

Raymond H J Staals

List of Publications by Year in descending order

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42
papers

4,354
citations

185998

28
h-index

301761

39
g-index

47
all docs

47
docs citations

47
times ranked

4694
citing authors

#	ARTICLE	IF	CITATIONS
1	CRISPR Immunity Relies on the Consecutive Binding and Degradation of Negatively Supercoiled Invader DNA by Cascade and Cas3. <i>Molecular Cell</i> , 2012, 46, 595-605.	4.5	475
2	CRISPRDetect: A flexible algorithm to define CRISPR arrays. <i>BMC Genomics</i> , 2016, 17, 356.	1.2	277
3	Inactivation of CRISPR-Cas systems by anti-CRISPR proteins in diverse bacterial species. <i>Nature Microbiology</i> , 2016, 1, 16085.	5.9	271
4	RNA Targeting by the Type III-A CRISPR-Cas Csm Complex of <i>Thermus thermophilus</i> . <i>Molecular Cell</i> , 2014, 56, 518-530.	4.5	267
5	The CRISPRs, They Are A-Changin': How Prokaryotes Generate Adaptive Immunity. <i>Annual Review of Genetics</i> , 2012, 46, 311-339.	3.2	260
6	Degenerate target sites mediate rapid primed CRISPR adaptation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E1629-38.	3.3	239
7	The Role of CRISPR-Cas Systems in Virulence of Pathogenic Bacteria. <i>Microbiology and Molecular Biology Reviews</i> , 2014, 78, 74-88.	2.9	228
8	Germline mutations in DIS3L2 cause the Perlman syndrome of overgrowth and Wilms tumor susceptibility. <i>Nature Genetics</i> , 2012, 44, 277-284.	9.4	219
9	Structure and Activity of the RNA-Targeting Type III-B CRISPR-Cas Complex of <i>Thermus thermophilus</i> . <i>Molecular Cell</i> , 2013, 52, 135-145.	4.5	212
10	Quorum Sensing Controls Adaptive Immunity through the Regulation of Multiple CRISPR-Cas Systems. <i>Molecular Cell</i> , 2016, 64, 1102-1108.	4.5	183
11	Priming in the Type I-F CRISPR-Cas system triggers strand-independent spacer acquisition, bi-directionally from the primed protospacer. <i>Nucleic Acids Research</i> , 2014, 42, 8516-8526.	6.5	171
12	Dis3-like 1: a novel exoribonuclease associated with the human exosome. <i>EMBO Journal</i> , 2010, 29, 2358-2367.	3.5	134
13	Ethylene regulates fast apoplastic acidification and expansin A transcription during submergence-induced petiole elongation in <i>Rumex palustris</i> . <i>Plant Journal</i> , 2005, 43, 597-610.	2.8	126
14	Structures of the CRISPR-Cmr complex reveal mode of RNA target positioning. <i>Science</i> , 2015, 348, 581-585.	6.0	126
15	Interference-driven spacer acquisition is dominant over naive and primed adaptation in a native CRISPR-Cas system. <i>Nature Communications</i> , 2016, 7, 12853.	5.8	125
16	CRISPR-Cas-Mediated Phage Resistance Enhances Horizontal Gene Transfer by Transduction. <i>MBio</i> , 2018, 9, .	1.8	103
17	The Cpf1 CRISPR-Cas protein expands genome-editing tools. <i>Genome Biology</i> , 2015, 16, 251.	3.8	91
18	Spacer capture and integration by a type I-F Cas1-Cas2-3 CRISPR adaptation complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E5122-E5128.	3.3	89

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19	Keeping<sc>crispr</sc>in check: diverse mechanisms of phage-encoded anti-<sc>crisprs</sc>. FEMS Microbiology Letters, 2019, 366, .	0.7	76
20	Good guide, bad guide: spacer sequence-dependent cleavage efficiency of Cas12a. Nucleic Acids Research, 2020, 48, 3228-3243.	6.5	62
21	SCOPE enables type III CRISPR-Cas diagnostics using flexible targeting and stringent CARF ribonuclease activation. Nature Communications, 2021, 12, 5033.	5.8	57
22	The Human Exosome and Disease. Advances in Experimental Medicine and Biology, 2010, 702, 132-142.	0.8	54
23	Addition of poly(A) and poly(A)-rich tails during RNA degradation in the cytoplasm of human cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7407-7412.	3.3	54
24	Coevolution between bacterial CRISPR-Cas systems and their bacteriophages. Cell Host and Microbe, 2021, 29, 715-725.	5.1	53
25	Bioinformatic evidence of widespread priming in type I and II CRISPR-Cas systems. RNA Biology, 2019, 16, 566-576.	1.5	45
26	Type I-F CRISPR-Cas resistance against virulent phages results in abortive infection and provides population-level immunity. Nature Communications, 2019, 10, 5526.	5.8	44
27	Alternative functions of CRISPRâ€œCas systems in the evolutionary arms race. Nature Reviews Microbiology, 2022, 20, 351-364.	13.6	44
28	Global analysis of the nuclear processing of transcripts with unspliced U12-type introns by the exosome. Nucleic Acids Research, 2014, 42, 7358-7369.	6.5	40
29	CRISPR-Cas systems preferentially target the leading regions of MOB_F conjugative plasmids. RNA Biology, 2013, 10, 749-761.	1.5	32
30	Shooting the messenger: RNA-targeting CRISPR-Cas systems. Bioscience Reports, 2018, 38, .	1.1	28
31	Analysis of proteinâ€œRNA interactions in CRISPR proteins and effector complexes by UV-induced cross-linking and mass spectrometry. Methods, 2015, 89, 138-148.	1.9	25
32	Different genetic and morphological outcomes for phages targeted by single or multiple CRISPR-Cas spacers. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180090.	1.8	24
33	Structure of a type IV CRISPR-Cas ribonucleoprotein complex. IScience, 2021, 24, 102201.	1.9	23
34	The human exosome and disease. Advances in Experimental Medicine and Biology, 2010, 702, 132-42.	0.8	20
35	Streamlined CRISPR genome engineering in wild-type bacteria using SIBR-Cas. Nucleic Acids Research, 2021, 49, 11392-11404.	6.5	15
36	Editor's cut: DNA cleavage by CRISPR RNA-guided nucleases Cas9 and Cas12a. Biochemical Society Transactions, 2020, 48, 207-219.	1.6	14

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37	CRISPR with a Happy Ending: Non-templated DNA Repair for Prokaryotic Genome Engineering. <i>Biotechnology Journal</i> , 2020, 15, e1900404.	1.8	9
38	Structural plasticity and in vivo activity of Cas1 from the type I-F CRISPR-Cas system. <i>Biochemical Journal</i> , 2016, 473, 1063-1072.	1.7	8
39	Distribution and Mechanism of the Type I CRISPR-Cas Systems. , 2013, , 145-169.		7
40	Distribution and Mechanism of the Type I CRISPR-Cas Systems. , 2013, , 145-169.		5
41	Ten simple rules for building an enthusiastic iGEM team. <i>PLoS Computational Biology</i> , 2022, 18, e1009916.	1.5	4
42	Adaptation by Type V-A and V-B CRISPR-Cas Systems Demonstrates Conserved Protospacer Selection Mechanisms Between Diverse CRISPR-Cas Types. <i>CRISPR Journal</i> , 0, , .	1.4	1