

Claudia Hbartner

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

107
papers

4,175
citations

33
h-index

63
g-index

123
ext. papers

5,176
ext. citations

10.6
avg, IF

5.97
L-index

#	Paper	IF	Citations
107	The RNA methyltransferase METTL8 installs mC in mitochondrial tRNAs to optimise tRNA structure and mitochondrial translation.. <i>Nature Communications</i> , 2022 , 13, 209	17.4	0
106	Structure and mechanism of the methyltransferase ribozyme MTR1.. <i>Nature Chemical Biology</i> , 2022 ,	11.7	1
105	In Vitro Selection of Deoxyribozymes for the Detection of RNA Modifications. <i>Methods in Molecular Biology</i> , 2022 , 167-179	1.4	
104	Large Stokes shift fluorescence activation in an RNA aptamer by intermolecular proton transfer to guanine. <i>Nature Communications</i> , 2021 , 12, 3549	17.4	4
103	RNA-Cleaving Deoxyribozymes Differentiate Methylated Cytidine Isomers in RNA. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 19058-19062	16.4	5
102	NOseq: amplicon sequencing evaluation method for RNA m6A sites after chemical deamination. <i>Nucleic Acids Research</i> , 2021 , 49, e23	20.1	12
101	RNA-Cleaving Deoxyribozymes Differentiate Methylated Cytidine Isomers in RNA. <i>Angewandte Chemie</i> , 2021 , 133, 19206-19210	3.6	0
100	Nucleic Acid-Catalyzed RNA Ligation and Labeling 2021 , 557-570		
99	Mechanism of molnupiravir-induced SARS-CoV-2 mutagenesis. <i>Nature Structural and Molecular Biology</i> , 2021 , 28, 740-746	17.6	108
98	Mechanism of SARS-CoV-2 polymerase stalling by remdesivir. <i>Nature Communications</i> , 2021 , 12, 279	17.4	171
97	Repurposing Antiviral Drugs for Orthogonal RNA-Catalyzed Labeling of RNA. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 9335-9339	16.4	18
96	Machine learning of reverse transcription signatures of variegated polymerases allows mapping and discrimination of methylated purines in limited transcriptomes. <i>Nucleic Acids Research</i> , 2020 , 48, 3734-3746	20.1	20
95	Supramolecular Fluorescence Resonance Energy Transfer in Nucleobase-Modified Fluorogenic RNA Aptamers. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 6760-6764	16.4	12
94	Repurposing Antiviral Drugs for Orthogonal RNA-Catalyzed Labeling of RNA. <i>Angewandte Chemie</i> , 2020 , 132, 9421-9425	3.6	8
93	Strategies for Characterization of Enzymatic Nucleic Acids. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2020 , 170, 37-58	1.7	
92	Supramolecular Fluorescence Resonance Energy Transfer in Nucleobase-Modified Fluorogenic RNA Aptamers. <i>Angewandte Chemie</i> , 2020 , 132, 6826-6830	3.6	
91	Measurement of Angstrom to Nanometer Molecular Distances with ¹⁹ F Nuclear Spins by EPR/ENDOR Spectroscopy. <i>Angewandte Chemie</i> , 2020 , 132, 381-387	3.6	0

90	Measurement of Angstrom to Nanometer Molecular Distances with F Nuclear Spins by EPR/ENDOR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 373-379	16.4	15
89	N-Isopentenyladenosine in RNA Determines the Cleavage Site of Endonuclease Deoxyribozymes. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 18627-18631	16.4	6
88	N6-Isopentenyladenosine in RNA Determines the Cleavage Site of Endonuclease Deoxyribozymes. <i>Angewandte Chemie</i> , 2020 , 132, 18786-18790	3.6	3
87	Site-specific RNA methylation by a methyltransferase ribozyme. <i>Nature</i> , 2020 , 587, 663-667	50.4	18
86	New Deoxyribozymes for the Native Ligation of RNA. <i>Molecules</i> , 2020 , 25,	4.8	3
85	Fundamental studies of functional nucleic acids: aptamers, riboswitches, ribozymes and DNAzymes. <i>Chemical Society Reviews</i> , 2020 , 49, 7331-7353	58.5	44
84	Eukaryotic 5-methylcytosine (m ⁵ C) RNA Methyltransferases: Mechanisms, Cellular Functions, and Links to Disease. <i>Genes</i> , 2019 , 10,	4.2	135
83	Structure-fluorescence activation relationships of a large Stokes shift fluorogenic RNA aptamer. <i>Nucleic Acids Research</i> , 2019 , 47, 11538-11550	20.1	5
82	Direct Selection of -Acting Ribozymes for Posttranscriptional, Site-Specific, and Covalent Fluorescent Labeling of RNA. <i>Journal of the American Chemical Society</i> , 2019 , 141, 19546-19549	16.4	25
81	A Multicolor Large Stokes Shift Fluorogen-Activating RNA Aptamer with Cationic Chromophores. <i>Chemistry - A European Journal</i> , 2019 , 25, 1931-1935	4.8	24
80	Chemoselective labeling and site-specific mapping of 5-formylcytosine as a cellular nucleic acid modification. <i>FEBS Letters</i> , 2018 , 592, 2032-2047	3.8	17
79	Titelbild: N6-Methyladenosine-Sensitive RNA-Cleaving Deoxyribozymes (Angew. Chem. 46/2018). <i>Angewandte Chemie</i> , 2018 , 130, 15165-15165	3.6	
78	Translation of non-standard codon nucleotides reveals minimal requirements for codon-anticodon interactions. <i>Nature Communications</i> , 2018 , 9, 4865	17.4	13
77	N-Methyladenosine-Sensitive RNA-Cleaving Deoxyribozymes. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 15117-15121	16.4	25
76	N6-Methyladenosine-Sensitive RNA-Cleaving Deoxyribozymes. <i>Angewandte Chemie</i> , 2018 , 130, 15337-15341	3.6	8
75	Efficiency and precision of microRNA biogenesis modes in plants. <i>Nucleic Acids Research</i> , 2018 , 46, 10709-10723	20.1	6
74	The mA reader protein YTHDC2 interacts with the small ribosomal subunit and the 5F3T exoribonuclease XRN1. <i>Rna</i> , 2018 , 24, 1339-1350	5.8	105
73	In Vitro Assays for RNA Methyltransferase Activity. <i>Methods in Molecular Biology</i> , 2017 , 1562, 259-268	1.4	2

72	Debranchase-resistant labeling of RNA using the 10DM24 deoxyribozyme and fluorescent modified nucleotides. <i>Chemical Communications</i> , 2017 , 53, 11992-11995	5.8	10
71	Human METTL16 is a -methyladenosine (m ⁶ A) methyltransferase that targets pre-mRNAs and various non-coding RNAs. <i>EMBO Reports</i> , 2017 , 18, 2004-2014	6.5	276
70	Aptamers provide superior stainings of cellular receptors studied under super-resolution microscopy. <i>PLoS ONE</i> , 2017 , 12, e0173050	3.7	32
69	Yeast Prp2 liberates the 5Tsplice site and the branch site adenosine for catalysis of pre-mRNA splicing. <i>Rna</i> , 2017 , 23, 1770-1779	5.8	17
68	Staining of Membrane Receptors with Fluorescently-labeled DNA Aptamers for Super-resolution Imaging. <i>Bio-protocol</i> , 2017 , 7, e2541	0.9	1
67	NSUN3 and ABH1 modify the wobble position of mt-tRNAMet to expand codon recognition in mitochondrial translation. <i>EMBO Journal</i> , 2016 , 35, 2104-2119	13	137
66	Fluorogene Markierung von 5-Formylpyrimidin-Nucleotiden in DNA und RNA. <i>Angewandte Chemie</i> , 2016 , 128, 1946-1950	3.6	11
65	Substrate-assisted mechanism of RNP disruption by the spliceosomal Brr2 RNA helicase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 7798-803	11.5	15
64	Fluorogenic Labeling of 5-Formylpyrimidine Nucleotides in DNA and RNA. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 1912-6	16.4	50
63	High-resolution measurement of long-range distances in RNA: pulse EPR spectroscopy with TEMPO-labeled nucleotides. <i>Chemical Science</i> , 2016 , 7, 3172-3180	9.4	41
62	Synthesis of a norcantharidin-tethered guanosine: Protein phosphatase-1 inhibitors that change alternative splicing. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 965-968	2.9	1
61	Crystal structure of a DNA catalyst. <i>Nature</i> , 2016 , 529, 231-4	50.4	95
60	Functional Hallmarks of a Catalytic DNA that Makes Lariat RNA. <i>Chemistry - A European Journal</i> , 2016 , 22, 3720-8	4.8	6
59	NSUN6 is a human RNA methyltransferase that catalyzes formation of m ⁵ C72 in specific tRNAs. <i>Rna</i> , 2015 , 21, 1532-43	5.8	102
58	Mg ²⁺ -dependent conformational changes and product release during DNA-catalyzed RNA ligation monitored by Bimane fluorescence. <i>Nucleic Acids Research</i> , 2015 , 43, 40-50	20.1	6
57	A Mini-Twister Variant and Impact of Residues/Cations on the Phosphodiester Cleavage of this Ribozyme Class. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 15128-15133	16.4	47
56	NAA-modified DNA oligonucleotides with zwitterionic backbones: stereoselective synthesis of A-T phosphoramidite building blocks. <i>Beilstein Journal of Organic Chemistry</i> , 2015 , 11, 50-60	2.5	8
55	The G-patch protein Spp2 couples the spliceosome-stimulated ATPase activity of the DEAH-box protein Prp2 to catalytic activation of the spliceosome. <i>Genes and Development</i> , 2015 , 29, 94-107	12.6	45

54	Site-specific labeling of RNA at internal ribose hydroxyl groups: terbium-assisted deoxyribozymes at work. <i>Journal of the American Chemical Society</i> , 2014 , 136, 8131-7	16.4	59
53	High-frequency 263 GHz PELDOR. <i>Applied Magnetic Resonance</i> , 2014 , 45, 969-979	0.8	12
52	Synthesis and properties of DNA oligonucleotides with a zwitterionic backbone structure. <i>Chemical Communications</i> , 2014 , 50, 13742-5	5.8	13
51	Enzymatic combinatorial nucleoside deletion scanning mutagenesis of functional RNA. <i>Chemical Communications</i> , 2014 , 50, 10937-40	5.8	3
50	Control of membrane gaps by synaptotagmin-Ca ²⁺ measured with a novel membrane distance ruler. <i>Nature Communications</i> , 2014 , 5, 5859	17.4	34
49	Deoxyribozyme-mediated ligation for incorporating EPR spin labels and reporter groups into RNA. <i>Methods in Enzymology</i> , 2014 , 549, 85-104	1.7	11
48	Lanthanide cofactors accelerate DNA-catalyzed synthesis of branched RNA. <i>Journal of the American Chemical Society</i> , 2013 , 135, 12839-48	16.4	26
47	Synthesis of spin-labeled riboswitch RNAs using convertible nucleosides and DNA-catalyzed RNA ligation. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 6171-80	3.4	60
46	Orientation selection in distance measurements between nitroxide spin labels at 94 GHz EPR with variable dual frequency irradiation. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 3433-7	3.6	53
45	Combinatorial nucleoside-deletion-scanning mutagenesis of functional DNA. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 2995-9	16.4	9
44	Mutationsanalyse funktionaler DNA durch statistische Nucleosiddeletion. <i>Angewandte Chemie</i> , 2013 , 125, 3069-3073	3.6	1
43	Synthesis and characterization of RNA containing a rigid and nonperturbing cytidine-derived spin label. <i>Journal of Organic Chemistry</i> , 2012 , 77, 7749-54	4.2	53
42	Synthesis, gene silencing, and molecular modeling studies of 4FC-aminomethyl-2FO-methyl modified small interfering RNAs. <i>Journal of Organic Chemistry</i> , 2012 , 77, 3233-45	4.2	26
41	Chemical Synthesis of RNA 2012 , 154-162		0
40	Incorporation of 4FC-aminomethyl-2FO-methylthymidine into DNA by thermophilic DNA polymerases. <i>Chemical Communications</i> , 2012 , 48, 9619-21	5.8	9
39	RNA-Cleaving DNA Enzymes and Their Potential Therapeutic Applications as Antibacterial and Antiviral Agents 2012 , 371-410		1
38	Probing essential nucleobase functional groups in aptamers and deoxyribozymes by nucleotide analogue interference mapping of DNA. <i>Journal of the American Chemical Society</i> , 2011 , 133, 14888-91	16.4	28
37	A dual-mode microwave resonator for double electron-electron spin resonance spectroscopy at W-band microwave frequencies. <i>Journal of Magnetic Resonance</i> , 2011 , 209, 341-6	3	30

36	Enzymatic labeling of 5-hydroxymethylcytosine in DNA. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 4268-70	16.4	12
35	One pot synthesis of Cu(II) 2,2' bipyridyl complexes of 5-hydroxy-hydurilic acid and alloxanic acid: synthesis, crystal structure, chemical nuclease activity and cytotoxicity. <i>Journal of Inorganic Biochemistry</i> , 2011 , 105, 256-67	4.2	28
34	Kombinatorische Mutationsinterferenz-Analyse zur Untersuchung funktioneller Nucleotide in Desoxyribozymen. <i>Angewandte Chemie</i> , 2010 , 122, 8682-8687	3.6	8
33	Chemical RNA modifications for studies of RNA structure and dynamics. <i>ChemBioChem</i> , 2010 , 11, 469-80	3.8	72
32	Sekundärstrukturanalyse von spinmarkierter RNA mit Puls-EPR-Spektroskopie. <i>Angewandte Chemie</i> , 2010 , 122, 6588-6592	3.6	21
31	Probing secondary structures of spin-labeled RNA by pulsed EPR spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 6443-7	16.4	81
30	Combinatorial mutation interference analysis reveals functional nucleotides required for DNA catalysis. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 8504-8	16.4	29
29	Multimodal optical sensing and analyte specificity using single-walled carbon nanotubes. <i>Nature Nanotechnology</i> , 2009 , 4, 114-20	28.7	255
28	Enzymatic ligation strategies for the preparation of purine riboswitches with site-specific chemical modifications. <i>Methods in Molecular Biology</i> , 2009 , 540, 15-24	1.4	17
27	DNA-catalyzed formation of nucleopeptide linkages. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 1753-7	16.4	83
26	DNA-Catalyzed Formation of Nucleopeptide Linkages. <i>Angewandte Chemie</i> , 2008 , 120, 1777-1781	3.6	19
25	Recent advances in DNA catalysis. <i>Biopolymers</i> , 2007 , 87, 279-92	2.2	65
24	Engineering a selective small-molecule substrate binding site into a deoxyribozyme. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 7420-4	16.4	22
23	Engineering a Selective Small-Molecule Substrate Binding Site into a Deoxyribozyme. <i>Angewandte Chemie</i> , 2007 , 119, 7564-7568	3.6	7
22	Site-selective depurination by a periodate-dependent deoxyribozyme. <i>Chemical Communications</i> , 2007 , 2255-7	5.8	21
21	Preparation of 2'-deoxy-2'-methylseleno-modified phosphoramidites and RNA. <i>Current Protocols in Nucleic Acid Chemistry</i> , 2007 , Chapter 1, Unit 1.15	0.5	5
20	Syntheses of RNAs with up to 100 nucleotides containing site-specific 2'-methylseleno labels for use in X-ray crystallography. <i>Journal of the American Chemical Society</i> , 2005 , 127, 12035-45	16.4	91
19	Structural basis for Diels-Alder ribozyme-catalyzed carbon-carbon bond formation. <i>Nature Structural and Molecular Biology</i> , 2005 , 12, 218-24	17.6	171

18	Modulation of RNA tertiary folding by incorporation of caged nucleotides. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 7305-9	16.4	74
17	Modulation of RNA Tertiary Folding by Incorporation of Caged Nucleotides. <i>Angewandte Chemie</i> , 2005 , 117, 7471-7475	3.6	26
16	Triggering of RNA secondary structures by a functionalized nucleobase. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 3922-5	16.4	40
15	Triggering of RNA Secondary Structures by a Functionalized Nucleobase. <i>Angewandte Chemie</i> , 2004 , 116, 4012-4015	3.6	13
14	Structural basis for discriminative regulation of gene expression by adenine- and guanine-sensing mRNAs. <i>Chemistry and Biology</i> , 2004 , 11, 1729-41		448
13	Chemical synthesis of selenium-modified oligoribonucleotides and their enzymatic ligation leading to an U6 SnRNA stem-loop segment. <i>Journal of the American Chemical Society</i> , 2004 , 126, 1141-9	16.4	93
12	Equilibria of RNA Secondary Structures 2004 , 1-17		
11	The Synthesis of 2'-O-[(Triisopropylsilyl)oxy] methyl (TOM) Phosphoramidites of Methylated Ribonucleosides (m 1 G, m 2 G, m 2 2 G, m 1 I, m 3 U, m 4 C, m 6 A, m 6 2 A) for Use in Automated RNA Solid-Phase Synthesis. <i>Monatshefte für Chemie</i> , 2003 , 134, 851-873	1.4	43
10	On secondary structure rearrangements and equilibria of small RNAs. <i>ChemBioChem</i> , 2003 , 4, 984-90	3.8	48
9	On Secondary Structure Rearrangements and Equilibria of Small RNAs. <i>ChemBioChem</i> , 2003 , 4, 1263-1263	3.8	1
8	Bistable secondary structures of small RNAs and their structural probing by comparative imino proton NMR spectroscopy. <i>Journal of Molecular Biology</i> , 2003 , 325, 421-31	6.5	67
7	RNA-Konformationsgleichgewichte und der Einfluss der Methylierung von Nucleobasen auf die Gleichgewichtslage. <i>Angewandte Chemie</i> , 2002 , 114, 619-623	3.6	12
6	RNA Two-State Conformation Equilibria and the Effect of Nucleobase Methylation. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 605-609	16.4	28
5	Methylation of the nucleobases in RNA oligonucleotides mediates duplex-hairpin conversion. <i>Nucleic Acids Research</i> , 2001 , 29, 3997-4005	20.1	71
4	Novel Fluoride-Labile Nucleobase-Protecting Groups for the Synthesis of 3'-(2')-O-Aminoacylated RNA Sequences. <i>Helvetica Chimica Acta</i> , 2000 , 83, 2477-2503	2	21
3	DNA Catalysts for Synthetic Applications in Biomolecular Chemistry	127-155	
2	Mechanism of molnupiravir-induced SARS-CoV-2 mutagenesis		4
1	Chemical Synthesis of Modified RNA	1-37	5

