Martin Jinek

List of Publications by Citations

84 papers	18,993 citations	39 h-index	106 g-index
106 ext. papers	23,488 ext. citations	15.2 avg, IF	7.06 L-index

#	Paper	IF	Citations
84	A programmable dual-RNA-guided DNA endonuclease in adaptive bacterial immunity. *Science*, **2012**, 337, 816-21	33.3	9062
83	RNA-programmed genome editing in human cells. *ELife*, **2013**, 2, e00471	8.9	1443
82	DNA interrogation by the CRISPR RNA-guided endonuclease Cas9. *Nature*, **2014**, 507, 62-7	50.4	1171
81	Structural basis of PAM-dependent target DNA recognition by the Cas9 endonuclease. *Nature*, **2014**, 513, 569-73	50.4	783
80	Structures of Cas9 endonucleases reveal RNA-mediated conformational activation. *Science*, **2014**, 343, 1247997	33.3	701
79	A three-dimensional view of the molecular machinery of RNA interference. *Nature*, **2009**, 457, 405-12	50.4	565
78	Sequence- and structure-specific RNA processing by a CRISPR endonuclease. *Science*, **2010**, 329, 1355-8	33.3	504
77	Structural biology of nucleocytoplasmic transport. *Annual Review of Biochemistry*, **2007**, 76, 647-71	29.1	422
76	Biotechnology. A prudent path forward for genomic engineering and germline gene modification. *Science*, **2015**, 348, 36-8	33.3	413
75	Mammalian miRNA RISC recruits CAF1 and PABP to affect PABP-dependent deadenylation. *Molecular Cell*, **2009**, 35, 868-80	17.6	301
74	Structural insights into the molecular mechanism of the m(6)A writer complex. *ELife*, **2016**, 5,	8.9	256
73	Type III CRISPR-Cas systems produce cyclic oligoadenylate second messengers. *Nature*, **2017**, 548, 543-548	50.4	226
72	Structural Basis for Guide RNA Processing and Seed-Dependent DNA Targeting by CRISPR-Cas12a. *Molecular Cell*, **2017**, 66, 221-233.e4	17.6	225
71	The superhelical TPR-repeat domain of O-linked GlcNAc transferase exhibits structural similarities to importin alpha. *Nature Structural and Molecular Biology*, **2004**, 11, 1001-7	17.6	219
70	Structural basis for DNase activity of a conserved protein implicated in CRISPR-mediated genome defense. *Structure*, **2009**, 17, 904-12	5.2	198
69	Maximizing mutagenesis with solubilized CRISPR-Cas9 ribonucleoprotein complexes. *Development (Cambridge)*, **2016**, 143, 2025-37	6.6	163
68	An RNA-induced conformational change required for CRISPR RNA cleavage by the endoribonuclease Cse3. *Nature Structural and Molecular Biology*, **2011**, 18, 680-7	17.6	149

67	Mechanistic Insights into the cis- and trans-Acting DNase Activities of Cas12a. *Molecular Cell*, **2019**, 73, 589-600.e4	17.6	121
66	Structural Plasticity of PAM Recognition by Engineered Variants of the RNA-Guided Endonuclease Cas9. *Molecular Cell*, **2016**, 61, 895-902	17.6	120
65	Coupled 5Tnucleotide recognition and processivity in Xrn1-mediated mRNA decay. *Molecular Cell*, **2011**, 41, 600-8	17.6	114
64	Cas9 versus Cas12a/Cpf1: Structure-function comparisons and implications for genome editing. *Wiley Interdisciplinary Reviews RNA*, **2018**, 9, e1481	9.3	103
63	CrispRVariants charts the mutation spectrum of genome engineering experiments. *Nature Biotechnology*, **2016**, 34, 701-2	44.5	101
62	Structural basis for the endoribonuclease activity of the type III-A CRISPR-associated protein Csm6. *Rna*, **2016**, 22, 318-29	5.8	95
61	Structures of the tRNA export factor in the nuclear and cytosolic states. *Nature*, **2009**, 461, 60-5	50.4	94
60	CRISPR-Cas9 conformational activation as elucidated from enhanced molecular simulations. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 7260-7265	11.5	91
59	Covalent linkage of the DNA repair template to the CRISPR-Cas9 nuclease enhances homology-directed repair. *ELife*, **2018**, 7,	8.9	88
58	Structural insights into the human GW182-PABC interaction in microRNA-mediated deadenylation. *Nature Structural and Molecular Biology*, **2010**, 17, 238-40	17.6	83
57	Striking Plasticity of CRISPR-Cas9 and Key Role of Non-target DNA, as Revealed by Molecular Simulations. *ACS Central Science*, **2016**, 2, 756-763	16.8	67
56	Protospacer Adjacent Motif-Induced Allostery Activates CRISPR-Cas9. *Journal of the American Chemical Society*, **2017**, 139, 16028-16031	16.4	66
55	In vitro enzymology of Cas9. *Methods in Enzymology*, **2014**, 546, 1-20	1.7	66
54	An internal promoter underlies the difference in disease severity between N- and C-terminal truncation mutations of Titin in zebrafish. *ELife*, **2015**, 4, e09406	8.9	61
53	Evolution of CRISPR RNA recognition and processing by Cas6 endonucleases. *Nucleic Acids Research* , **2014**, 42, 1341-53	20.1	58
52	Deciphering Off-Target Effects in CRISPR-Cas9 through Accelerated Molecular Dynamics. *ACS Central Science*, **2019**, 5, 651-662	16.8	57
51	Structural basis of AAUAAA polyadenylation signal recognition by the human CPSF complex. *Nature Structural and Molecular Biology*, **2018**, 25, 135-138	17.6	57
50	Structural insights into the assembly and polyA signal recognition mechanism of the human CPSF complex. *ELife*, **2017**, 6,	8.9	52

49	In vivo adenine base editing of PCSK9 in macaques reduces LDL cholesterol levels. *Nature Biotechnology*, **2021**, 39, 949-957	44.5	50
48	Mechanistic insights into mRNA 3′-end processing. *Current Opinion in Structural Biology*, **2019**, 59, 143-150	8.1	47
47	Key role of the REC lobe during CRISPR-Cas9 activation by 'sensing', 'regulating', and 'locking' the catalytic HNH domain. *Quarterly Reviews of Biophysics*, **2018**, 51,	7	42
46	Molecular architectures and mechanisms of Class 2 CRISPR-associated nucleases. *Current Opinion in Structural Biology*, **2017**, 47, 157-166	8.1	40
45	Molecular basis for cytoplasmic RNA surveillance by uridylation-triggered decay in Drosophila. *EMBO Journal*, **2016**, 35, 2417-2434	13	39
44	Data-collection strategy for challenging native SAD phasing. *Acta Crystallographica Section D: Structural Biology*, **2016**, 72, 421-9	5.5	35
43	DNA-guided DNA cleavage at moderate temperatures by Clostridium butyricum Argonaute. *Nucleic Acids Research*, **2019**, 47, 5809-5821	20.1	34
42	Activation and self-inactivation mechanisms of the cyclic oligoadenylate-dependent CRISPR ribonuclease Csm6. *Nature Communications*, **2020**, 11, 1596	17.4	34
41	Bacteriophage DNA glucosylation impairs target DNA binding by type I and II but not by type V CRISPR-Cas effector complexes. *Nucleic Acids Research*, **2018**, 46, 873-885	20.1	34
40	Structural insights into the Notch-modifying glycosyltransferase Fringe. *Nature Structural and Molecular Biology*, **2006**, 13, 945-6	17.6	31
39	Molecular architecture of LSM14 interactions involved in the assembly of mRNA silencing complexes. *EMBO Journal*, **2018**, 37,	13	27
38	Structural mimicry in transcription regulation of human RNA polymerase II by the DNA helicase RECQL5. *Nature Structural and Molecular Biology*, **2013**, 20, 892-9	17.6	25
37	Structural and biochemical studies of a fluoroacetyl-CoA-specific thioesterase reveal a molecular basis for fluorine selectivity. *Biochemistry*, **2010**, 49, 9269-79	3.2	24
36	Catalytic Mechanism of Non-Target DNA Cleavage in CRISPR-Cas9 Revealed by Molecular Dynamics. *ACS Catalysis*, **2020**, 10, 13596-13605	13.1	24
35	The C-terminal region of Ge-1 presents conserved structural features required for P-body localization. *Rna*, **2008**, 14, 1991-8	5.8	23
34	In Vitro Reconstitution and Crystallization of Cas9 Endonuclease Bound to a Guide RNA and a DNA Target. *Methods in Enzymology*, **2015**, 558, 515-537	1.7	19
33	Molecular mechanism of the RNA helicase DHX37 and its activation by UTP14A in ribosome biogenesis. *Rna*, **2019**, 25, 685-701	5.8	16
32	Molecular Dynamics Reveals a DNA-Induced Dynamic Switch Triggering Activation of CRISPR-Cas12a. *Journal of Chemical Information and Modeling*, **2020**, 60, 6427-6437	6.1	13

31	Introducing gene deletions by mouse zygote electroporation of Cas12a/Cpf1. *Transgenic Research*, **2019**, 28, 525-535	3.3	12
30	Human MARF1 is an endoribonuclease that interacts with the DCP1:2 decapping complex and degrades target mRNAs. *Nucleic Acids Research*, **2018**, 46, 12008-12021	20.1	12
29	Use of RNA tertiary interaction modules for the crystallisation of the spliceosomal snRNP core domain. *Journal of Molecular Biology*, **2010**, 402, 154-64	6.5	11
28	Crystal structure of the C-terminal 2Ţ5Ţphosphodiesterase domain of group A rotavirus protein VP3. *Proteins: Structure, Function and Bioinformatics*, **2015**, 83, 997-1002	4.2	9
27	Heterologous Expression and Purification of CRISPR-Cas12a/Cpf1. *Bio-protocol*, **2018**, 8, e2842	0.9	9
26	Hakai is required for stabilization of core components of the mA mRNA methylation machinery. *Nature Communications*, **2021**, 12, 3778	17.4	9
25	Generation of CRISPR-Cas9 Complexes with Covalently Bound Repair Templates for Genome Editing in Mammalian Cells. *Bio-protocol*, **2019**, 9,	0.9	8
24	ANGEL2 is a member of the CCR4 family of deadenylases with 2Ţ3Ţcyclic phosphatase activity. *Science*, **2020**, 369, 524-530	33.3	8
23	Structural basis for acceptor RNA substrate selectivity of the 3Ţterminal uridylyl transferase Tailor. *Nucleic Acids Research*, **2019**, 47, 1030-1042	20.1	7
22	Preparation and electroporation of Cas12a/Cpf1-guide RNA complexes for introducing large gene deletions in mouse embryonic stem cells. *Methods in Enzymology*, **2019**, 616, 241-263	1.7	7
21	Conformational control of Cas9 by CRISPR hybrid RNA-DNA guides mitigates off-target activity in T´cells. *Molecular Cell*, **2021**, 81, 3637-3649.e5	17.6	6
20	Specialized Weaponry: How a Type III-A CRISPR-Cas System Excels at Combating Phages. *Cell Host and Microbe*, **2017**, 22, 258-259	23.4	4
19	Covalent linkage of the DNA repair template to the CRISPR/Cas9 complex enhances homology-directed repair		4
18	Molecular mechanism of off-target effects in CRISPR-Cas9		4
17	DNA-guided DNA cleavage at moderate temperatures by Clostridium butyricum Argonaute		4
16	Mechanistic Insights into theCis-andTrans-acting Deoxyribonuclease Activities of Cas12a		3
15	CRISPR-Directed Therapeutic Correction at the Locus Is Challenged by Frequent Incidence of Chromosomal Deletions. *Molecular Therapy - Methods and Clinical Development*, **2020**, 17, 936-943	6.4	3
14	Mechanism of R-loop formation and conformational activation of Cas9		3

13	Two-Metal Ion Mechanism of DNA Cleavage in CRISPR-Cas9. *Biophysical Journal*, **2020**, 118, 64a	2.9	2
12	Target site selection and remodelling by type V CRISPR-transposon systems. *Nature*, **2021**, 599, 497-502	50.4	2
11	Molecular architecture of the human tRNA ligase complex. *ELife*, **2021**, 10,	8.9	2
10	Author response: Covalent linkage of the DNA repair template to the CRISPR-Cas9 nuclease enhances homology-directed repair **2018**,		2
9	CrispRVariants: precisely charting the mutation spectrum in genome engineering experiments		2
8	Type III CRISPR-Cas systems generate cyclic oligoadenylate second messengers to activate Csm6 RNases		2
7	The oxidoreductase PYROXD1 uses NAD(P) as an antioxidant to sustain tRNA ligase activity in pre-tRNA splicing and unfolded protein response. *Molecular Cell*, **2021**, 81, 2520-2532.e16	17.6	2
6	Structural basis for Cas9 off-target activity		1
5	The CRISPR-RNA World: An Interview with Martin J□ek. *CRISPR Journal*, **2020**, 3, 68-72	2.5	1
4	Multiplexed Single-Molecule Experiments Reveal Nucleosome Invasion Dynamics of the Cas9 Genome Editor. *Journal of the American Chemical Society*, **2021**, 143, 16313-16319	16.4	1
3	Eukaryotic expression, purification, crystallization and preliminary X-ray analysis of murine Manic Fringe. *Acta Crystallographica Section F: Structural Biology Communications*, **2006**, 62, 774-7		
2	Uncut but Primed for Change. *CRISPR Journal*, **2019**, 2, 352-354	2.5	
1	Cover Image, Volume 9, Issue 5. *Wiley Interdisciplinary Reviews RNA*, **2018**, 9, e1505	9.3	