

# 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	Vesicle encapsulation stabilizes intermolecular association and structure formation of functional RNA and DNA. <i>Current Biology</i> , 2022, 32, 86-96.e6.	3.9	12
2	Design and NMR characterization of reversible head-to-tail boronate-linked macrocyclic nucleic acids. <i>Organic and Biomolecular Chemistry</i> , 2022, 20, 2889-2895.	2.8	2
3	Azide-Modified Nucleosides as Versatile Tools for Bioorthogonal Labeling and Functionalization. <i>Chemical Record</i> , 2022, 22, e202100322.	5.8	8
4	RNA self-splicing by engineered hairpin ribozyme variants. <i>Nucleic Acids Research</i> , 2022, 50, 368-377.	14.5	5
5	Boronic Acid-Mediated Activity Control of Split 10 <sup>23</sup> DNAzymes. <i>Chemistry - A European Journal</i> , 2021, 27, 1138-1144.	3.3	7
6	Synthesis of fully protected trinucleotide building blocks on a disulphide-linked soluble support. <i>RSC Advances</i> , 2021, 11, 3892-3896.	3.6	3
7	Towards Higher Complexity in the RNA World: Hairpin Ribozyme Supported RNA Recombination. <i>ChemSystemsChem</i> , 2021, 3, e2100003.	2.6	4
8	Self-cleaving ribozymes: substrate specificity and synthetic biology applications. <i>RSC Chemical Biology</i> , 2021, 2, 1370-1383.	4.1	18
9	Azido Functionalized Nucleosides Linked to Controlled Pore Glass as Suitable Starting Materials for Oligonucleotide Synthesis by the Phosphoramidite Approach. <i>European Journal of Organic Chemistry</i> , 2021, 2021, 6408-6416.	2.4	2
10	Reductive Charge Transfer through an RNA Aptamer. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22999-23004.	13.8	7
11	Reductive Charge Transfer through an RNA Aptamer. <i>Angewandte Chemie</i> , 2020, 132, 23199-23204.	2.0	2
12	Changed reactivity of secondary hydroxy groups in C8-modified adenosine <sup>8</sup> lessons learned from silylation. <i>Beilstein Journal of Organic Chemistry</i> , 2020, 16, 2854-2861.	2.2	0
13	Splitting aptamers and nucleic acid enzymes for the development of advanced biosensors. <i>Nucleic Acids Research</i> , 2020, 48, 3400-3422.	14.5	101
14	Recent advances in understanding circular RNAs. <i>F1000Research</i> , 2020, 9, 655.	1.6	18
15	Solid Phase Assembly of Fully Protected Trinucleotide Building Blocks for Codon-Based Gene Synthesis. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2199.	2.5	2
16	Engineering of hairpin ribozyme variants for RNA recombination and splicing. <i>Annals of the New York Academy of Sciences</i> , 2019, 1447, 135-143.	3.8	15
17	Synthesis and Engineering of Circular RNAs. <i>Methods in Molecular Biology</i> , 2018, 1724, 167-180.	0.9	12
18	Ligand-Induced Dimerization of a Truncated Parallel MYC G <sup>4</sup> Quadruplex. <i>ChemBioChem</i> , 2018, 19, 505-512.	2.6	21

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19	RNA-based boronate internucleosidic linkages: an entry into reversible templated ligation and loop formation. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 8824-8830.	2.8	14
20	Preparation and characterization of pyrene modified uridine derivatives as potential electron donors in RNA. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 7663-7673.	2.8	10
21	Synthesis of Trinucleotide Building Blocks in Solution and on Solid Phase. <i>Current Protocols in Nucleic Acid Chemistry</i> , 2018, 75, e60.	0.5	4
22	Preparation of trinucleotide phosphoramidites as synthons for the synthesis of gene libraries. <i>Beilstein Journal of Organic Chemistry</i> , 2018, 14, 397-406.	2.2	11
23	Accurate Determination of the RNA Three-Way Junctions Via Single-Molecule High-Precision Fret Measurements. <i>Biophysical Journal</i> , 2017, 112, 367a.	0.5	0
24	Phosphorous chemistry in vivo: what makes the phosphoesters in DNA and RNA so diverse?. <i>ChemTexts</i> , 2017, 3, 1.	1.9	0
25	Challenges and Perspectives in Nucleic Acid Enzyme Engineering. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2017, 170, 21-35.	1.1	5
26	In vitro circularization of RNA. <i>RNA Biology</i> , 2017, 14, 1018-1027.	3.1	57
27	Thirty-five years of research into ribozymes and nucleic acid catalysis: where do we stand today?. <i>F1000Research</i> , 2016, 5, 1511.	1.6	33
28	Landmarks in the Evolution of (t)-RNAs from the Origin of Life up to Their Present Role in Human Cognition. <i>Life</i> , 2016, 6, 1.	2.4	7
29	In vitro repair of a defective EGFP transcript and translation into a functional protein. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 6729-6737.	2.8	6
30	Welcome to a SUPA issue. <i>Chemico-Biological Interactions</i> , 2016, 259, 1.	4.0	2
31	RNA Hairpin Folding in the Crowded Cell. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3224-3228.	13.8	73
32	Accurate Determination of the RNA Junctions via Single-Molecule High-Precision FRET Measurements. <i>Biophysical Journal</i> , 2016, 110, 409a.	0.5	0
33	Sugar-Edge Interactions in a DNA-RNA Quadruplex: Evidence of Sequential C-H...O Hydrogen Bonds Contributing to RNA Quadruplex Folding. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15162-15165.	13.8	13
34	Zuckerseitige Wechselwirkungen in einem DNA-RNA-Quadruplex: Hinweise auf sequentielle C-H...O-Wasserstoffbrücken als Beitrag zur RNA-Quadruplex-Faltung. <i>Angewandte Chemie</i> , 2016, 128, 15386-15390.	13.8	4
35	Challenges and Opportunities in the Development of Aptamers for TNF $\alpha$ . <i>Applied Biochemistry and Biotechnology</i> , 2016, 179, 398-414.	2.9	5
36	Hairpin ribozyme mediated RNA recombination. <i>Chemical Communications</i> , 2016, 52, 4365-4368.	4.1	17

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37	Engineering of ribozymes with useful activities in the ancient RNA world. <i>Annals of the New York Academy of Sciences</i> , 2015, 1341, 54-60.	3.8	18
38	Sequence-controlled RNA self-processing: computational design, biochemical analysis, and visualization by AFM. <i>Rna</i> , 2015, 21, 1249-1260.	3.5	18
39	RNA circularization strategies in vivo and in vitro. <i>Nucleic Acids Research</i> , 2015, 43, 2454-2465.	14.5	262
40	Ribozymes that can be regulated by external stimuli. <i>Current Opinion in Biotechnology</i> , 2015, 31, 35-41.	6.6	24
41	Synthesis of a bifunctional cytidine derivative and its conjugation to RNA for in vitro selection of a cytidine deaminase ribozyme. <i>Beilstein Journal of Organic Chemistry</i> , 2014, 10, 1906-1913.	2.2	1
42	Preparation of modified long-mer RNAs and analysis of FMN binding to theypaAptamer from <i>B. subtilis</i> . <i>RNA Biology</i> , 2014, 11, 609-623.	3.1	10
43	Generation and selection of ribozyme variants with potential application in protein engineering and synthetic biology. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 3389-3399.	3.6	13
44	RNA Aminoacylation Mediated by Sequential Action of Two Ribozymes and a Nonactivated Amino Acid. <i>ChemBioChem</i> , 2014, 15, 1200-1209.	2.6	12
45	Design and Characterization of a Twin Ribozyme for Potential Repair of a Deletion Mutation within the Oncogenic <i>CTNNB1</i> mRNA. <i>ChemMedChem</i> , 2014, 9, 2128-2137.	3.2	13
46	Synthesis of Site-Specifically Modified Long-mer RNAs. , 2014, , 477-496.		1
47	Accurate Distance and Structure Determination of Three Different RNA Three-Way Junctions via High Precision FRET. <i>Biophysical Journal</i> , 2013, 104, 263a.	0.5	0
48	RNA self-processing: Formation of cyclic species and concatemers from a small engineered RNA. <i>FEBS Letters</i> , 2013, 587, 2435-2440.	2.8	30
49	Complex formation with nucleic acids and aptamers alters the antigenic properties of platelet factor 4. <i>Blood</i> , 2013, 122, 272-281.	1.4	129
50	A new and convenient approach for the preparation of Î²-cyanoethyl protected trinucleotide phosphoramidites. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 1510.	2.8	16
51	RNA self-ligation: From oligonucleotides to full length ribozymes. <i>Biochimie</i> , 2012, 94, 1457-1463.	2.6	34
52	Mixed oligonucleotides for random mutagenesis: best way of making them. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 4641.	2.8	22
53	The many faces of the hairpin ribozyme: Structural and functional variants of a small catalytic rna. <i>IUBMB Life</i> , 2012, 64, 36-47.	3.4	33
54	Kinetic Characterization of Hairpin Ribozyme Variants. <i>Methods in Molecular Biology</i> , 2012, 848, 41-59.	0.9	6

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55	Accurate Single-Molecule FRET Studies of Nucleic Acids Using Multi-Parameter Fluorescence Detection. <i>Biophysical Journal</i> , 2011, 100, 1a.	0.5	0
56	Accurate Distance Determination of Nucleic Acids via Förster Resonance Energy Transfer: Implications of Dye Linker Length and Rigidity. <i>Journal of the American Chemical Society</i> , 2011, 133, 2463-2480.	13.7	248
57	Synthesis of Specifically Modified Oligonucleotides for Application in Structural and Functional Analysis of RNA. <i>Journal of Nucleic Acids</i> , 2011, 2011, 1-19.	1.2	17
58	Design of hairpin ribozyme variants with improved activity for poorly processed substrates. <i>FEBS Journal</i> , 2011, 278, 622-633.	4.7	13
59	Impedimetric Detection of Hairpin Ribozyme Activity. <i>Electroanalysis</i> , 2011, 23, 37-42.	2.9	2
60	Ligand-induced conformational capture of a synthetic tetracycline riboswitch revealed by pulse EPR. <i>Rna</i> , 2011, 17, 182-188.	3.5	49
61	Reading the Code of Single RNA Molecules. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 1197-1199.	13.8	3
62	Electrochemically Induced Modulation of the Catalytic Activity of a Reversible Redox-sensitive Riboswitch. <i>Electroanalysis</i> , 2008, 20, 935-940.	2.9	10
63	Synthesis of guanosine 5'-conjugates and their use as initiator molecules for transcription priming. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 899.	2.8	20
64	Drugs Made of RNA: Development and Application of Engineered RNAs for Gene Therapy. <i>Mini-Reviews in Medicinal Chemistry</i> , 2007, 7, 912-931.	2.4	25
65	RNA self-processing towards changed topology and sequence oligomerization. <i>Biological Chemistry</i> , 2007, 388, 743-6.	2.5	14
66	Twin ribozyme mediated removal of nucleotides from an internal RNA site. <i>Biochemical and Biophysical Research Communications</i> , 2007, 363, 24-29.	2.1	21
67	Sensors made of RNA: tailored ribozymes for detection of small organic molecules, metals, nucleic acids and proteins. <i>IET Nanobiotechnology</i> , 2006, 153, 31.	2.1	15
68	Redox-Active Riboswitching: Allosteric Regulation of Ribozyme Activity by Ligand-Shape Control. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2127-2129.	13.8	35
69	Lipid-Anchored Oligonucleotides for Stable Double-Helix Formation in Distinct Membrane Domains. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 4440-4444.	13.8	77
70	The Methanothermobacter thermoautotrophicus ExoIII homologue Mth212 is a DNA uridine endonuclease. <i>Nucleic Acids Research</i> , 2006, 34, 5325-5336.	14.5	28
71	Efficient RNA ligation by reverse-joined hairpin ribozymes and engineering of twin ribozymes consisting of conventional and reverse-joined hairpin ribozyme units. <i>FEBS Journal</i> , 2005, 272, 4464-4474.	4.7	18
72	Site-Specific Fluorescent and Affinity Labelling of RNA by Using a Small Engineered Twin Ribozyme. <i>ChemBioChem</i> , 2005, 6, 2158-2162.	2.6	31

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73	RNA Synthesis by T7 RNA Polymerase Supported Primer Extension. <i>Molecular Biology</i> , 2004, 38, 674-679.	1.3	3
74	Chemical synthesis of an artificially branched hairpin ribozyme variant with RNA cleavage activity. <i>Tetrahedron</i> , 2004, 60, 9273-9281.	1.9	12
75	Stereoselective Synthesis of trans-threo-trans-Oligopyrrolidines: Potential Agents for RNA Cleavage. <i>Chemistry - A European Journal</i> , 2004, 10, 3945-3962.	3.3	12
76	Current Strategies for the Synthesis of RNA. <i>Current Organic Synthesis</i> , 2004, 1, 293-307.	1.3	49
77	Gezielte RNA-Sequenz-Veränderung durch ein synthetisches Twinribozym. <i>Angewandte Chemie</i> , 2003, 115, 2526-2530.	2.0	7
78	Another Face of RNA: Metabolite-Induced "Riboswitching" for Regulation of Gene Expression. <i>ChemBioChem</i> , 2003, 4, 817-819.	2.6	5
79	Engineered Ribozymes as Molecular Tools for Site-Specific Alteration of RNA Sequence. <i>ChemBioChem</i> , 2003, 4, 991-997.	2.6	8
80	External Regulation of Hairpin Ribozyme Activity by an Oligonucleotide Effector. <i>ChemBioChem</i> , 2003, 4, 220-224.	2.6	18
81	Site-Directed Alteration of RNA Sequence Mediated by an Engineered Twin Ribozyme. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 2424-2427.	13.8	44
82	5-(Benzylmercapto)-1 H -tetrazole as activator for 2'-O -TBDMS phosphoramidite building blocks in RNA synthesis. <i>Tetrahedron Letters</i> , 2002, 43, 795-797.	1.4	78
83	Polyamine dependent RNA cleavage: Investigations on the function of spermine in hairpin ribozyme catalysis. , 2002, , .		0
84	Spermine Supports Catalysis of Hairpin Ribozyme Variants to Differing Extents. <i>Biochemical and Biophysical Research Communications</i> , 2001, 283, 648-654.	2.1	21
85	Rational Design and Synthesis of Ribozymes. <i>Molecular Biology</i> , 2000, 34, 934-939.	1.3	5
86	Title is missing!. <i>Molecular Biology</i> , 2000, 34, 913-920.	1.3	8
87	RNA double cleavage by a hairpin-derived twin ribozyme. <i>Nucleic Acids Research</i> , 2000, 28, 886-894.	14.5	42
88	Fast quantitative assay of hairpin ribozyme activity based on DNA sequencer technology. , 1999, , .		0
89	Ribozyme mediated RNA double cleavage. , 1999, , .		0
90	The hairpin ribozyme as a three-way junction. , 1999, , .		0

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91	Inter-domain cross-linking and molecular modelling of the hairpin ribozyme. <i>Journal of Molecular Biology</i> , 1997, 274, 197-212.	4.2	96
92	Base and Sugar Requirements for RNA Cleavage of Essential Nucleoside Residues in Internal Loop B of the Hairpin Ribozyme: Implications for Secondary Structure. <i>Nucleic Acids Research</i> , 1996, 24, 573-581.	14.5	76
93	A New Approach to the Synthesis of 2-Aminopurine-2'-deoxyriboside via Tri-n-butyltin Hydride Reduction. <i>Nucleosides &amp; Nucleotides</i> , 1995, 14, 1445-1452.	0.5	7
94	The interaction of DNA duplexes containing 2-aminopurine with restriction endonucleases EcoRI and SmaI. <i>Nucleic Acids Research</i> , 1995, 23, 2192-2197.	14.5	19
95	Sequence-specific and mechanism-based crosslinking of Dcm DNA cytosine-C5 methyltransferase of <i>E. coli</i> K-12 to synthetic oligonucleotides containing 5-fluoro-2'-deoxycytidine. <i>Nucleic Acids Research</i> , 1993, 21, 303-309.	14.5	44
96	Fast Quantitative Assay of Sequence-Specific Endonuclease Activity Based on DNA Sequencer Technology. <i>Biological Chemistry Hoppe-Seyler</i> , 1992, 373, 1223-1226.	1.4	17
97	Chemical synthesis of 2'-deoxyoligonucleotides containing 5-fluoro-2'-deoxycytidine. <i>Nucleic Acids Research</i> , 1992, 20, 2421-2426.	14.5	26
98	The use of oligonucleotide probes containing 2'-deoxy-2'-fluoronucleosides for regiospecific cleavage of RNA by RNase H from <i>Escherichia coli</i> . <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1992, 1130, 41-46.	2.4	10
99	Transformation von Uridin- zu Cytidinderivaten durch selektive Aminierung. <i>Journal für Praktische Chemie</i> , 1989, 331, 835-842.	0.2	12