Claudia HÃ¶bartner

List of Publications by Year
in descending order

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101	6,071	101543	76900
papers	citations	36 h-index	74 g-index

123	123	123	6102
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Throughput Activity Profiling of RNA-Cleaving DNA Catalysts by Deoxyribozyme Sequencing (DZ-seq). Journal of the American Chemical Society, 2022, 144, 2090-2094.	13.7	5
2	Tuning Exciton Coupling of Merocyanine Nucleoside Dimers by RNA, DNA and GNA Double Helix Conformations. Angewandte Chemie - International Edition, 2022, 61, .	13.8	18
3	Tuning Exciton Coupling of Merocyanine Nucleoside Dimers by RNA, DNA and GNA Double Helix Conformations. Angewandte Chemie, 2022, 134, .	2.0	8
4	The RNA methyltransferase METTL8 installs m3C32 in mitochondrial tRNAsThr/Ser(UCN) to optimise tRNA structure and mitochondrial translation. Nature Communications, 2022, 13, 209.	12.8	19
5	Structure and mechanism of the methyltransferase ribozyme MTR1. Nature Chemical Biology, 2022, 18, 547-555.	8.0	16
6	Peptide Backbone Directed Selfâ€Assembly of Merocyanine Oligomers into Duplex Structures. Angewandte Chemie - International Edition, 2022, 61, .	13.8	10
7	NOseq: amplicon sequencing evaluation method for RNA m6A sites after chemical deamination. Nucleic Acids Research, 2021, 49, e23-e23.	14.5	25
8	Large Stokes shift fluorescence activation in an RNA aptamer by intermolecular proton transfer to guanine. Nature Communications, 2021, 12, 3549.	12.8	26
9	RNAâ€Cleaving Deoxyribozymes Differentiate Methylated Cytidine Isomers in RNA. Angewandte Chemie - International Edition, 2021, 60, 19058-19062.	13.8	13
10	RNAâ€Cleaving Deoxyribozymes Differentiate Methylated Cytidine Isomers in RNA. Angewandte Chemie, 2021, 133, 19206-19210.	2.0	1
11	Mechanism of molnupiravir-induced SARS-CoV-2 mutagenesis. Nature Structural and Molecular Biology, 2021, 28, 740-746.	8.2	450
12	Mechanism of SARS-CoV-2 polymerase stalling by remdesivir. Nature Communications, 2021, 12, 279.	12.8	412
13	Measurement of Angstrom to Nanometer Molecular Distances with 19 F Nuclear Spins by EPR/ENDOR Spectroscopy. Angewandte Chemie, 2020, 132, 381-387.	2.0	1
14	Measurement of Angstrom to Nanometer Molecular Distances with ¹⁹F Nuclear Spins by EPR/ENDOR Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 373-379.	13.8	32
15	N⁶â€Isopentenyladenosine in RNA Determines the Cleavage Site of Endonuclease Deoxyribozymes. Angewandte Chemie - International Edition, 2020, 59, 18627-18631.	13.8	16
16	N6â€Isopentenyladenosine in RNA Determines the Cleavage Site of Endonuclease Deoxyribozymes. Angewandte Chemie, 2020, 132, 18786-18790.	2.0	4
17	Site-specific RNA methylation by a methyltransferase ribozyme. Nature, 2020, 587, 663-667.	27.8	49
18	New Deoxyribozymes for the Native Ligation of RNA. Molecules, 2020, 25, 3650.	3.8	7

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19	Fundamental studies of functional nucleic acids: aptamers, riboswitches, ribozymes and DNAzymes. Chemical Society Reviews, 2020, 49, 7331-7353.	38.1	130
20	Repurposing Antiviral Drugs for Orthogonal RNAâ€Catalyzed Labeling of RNA. Angewandte Chemie - International Edition, 2020, 59, 9335-9339.	13.8	27
21	Machine learning of reverse transcription signatures of variegated polymerases allows mapping and discrimination of methylated purines in limited transcriptomes. Nucleic Acids Research, 2020, 48, 3734-3746.	14.5	45
22	Supramolecular Fluorescence Resonance Energy Transfer in Nucleobaseâ€Modified Fluorogenic RNA Aptamers. Angewandte Chemie - International Edition, 2020, 59, 6760-6764.	13.8	22
23	Repurposing Antiviral Drugs for Orthogonal RNAâ€Catalyzed Labeling of RNA. Angewandte Chemie, 2020, 132, 9421-9425.	2.0	9
24	Supramolecular Fluorescence Resonance Energy Transfer in Nucleobaseâ€Modified Fluorogenic RNA Aptamers. Angewandte Chemie, 2020, 132, 6826-6830.	2.0	1
25	Eukaryotic 5-methylcytosine (m5C) RNA Methyltransferases: Mechanisms, Cellular Functions, and Links to Disease. Genes, 2019, 10, 102.	2.4	291
26	How DNA catalyses RNA ligation. Nature Catalysis, 2019, 2, 483-484.	34.4	4
27	Structureâ€“fluorescence activation relationships of a large Stokes shift fluorogenic RNA aptamer. Nucleic Acids Research, 2019, 47, 11538-11550.	14.5	11
28	Direct in Vitro Selection of Trans-Acting Ribozymes for Posttranscriptional, Site-Specific, and Covalent Fluorescent Labeling of RNA. Journal of the American Chemical Society, 2019, 141, 19546-19549.	13.7	37
29	A Multicolor Large Stokes Shift Fluorogenâ€Activating RNA Aptamer with Cationic Chromophores. Chemistry - A European Journal, 2019, 25, 1931-1935.	3.3	44
30	Chemoselective labeling and siteâ€specific mapping of 5â€formylcytosine as a cellular nucleic acid modification. FEBS Letters, 2018, 592, 2032-2047.	2.8	23
31	Titelbild: N⁶â€Methyladenosineâ€Sensitive RNAâ€Cleaving Deoxyribozymes (Angew. Chem.) Tj ETQq1 1 0.784314	2.0	0
32	Translation of non-standard codon nucleotides reveals minimal requirements for codon-anticodon interactions. Nature Communications, 2018, 9, 4865.	12.8	33
33	N⁶â€Methyladenosineâ€Sensitive RNAâ€Cleaving Deoxyribozymes. Angewandte Chemie - International Edition, 2018, 57, 15117-15121.	13.8	39
34	N 6 â€Methyladenosineâ€Sensitive RNAâ€Cleaving Deoxyribozymes. Angewandte Chemie, 2018, 130, 15337-15341.	2.0	11
35	Efficiency and precision of microRNA biogenesis modes in plants. Nucleic Acids Research, 2018, 46, 10709-10723.	14.5	37
36	The m⁶A reader protein YTHDC2 interacts with the small ribosomal subunit and the 5â€²â€“3â€² exoribonuclease XRN1. Rna, 2018, 24, 1339-1350.	3.5	171

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37	In Vitro Assays for RNA Methyltransferase Activity. Methods in Molecular Biology, 2017, 1562, 259-268.	0.9	2
38	Debranchase-resistant labeling of RNA using the 10DM24 deoxyribozyme and fluorescent modified nucleotides. Chemical Communications, 2017, 53, 11992-11995.	4.1	12
39	Human METTL16 is a N ⁶ â€methyladenosine (m ⁶ A) methyltransferase that targets preâ€mRNAs and various nonâ€coding RNAs. EMBO Reports, 2017, 18, 2004-2014.	4.5	481
40	Yeast Prp2 liberates the 5â€² splice site and the branch site adenosine for catalysis of pre-mRNA splicing. Rna, 2017, 23, 1770-1779.	3.5	26
41	Strategies for Characterization of Enzymatic Nucleic Acids. Advances in Biochemical Engineering/Biotechnology, 2017, 170, 37-58.	1.1	1
42	How RNA modification allows non-conventional decoding in mitochondria. Cell Cycle, 2017, 16, 145-146.	2.6	4
43	Aptamers provide superior stainings of cellular receptors studied under super-resolution microscopy. PLoS ONE, 2017, 12, e0173050.	2.5	40
44	Staining of Membrane Receptors with Fluorescently-labeled DNA Aptamers for Super-resolution Imaging. Bio-protocol, 2017, 7, e2541.	0.4	1
45	Functional Hallmarks of a Catalytic DNA that Makes Lariat RNA. Chemistry - A European Journal, 2016, 22, 3720-3728.	3.3	6
46	<scp>NSUN</scp> 3 and <scp>ABH</scp> 1 modify the wobble position of mtâ€t <scp>RNA</scp> ^{Met} to expand codon recognition in mitochondrial translation. EMBO Journal, 2016, 35, 2104-2119.	7.8	197
47	Fluorogene Markierung von 5â€Formylpyrimidinâ€Nucleotiden in DNA und RNA. Angewandte Chemie, 2016, 128, 1946-1950.	2.0	15
48	Substrate-assisted mechanism of RNP disruption by the spliceosomal Brr2 RNA helicase. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7798-7803.	7.1	21
49	Fluorogenic Labeling of 5â€Formylpyrimidine Nucleotides in DNA and RNA. Angewandte Chemie - International Edition, 2016, 55, 1912-1916.	13.8	65
50	Frontispiece: Functional Hallmarks of a Catalytic DNA that Makes Lariat RNA. Chemistry - A European Journal, 2016, 22, n/a-n/a.	3.3	0
51	High-resolution measurement of long-range distances in RNA: pulse EPR spectroscopy with TEMPO-labeled nucleotides. Chemical Science, 2016, 7, 3172-3180.	7.4	49
52	Synthesis of a norcantharidin-tethered guanosine: Protein phosphatase-1 inhibitors that change alternative splicing. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 965-968.	2.2	1
53	Crystal structure of a DNA catalyst. Nature, 2016, 529, 231-234.	27.8	126
54	A Miniâ€Twister Variant and Impact of Residues/Cations on the Phosphodiester Cleavage of this Ribozyme Class. Angewandte Chemie - International Edition, 2015, 54, 15128-15133.	13.8	51

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55	NAA-modified DNA oligonucleotides with zwitterionic backbones: stereoselective synthesis of Aâ€“T phosphoramidite building blocks. Beilstein Journal of Organic Chemistry, 2015, 11, 50-60.	2.2	8
56	The G-patch protein Spp2 couples the spliceosome-stimulated ATPase activity of the DEAH-box protein Prp2 to catalytic activation of the spliceosome. Genes and Development, 2015, 29, 94-107.	5.9	59
57	NSUN6 is a human RNA methyltransferase that catalyzes formation of m⁵C72 in specific tRNAs. Rna, 2015, 21, 1532-1543.	3.5	144
58	Mg2+-dependent conformational changes and product release during DNA-catalyzed RNA ligation monitored by Bimane fluorescence. Nucleic Acids Research, 2015, 43, 40-50.	14.5	14
59	Control of membrane gaps by synaptotagmin-Ca2+ measured with a novel membrane distance ruler. Nature Communications, 2014, 5, 5859.	12.8	42
60	Deoxyribozyme-Mediated Ligation for Incorporating EPR Spin Labels and Reporter Groups into RNA. Methods in Enzymology, 2014, 549, 85-104.	1.0	11
61	Site-Specific Labeling of RNA at Internal Ribose Hydroxyl Groups: Terbium-Assisted Deoxyribozymes at Work. Journal of the American Chemical Society, 2014, 136, 8131-8137.	13.7	69
62	High-frequency 263ÂGHz PELDOR. Applied Magnetic Resonance, 2014, 45, 969-979.	1.2	14
63	Synthesis and properties of DNA oligonucleotides with a zwitterionic backbone structure. Chemical Communications, 2014, 50, 13742-13745.	4.1	14
64	Enzymatic combinatorial nucleoside deletion scanning mutagenesis of functional RNA. Chemical Communications, 2014, 50, 10937.	4.1	4
65	Lanthanide Cofactors Accelerate DNA-Catalyzed Synthesis of Branched RNA. Journal of the American Chemical Society, 2013, 135, 12839-12848.	13.7	27
66	Synthesis of spin-labeled riboswitch RNAs using convertible nucleosides and DNA-catalyzed RNA ligation. Bioorganic and Medicinal Chemistry, 2013, 21, 6171-6180.	3.0	65
67	Orientation selection in distance measurements between nitroxide spin labels at 94 GHz EPR with variable dual frequency irradiation. Physical Chemistry Chemical Physics, 2013, 15, 3433.	2.8	58
68	Combinatorial Nucleosideâ€Deletionâ€Scanning Mutagenesis of Functional DNA. Angewandte Chemie - International Edition, 2013, 52, 2995-2999.	13.8	13
69	4. Bioorthogonal modifications and cycloaddition reactions for RNA chemical biology. , 2013, , 75-100.		0
70	Synthesis and Characterization of RNA Containing a Rigid and Nonperturbing Cytidine-Derived Spin Label. Journal of Organic Chemistry, 2012, 77, 7749-7754.	3.2	61
71	Synthesis, Gene Silencing, and Molecular Modeling Studies of 4â€²-C-Aminomethyl-2â€²-O-methyl Modified Small Interfering RNAs. Journal of Organic Chemistry, 2012, 77, 3233-3245.	3.2	35
72	Incorporation of 4â€²-C-aminomethyl-2â€²-O-methylthymidine into DNA by thermophilic DNA polymerases. Chemical Communications, 2012, 48, 9619.	4.1	9

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73	RNA-Cleaving DNA Enzymes and Their Potential Therapeutic Applications as Antibacterial and Antiviral Agents. , 2012, , 371-410.		2
74	Probing Essential Nucleobase Functional Groups in Aptamers and Deoxyribozymes by Nucleotide Analogue Interference Mapping of DNA. Journal of the American Chemical Society, 2011, 133, 14888-14891.	13.7	30
75	A dual-mode microwave resonator for double electronâ€“electron spin resonance spectroscopy at W-band microwave frequencies. Journal of Magnetic Resonance, 2011, 209, 341-346.	2.1	32
76	Enzymatic Labeling of 5â€Hydroxymethylcytosine in DNA. Angewandte Chemie - International Edition, 2011, 50, 4268-4270.	13.8	16
77	One pot synthesis of Cu(II) 2,2â€²-bipyridyl complexes of 5-hydroxy-hydurilic acid and alloxanic acid: Synthesis, crystal structure, chemical nuclease activity and cytotoxicity. Journal of Inorganic Biochemistry, 2011, 105, 256-267.	3.5	30
78	Chemical RNA Modifications for Studies of RNA Structure and Dynamics. ChemBioChem, 2010, 11, 469-480.	2.6	83
79	Probing Secondary Structures of Spinâ€Labeled RNA by Pulsed EPR Spectroscopy. Angewandte Chemie - International Edition, 2010, 49, 6443-6447.	13.8	88
80	Combinatorial Mutation Interference Analysis Reveals Functional Nucleotides Required for DNA Catalysis. Angewandte Chemie - International Edition, 2010, 49, 8504-8508.	13.8	30
81	Multimodal optical sensing and analyte specificity using single-walled carbon nanotubes. Nature Nanotechnology, 2009, 4, 114-120.	31.5	284
82	Enzymatic Ligation Strategies for the Preparation of Purine Riboswitches with Site-Specific Chemical Modifications. Methods in Molecular Biology, 2009, 540, 15-24.	0.9	17
83	DNAâ€Catalyzed Formation of Nucleopeptide Linkages. Angewandte Chemie - International Edition, 2008, 47, 1753-1757.	13.8	88
84	Site-selective depurination by a periodate-dependent deoxyribozyme. Chemical Communications, 2007, , 2255-2257.	4.1	22
85	Recent advances in DNA catalysis. Biopolymers, 2007, 87, 279-292.	2.4	72
86	Engineering a Selective Smallâ€Molecule Substrate Binding Site into a Deoxyribozyme. Angewandte Chemie - International Edition, 2007, 46, 7420-7424.	13.8	24
87	Preparation of 2â€²â€Deoxyâ€2â€²â€Methylselenoâ€Modified Phosphoramidites and RNA. Current Protocols in Nucleic Acid Chemistry, 2006, 27, Unit 1.15.	0.5	5
88	Structural basis for Diels-Alder ribozyme-catalyzed carbon-carbon bond formation. Nature Structural and Molecular Biology, 2005, 12, 218-224.	8.2	183
89	Modulation of RNA Tertiary Folding by Incorporation of Caged Nucleotides. Angewandte Chemie - International Edition, 2005, 44, 7305-7309.	13.8	76
90	Syntheses of RNAs with up to 100 Nucleotides Containing Site-Specific 2â€˜-Methylseleno Labels for Use in X-ray Crystallography. Journal of the American Chemical Society, 2005, 127, 12035-12045.	13.7	98

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91	Triggering of RNA Secondary Structures by a Functionalized Nucleobase. Angewandte Chemie - International Edition, 2004, 43, 3922-3925.	13.8	42
92	Structural Basis for Discriminative Regulation of Gene Expression by Adenine- and Guanine-Sensing mRNAs. Chemistry and Biology, 2004, 11, 1729-1741.	6.0	505
93	Chemical Synthesis of Selenium-Modified Oligoribonucleotides and Their Enzymatic Ligation Leading to an U6 SnRNA Stemâ^'Loop Segment. Journal of the American Chemical Society, 2004, 126, 1141-1149.	13.7	96
94	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. Monatshefte FÃ¼r Chemie, 2003, 134, 851-873.	1.8	48
95	On Secondary Structure Rearrangements and Equilibria of Small RNAs. ChemBioChem, 2003, 4, 984-990.	2.6	56
96	On Secondary Structure Rearrangements and Equilibria of Small RNAs. ChemBioChem, 2003, 4, 1263-1263.	2.6	1
97	Bistable Secondary Structures of Small RNAs and Their Structural Probing by Comparative Imino Proton NMR Spectroscopy. Journal of Molecular Biology, 2003, 325, 421-431.	4.2	73
98	RNA Two-State Conformation Equilibria and the Effect of Nucleobase Methylation. Angewandte Chemie - International Edition, 2002, 41, 605-609.	13.8	33
99	Methylation of the nucleobases in RNA oligonucleotides mediates duplexâ€“hairpin conversion. Nucleic Acids Research, 2001, 29, 3997-4005.	14.5	81
100	Novel Fluoride-Labile Nucleobase-Protecting Groups for the Synthesis of 3â€²(2â€²)-O-Aminoacylated RNA Sequences. Helvetica Chimica Acta, 2000, 83, 2477-2503.	1.6	27
101	Peptide Backbone Directed Selfâ€Assembly of Merocyanine Oligomers into Duplex Structures. Angewandte Chemie, 0, , .	2.0	2