Gisela Storz

List of Publications by Year in descending order

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166 papers	31,454 citations	6613 79 h-index	17105 122 g-index
192 all docs	192 docs citations	192 times ranked	21540 citing authors

#	Article	IF	Citations
1	Genomic Expression Programs in the Response of Yeast Cells to Environmental Changes. Molecular Biology of the Cell, 2000, 11, 4241-4257.	2.1	4,281
2	Regulatory RNAs in Bacteria. Cell, 2009, 136, 615-628.	28.9	1,404
3	Activation of the OxyR Transcription Factor by Reversible Disulfide Bond Formation. Science, 1998, 279, 1718-1722.	12.6	1,112
4	Regulation by Small RNAs in Bacteria: Expanding Frontiers. Molecular Cell, 2011, 43, 880-891.	9.7	1,087
5	Oxidative stress. Current Opinion in Microbiology, 1999, 2, 188-194.	5.1	1,017
6	Cloning and sequencing of thiol-specific antioxidant from mammalian brain: alkyl hydroperoxide reductase and thiol-specific antioxidant define a large family of antioxidant enzymes.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 7017-7021.	7.1	768
7	DNA Microarray-Mediated Transcriptional Profiling of the Escherichia coli Response to Hydrogen Peroxide. Journal of Bacteriology, 2001, 183, 4562-4570.	2.2	752
8	Definitions and guidelines for research on antibiotic persistence. Nature Reviews Microbiology, 2019, 17, 441-448.	28.6	748
9	Bacterial Small RNA Regulators: Versatile Roles and Rapidly Evolving Variations. Cold Spring Harbor Perspectives in Biology, 2011, 3, a003798-a003798.	5.5	643
10	Roles of the Glutathione- and Thioredoxin-Dependent Reduction Systems in theEscherichia ColiandSaccharomyces CerevisiaeResponses to Oxidative Stress. Annual Review of Microbiology, 2000, 54, 439-461.	7.3	636
11	Identification of novel small RNAs using comparative genomics and microarrays. Genes and Development, 2001, 15, 1637-1651.	5.9	627
12	An Expanding Universe of Noncoding RNAs. Science, 2002, 296, 1260-1263.	12.6	562
13	Analysis of Arabidopsis mutants deficient in flavonoid biosynthesis. Plant Journal, 1995, 8, 659-671.	5.7	545
14	Global analysis of small RNA and mRNA targets of Hfq. Molecular Microbiology, 2003, 50, 1111-1124.	2.5	494
15	Regulation of the OxyR transcription factor by hydrogen peroxide and the cellular thiolâ€”disulfide status. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 6161-6165.	7.1	490
16	Structural Basis of the Redox Switch in the OxyR Transcription Factor. Cell, 2001, 105, 103-113.	28.9	484
17	A Small, Stable RNA Induced by Oxidative Stress: Role as a Pleiotropic Regulator and Antimutator. Cell, 1997, 90, 43-53.	28.9	459
18	The Sm-like Hfq Protein Increases OxyS RNA Interaction with Target mRNAs. Molecular Cell, 2002, 9, 11-22.	9.7	452

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19	Hydrogen peroxide-inducible proteins in Salmonella typhimurium overlap with heat shock and other stress proteins.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 8059-8063.	7.1	444
20	The OxyS regulatory RNA represses rpoS translation and binds the Hfq (HF-I) protein. EMBO Journal, 1998, 17, 6061-6068.	7.8	436
21	6S RNA Regulates E. coli RNA Polymerase Activity. Cell, 2000, 101, 613-623.	28.9	436
22	Thedpspromoter is activated by OxyR during growth and by IHF and Ïƒsin stationary phase. Molecular Microbiology, 1994, 13, 265-272.	2.5	416
23	A suf operon requirement for Fe-S cluster assembly during iron starvation in Escherichia coli. Molecular Microbiology, 2004, 52, 861-872.	2.5	400
24	Redox-dependent shift of OxyR-DNA contacts along an extended DNA-binding site: A mechanism for differential promoter selection. Cell, 1994, 78, 897-909.	28.9	375
25	OxyR and SoxRS Regulation of fur. Journal of Bacteriology, 1999, 181, 4639-4643.	2.2	358
26	Small Proteins Can No Longer Be Ignored. Annual Review of Biochemistry, 2014, 83, 753-777.	11.1	346
27	AN ABUNDANCE OF RNA REGULATORS. Annual Review of Biochemistry, 2005, 74, 199-217.	11.1	337
28	Bacterial Antisense RNAs: How Many Are There, and What Are They Doing?. Annual Review of Genetics, 2010, 44, 167-188.	7.6	331
29	Controlling mRNA stability and translation with small, noncoding RNAs. Current Opinion in Microbiology, 2004, 7, 140-144.	5.1	328
30	Bacterial defenses against oxidative stress. Trends in Genetics, 1990, 6, 363-368.	6.7	324
31	GadY, a Small-RNA Regulator of Acid Response Genes inEscherichia coli. Journal of Bacteriology, 2004, 186, 6698-6705.	2.2	311
32	Hfq: the flexible RNA matchmaker. Current Opinion in Microbiology, 2016, 30, 133-138.	5.1	302
33	Global Transcriptional Start Site Mapping Using Differential RNA Sequencing Reveals Novel Antisense RNAs in Escherichia coli. Journal of Bacteriology, 2015, 197, 18-28.	2.2	287
34	Base pairing small RNAs and their roles in global regulatory networks. FEMS Microbiology Reviews, 2010, 34, 866-882.	8.6	256
35	MicL, a new Ïƒ^E-dependent sRNA, combats envelope stress by repressing synthesis of Lpp, the major outer membrane lipoprotein. Genes and Development, 2014, 28, 1620-1634.	5.9	255
36	The SufE Protein and the SufBCD Complex Enhance SufS Cysteine Desulfurase Activity as Part of a Sulfur Transfer Pathway for Fe-S Cluster Assembly in Escherichia coli. Journal of Biological Chemistry, 2003, 278, 45713-45719.	3.4	252

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37	Abundance of type I toxinâ€“antitoxin systems in bacteria: searches for new candidates and discovery of novel families. Nucleic Acids Research, 2010, 38, 3743-3759.	14.5	237
38	Redox regulation of OxyR requires specific disulfide bond formation involving a rapid kinetic reaction path. Nature Structural and Molecular Biology, 2004, 11, 1179-1185.	8.2	235
39	An antisense RNA controls synthesis of an SOS-induced toxin evolved from an antitoxin. Molecular Microbiology, 2007, 64, 738-754.	2.5	234
40	Redox sensing by prokaryotic transcription factors. Biochemical Pharmacology, 2000, 59, 1-6.	4.4	229
41	MicC, a Second Small-RNA Regulator of Omp Protein Expression inEscherichia coli. Journal of Bacteriology, 2004, 186, 6689-6697.	2.2	226
42	Small Toxic Proteins and the Antisense RNAs That Repress Them. Microbiology and Molecular Biology Reviews, 2008, 72, 579-589.	6.6	222
43	Target prediction for small, noncoding RNAs in bacteria. Nucleic Acids Research, 2006, 34, 2791-2802.	14.5	219
44	Detection of 5'- and 3'-UTR-derived small RNAs and cis-encoded antisense RNAs in Escherichia coli. Nucleic Acids Research, 2005, 33, 1040-1050.	14.5	208
45	The Escherichia coli OxyS regulatory RNA represses fhlA translation by blocking ribosome binding. EMBO Journal, 1998, 17, 6069-6075.	7.8	207
46	Alternative ORFs and small ORFs: shedding light on the dark proteome. Nucleic Acids Research, 2020, 48, 1029-1042.	14.5	205
47	Identification and molecular analysis of oxyR-regulated promoters important for the bacterial adaptation to oxidative stress. Journal of Molecular Biology, 1989, 210, 709-719.	4.2	201
48	Small RNAs in Escherichia coli. Trends in Microbiology, 1999, 7, 37-45.	7.7	199
49	Prominent roles of the NorR and Fur regulators in the Escherichia coli transcriptional response to reactive nitrogen species. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 745-750.	7.1	198
50	The Base-Pairing RNA Spot 42 Participates in a Multioutput Feedforward Loop to Help Enact Catabolite Repression in Escherichia coli. Molecular Cell, 2011, 41, 286-297.	9.7	197
51	Modulating the outer membrane with small RNAs. Genes and Development, 2006, 20, 2338-2348.	5.9	196
52	Small membrane proteins found by comparative genomics and ribosome binding site models. Molecular Microbiology, 2008, 70, 1487-1501.	2.5	194
53	A small RNA that regulates motility and biofilm formation in response to changes in nutrient availability in Escherichia coli. Molecular Microbiology, 2012, 84, 17-35.	2.5	189
54	Conserved small protein associates with the multidrug efflux pump AcrB and differentially affects antibiotic resistance. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16696-16701.	7.1	177

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55	RNA-RNA Interactomes of ProQ and Hfq Reveal Overlapping and Competing Roles. Molecular Cell, 2020, 77, 411-425.e7.	9.7	173
56	Alternative Hfqâ€<scp>sRNA</scp> interaction modes dictate alternative <scp>mRNA</scp> recognition. EMBO Journal, 2015, 34, 2557-2573.	7.8	172
57	Repression of small toxic protein synthesis by the Sib and OhsC small RNAs. Molecular Microbiology, 2008, 70, 1076-1093.	2.5	166
58	Trans-Acting Small RNAs and Their Effects on Gene Expression in Escherichia coli and Salmonella enterica. EcoSal Plus, 2020, 9, .	5.4	161
59	Small Stress Response Proteins in Escherichia coli : Proteins Missed by Classical Proteomic Studies. Journal of Bacteriology, 2010, 192, 46-58.	2.2	157
60	Reprogramming of anaerobic metabolism by the FnrS small RNA. Molecular Microbiology, 2010, 75, 1215-1231.	2.5	150
61	Structural basis for redox regulation of Yap1 transcription factor localization. Nature, 2004, 430, 917-921.	27.8	148
62	Identifying Small Proteins by Ribosome Profiling with Stalled Initiation Complexes. MBio, 2019, 10, .	4.1	146
63	Dual function of the McaS small RNA in controlling biofilm formation. Genes and Development, 2013, 27, 1132-1145.	5.9	143
64	The Escherichia coli MntR Miniregulon Includes Genes Encoding a Small Protein and an Efflux Pump Required for Manganese Homeostasis. Journal of Bacteriology, 2011, 193, 5887-5897.	2.2	137
65	Thioredoxin 2 Is Involved in the Oxidative Stress Response inEscherichia coli. Journal of Biological Chemistry, 2000, 275, 2505-2512.	3.4	132
66	Mutations in Interaction Surfaces Differentially Impact E. coli Hfq Association with Small RNAs and Their mRNA Targets. Journal of Molecular Biology, 2013, 425, 3678-3697.	4.2	127
67	ProQ/FinOâ€domain proteins: another ubiquitous family of RNA matchmakers?. Molecular Microbiology, 2017, 104, 905-915.	2.5	127
68	Computation-Directed Identification of OxyR DNA Binding Sites in Escherichia coli. Journal of Bacteriology, 2001, 183, 4571-4579.	2.2	126
69	The Ubiquitous yybP-ykoY Riboswitch Is a Manganese-Responsive Regulatory Element. Molecular Cell, 2015, 57, 1099-1109.	9.7	120
70	OxyR: A Regulator of Antioxidant Genes. Journal of Nutrition, 1992, 122, 627-630.	2.9	118
71	Role of thioredoxin reductase in the Yap1p-dependent response to oxidative stress in Saccharomyces cerevisiae. Molecular Microbiology, 2001, 39, 595-605.	2.5	107
72	An antibody-based microarray assay for small RNA detection. Nucleic Acids Research, 2006, 34, e52-e52.	14.5	105

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73	The Escherichia coli Small Protein MntS and Exporter MntP Optimize the Intracellular Concentration of Manganese. PLoS Genetics, 2015, 11, e1004977.	3.5	104
74	Analysis of fast neutron-generated mutants at the Arabidopsis thaliana HY4 locus. Plant Journal, 1996, 10, 755-760.	5.7	102
75	RNase III Participates in GadY-Dependent Cleavage of the gadX-gadW mRNA. Journal of Molecular Biology, 2011, 406, 29-43.	4.2	101
76	Small RNAs and Small Proteins Involved in Resistance to Cell Envelope Stress and Acid Shock in Escherichia coli : Analysis of a Bar-Coded Mutant Collection. Journal of Bacteriology, 2010, 192, 59-67.	2.2	99
77	Multiple factors dictate target selection by Hfq-binding small RNAs. EMBO Journal, 2012, 31, 1961-1974.	7.8	99
78	An expanding universe of small proteins. Current Opinion in Microbiology, 2011, 14, 167-173.	5.1	96
79	Exploiting Thiol Modifications. PLoS Biology, 2004, 2, e400.	5.6	89
80	The OxyR regulon. Antonie Van Leeuwenhoek, 1990, 58, 157-161.	1.7	85
81	[17] OxyR regulon. Methods in Enzymology, 1994, 234, 217-223.	1.0	85
82	High intensity and blue light regulated expression of chimeric chalcone synthase genes in transgenic Arabidopsis thaliana plants. Molecular Genetics and Genomics, 1991, 226, 449-56.	2.4	83
83	Discovery of Fur binding site clusters in Escherichia coli by information theory models. Nucleic Acids Research, 2007, 35, 6762-6777.	14.5	79
84	How do base-pairing small RNAs evolve?. FEMS Microbiology Reviews, 2015, 39, 379-391.	8.6	76
85	Membrane Localization of Small Proteins in Escherichia coli. Journal of Biological Chemistry, 2011, 286, 32464-32474.	3.4	67
86	Prevalence of small base-pairing RNAs derived from diverse genomic loci. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2020, 1863, 194524.	1.9	66
87	Increasing intracellular magnesium levels with the 31-amino acid MgtS protein. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5689-5694.	7.1	64
88	Regulatory roles of Escherichia coli 5' UTR and ORF-internal RNAs detected by 3' end mapping. ELife, 2021, 10, .	6.0	60
89	The Redox Domain of the Yap1p Transcription Factor Contains Two Disulfide Bondsâ€. Biochemistry, 2003, 42, 11982-11991.	2.5	58
90	Escherichia coli Small Proteome. EcoSal Plus, 2020, 9, .	5.4	55

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91	Interactions of a Bacterial RND Transporter with a Transmembrane Small Protein in a Lipid Environment. Structure, 2020, 28, 625-634.e6.	3.3	47
92	RNA reflections: converging on Hfq. Rna, 2015, 21, 511-512.	3.5	42
93	Detection of low-level promoter activity within open reading frame sequences of Escherichia coli. Nucleic Acids Research, 2005, 33, 6268-6276.	14.5	41
94	The General Stress Response in Gram-Negative Bacteria. , 0, , 251-289.		41
95	Protection against deleterious nitrogen compounds: role of Ïƒ^S-dependent small RNAs encoded adjacent tosdiA. Nucleic Acids Research, 2016, 44, 6935-6948.	14.5	40
96	Regulation of Bacterial Responses to Oxidative Stress. Current Topics in Cellular Regulation, 1997, 35, 163-177.	9.6	37
97	The small protein floodgates are opening; now the functional analysis begins. BMC Biology, 2014, 12, 96.	3.8	37
98	The small protein MgtS and small RNA MgrR modulate the PitA phosphate symporter to boost intracellular magnesium levels. Molecular Microbiology, 2019, 111, 131-144.	2.5	37
99	Small Proteins; Big Questions. Journal of Bacteriology, 2022, 204, JB0034121.	2.2	33
100	Regulating Bacterial Transcription with Small RNAs. Cold Spring Harbor Symposia on Quantitative Biology, 2006, 71, 269-273.	1.1	29
101	Regulation of bacterial gene expression in response to oxidative stress. Methods in Enzymology, 1994, 236, 196-207.	1.0	28
102	Stem-loops direct precise processing of 3â€² UTR-derived small RNA MicL. Nucleic Acids Research, 2019, 47, 1482-1492.	14.5	25
103	KH domain proteins: Another family of bacterial RNA matchmakers?. Molecular Microbiology, 2022, 117, 10-19.	2.5	25
104	Mutational Analysis To Define an Activating Region on the Redox-Sensitive Transcriptional Regulator OxyR. Journal of Bacteriology, 2006, 188, 8335-8342.	2.2	23
105	Discriminating tastes. RNA Biology, 2011, 8, 766-770.	3.1	23
106	Dual-function Spot 42 RNA encodes a 15â€“amino acid protein that regulates the CRP transcription factor. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119866119.	7.1	23
107	A guide to small RNAs in microorganisms. Current Opinion in Microbiology, 2007, 10, 93-95.	5.1	20
108	Multiple in vivo roles for the C-terminal domain of the RNA chaperone Hfq. Nucleic Acids Research, 2022, 50, 1718-1733.	14.5	20

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109	Characterization of polysaccharides isolated from maple syrup. Phytochemistry, 1986, 25, 437-441.	2.9	16
110	Cross-Regulation between Bacteria and Phages at a Posttranscriptional Level. Microbiology Spectrum, 2018, 6, .	3.0	15
111	Dual-function AzuCR RNA modulates carbon metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2117930119.	7.1	13
112	Osmotic Stress. , 2014, , 133-156.		11
113	Resistance of Bacterial Spores. , 2014, , 319-332.		10
114	Widespread Antisense Transcription in Prokaryotes. , 2018, , 191-210.		10
115	RNA Thermometers in Bacterial Pathogens. , 0, , 55-73.		10
116	SgrT, a Small Protein That Packs a Sweet Punch. Journal of Bacteriology, 2017, 199, .	2.2	8
117	Proteins That Chaperone RNA Regulation. , 0, , 383-397.		7
118	Characterization of an Unstable Allele of the Arabidopsis HY4 Locus. Genetics, 1998, 149, 1575-1585.	2.9	7
119	6S RNA, a Global Regulator of Transcription. , 0, , 355-367.		6
120	Synthetic Biology of Small RNAs and Riboswitches. , 2018, , 527-545.		6
121	Bacterial Iron Homeostasis Regulation by sRNAs. , 0, , 267-281.		6
122	Take Your Vitamins with a Pinch of RNA. Molecular Cell, 2002, 10, 1266-1268.	9.7	5
123	Interesting twists on small RNA themes in Pseudomonas aeruginosa. Molecular Microbiology, 2011, 80, 855-859.	2.5	5
124	Sensing and Responding to Reactive Oxygen and Nitrogen Species. , 0, , 157-173.		5
125	New perspectives: Insights into oxidative stress from bacterial studies. Archives of Biochemistry and Biophysics, 2016, 595, 25-27.	3.0	5
126	Small RNA with a large impact. Nature, 2016, 529, 472-473.	27.8	5

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127	Small Regulatory RNAs in the Enterobacterial Response to Envelope Damage and Oxidative Stress. , 0, , 211-228.		5
128	Global Regulation by CsrA and Its RNA Antagonists. , 2018, , 339-354.		5
129	Small RNA-Based Regulation of Bacterial Quorum Sensing and Biofilm Formation. , 2018, , 283-304.		5
130	RNase E and the High-Fidelity Orchestration of RNA Metabolism. , 2018, , 1-18.		5
131	Type I Toxin-Antitoxin Systems: Regulating Toxin Expression via Shine-Dalgarno Sequence Sequestration and Small RNA Binding. , 2018, , 171-190.		5
132	Not just Salk. Science, 2017, 357, 1105-1106.	12.6	4
133	Origin, Evolution, and Loss of Bacterial Small RNAs. , 0, , 487-497.		4
134	RNA Localization in Bacteria. , 2018, , 421-439.		4
135	Genes within Genes in Bacterial Genomes. , 2018, , 133-154.		4
136	Sponges and Predators in the Small RNA World. , 0, , 441-451.		4
137	Regulatory RNAs in Virulence and Host-Microbe Interactions. , 2018, , 305-337.		4
138	Roles of mRNA Stability, Translational Regulation, and Small RNAs in Stress Response Regulation. , 0, , 59-73.		4
139	Large Noncoding RNAs in Bacteria. , 2018, , 515-526.		3
140	Carbohydrate Utilization in Bacteria: Making the Most Out of Sugars with the Help of Small Regulatory RNAs. , 2018, , 229-248.		3
141	Dual-Function RNAs. , 0, , 471-485.		3
142	Leaderless mRNAs in the Spotlight: Ancient but Not Outdated!. , 2018, , 155-170.		3
143	Epitranscriptomics: RNA Modifications in Bacteria and Archaea. , 2018, , 399-420.		3
144	Small-Molecule-Binding Riboswitches. , 0, , 75-88.		3

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145	RNases and Helicases in Gram-Positive Bacteria. , 2018, , 37-53.		3
146	Competition Assays Using Barcoded Deletion Strains to Gain Insight into Small RNA Function. , 2012, 905, 63-72.		2
147	Enzymes Involved in Posttranscriptional RNA Metabolism in Gram-Negative Bacteria. , 2018, , 19-35.		2
148	Synthetic Dual-Function RNA Reveals Features Necessary for Target Regulation. Journal of Bacteriology, 2022, 204, JB0034521.	2.2	2
149	Cross-Regulation between Bacteria and Phages at a Posttranscriptional Level. , 0, , 499-514.		2
150	The T-Box Riboswitch: tRNA as an Effector to Modulate Gene Regulation. , 0, , 89-100.		2
151	Oxygen, Metabolism, and Gene Expression: The T-Rex Connection. Structure, 2005, 13, 2-4.	3.3	1
152	Repression of small toxic protein synthesis by the Sib and OhsC small RNAs. Molecular Microbiology, 2008, 70, 1305-1305.	2.5	1
153	Bridges and Chasms: Summary of the IMAGE 2 Meeting in Montreal, Canada, 30 April to 3 May 2007. Journal of Bacteriology, 2008, 190, 792-797.	2.2	1
154	Structure and Evolution of Transcriptional Regulatory Networks. , 2014, , 1-16.		1
155	Processive Antitermination. , 2018, , 117-131.		1
156	Bacterial Y RNAs: Gates, Tethers, and tRNA Mimics. , 0, , 369-381.		1
157	Free radicals, peroxides and the control of gene expression. Chemistry and Biology, 1994, 1, xvi-xvii.	6.0	0
158	Sensing Metals: the Versatility of Fur. , 0, , 191-204.		0
159	rRNA Mimicry in RNA Regulation of Gene Expression. , 2018, , 101-116.		0
160	Functional Transcriptomics for Bacterial Gene Detectives. , 2018, , 547-561.		0
161	Structure and Interaction Prediction in Prokaryotic RNA Biology. , 2018, , 563-579.		0
162	Small RNAs Involved in Regulation of Nitrogen Metabolism. , 2018, , 249-265.		0

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163	Bacterial Small RNAs in Mixed Regulatory Networks. , 0, , 453-469.		0
164	Regulatory Disulfides Controlling Transcription Factor Activity in the Bacterial and Yeast Responses to Oxidative Stress. , 2003, , 287-310.		0
165	Varied functions of small, nonâ€coding RNAs in bacteria. FASEB Journal, 2008, 22, 97.2.	0.5	0
166	Synergistic and Global Effect of Câ€terminus of Hfq in Small RNA Regulation. FASEB Journal, 2019, 33, lb190.	0.5	0