Sabine MÃ¼ller

List of Publications by Year
in descending order

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99 papers	2,412 citations	257450 24 h-index	233421 45 g-index
256 all docs	256 docs citations	256 times ranked	2637 citing authors

#	Article	IF	Citations
1	RNA circularization strategies in vivo and in vitro. Nucleic Acids Research, 2015, 43, 2454-2465.	14.5	262
2	Accurate Distance Determination of Nucleic Acids via FÃ¶rster Resonance Energy Transfer: Implications of Dye Linker Length and Rigidity. Journal of the American Chemical Society, 2011, 133, 2463-2480.	13.7	248
3	Complex formation with nucleic acids and aptamers alters the antigenic properties of platelet factor 4. Blood, 2013, 122, 272-281.	1.4	129
4	Splitting aptamers and nucleic acid enzymes for the development of advanced biosensors. Nucleic Acids Research, 2020, 48, 3400-3422.	14.5	101
5	Inter-domain cross-linking and molecular modelling of the hairpin ribozyme. Journal of Molecular Biology, 1997, 274, 197-212.	4.2	96
6	5-(Benzylmercapto)-1 H -tetrazole as activator for 2â€²- O -TBDMS phosphoramidite building blocks in RNA synthesis. Tetrahedron Letters, 2002, 43, 795-797.	1.4	78
7	Lipid-Anchored Oligonucleotides for Stable Double-Helix Formation in Distinct Membrane Domains. Angewandte Chemie - International Edition, 2006, 45, 4440-4444.	13.8	77
8	Base and Sugar Requirements for RNA Cleavage of Essential Nucleoside Residues in Internal Loop B of the Hairpin Ribozyme: Implications for Secondary Structure. Nucleic Acids Research, 1996, 24, 573-581.	14.5	76
9	RNA Hairpin Folding in the Crowded Cell. Angewandte Chemie - International Edition, 2016, 55, 3224-3228.	13.8	73
10	In vitro circularization of RNA. RNA Biology, 2017, 14, 1018-1027.	3.1	57
11	Ligand-induced conformational capture of a synthetic tetracycline riboswitch revealed by pulse EPR. Rna, 2011, 17, 182-188.	3.5	49
12	Current Strategies for the Synthesis of RNA. Current Organic Synthesis, 2004, 1, 293-307.	1.3	49
13	Sequence-specific and mechanism-based crosslinking of Dcm DNA cytosine-C5methyltransferase ofE.coliK-12 to synthetic oligonucleotides containing 5-fluoro-2'-deoxycytidine. Nucleic Acids Research, 1993, 21, 303-309.	14.5	44
14	Site-Directed Alteration of RNA Sequence Mediated by an Engineered Twin Ribozyme. Angewandte Chemie - International Edition, 2003, 42, 2424-2427.	13.8	44
15	RNA double cleavage by a hairpin-derived twin ribozyme. Nucleic Acids Research, 2000, 28, 886-894.	14.5	42
16	Redox-Active Riboswitching: Allosteric Regulation of Ribozyme Activity by Ligand-Shape Control. Angewandte Chemie - International Edition, 2006, 45, 2127-2129.	13.8	35
17	RNA self-ligation: From oligonucleotides to full length ribozymes. Biochimie, 2012, 94, 1457-1463.	2.6	34
18	The many faces of the hairpin ribozyme: Structural and functional variants of a small catalytic rna. IUBMB Life, 2012, 64, 36-47.	3.4	33

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19	Thirty-five years of research into ribozymes and nucleic acid catalysis: where do we stand today?. F1000Research, 2016, 5, 1511.	1.6	33
20	Site-Specific Fluorescent and Affinity Labelling of RNA by Using a Small Engineered Twin Ribozyme. ChemBioChem, 2005, 6, 2158-2162.	2.6	31
21	RNA selfâ€processing: Formation of cyclic species and concatemers from a small engineered RNA. FEBS Letters, 2013, 587, 2435-2440.	2.8	30
22	The Methanothermobacter thermautotrophicus ExoIII homologue Mth212 is a DNA uridine endonuclease. Nucleic Acids Research, 2006, 34, 5325-5336.	14.5	28
23	Chemical synthesis of 2â€²-deoxyoligonucleotides containing 5-fluoro-2â€²-deoxycytidine. Nucleic Acids Research, 1992, 20, 2421-2426.	14.5	26
24	Drugs Made of RNA: Development and Application of Engineered RNAs for Gene Therapy. Mini-Reviews in Medicinal Chemistry, 2007, 7, 912-931.	2.4	25
25	Ribozymes that can be regulated by external stimuli. Current Opinion in Biotechnology, 2015, 31, 35-41.	6.6	24
26	Mixed oligonucleotides for random mutagenesis: best way of making them. Organic and Biomolecular Chemistry, 2012, 10, 4641.	2.8	22
27	Spermine Supports Catalysis of Hairpin Ribozyme Variants to Differing Extents. Biochemical and Biophysical Research Communications, 2001, 283, 648-654.	2.1	21
28	Twin ribozyme mediated removal of nucleotides from an internal RNA site. Biochemical and Biophysical Research Communications, 2007, 363, 24-29.	2.1	21
29	Ligandâ€induced Dimerization of a Truncated Parallel MYC Gâ€Quadruplex. ChemBioChem, 2018, 19, 505-512.	2.6	21
30	Synthesis of guanosine 5â€²-conjugates and their use as initiator molecules for transcription priming. Organic and Biomolecular Chemistry, 2008, 6, 899.	2.8	20
31	The interaction of DNA duplexes containing 2-aminopurine with restrictionendonucleases EcoRIIandSsoII. Nucleic Acids Research, 1995, 23, 2192-2197.	14.5	19
32	External Regulation of Hairpin Ribozyme Activity by an Oligonucleotide Effector. ChemBioChem, 2003, 4, 220-224.	2.6	18
33	Efficient RNA ligation by reverse-joined hairpin ribozymes and engineering of twin ribozymes consisting of conventional and reverse-joined hairpin ribozyme units. FEBS Journal, 2005, 272, 4464-4474.	4.7	18
34	Engineering of ribozymes with useful activities in the ancient RNA world. Annals of the New York Academy of Sciences, 2015, 1341, 54-60.	3.8	18
35	Sequence-controlled RNA self-processing: computational design, biochemical analysis, and visualization by AFM. Rna, 2015, 21, 1249-1260.	3.5	18
36	Self-cleaving ribozymes: substrate specificity and synthetic biology applications. RSC Chemical Biology, 2021, 2, 1370-1383.	4.1	18

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37	Recent advances in understanding circular RNAs. F1000Research, 2020, 9, 655.	1.6	18
38	Fast Quantitative Assay of Sequence-Specific Endonuclease Activity Based on DNA Sequencer Technology. Biological Chemistry Hoppe-Seyler, 1992, 373, 1223-1226.	1.4	17
39	Synthesis of Specifically Modified Oligonucleotides for Application in Structural and Functional Analysis of RNA. Journal of Nucleic Acids, 2011, 2011, 1-19.	1.2	17
40	Hairpin ribozyme mediated RNA recombination. Chemical Communications, 2016, 52, 4365-4368.	4.1	17
41	A new and convenient approach for the preparation of Î²-cyanoethyl protected trinucleotide phosphoramidites. Organic and Biomolecular Chemistry, 2012, 10, 1510.	2.8	16
42	Sensors made of RNA: tailored ribozymes for detection of small organic molecules, metals, nucleic acids and proteins. IET Nanobiotechnology, 2006, 153, 31.	2.1	15
43	Engineering of hairpin ribozyme variants for RNA recombination and splicing. Annals of the New York Academy of Sciences, 2019, 1447, 135-143.	3.8	15
44	RNA self-processing towards changed topology and sequence oligomerization. Biological Chemistry, 2007, 388, 743-6.	2.5	14
45	RNA-based boronate internucleosidic linkages: an entry into reversible templated ligation and loop formation. Organic and Biomolecular Chemistry, 2018, 16, 8824-8830.	2.8	14
46	Design of hairpin ribozyme variants with improved activity for poorly processed substrates. FEBS Journal, 2011, 278, 622-633.	4.7	13
47	Generation and selection of ribozyme variants with potential application in protein engineering and synthetic biology. Applied Microbiology and Biotechnology, 2014, 98, 3389-3399.	3.6	13
48	Design and Characterization of a Twin Ribozyme for Potential Repair of a Deletion Mutation within the Oncogenic CTNNB1â€”S45 mRNA. ChemMedChem, 2014, 9, 2128-2137.	3.2	13
49	Sugarâ€“Edge Interactions in a DNAâ€“RNA Gâ€Quadruplex: Evidence of Sequential Câ€¦Hâ€…â€¦Oâ€…â€¦O Hydrogen Bonds Contributing to RNA Quadruplex Folding. Angewandte Chemie - International Edition, 2016, 55, 15162-15165.	13.8	13
50	Transformation von Uridin- zu Cytidinderivaten durch selektive Aminierung. Journal FÃ¼r Praktische Chemie, 1989, 331, 835-842.	0.2	12
51	Chemical synthesis of an artificially branched hairpin ribozyme variant with RNA cleavage activity. Tetrahedron, 2004, 60, 9273-9281.	1.9	12
52	Stereoselective Synthesis oftrans-threo-trans-Oligopyrrolidines: Potential Agents for RNA Cleavage. Chemistry - A European Journal, 2004, 10, 3945-3962.	3.3	12
53	RNA Aminoacylation Mediated by Sequential Action of Two Ribozymes and a Nonactivated Amino Acid. ChemBioChem, 2014, 15, 1200-1209.	2.6	12
54	Synthesis and Engineering of Circular RNAs. Methods in Molecular Biology, 2018, 1724, 167-180.	0.9	12

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55	Vesicle encapsulation stabilizes intermolecular association and structure formation of functional RNA and DNA. Current Biology, 2022, 32, 86-96.e6.	3.9	12
56	Preparation of trinucleotide phosphoramidites as synthons for the synthesis of gene libraries. Beilstein Journal of Organic Chemistry, 2018, 14, 397-406.	2.2	11
57	The use of oligonucleotide probes containing 2â€²-deoxy-2â€²-fluoronucleosides for regiospecific cleavage of RNA by RNase H from Escherichia coli. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1992, 1130, 41-46.	2.4	10
58	Electrochemically Induced Modulation of the Catalytic Activity of a Reversible Redoxsensitive Riboswitch. Electroanalysis, 2008, 20, 935-940.	2.9	10
59	Preparation of modified long-mer RNAs and analysis of FMN binding to theypaAaptamer fromB. subtilis. RNA Biology, 2014, 11, 609-623.	3.1	10
60	Preparation and characterization of pyrene modified uridine derivatives as potential electron donors in RNA. Organic and Biomolecular Chemistry, 2018, 16, 7663-7673.	2.8	10
61	Title is missing!. Molecular Biology, 2000, 34, 913-920.	1.3	8
62	Engineered Ribozymes as Molecular Tools for Site-Specific Alteration of RNA Sequence. ChemBioChem, 2003, 4, 991-997.	2.6	8
63	Azideâ€Modified Nucleosides as Versatile Tools for Bioorthogonal Labeling and Functionalization. Chemical Record, 2022, 22, e202100322.	5.8	8
64	A New Approach to the Synthesis of 2-Aminopurine-2â€²-deoxyribosideviaTri-n-butyltin Hydride Reduction. Nucleosides & Nucleotides, 1995, 14, 1445-1452.	0.5	7
65	Gezielte RNA-Sequenz-VerÃnderung durch ein synthetisches Twinribozym. Angewandte Chemie, 2003, 115, 2526-2530.	2.0	7
66	Landmarks in the Evolution of (t)-RNAs from the Origin of Life up to Their Present Role in Human Cognition. Life, 2016, 6, 1.	2.4	7
67	Reductive Charge Transfer through an RNA Aptamer. Angewandte Chemie - International Edition, 2020, 59, 22999-23004.	13.8	7
68	Boronic Acidâ€Mediated Activity Control of Split 10â€“23 DNAzymes. Chemistry - A European Journal, 2021, 27, 1138-1144.	3.3	7
69	In vitro repair of a defective EGFP transcript and translation into a functional protein. Organic and Biomolecular Chemistry, 2016, 14, 6729-6737.	2.8	6
70	Kinetic Characterization of Hairpin Ribozyme Variants. Methods in Molecular Biology, 2012, 848, 41-59.	0.9	6
71	Rational Design and Synthesis of Ribozymes. Molecular Biology, 2000, 34, 934-939.	1.3	5
72	Another Face of RNA: Metabolite-Induced â€œRiboswitchingâ€•for Regulation of Gene Expression. ChemBioChem, 2003, 4, 817-819.	2.6	5

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73	Challenges and Opportunities in the Development of Aptamers for TNFÎ±. Applied Biochemistry and Biotechnology, 2016, 179, 398-414.	2.9	5
74	Challenges and Perspectives in Nucleic Acid Enzyme Engineering. Advances in Biochemical Engineering/Biotechnology, 2017, 170, 21-35.	1.1	5
75	RNA self-splicing by engineered hairpin ribozyme variants. Nucleic Acids Research, 2022, 50, 368-377.	14.5	5
76	Zuckerseitige Wechselwirkungen in einem DNAâ€RNAâ€Câ€Quadruplex: Hinweise auf sequentielle Câ”Hâ‹…â‹…â‹…Oâ€Wasserstoffbrücken als Beitrag zur RNAâ€Quadruplexâ€Faltung. Angewandte Chemie, 2016, 128, 15386-15390.	2.0	4
77	Synthesis of Trinucleotide Building Blocks in Solution and on Solid Phase. Current Protocols in Nucleic Acid Chemistry, 2018, 75, e60.	0.5	4
78	Towards Higher Complexity in the RNA World: Hairpin Ribozyme Supported RNA Recombination. ChemSystemsChem, 2021, 3, e2100003.	2.6	4
79	RNA Synthesis by T7 RNA Polymerase Supported Primer Extension. Molecular Biology, 2004, 38, 674-679.	1.3	3
80	Reading the Code of Single RNA Molecules. Angewandte Chemie - International Edition, 2010, 49, 1197-1199.	13.8	3
81	Synthesis of fully protected trinucleotide building blocks on a disulphide-linked soluble support. RSC Advances, 2021, 11, 3892-3896.	3.6	3
82	Impedimetric Detection of Hairpin Ribozyme Activity. Electroanalysis, 2011, 23, 37-42.	2.9	2
83	Welcome to a SUPA issue. Chemico-Biological Interactions, 2016, 259, 1.	4.0	2
84	Solid Phase Assembly of Fully Protected Trinucleotide Building Blocks for Codon-Based Gene Synthesis. Applied Sciences (Switzerland), 2019, 9, 2199.	2.5	2
85	Reductive Charge Transfer through an RNA Aptamer. Angewandte Chemie, 2020, 132, 23199-23204.	2.0	2
86	Azido Functionalized Nucleosides Linked to Controlled Pore Glass as Suitable Starting Materials for Oligonucleotide Synthesis by the Phosphoramidite Approach. European Journal of Organic Chemistry, 2021, 2021, 6408-6416.	2.4	2
87	Design and NMR characterization of reversible head-to-tail boronate-linked macrocyclic nucleic acids. Organic and Biomolecular Chemistry, 2022, 20, 2889-2895.	2.8	2
88	Synthesis of a bifunctional cytidine derivative and its conjugation to RNA for in vitro selection of a cytidine deaminase ribozyme. Beilstein Journal of Organic Chemistry, 2014, 10, 1906-1913.	2.2	1
89	Synthesis of Site-Specifically Modified Long-mer RNAs. , 2014, , 477-496.		1
90	Accurate Single-Molecule FRET Studies of Nucleic Acids Using Multi-Parameter Fluorescence Detection. Biophysical Journal, 2011, 100, 1a.	0.5	0

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91	Accurate Distance and Structure Determination of Three Different RNA Three-Way Junctions via High Precision FRET. Biophysical Journal, 2013, 104, 263a.	0.5	0
92	Accurate Determination of the RNA Junctions via Single-Molecule High-Precision FRET Measurements. Biophysical Journal, 2016, 110, 409a.	0.5	0
93	Accurate Determination of the RNA Three-Way Junctions Via Single-Molecule High-Precision Fret Measurements. Biophysical Journal, 2017, 112, 367a.	0.5	0
94	Phosphorous chemistry in vivo: what makes the phosphoesters in DNA and RNA so diverse?. ChemTexts, 2017, 3, 1.	1.9	0
95	Changed reactivity of secondary hydroxy groups in C8-modified adenosine â€“ lessons learned from silylation. Beilstein Journal of Organic Chemistry, 2020, 16, 2854-2861.	2.2	0
96	Polyamine dependent RNA cleavage: Investigations on the function of spermine in hairpin ribozyme catalysis. , 2002, , .		0
97	Fast quantitative assay of hairpin ribozyme activity based on DNA sequencer technology. , 1999, , .		0
98	Ribozyme mediated RNA double cleavage. , 1999, , .		0
99	The hairpin ribozyme as a three-way junction. , 1999, , .		0