

# Heike Betat

## List of Publications by Year in descending order

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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	Crystal Structure of the Human CCA-adding Enzyme: Insights into Template-independent Polymerization. <i>Journal of Molecular Biology</i> , 2003, 328, 985-994.	4.2	71
2	tRNA nucleotidyltransferases: ancient catalysts with an unusual mechanism of polymerization. <i>Cellular and Molecular Life Sciences</i> , 2010, 67, 1447-1463.	5.4	62
3	Exchange of Regions between Bacterial Poly(A) Polymerase and the CCA-Adding Enzyme Generates Altered Specificities. <i>Molecular Cell</i> , 2004, 15, 389-398.	9.7	46
4	A comparative analysis of CCA-adding enzymes from human and <i>E. coli</i> : Differences in CCA addition and tRNA 3' end repair. <i>Biochimie</i> , 2008, 90, 762-772.	2.6	42
5	Evolution of tRNA nucleotidyltransferases: A small deletion generated CC-adding enzymes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7953-7958.	7.1	42
6	A tRNA's fate is decided at its 3' end: Collaborative actions of CCA-adding enzyme and RNases involved in tRNA processing and degradation. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2018, 1861, 433-441.	1.9	41
7	The CCA-adding enzyme: A central scrutinizer in tRNA quality control. <i>BioEssays</i> , 2015, 37, 975-982.	2.5	35
8	Small but large enough: structural properties of armless mitochondrial tRNAs from the nematode <i>Romanomermis culicivorax</i> . <i>Nucleic Acids Research</i> , 2018, 46, 9170-9180.	14.5	35
9	From End to End: tRNA Editing at 5'- and 3'-Terminal Positions. <i>International Journal of Molecular Sciences</i> , 2014, 15, 23975-23998.	4.1	27
10	A comparative analysis of two conserved motifs in bacterial poly(A) polymerase and CCA-adding enzyme. <i>Nucleic Acids Research</i> , 2008, 36, 5212-5220.	14.5	25
11	Cold adaptation of tRNA nucleotidyltransferases: A tradeoff in activity, stability and fidelity. <i>RNA Biology</i> , 2018, 15, 144-155.	3.1	24
12	A simple and versatile microfluidic device for efficient biomacromolecule crystallization and structural analysis by serial crystallography. <i>IUCrJ</i> , 2019, 6, 454-464.	2.2	23
13	Hfq stimulates the activity of the CCA-adding enzyme. <i>BMC Molecular Biology</i> , 2007, 8, 92.	3.0	22
14	The identity of the discriminator base has an impact on CCA addition. <i>Nucleic Acids Research</i> , 2015, 43, 5617-5629.	14.5	22
15	LOTTE-seq (Long hairpin oligonucleotide based tRNA high-throughput sequencing): specific selection of tRNAs with 3' end CCA for high-throughput sequencing. <i>RNA Biology</i> , 2020, 17, 23-32.	3.1	22
16	An inhibitory C-terminal region dictates the specificity of A-adding enzymes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 21040-21045.	7.1	20
17	Examining tRNA 3' ends in <i>Escherichia coli</i> : teamwork between CCA-adding enzyme, RNase T, and RNase R. <i>Rna</i> , 2018, 24, 361-370.	3.5	20
18	Unusual evolution of a catalytic core element in CCA-adding enzymes. <i>Nucleic Acids Research</i> , 2010, 38, 4436-4447.	14.5	19

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19	The ancestor of modern Holozoa acquired the CCA-adding enzyme from Alphaproteobacteria by horizontal gene transfer. <i>Nucleic Acids Research</i> , 2015, 43, 6739-6746.	14.5	14
20	Domain movements during CCA-addition: A new function for motif C in the catalytic core of the human tRNA nucleotidyltransferases. <i>RNA Biology</i> , 2015, 12, 435-446.	3.1	14
21	Combining crystallogensis methods to produce diffraction-quality crystals of a psychrophilic tRNA-maturation enzyme. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2018, 74, 747-753.	0.8	8
22	Dual expression of CCA-adding enzyme and RNase T in <i>Escherichia coli</i> generates a distinct cca growth phenotype with diverse applications. <i>Nucleic Acids Research</i> , 2019, 47, 3631-3639.	14.5	7
23	Adaptation of the <i>Romanormis culicivorax</i> CCA-Adding Enzyme to Miniaturized Armless tRNA Substrates. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9047.	4.1	6
24	Genotyping bacterial and fungal pathogens using sequence variation in the gene for the CCA-adding enzyme. <i>BMC Microbiology</i> , 2016, 16, 47.	3.3	5
25	Divergent Evolution of Eukaryotic CC- and A-Adding Enzymes. <i>International Journal of Molecular Sciences</i> , 2020, 21, 462.	4.1	5
26	Unusual Occurrence of Two Bona-Fide CCA-Adding Enzymes in <i>Dictyostelium discoideum</i> . <i>International Journal of Molecular Sciences</i> , 2020, 21, 5210.	4.1	4
27	A Temporal Order in 5' and 3' Processing of Eukaryotic tRNA <sup>His</sup> . <i>International Journal of Molecular Sciences</i> , 2019, 20, 1384.	4.1	3
28	Monitoring the Production of High Diffraction-Quality Crystals of Two Enzymes in Real Time Using In Situ Dynamic Light Scattering. <i>Crystals</i> , 2020, 10, 65.	2.2	3
29	CCA-addition in the cold: Structural characterization of the psychrophilic CCA-adding enzyme from the permafrost bacterium <i>Planococcus halocryophilus</i> . <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 5845-5855.	4.1	2
30	Changes of the tRNA Modification Pattern during the Development of <i>Dictyostelium discoideum</i> . <i>Non-coding RNA</i> , 2021, 7, 32.	2.6	1
31	CCA-Addition Gone Wild: Unusual Occurrence and Phylogeny of Four Different tRNA Nucleotidyltransferases in <i>Acanthamoeba castellanii</i> . <i>Molecular Biology and Evolution</i> , 2021, 38, 1006-1017.	8.9	0
32	Crystallization and Structural Determination of an Enzyme:Substrate Complex by Serial Crystallography in a Versatile Microfluidic Chip. <i>Journal of Visualized Experiments</i> , 2021, , .	0.3	0