.	5.4	76
48	Increasing the Potency of an Alhydrogel-Formulated Anthrax Vaccine by Minimizing Antigen-Adjuvant Interactions. Vaccine Journal, 2013, 20, 1659-1668.	3.1	28
49	Asymmetric phospholipid: lipopolysaccharide bilayers; a Gram-negative bacterial outer membrane mimic. Journal of the Royal Society Interface, 2013, 10, 20130810.	3.4	103
50	In situ study of the impact of acidic and neutral deposition pH on alkane phosphate film formation and stability on TiO2. RSC Advances, 2013, 3, 2581.	3.6	4
51	Low Resolution Structure and Dynamics of a Colicin-Receptor Complex Determined by Neutron Scattering. Journal of Biological Chemistry, 2012, 287, 337-346.	3.4	54
52	Anthrax sub-unit vaccine: The structural consequences of binding rPA83 to AlhydrogelÂ®. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 80, 25-32.	4.3	16
53	AlhydrogelÂ® adjuvant, ultrasonic dispersion and protein binding: A TEM and analytical study. Micron, 2012, 43, 192-200.	2.2	30
54	Exome sequencing identifies GATA-2 mutation as the cause of dendritic cell, monocyte, B and NK lymphoid deficiency. Blood, 2011, 118, 2656-2658.	1.4	382

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55	The structural orientation of antibody layers bound to engineered biosensor surfaces. Biomaterials, 2011, 32, 3303-3311.	11.4	48
56	Self-Assembly of Protein Monolayers Engineered for Improved Monoclonal Immunoglobulin G Binding. International Journal of Molecular Sciences, 2011, 12, 5157-5167.	4.1	6
57	Controlled spatial and conformational display of immobilised bone morphogenetic protein-2 and osteopontin signalling motifs regulates osteoblast adhesion and differentiation in vitro. BMC Biology, 2010, 8, 57.	3.8	23
58	Discovery of Biphasic Thermal Unfolding of OmpC with Implications for Surface Loop Stability. Biochemistry, 2010, 49, 9715-9721.	2.5	10
59	Simple Detection of Protein Soft Structure Changes. Analytical Chemistry, 2010, 82, 3073-3076.	6.5	13
60	The structure of Yersinia pestis Caf1 polymer in free and adjuvant bound states. Vaccine, 2010, 28, 5746-5754.	3.8	22
61	Interfacial Interactions of Pore-Forming Colicins. Advances in Experimental Medicine and Biology, 2010, 677, 81-90.	1.6	17
62	Neutrons for biologists: a beginner's guide, or why you should consider using neutrons. Journal of the Royal Society Interface, 2009, 6, S567-73.	3.4	36
63	Probing the orientation of yeast VDAC1 in vivo. FEBS Letters, 2009, 583, 739-742.	2.8	29
64	A Common Interaction for the Entry of Colicin N and Filamentous Phage into Escherichia coli. Journal of Molecular Biology, 2009, 388, 880-893.	4.2	16
65	An ion-channel-containing model membrane: structural determination by magnetic contrast neutron reflectometry. Soft Matter, 2009, 5, 2576-2586.	2.7	67
66	Monitoring the assembly of antibody-binding membrane protein arrays using polarised neutron reflection. European Biophysics Journal, 2008, 37, 639-645.	2.2	32
67	Selfâ€recognition by an intrinsically disordered protein. FEBS Letters, 2008, 582, 2673-2677.	2.8	13
68	Colicin N Binds to the Periphery of Its Receptor andÂTranslocator, Outer Membrane Protein F. Structure, 2008, 16, 371-379.	3.3	47
69	Disparate proteins use similar architectures to damage membranes. Trends in Biochemical Sciences, 2008, 33, 482-490.	7.5	130
70	High-yield expression and purification of soluble forms of the anti-apoptotic Bcl-xL and Bcl-2 as TolAIII-fusion proteins. Protein Expression and Purification, 2008, 60, 214-220.	1.3	5
71	Silicon Surface Nanostructuring for Covalent Immobilization of Biomolecules. Journal of Physical Chemistry C, 2008, 112, 9308-9314.	3.1	22
72	A generic expression system to produce proteins that co-assemble with alkane thiol SAM. International Journal of Nanomedicine, 2008, 3, 287.	6.7	4

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73	Unfolding transitions of Bacillus anthracis protective antigen. Archives of Biochemistry and Biophysics, 2007, 465, 1-10.	3.0	18
74	Helix orientations in membrane-associated Bcl-XL determined by 15N-solid-state NMR spectroscopy. European Biophysics Journal, 2007, 37, 71-80.	2.2	17
75	Determining OMP topology by computation, surface plasmon resonance and cysteine labelling: The test case of OMPG. Biochemical and Biophysical Research Communications, 2006, 351, 113-117.	2.1	10
76	Lipid Interactions of Î±-Helical Protein Toxins. , 2006, , 139-162.		1
77	Surface plasmon resonance in proteinâ€"membrane interactions. Chemistry and Physics of Lipids, 2006, 141, 169-178.	3.2	201
78	An Approach To Prepare Membrane Proteins for Single-Molecule Imaging. Angewandte Chemie - International Edition, 2006, 45, 3252-3256.	13.8	30
79	Immunogenicity of a Yersinia pestis Vaccine Antigen Monomerized by Circular Permutation. Infection and Immunity, 2006, 74, 6624-6631.	2.2	34
80	Refolding of Escherichia coli outer membrane protein F in detergent creates LPS-free trimers and asymmetric dimers. Biochemical Journal, 2005, 392, 375-381.	3.7	40
81	Properties of nonfused liposomes immobilized on an L1 Biacore chip and their permeabilization by a eukaryotic pore-forming toxin. Analytical Biochemistry, 2005, 344, 43-52.	2.4	83
82	Circular Dichroism Spectroscopy of Folding in a Protein Monolayer. Angewandte Chemie - International Edition, 2005, 44, 4801-4804.	13.8	17
83	A manufacturable surface-biology platform for nano applications; Cell culture, analyte detection, diagnostics sensors. Industrial Biotechnology, 2005, 1, 185-189.	0.8	7
84	Neutron Reflectometry of Membrane Protein Assemblies at the Solid/Liquid Interface. Australian Journal of Chemistry, 2005, 58, 674.	0.9	12
85	A Natively Unfolded Toxin Domain Uses Its Receptor as a Folding Template. Journal of Biological Chemistry, 2004, 279, 22002-22009.	3.4	27
86	Identification and characterization of the Pasteurella multocida toxin translocation domain. Molecular Microbiology, 2004, 54, 239-250.	2.5	31
87	The Pasteurella multocida toxin interacts with signalling pathways to perturb cell growth and differentiation. International Journal of Medical Microbiology, 2004, 293, 505-512.	3.6	33
88	Peeking into a secret world of pore-forming toxins: membrane binding processes studied by surface plasmon resonance. Toxicon, 2003, 42, 225-228.	1.6	19
89	Expression of proteins using the third domain of the Escherichia coli periplasmic-protein TolA as a fusion partner. Protein Expression and Purification, 2003, 28, 173-181.	1.3	32
90	Concerted Folding and Binding of a Flexible Colicin Domain to Its Periplasmic Receptor TolA. Journal of Biological Chemistry, 2003, 278, 21860-21868.	3.4	27

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91	A Novel Mechanism of Pore Formation. Journal of Biological Chemistry, 2003, 278, 22678-22685.	3.4	121
92	Two-step Membrane Binding by Equinatoxin II, a Pore-forming Toxin from the Sea Anemone, Involves an Exposed Aromatic Cluster and a Flexible Helix. Journal of Biological Chemistry, 2002, 277, 41916-41924.	3.4	185
93	Stable self-assembly of a protein engineering scaffold on gold surfaces. Protein Science, 2002, 11, 1917-1925.	7.6	70
94	Surface Aspartate Residues Are Essential for the Stability of Colicin A P-Domain:â€‰ A Mechanism for the Formation of an Acidic Molten-Globule,. Biochemistry, 2002, 41, 1579-1586.	2.5	16
95	High level expression of His-tagged colicin pore-forming domains and reflections on the sites for pore formation in the inner membrane. Biochimie, 2002, 84, 477-483.	2.6	17
96	Theory and simulation Macromolecular assemblages. Current Opinion in Structural Biology, 2002, 12, 141-142.	5.7	0
97	Heat does not come in different colours: entropyâ€"enthalpy compensation, free energy windows, quantum confinement, pressure perturbation calorimetry, solvation and the multiple causes of heat capacity effects in biomolecular interactions. Biophysical Chemistry, 2001, 93, 215-230.	2.8	308
98	Proteinâ€"nucleic acid interactions. Current Opinion in Structural Biology, 2001, 11, 9-10.	5.7	1
99	Macromolecular assemblages. Current Opinion in Structural Biology, 2001, 11, 139-140.	5.7	1
100	Membranes Engineering and design. Current Opinion in Structural Biology, 2001, 11, 391-392.	5.7	0
101	Web Alert: Biophysical methods. Current Opinion in Structural Biology, 2001, 11, 511-512.	5.7	0
102	The influence of secretory-protein charge on late stages of secretion from the Gram-positive bacterium Bacillus subtilis. Biochemical Journal, 2000, 350, 31-39.	3.7	25
103	Theory and simulation: Macromolecular assemblages Web alert. Current Opinion in Structural Biology, 2000, 10, 135-136.	5.7	0
104	Biophysical methods. Current Opinion in Structural Biology, 2000, 10, 505-506.	5.7	0
105	The TolA-recognition Site of Colicin N. ITC, SPR and Stopped-flow Fluorescence Define a Crucial 27-residue Segment. Journal of Molecular Biology, 2000, 304, 621-632.	4.2	38
106	Carbohydrates and glycoconjugates Biophysical methods. Current Opinion in Structural Biology, 1999, 9, 545-546.	5.7	0
107	Catalysis and regulation: Proteins. Current Opinion in Structural Biology, 1999, 9, 659-660.	5.7	0
108	Lipids membrane proteins engineering and design web alert. Current Opinion in Structural Biology, 1999, 9, 423-424.	5.7	0

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109	Ion-Channel Gating in Transmembrane Receptor Proteins: Functional Activity in Tethered Lipid Membranes. Angewandte Chemie - International Edition, 1999, 38, 389-392.	13.8	117
110	Secondary structure of Streptococcus downei GTF-I glucansucrase. FEMS Microbiology Letters, 1999, 177, 243-248.	1.8	3
111	Macromolecular organisation of recombinantYersinia pestisF1 antigen and the effect of structure on immunogenicity. FEMS Immunology and Medical Microbiology, 1998, 21, 213-221.	2.7	64
112	Emerging techniques for investigating molecular interactions at lipid membranes. BBA - Biomembranes, 1998, 1376, 319-338.	8.0	121
113	Crystal structure of a colicin N fragment suggests a model for toxicity. Structure, 1998, 6, 863-874.	3.3	134
114	Discovery of critical Tol A-binding residues in the bactericidal toxin colicin N: a biophysical approach. Molecular Microbiology, 1998, 28, 1335-1343.	2.5	58
115	Measuring proteinâ€"protein interactions. Current Opinion in Structural Biology, 1998, 8, 119-123.	5.7	97
116	Carbohydrates and glycoconjugates Biophysical methods Web alert. Current Opinion in Structural Biology, 1998, 8, 543-544.	5.7	0
117	Voltage gating is a fundamental feature of porin and toxin Î²-barrel membrane channels. FEBS Letters, 1998, 431, 305-308.	2.8	87
118	Displacement of OmpF loop 3 is not required for the membrane translocation of colicins N and A in vivo. FEBS Letters, 1998, 432, 117-122.	2.8	22
119	Voltage-gating of Escherichia coli porin: a cystine-scanning mutagenesis study of loop 3 1 1Edited by I. B. Holland. Journal of Molecular Biology, 1998, 275, 171-176.	4.2	70
120	Stabilising and destabilising modifications of cysteines in theE. coliouter membrane porin protein OmpC. FEBS Letters, 1997, 411, 201-205.	2.8	11
121	Molecular characterization of the B-box protein-protein interaction motif of the ETS-domain transcription factor Elk-1. EMBO Journal, 1997, 16, 2431-2440.	7.8	71
122	Different Sensitivities to Acid Denaturation within a Family of Proteins:Â Implications for Acid Unfolding and Membrane Translocationâ€. Biochemistry, 1996, 35, 13180-13185.	2.5	34
123	Comparative analysis of the QUTR transcription repressor protein and the three C-terminal domains of the pentafunctional AROM enzyme. Biochemical Journal, 1996, 313, 941-950.	3.7	14
124	All in the family: the toxic activity of pore-forming colicins. Toxicology, 1994, 87, 85-108.	4.2	69
125	The role of electrostatic charge in the membrane insertion of colicin A. Calculation and mutation. FEBS Journal, 1994, 220, 155-163.	0.2	32
126	Interacion of the colicin-A pore-forming domain with negatively charged phospholipds. FEBS Journal, 1993, 211, 625-633.	0.2	18

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127	Brominated phospholipids as a tool for monitoring the membrane insertion of colicin A. Biochemistry, 1992, 31, 7294-7300.	2.5	73
128	The molten globule intermediate for protein insertion or translocation through membranes. Trends in Cell Biology, 1992, 2, 343-348.	7.9	83
129	Membrane insertion of the pore-forming domain of colicin A. A spectroscopic study. FEBS Journal, 1991, 196, 599-607.	0.2	84
130	A 136-amino-acid-residue COOH-terminal fragment of colicin A is endowed with ionophoric activity. FEBS Journal, 1990, 189, 409-413.	0.2	30
131	The voltage-dependent activity of Escherichia coli porins in different planar bilayer reconstitutions. FEBS Journal, 1989, 186, 303-308.	0.2	76
132	The lipopeptide antibiotic A21978C has a specific interaction with DMPC only in the presence of calcium ions. Biochimica Et Biophysica Acta - Biomembranes, 1989, 985, 60-66.	2.6	23