Lennart Randau

List of Publications by Year
in descending order

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61	2,718	172207	189595
papers	citations	29 h-index	50 g-index

68	68	68	2615
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A korarchaeal genome reveals insights into the evolution of the Archaea. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8102-8107.	3.3	253
2	Nanoarchaeum equitans creates functional tRNAs from separate genes for their 5â€²- and 3â€²-halves. Nature, 2005, 433, 537-541.	13.7	192
3	PAM identification by CRISPR-Cas effector complexes: diversified mechanisms and structures. RNA Biology, 2019, 16, 504-517.	1.5	160
4	Type IV CRISPRâ€“Cas systems are highly diverse and involved in competition between plasmids. Nucleic Acids Research, 2020, 48, 2000-2012.	6.5	128
5	Life without RNase P. Nature, 2008, 453, 120-123.	13.7	109
6	Characterization of CRISPR RNA processing in Clostridium thermocellum and Methanococcus maripaludis. Nucleic Acids Research, 2012, 40, 9887-9896.	6.5	109
7	Small regulatory RNAs in Archaea. RNA Biology, 2014, 11, 484-493.	1.5	99
8	Characterization of the CRISPR/Cas Subtype I-A System of the Hyperthermophilic Crenarchaeon Thermoproteus tenax. Journal of Bacteriology, 2012, 194, 2491-2500.	1.0	98
9	DNA and RNA interference mechanisms by CRISPR-Cas surveillance complexes. FEMS Microbiology Reviews, 2015, 39, 442-463.	3.9	98
10	Transfer RNA genes in pieces. EMBO Reports, 2008, 9, 623-628.	2.0	79
11	The heteromeric Nanoarchaeum equitans splicing endonuclease cleaves noncanonical bulge-helix-bulge motifs of joined tRNA halves. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17934-17939.	3.3	71
12	Type IV CRISPR RNA processing and effector complex formation in Aromatoleum aromaticum. Nature Microbiology, 2019, 4, 89-96.	5.9	70
13	Structural Variation of Type I-F CRISPR RNA Guided DNA Surveillance. Molecular Cell, 2017, 67, 622-632.e4.	4.5	67
14	A Complex of Cas Proteins 5, 6, and 7 Is Required for the Biogenesis and Stability of Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)-derived RNAs (crRNAs) in Haloferax volcanii. Journal of Biological Chemistry, 2014, 289, 7164-7177.	1.6	65
15	A Cytidine Deaminase Edits C to U in Transfer RNAs in Archaea. Science, 2009, 324, 657-659.	6.0	64
16	RNA processing in the minimal organism Nanoarchaeum equitans. Genome Biology, 2012, 13, R63.	13.9	62
17	Modulating the Cascade architecture of a minimal Type I-F CRISPR-Cas system. Nucleic Acids Research, 2016, 44, 5872-5882.	6.5	57
18	Multi-omics Analysis of CRISPRi-Knockdowns Identifies Mechanisms that Buffer Decreases of Enzymes in E.Âcoli Metabolism. Cell Systems, 2021, 12, 56-67.e6.	2.9	57

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19	In vitro assembly and activity of an archaeal CRISPR-Cas type I-A Cascade interference complex. Nucleic Acids Research, 2014, 42, 5125-5138.	6.5	56
20	Escherichia coli Glutamyl-tRNA Reductase. Journal of Biological Chemistry, 2002, 277, 48657-48663.	1.6	55
21	The complete set of tRNA species inNanoarchaeum equitans. FEBS Letters, 2005, 579, 2945-2947.	1.3	53
22	RNA-Seq analyses reveal the order of tRNA processing events and the maturation of C/D box and CRISPR RNAs in the hyperthermophile Methanopyrus kandleri. Nucleic Acids Research, 2013, 41, 6250-6258.	6.5	50
23	Bio-Layer Interferometry Analysis of the Target Binding Activity of CRISPR-Cas Effector Complexes. Frontiers in Molecular Biosciences, 2020, 7, 98.	1.6	39
24	tRNA Modification Profiles and Codon-Decoding Strategies in Methanocaldococcus jannaschii. Journal of Bacteriology, 2019, 201, .	1.0	38
25	Small RNAs for defence and regulation in archaea. Extremophiles, 2012, 16, 685-696.	0.9	37
26	Structure and RNA-binding properties of the Type III-A CRISPR-associated protein Csm3. RNA Biology, 2013, 10, 1670-1678.	1.5	35
27	C/D box sRNA-guided 2â€²-O-methylation patterns of archaeal rRNA molecules. BMC Genomics, 2015, 16, 632.	1.2	35
28	A regulatory RNA is involved in RNA duplex formation and biofilm regulation in Sulfolobus acidocaldarius. Nucleic Acids Research, 2018, 46, 4794-4806.	6.5	32
29	tRNA Recognition by Glutamyl-tRNA Reductase. Journal of Biological Chemistry, 2004, 279, 34931-34937.	1.6	31
30	Transfer RNA processing in archaea: Unusual pathways and enzymes. FEBS Letters, 2010, 584, 303-309.	1.3	30
31	3â€²â€“5â€² tRNA^{His} guanylyltransferase in bacteria. FEBS Letters, 2010, 584, 3567-3572.	1.3	30
32	Exploiting CRISPR/Cas: Interference Mechanisms and Applications. International Journal of Molecular Sciences, 2013, 14, 14518-14531.	1.8	30
33	Interference activity of a minimal Type I CRISPRâ€“Cas system fromShewanella putrefaciens. Nucleic Acids Research, 2015, 43, 8913-8923.	6.5	28
34	Crystal structure and assembly of the functional Nanoarchaeum equitans tRNA splicing endonuclease. Nucleic Acids Research, 2009, 37, 5793-5802.	6.5	25
35	Analysis of proteinâ€“RNA interactions in CRISPR proteins and effector complexes by UV-induced cross-linking and mass spectrometry. Methods, 2015, 89, 138-148.	1.9	25
36	A Non-Stem-Loop CRISPR RNA Is Processed by Dual Binding Cas6. Structure, 2016, 24, 547-554.	1.6	24

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37	RIP-Seq Suggests Translational Regulation by L7Ae in Archaea. MBio, 2017, 8, .	1.8	23
38	Comparative analysis of Cas6b processing and CRISPR RNA stability. RNA Biology, 2013, 10, 700-707.	1.5	22
39	Anti-CRISPR AcrIF9 functions by inducing the CRISPRâ€“Cas complex to bind DNA non-specifically. Nucleic Acids Research, 2021, 49, 3381-3393.	6.5	22
40	RNA-Seq analyses reveal CRISPR RNA processing and regulation patterns. Biochemical Society Transactions, 2013, 41, 1459-1463.	1.6	18
41	Selective Enrichment of Slow-Growing Bacteria in a Metabolism-Wide CRISPRi Library with a TIMER Protein. ACS Synthetic Biology, 2018, 7, 2775-2782.	1.9	17
42	Circularization restores signal recognition particle RNA functionality in Thermoproteus. ELife, 2015, 4, .	2.8	15
43	Commentary: Type I CRISPR-Cas targets endogenous genes and regulates virulence to evade mammalian host immunity. Frontiers in Microbiology, 2017, 8, 319.	1.5	11
44	Unique Archaeal Small RNAs. Annual Review of Genetics, 2018, 52, 465-487.	3.2	11
45	DNA Binding Properties of the Small Cascade Subunit Csa5. PLoS ONE, 2014, 9, e105716.	1.1	11
46	Fragmentation of the CRISPR-Cas Type I-B signature protein Cas8b. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 2993-3000.	1.1	10
47	Plasticity of archaeal C/D box sRNA biogenesis. Molecular Microbiology, 2017, 103, 151-164.	1.2	10
48	Conservation of Archaeal C/D Box sRNA-Guided RNA Modifications. Frontiers in Microbiology, 2021, 12, 654029.	1.5	9
49	Noncoding RNAs in Archaea: Genome-Wide Identification and Functional Classification. Methods in Enzymology, 2018, 612, 413-442.	0.4	7
50	Response by Lennart Randau & Dieter SÃ¶ll. EMBO Reports, 2008, 9, 820-821.	2.0	6
51	C/D box sRNA, CRISPR RNA and tRNA processing in an archaeon with a minimal fragmented genome. Biochemical Society Transactions, 2013, 41, 411-415.	1.6	6
52	Evolution of small guide RNA genes in hyperthermophilic archaea. Annals of the New York Academy of Sciences, 2015, 1341, 188-193.	1.8	6
53	RNA stabilization in hyperthermophilic archaea. Annals of the New York Academy of Sciences, 2019, 1447, 88-96.	1.8	6
54	Live-cell single-particle tracking photoactivated localization microscopy of Cascade-mediated DNA surveillance. Methods in Enzymology, 2019, 616, 133-171.	0.4	4

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55	Small RNA-guided adaptive immunity. Physics of Life Reviews, 2014, 11, 139-140.	1.5	3
56	Features of Aminoacyl-tRNA Synthesis Unique to Archaea. , 0, , 198-208.		1
57	In Vitro Co-reconstitution of Cas Protein Complexes. Methods in Molecular Biology, 2015, 1311, 23-33.	0.4	0
58	Archaeal physiology: Two modes of a DNA scissor. Nature Microbiology, 2017, 2, 17049.	5.9	0
59	VielfÃltige Genscheren: natÃ¼rliche AktivitÃten von CRISPR-Cas-Systemen. BioSpektrum, 2018, 24, 704-706.	0.0	0
60	Meeting Report: German Genetics Societyâ€"Genome Editing with CRISPR. BioEssays, 2020, 42, 1900223.	1.2	0
61	Evolution of C/D Box sRNAs. Nucleic Acids and Molecular Biology, 2017, , 201-224.	0.2	0