Karen L Maxwell

List of Publications by Year
in descending order

70 papers	6,308 citations	87723 38 h-index	98622 67 g-index
74 all docs	74 docs citations	74 times ranked	5106 citing authors

#	Article	IF	Citations
1	Bacteriophage genes that inactivate the CRISPR/Cas bacterial immune system. Nature, 2013, 493, 429-432.	13.7	689
2	Prophages mediate defense against phage infection through diverse mechanisms. ISME Journal, 2016, 10, 2854-2866.	4.4	363
3	Naturally Occurring Off-Switches for CRISPR-Cas9. Cell, 2016, 167, 1829-1838.e9.	13.5	345
4	Multiple mechanisms for CRISPRâ€"Cas inhibition by anti-CRISPR proteins. Nature, 2015, 526, 136-139.	13.7	325
5	Anti-CRISPR: discovery, mechanism and function. Nature Reviews Microbiology, 2018, 16, 12-17.	13.6	288
6	Structural proteomics of an archaeon. Nature Structural Biology, 2000, 7, 903-909.	9.7	272
7	Inactivation of CRISPR-Cas systems by anti-CRISPR proteins in diverse bacterial species. Nature Microbiology, 2016, 1, 16085.	5.9	271
8	A New Group of Phage Anti-CRISPR Genes Inhibits the Type I-E CRISPR-Cas System of Pseudomonas aeruginosa. MBio, 2014, 5, e00896.	1.8	224
9	A Broad-Spectrum Inhibitor of CRISPR-Cas9. Cell, 2017, 170, 1224-1233.e15.	13.5	211
10	Protein folding: Defining a â€œstandardâ€•set of experimental conditions and a preliminary kinetic data set of two-state proteins. Protein Science, 2005, 14, 602-616.	3.1	207
11	Structure Reveals Mechanisms of Viral Suppressors that Intercept a CRISPR RNA-Guided Surveillance Complex. Cell, 2017, 169, 47-57.e11.	13.5	191
12	Ig-Like Domains on Bacteriophages: A Tale of Promiscuity and Deceit. Journal of Molecular Biology, 2006, 359, 496-507.	2.0	169
13	A simple in vivo assay for increased protein solubility. Protein Science, 1999, 8, 1908-1911.	3.1	153
14	A chemical defence against phage infection. Nature, 2018, 564, 283-286.	13.7	142
15	Phage-Encoded Anti-CRISPR Defenses. Annual Review of Genetics, 2018, 52, 445-464.	3.2	125
16	HNH proteins are a widespread component of phage DNA packaging machines. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6022-6027.	3.3	110
17	Viral Proteomics. Microbiology and Molecular Biology Reviews, 2007, 71, 398-411.	2.9	108
18	The Bacteriophage HK97 gp15 Moron Element Encodes a Novel Superinfection Exclusion Protein. Journal of Bacteriology, 2012, 194, 5012-5019.	1.0	107

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19	Long Noncontractile Tail Machines of Bacteriophages. Advances in Experimental Medicine and Biology, 2012, 726, 115-142.	0.8	101
20	A Unified Resource for Tracking Anti-CRISPR Names. CRISPR Journal, 2018, 1, 304-305.	1.4	94
21	The Diverse Impacts of Phage Morons on Bacterial Fitness and Virulence. Advances in Virus Research, 2019, 103, 1-31.	0.9	93
22	Mutagenesis of a Buried Polar Interaction in an SH3 Domain:Â Sequence Conservation Provides the Best Prediction of Stability Effectsâ€. Biochemistry, 1998, 37, 16172-16182.	1.2	92
23	The phage tail tape measure protein, an inner membrane protein and a periplasmic chaperone play connected roles in the genome injection process of <scp><i>E</i></scp><i>.â€‰coli</i> phage <scp>HK</scp>97. Molecular Microbiology, 2015, 96, 437-447.	1.2	89
24	Immunoglobulin-like domains on bacteriophage: weapons of modest damage?. Current Opinion in Microbiology, 2007, 10, 382-387.	2.3	86
25	Potent Cas9 Inhibition in Bacterial and Human Cells by AcrIIC4 and AcrIIC5 Anti-CRISPR Proteins. MBio, 2018, 9, .	1.8	80
26	A phage-encoded anti-activator inhibits quorum sensing in Pseudomonas aeruginosa. Molecular Cell, 2021, 81, 571-583.e6.	4.5	80
27	Protein Folding Kinetics Beyond the Î¦ Value: Using Multiple Amino Acid Substitutions to Investigate the Structure of the SH3 Domain Folding Transition State. Journal of Molecular Biology, 2002, 320, 389-402.	2.0	75
28	The Anti-CRISPR Story: A Battle for Survival. Molecular Cell, 2017, 68, 8-14.	4.5	69
29	Meet the Anti-CRISPRs: Widespread Protein Inhibitors of CRISPR-Cas Systems. CRISPR Journal, 2019, 2, 23-30.	1.4	68
30	Disabling a Type I-E CRISPR-Cas Nuclease with a Bacteriophage-Encoded Anti-CRISPR Protein. MBio, 2017, 8, .	1.8	63
31	The Crystal Structure of Bacteriophage HK97 gp6: Defining a Large Family of Headâ€“Tail Connector Proteins. Journal of Molecular Biology, 2010, 395, 754-768.	2.0	62
32	Phage Morons Play an Important Role in Pseudomonas aeruginosa Phenotypes. Journal of Bacteriology, 2018, 200, .	1.0	53
33	The moron comes of age. Bacteriophage, 2012, 2, e23146.	1.9	52
34	Phages Fight Back: Inactivation of the CRISPR-Cas Bacterial Immune System by Anti-CRISPR Proteins. PLoS Pathogens, 2016, 12, e1005282.	2.1	51
35	Inhibition of CRISPR-Cas9 ribonucleoprotein complex assembly by anti-CRISPR AcrIIC2. Nature Communications, 2019, 10, 2806.	5.8	50
36	The solution structure of an anti-CRISPR protein. Nature Communications, 2016, 7, 13134.	5.8	48

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37	The Solution Structure of the C-Terminal Ig-like Domain of the Bacteriophage Î» Tail Tube Protein. Journal of Molecular Biology, 2010, 403, 468-479.	2.0	46
38	Baseplate assembly of phage Mu: Defining the conserved core components of contractile-tailed phages and related bacterial systems. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10174-10179.	3.3	46
39	The solution structure of bacteriophage Î» protein W, a small morphogenetic protein possessing a novel fold11Edited by P. E. Wright. Journal of Molecular Biology, 2001, 308, 9-14.	2.0	41
40	Refolding out of guanidine hydrochloride is an effective approach for high-throughput structural studies of small proteins. Protein Science, 2003, 12, 2073-2080.	3.1	39
41	Crystal Structure of Bacteriophage Î»cII and Its DNA Complex. Molecular Cell, 2005, 19, 259-269.	4.5	39
42	The Solution Structure of the Bacteriophage Î» Headâ€"Tail Joining Protein, gpFII. Journal of Molecular Biology, 2002, 318, 1395-1404.	2.0	38
43	Phages have adapted the same protein fold to fulfill multiple functions in virion assembly. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14384-14389.	3.3	37
44	Rapid Detection of E. coli Bacteria Using Potassium-Sensitive FETs in CMOS. IEEE Transactions on Biomedical Circuits and Systems, 2013, 7, 621-630.	2.7	37
45	Efficacy of Bacteriophage Treatment on Pseudomonas aeruginosa Biofilms. Journal of Endodontics, 2013, 39, 364-369.	1.4	35
46	Anti-CRISPR AcrIIA5 Potently Inhibits All Cas9 Homologs Used for Genome Editing. Cell Reports, 2019, 29, 1739-1746.e5.	2.9	35
47	A Filamentous Bacteriophage Protein Inhibits Type IV Pili To Prevent Superinfection of Pseudomonas aeruginosa. MBio, 2022, 13, e0244121.	1.8	31
48	The protein gp74 from the bacteriophage HK97 functions as a HNH endonuclease. Protein Science, 2012, 21, 809-818.	3.1	30
49	The NMR Structure of the gpU Tail-terminator Protein from Bacteriophage Lambda: Identification of Sites Contributing to Mg(II)-mediated Oligomerization and Biological Function. Journal of Molecular Biology, 2007, 365, 175-186.	2.0	28
50	Rapid detection of E.Coli bacteria using potassium-sensitive FETs in CMOS. , 2012, , .		28
51	Tail Tip Proteins Related to Bacteriophage Î» gpL Coordinate an Iron-Sulfur Cluster. Journal of Molecular Biology, 2013, 425, 2450-2462.	2.0	23
52	A Conserved Spiral Structure for Highly Diverged Phage Tail Assembly Chaperones. Journal of Molecular Biology, 2013, 425, 2436-2449.	2.0	20
53	Thermodynamic and Functional Characterization of Protein W from Bacteriophage Î». Journal of Biological Chemistry, 2000, 275, 18879-18886.	1.6	18
54	Structural and Functional Studies of gpX of Escherichia coli Phage P2 Reveal a Widespread Role for LysM Domains in the Baseplates of Contractile-Tailed Phages. Journal of Bacteriology, 2013, 195, 5461-5468.	1.0	18

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55	Extrachromosomal circular elements targeted by CRISPR-Cas in <i>Dehalococcoides mccartyi</i> are linked to mobilization of reductive dehalogenase genes. ISME Journal, 2019, 13, 24-38.	4.4	16
56	The Solution Structures of Two Prophage Homologues of the Bacteriophage Î» Ea8.5 Protein Reveal a Newly Discovered Hybrid Homeodomain/Zinc-Finger Fold. Biochemistry, 2013, 52, 3612-3614.	1.2	14
57	Assembly mechanism is the key determinant of the dosage sensitivity of a phage structural protein. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10168-10173.	3.3	13
58	Anti-CRISPR AcrIE2 Binds the Type I-E CRISPR-Cas Complex But Does Not Block DNA Binding. Journal of Molecular Biology, 2021, 433, 166759.	2.0	11
59	Phages Tune in to Host Cell Quorum Sensing. Cell, 2019, 176, 7-8.	13.5	10
60	A Shifty Chaperone for Phage Tail Assembly. Journal of Molecular Biology, 2014, 426, 1001-1003.	2.0	9
61	Structural and Biochemical Characterization of Phage Î» FI Protein (gpFI) Reveals a Novel Mechanism of DNA Packaging Chaperone Activity. Journal of Biological Chemistry, 2012, 287, 32085-32095.	1.6	8
62	Gold Nanoparticle Smartphone Platform for Diagnosing Urinary Tract Infections. ACS Nanoscience Au, 2022, 2, 324-332.	2.0	7
63	Structural and Mechanistic Insight into CRISPR-Cas9 Inhibition by Anti-CRISPR Protein AcrIIC4. Journal of Molecular Biology, 2022, 434, 167420.	2.0	6
64	Retrons: Complementing CRISPR in Phage Defense. CRISPR Journal, 2020, 3, 226-227.	1.4	5
65	Bacterial twist to an antiviral defence. Nature, 2019, 574, 638-639.	13.7	3
66	HK97 gp74 Possesses an Î±-Helical Insertion in the Î²Î²Î± Fold That Affects Its Metal Binding, cos Site Digestion, and In Vivo Activities. Journal of Bacteriology, 2020, 202, .	1.0	3
67	Cyclic pyrimidines jump on the anti-phage bandwagon. Cell, 2021, 184, 5691-5693.	13.5	2
68	Type VI secretion system baseplate. Nature Microbiology, 2018, 3, 1330-1331.	5.9	1
69	One Anti-CRISPR to Rule Them All: Potent Inhibition of Cas9 Homologs Used for Genome Editing. SSRN Electronic Journal, 0, , .	0.4	1
70	Crystal Structure of Bacteriophage Î»cII and Its DNA Complex. Molecular Cell, 2005, 19, 578.	4.5	0