Heike Betat

List of Publications by Year
in descending order

32 papers	673 citations	471509 17 h-index	580821 25 g-index
33 all docs	33 docs citations	33 times ranked	611 citing authors

#	Article	IF	Citations
1	CCA-Addition Gone Wild: Unusual Occurrence and Phylogeny of Four Different tRNA Nucleotidyltransferases in Acanthamoeba castellanii. Molecular Biology and Evolution, 2021, 38, 1006-1017.	8.9	0
2	Crystallization and Structural Determination of an Enzyme:Substrate Complex by Serial Crystallography in a Versatile Microfluidic Chip. Journal of Visualized Experiments, 2021, , .	0.3	0
3	Changes of the tRNA Modification Pattern during the Development of Dictyostelium discoideum. Non-coding RNA, 2021, 7, 32.	2.6	1
4	CCA-addition in the cold: Structural characterization of the psychrophilic CCA-adding enzyme from the permafrost bacterium Planococcus halocryophilus. Computational and Structural Biotechnology Journal, 2021, 19, 5845-5855.	4.1	2
5	LOTTE-seq (Long hairpin oligonucleotide based tRNA high-throughput sequencing): specific selection of tRNAs with 3â€™-CCA end for high-throughput sequencing. RNA Biology, 2020, 17, 23-32.	3.1	22
6	Unusual Occurrence of Two Bona-Fide CCA-Adding Enzymes in Dictyostelium discoideum. International Journal of Molecular Sciences, 2020, 21, 5210.	4.1	4
7	Adaptation of the Romanomermis culicivorax CCA-Adding Enzyme to Miniaturized Armless tRNA Substrates. International Journal of Molecular Sciences, 2020, 21, 9047.	4.1	6
8	Divergent Evolution of Eukaryotic CC- and A-Adding Enzymes. International Journal of Molecular Sciences, 2020, 21, 462.	4.1	5
9	Monitoring the Production of High Diffraction-Quality Crystals of Two Enzymes in Real Time Using In Situ Dynamic Light Scattering. Crystals, 2020, 10, 65.	2.2	3
10	Dual expression of CCA-adding enzyme and RNase T in Escherichia coli generates a distinct cca growth phenotype with diverse applications. Nucleic Acids Research, 2019, 47, 3631-3639.	14.5	7
11	A Temporal Order in 5â€²- and 3â€²- Processing of Eukaryotic tRNAHis. International Journal of Molecular Sciences, 2019, 20, 1384.	4.1	3
12	A simple and versatile microfluidic device for efficient biomacromolecule crystallization and structural analysis by serial crystallography. IUCrJ, 2019, 6, 454-464.	2.2	23
13	A tRNA's fate is decided at its 3â€² end: Collaborative actions of CCA-adding enzyme and RNases involved in tRNA processing and degradation. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2018, 1861, 433-441.	1.9	41
14	Cold adaptation of tRNA nucleotidyltransferases: A tradeoff in activity, stability and fidelity. RNA Biology, 2018, 15, 144-155.	3.1	24
15	Examining tRNA 3â€²-ends in<i>Escherichia coli</i>: teamwork between CCA-adding enzyme, RNase T, and RNase R. Rna, 2018, 24, 361-370.	3.5	20
16	Combining crystallogenesis methods to produce diffraction-quality crystals of a psychrophilic tRNA-maturation enzyme. Acta Crystallographica Section F, Structural Biology Communications, 2018, 74, 747-753.	0.8	8
17	Small but large enough: structural properties of armless mitochondrial tRNAs from the nematode Romanomermis culicivorax. Nucleic Acids Research, 2018, 46, 9170-9180.	14.5	35
18	Genotyping bacterial and fungal pathogens using sequence variation in the gene for the CCA-adding enzyme. BMC Microbiology, 2016, 16, 47.	3.3	5

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19	The CCAâ€adding enzyme: A central scrutinizer in tRNA quality control. BioEssays, 2015, 37, 975-982.	2.5	35
20	The identity of the discriminator base has an impact on CCA addition. Nucleic Acids Research, 2015, 43, 5617-5629.	14.5	22
21	The ancestor of modern Holozoa acquired the CCA-adding enzyme from Alphaproteobacteria by horizontal gene transfer. Nucleic Acids Research, 2015, 43, 6739-6746.	14.5	14
22	Domain movements during CCA-addition: A new function for motif C in the catalytic core of the human tRNA nucleotidyltransferases. RNA Biology, 2015, 12, 435-446.	3.1	14
23	From End to End: tRNA Editing at 5'- and 3'-Terminal Positions. International Journal of Molecular Sciences, 2014, 15, 23975-23998.	4.1	27
24	An inhibitory C-terminal region dictates the specificity of A-adding enzymes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 21040-21045.	7.1	20
25	tRNA nucleotidyltransferases: ancient catalysts with an unusual mechanism of polymerization. Cellular and Molecular Life Sciences, 2010, 67, 1447-1463.	5.4	62
26	Unusual evolution of a catalytic core element in CCA-adding enzymes. Nucleic Acids Research, 2010, 38, 4436-4447.	14.5	19
27	A comparative analysis of CCA-adding enzymes from human and E. coli: Differences in CCA addition and tRNA 3â€²-end repair. Biochimie, 2008, 90, 762-772.	2.6	42
28	Evolution of tRNA nucleotidyltransferases: A small deletion generated CC-adding enzymes. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7953-7958.	7.1	42
29	A comparative analysis of two conserved motifs in bacterial poly(A) polymerase and CCA-adding enzyme. Nucleic Acids Research, 2008, 36, 5212-5220.	14.5	25
30	Hfq stimulates the activity of the CCA-adding enzyme. BMC Molecular Biology, 2007, 8, 92.	3.0	22
31	Exchange of Regions between Bacterial Poly(A) Polymerase and the CCA-Adding Enzyme Generates Altered Specificities. Molecular Cell, 2004, 15, 389-398.	9.7	46
32	Crystal Structure of the Human CCA-adding Enzyme: Insights into Template-independent Polymerization. Journal of Molecular Biology, 2003, 328, 985-994.	4.2	71