Andrea Rentmeister

List of Publications by Year
in descending order

94	3,039	147566	189595
papers	citations	31 h-index	50 g-index

133	133	133	3042
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantification of mRNA cap-modifications by means of LC-QqQ-MS. Methods, 2022, 203, 196-206.	1.9	12
2	Visibleâ€Light Removable Photocaging Groups Accepted by MjMAT Variant: Structural Basis and Compatibility with DNA and RNA Methyltransferases. ChemBioChem, 2022, 23, e202100437.	1.3	9
3	Chemo-Enzymatic Modification of the 5â€² Cap To Study mRNAs. Accounts of Chemical Research, 2022, 55, 1249-1261.	7.6	13
4	Covalent labeling of immune cells. Current Opinion in Chemical Biology, 2022, 68, 102144.	2.8	3
5	Photocaged 5â€² cap analogues for optical control of mRNA translation in cells. Nature Chemistry, 2022, 14, 905-913.	6.6	29
6	Sequence-specific targeting of RNA. Methods, 2022, 205, 73-82.	1.9	1
7	Engineered SAM Synthetases for Enzymatic Generation of AdoMet Analogs with Photocaging Groups and Reversible DNA Modification in Cascade Reactions. Angewandte Chemie - International Edition, 2021, 60, 480-485.	7.2	36
8	MaÃŸgeschneiderte SAMâ€Synthetasen zur enzymatischen Herstellung von AdoMetâ€Analoga mit Photoschutzgruppen und zur reversiblen DNAâ€Modifizierung in Kaskadenreaktionen. Angewandte Chemie, 2021, 133, 484-489.	1.6	5
9	Tagâ€Free Internal RNA Labeling and Photocaging Based on mRNA Methyltransferases. Angewandte Chemie - International Edition, 2021, 60, 4098-4103.	7.2	40
10	Tagâ€Free Internal RNA Labeling and Photocaging Based on mRNA Methyltransferases. Angewandte Chemie, 2021, 133, 4144-4149.	1.6	11
11	Harnessing methylation and AdoMet-utilising enzymes for selective modification in cascade reactions. Organic and Biomolecular Chemistry, 2021, 19, 3756-3762.	1.5	16
12	Light-control of cap methylation and mRNA translation via genetic code expansion of Ecm1. Chemical Science, 2021, 12, 4383-4388.	3.7	4
13	A novel ¹⁸F-labeled clickable substrate for targeted imaging of SNAP-tag expressing cells by PET in vivo. Chemical Communications, 2021, 57, 9850-9853.	2.2	5
14	Chemoenzymatic labeling of RNA to enrich, detect and identify methyltransferase-target sites. Methods in Enzymology, 2021, 658, 161-190.	0.4	1
15	Chemoâ€Enzymatic Modification of the 5â€² Cap Maintains Translation and Increases Immunogenic Properties of mRNA. Angewandte Chemie - International Edition, 2021, 60, 13280-13286.	7.2	34
16	Eine chemoâ€enzymatische Modifizierung der 5â€²â€Kappe erhÃlt die Translation und erhÃ¶ht die ImmunogenitÃt der mRNA. Angewandte Chemie, 2021, 133, 13390-13397.	1.6	2
17	Selfâ€Assembled Cationic Polypeptide Supramolecular Nanogels for Intracellular DNA Delivery. Chemistry - A European Journal, 2021, 27, 12198-12206.	1.7	8
18	Chemoenzymatic strategies for RNA modification and labeling. Current Opinion in Chemical Biology, 2021, 63, 46-56.	2.8	9

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19	Multiresponsive hydrogels and organogels based on photocaged cysteine. Chemical Communications, 2021, 57, 5913-5916.	2.2	10
20	Computational design and experimental characterization of a photo-controlled mRNA-cap guanine-N7 methyltransferase. RSC Chemical Biology, 2021, 2, 1484-1490.	2.0	2
21	Titelbild: MaÃŸgeschneiderte SAMâ€Synthetasen zur enzymatischen Herstellung von AdoMetâ€Analoga mit Photoschutzgruppen und zur reversiblen DNAâ€Modifizierung in Kaskadenreaktionen (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Ov	1.6	1
22	Chemoâ€enzymatic treatment of RNA to facilitate analyses. Wiley Interdisciplinary Reviews RNA, 2020, 11, e1561.	3.2	31
23	Practical Synthesis of Capâ€4 RNA. ChemBioChem, 2020, 21, 265-271.	1.3	9
24	A Benzophenoneâ€Based Photocaging Strategy for the N7 Position of Guanosine. Angewandte Chemie - International Edition, 2020, 59, 3161-3165.	7.2	36
25	Eine auf dem BenzophenongerÃ¼st basierende Strategie fÃ¼r die PhotoschÃ¼tzung der N7â€Position des Guanosins. Angewandte Chemie, 2020, 132, 3186-3191.	1.6	8
26	Covalent labeling of nucleic acids. Chemical Society Reviews, 2020, 49, 8749-8773.	18.7	79
27	Challenging natureâ€™s preference for methylation. Nature Chemistry, 2020, 12, 791-792.	6.6	6
28	Bioorthogonal mRNA labeling at the poly(A) tail for imaging localization and dynamics in live zebrafish embryos. Chemical Science, 2020, 11, 3089-3095.	3.7	23
29	Chemically labeled toxins or bioactive peptides show a heterogeneous intracellular distribution and low spatial overlap with autofluorescence in bloom-forming cyanobacteria. Scientific Reports, 2020, 10, 2781.	1.6	9
30	Nucleoside-modified AdoMet analogues for differential methyltransferase targeting. Chemical Communications, 2020, 56, 2115-2118.	2.2	27
31	mRNA Therapies: New Hope in the Fight against Melanoma. Biochemistry, 2020, 59, 1650-1655.	1.2	14
32	Bio-additive-based screening: toward evaluation of the biocompatibility of chemical reactions. Nature Protocols, 2019, 14, 2599-2626.	5.5	11
33	Sequence-specific m⁶A demethylation in RNA by FTO fused to RCas9. Rna, 2019, 25, 1311-1323.	1.6	34
34	Enzymatic Transfer of Photo-Cross-Linkers for RNA-Protein Photo-Cross-Linking at the mRNA 5â€²-Cap. Methods in Molecular Biology, 2019, 2008, 131-146.	0.4	1
35	Multiple covalent fluorescence labeling of eukaryotic mRNA at the poly(A) tail enhances translation and can be performed in living cells. Nucleic Acids Research, 2019, 47, e42-e42.	6.5	47
36	Combining Chemical Synthesis and Enzymatic Methylation to Access Short RNAs with Various 5â€² Caps. ChemBioChem, 2019, 20, 1693-1700.	1.3	7

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37	FTO controls reversible m6Am RNA methylation during snRNA biogenesis. Nature Chemical Biology, 2019, 15, 340-347.	3.9	192
38	Clicking a Fish: Click Chemistry of Different Biomolecules inDanio rerio. Biochemistry, 2019, 58, 24-30.	1.2	11
39	Mapping N⁶â€Methyladenosine (m⁶A) in RNA: Established Methods, Remaining Challenges, and Emerging Approaches. Chemistry - A European Journal, 2019, 25, 3455-3464.	1.7	18
40	Enzymatic or In Vivo Installation of Propargyl Groups in Combination with Click Chemistry for the Enrichment and Detection of Methyltransferase Target Sites in RNA. Angewandte Chemie - International Edition, 2018, 57, 6342-6346.	7.2	82
41	Enzymatischer oder In-vivo-Einbau von Propargylgruppen in Kombination mit Klick-Chemie zur Anreicherung und Detektion von Methyltransferase-Zielsequenzen in RNA. Angewandte Chemie, 2018, 130, 6451-6455.	1.6	19
42	Direct Bisulfiteâ€Free Detection of 5â€Methylcytosine by Using Electrochemical Measurements Aided by a Monoclonal Antibody. ChemElectroChem, 2018, 5, 1631-1635.	1.7	5
43	Reversible modification of DNA by methyltransferase-catalyzed transfer and light-triggered removal of photo-caging groups. Chemical Communications, 2018, 54, 449-451.	2.2	42
44	Emerging approaches for detection of methylation sites in RNA. Open Biology, 2018, 8, .	1.5	22
45	Differential Requirement for Translation Initiation Factor Pathways during Ecdysone-Dependent Neuronal Remodeling in Drosophila. Cell Reports, 2018, 24, 2287-2299.e4.	2.9	32
46	The energy-transfer-enabled biocompatible disulfideâ€“ene reaction. Nature Chemistry, 2018, 10, 981-988.	6.6	143
47	Innentitelbild: Enzymatischer oder Inâ€vivoâ€Einbau von Propargylgruppen in Kombination mit Klickâ€Chemie zur Anreicherung und Detektion von Methyltransferaseâ€Zielsequenzen in RNA (Angew. Chem. 21/2018). Angewandte Chemie, 2018, 130, 6064-6064.	1.6	0
48	Visualization of Cellular Components in a Mammalian Cell with Liquid-Cell Transmission Electron Microscopy. Microscopy and Microanalysis, 2017, 23, 46-55.	0.2	10
49	Enzyme-mediated tagging of RNA. Current Opinion in Biotechnology, 2017, 48, 69-76.	3.3	24
50	New AdoMet Analogues as Tools for Enzymatic Transfer of Photoâ€Crossâ€Linkers and Capturing RNAâ€“Protein Interactions. Chemistry - A European Journal, 2017, 23, 5988-5993.	1.7	48
51	Chemo-enzymatic modification of eukaryotic mRNA. Organic and Biomolecular Chemistry, 2017, 15, 278-284.	1.5	10
52	A benzylic linker promotes methyltransferase catalyzed norbornene transfer for rapid bioorthogonal tetrazine ligation. Chemical Science, 2017, 8, 7947-7953.	3.7	36
53	Making the Message Clear: Concepts for mRNA Imaging. ACS Central Science, 2017, 3, 701-707.	5.3	16
54	A FACS-based screening strategy to assess sequence-specific RNA-binding of Pumilio protein variants in E. coli. Biological Chemistry, 2017, 398, 69-75.	1.2	10

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55	Dual 5â€² Cap Labeling Based on Regioselective RNA Methyltransferases and Bioorthogonal Reactions. Chemistry - A European Journal, 2017, 23, 6165-6173.	1.7	43
56	Synthetic mRNA capping. Beilstein Journal of Organic Chemistry, 2017, 13, 2819-2832.	1.3	68
57	Current techniques for visualizing RNA in cells. F1000Research, 2016, 5, 775.	0.8	23
58	CRISPR/Cas9: A New Tool for RNA Imaging in Live Cells. ChemBioChem, 2016, 17, 1682-1684.	1.3	8
59	Manipulation von RNA mit Designerproteinen. Nachrichten Aus Der Chemie, 2016, 64, 297-301.	0.0	1
60	Eine biokatalytische Kaskade fÃ¼r die vielseitige Eintopfâ€Modifizierung von mRNA ausgehend von Methioninanaloga. Angewandte Chemie, 2016, 128, 1951-1954.	1.6	28
61	Modifying the 5â€²â€Cap for Click Reactions of Eukaryotic mRNA and To Tune Translation Efficiency in Living Cells. Angewandte Chemie - International Edition, 2016, 55, 10899-10903.	7.2	86
62	A Genetically Encodable System for Sequenceâ€Specific Detection of RNAs in Two Colors. ChemBioChem, 2016, 17, 895-899.	1.3	7
63	A Biocatalytic Cascade for Versatile Oneâ€Pot Modification of mRNA Starting from Methionine Analogues. Angewandte Chemie - International Edition, 2016, 55, 1917-1920.	7.2	66
64	Enzymatic Modification of 5â€²-Capped RNA and Subsequent Labeling by Click Chemistry. Methods in Molecular Biology, 2016, 1428, 45-60.	0.4	5
65	Current covalent modification methods for detecting RNA in fixed and living cells. Methods, 2016, 98, 18-25.	1.9	42
66	One-pot modification of 5â€²-capped RNA based on methionine analogs. Methods, 2016, 107, 3-9.	1.9	18
67	Modifizierung der 5â€²â€Kappe eukaryotischer mRNA fÃ¼r Klickâ€Reaktionen und zur Beeinflussung der Translationseffizienz in lebenden Zellen. Angewandte Chemie, 2016, 128, 11059-11063.	1.6	28
68	Quantum Chemical Calculations and Experimental Validation of the Photoclick Reaction for Fluorescent Labeling of the 5â€™ cap of Eukaryotic mRNAs. ChemistryOpen, 2015, 4, 295-301.	0.9	13
69	Structural Elucidation of the Bispecificity of A Domains as a Basis for Activating Nonâ€natural Amino Acids. Angewandte Chemie - International Edition, 2015, 54, 8833-8836.	7.2	46
70	Engineering Giardia lamblia trimethylguanosine synthase (GlaTgs2) to transfer non-natural modifications to the RNA 5'-cap. Protein Engineering, Design and Selection, 2015, 28, 179-186.	1.0	30
71	Enzymatic modification of 5â€²-capped RNA with a 4-vinylbenzyl group provides a platform for photoclick and inverse electron-demand Dielsâ€“Alder reaction. Chemical Science, 2015, 6, 1362-1369.	3.7	92
72	CRISPR Craze Conquers the RNA World: Precise Manipulation of DNA and RNA Based on a Bacterial Defense System. Angewandte Chemie - International Edition, 2015, 54, 4710-4712.	7.2	5

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73	Visualization of Multimerization and Self-Assembly of DNA-Functionalized Gold Nanoparticles Using In-Liquid Transmission Electron Microscopy. Journal of Physical Chemistry Letters, 2015, 6, 4487-4492.	2.1	31
74	Genetically encoded tools for RNA imaging in living cells. Current Opinion in Biotechnology, 2015, 31, 42-49.	3.3	42
75	Current Developments in Cellulase Engineering. ChemBioEng Reviews, 2014, 1, 6-13.	2.6	6
76	Current Approaches for RNA Labeling in Vitro and in Cells Based on Click Reactions. ChemBioChem, 2014, 15, 2342-2347.	1.3	49
77	Bioorthogonal site-specific labeling of the 5â€²-cap structure in eukaryotic mRNAs. Chemical Communications, 2014, 50, 4478-4481.	2.2	81
78	Programmable Design of Functional Ribonucleoprotein Complexes. Chemistry - an Asian Journal, 2014, 9, 2045-2051.	1.7	6
79	Chemo-enzymatic Strategies to Modify RNA in vitro or in Living Cells. , 2014, , 409-421.		1
80	Tetramolecular Fluorescence Complementation for Detection of Specific RNAs in Vitro. ChemBioChem, 2013, 14, 200-204.	1.3	31
81	A Chemoâ€Enzymatic Approach for Siteâ€Specific Modification of the RNA Cap. Angewandte Chemie - International Edition, 2013, 52, 7874-7878.	7.2	110
82	Current Developments in Cellulase Engineering. Chemie-Ingenieur-Technik, 2013, 85, 818-825.	0.4	5
83	An enzyme-coupled high-throughput assay for screening RNA methyltransferase activity inE. Colicell lysate. RNA Biology, 2012, 9, 577-586.	1.5	19
84	A diverse set of familyÂ48 bacterial glycoside hydrolase cellulases created by structureâ€guided recombination. FEBS Journal, 2012, 279, 4453-4465.	2.2	38
85	Cell-Specific Aptamers as Emerging Therapeutics. Journal of Nucleic Acids, 2011, 2011, 1-18.	0.8	79
86	Engineered Bacterial Mimics of Human Drug Metabolizing Enzyme CYP2C9. ChemCatChem, 2011, 3, 1065-1071.	1.8	36
87	An Aptamer Targeting the Apicalâ€Loop Domain Modulates priâ€miRNA Processing. Angewandte Chemie - International Edition, 2010, 49, 4674-4677.	7.2	49
88	Chemo-enzymatic fluorination of unactivated organic compounds. Nature Chemical Biology, 2009, 5, 26-28.	3.9	125
89	Functional Nucleic Acid Sensors as Screening Tools. , 2009, , 343-354.		0
90	Secondary structures and functional requirements for thiM riboswitches from Desulfovibrio vulgaris, Erwinia carotovora and Rhodobacter spheroides. Biological Chemistry, 2008, 389, 127-134.	1.2	15

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91	Conformational changes in the expression domain of the Escherichia coli thiM riboswitch. Nucleic Acids Research, 2007, 35, 3713-3722.	6.5	67
92	RNA aptamers selectively modulate protein recruitment to the cytoplasmic domain of Â-secretase BACE1 in vitro. Rna, 2006, 12, 1650-1660.	1.6	51
93	GGA1 Is Expressed in the Human Brain and Affects the Generation of Amyloid Â-Peptide. Journal of Neuroscience, 2006, 26, 12838-12846.	1.7	82
94	Kinetic Examination and Simulation of GDP-Î²-l-fucose Synthetase Reaction Using NADPH or NADH. Biocatalysis and Biotransformation, 2004, 22, 49-56.	1.1	2