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List of Publications by Year
in descending order

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83	4,563	109137	114278
papers	citations	35 h-index	63 g-index

94	94	94	4200
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	cis-Antisense RNA, Another Level of Gene Regulation in Bacteria. Microbiology and Molecular Biology Reviews, 2011, 75, 286-300.	2.9	383
2	An experimentally anchored map of transcriptional start sites in the model cyanobacterium Synechocystis sp. PCC6803. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2124-2129.	3.3	364
3	Dynamics of transcriptional start site selection during nitrogen stress-induced cell differentiation in Anabaena sp. PCC7120. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20130-20135.	3.3	241
4	Comparative genomics boosts target prediction for bacterial small RNAs. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3487-96.	3.3	208
5	CRISPR-Cas Systems in the Cyanobacterium Synechocystis sp. PCC6803 Exhibit Distinct Processing Pathways Involving at Least Two Cas6 and a Cmr2 Protein. PLoS ONE, 2013, 8, e56470.	1.1	144
6	Microevolution in Cyanobacteria: Re-sequencing a Motile Substrain of Synechocystis sp. PCC 6803. DNA Research, 2012, 19, 435-448.	1.5	138
7	Heterocyst differentiation: from single mutants to global approaches. Trends in Microbiology, 2012, 20, 548-557.	3.5	112
8	The Infinitely Many Genes Model for the Distributed Genome of Bacteria. Genome Biology and Evolution, 2012, 4, 443-456.	1.1	111
9	Adaptation and modification of three CRISPR loci in two closely related cyanobacteria. RNA Biology, 2013, 10, 852-864.	1.5	106
10	Regulatory RNAs in photosynthetic cyanobacteria. FEMS Microbiology Reviews, 2015, 39, 301-315.	3.9	106
11	The sRNA NsiR4 is involved in nitrogen assimilation control in cyanobacteria by targeting glutamine synthetase inactivating factor IF7. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6243-52.	3.3	104
12	CRISPR-Based Technologies for Metabolic Engineering in Cyanobacteria. Trends in Biotechnology, 2018, 36, 996-1010.	4.9	103
13	Genomic insights into the physiology and ecology of the marine filamentous cyanobacterium Lyngbya majuscula. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8815-8820.	3.3	99
14	Computational prediction of sRNAs and their targets in bacteria. RNA Biology, 2010, 7, 33-42.	1.5	97
15	Comprehensive search for accessory proteins encoded with archaeal and bacterial type III CRISPR-cas gene cassettes reveals 39 new cas gene families. RNA Biology, 2019, 16, 530-542.	1.5	97
16	Insights into the Physiology and Ecology of the Brackish-Water-Adapted Cyanobacterium Nodularia spumigena CCY9414 Based on a Genome-Transcriptome Analysis. PLoS ONE, 2013, 8, e60224.	1.1	95
17	Positive Regulation of psbA Gene Expression by cis-Encoded Antisense RNAs in Synechocystis sp. PCC 6803 Â. Plant Physiology, 2012, 160, 1000-1010.	2.3	92
18	Systems and synthetic biology for the biotechnological application of cyanobacteria. Current Opinion in Biotechnology, 2018, 49, 94-99.	3.3	90

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19	The Antisense RNA As1_flv4 in the Cyanobacterium Synechocystis sp. PCC 6803 Prevents Premature Expression of the flv4-2 Operon upon Shift in Inorganic Carbon Supply*. Journal of Biological Chemistry, 2012, 287, 33153-33162.	1.6	81
20	Characterization of trueâ€branching cyanobacteria from geothermal sites and hot springs of Costa Rica. Environmental Microbiology, 2008, 10, 460-473.	1.8	80
21	Strains of the toxic and bloom-forming Nodularia spumigena (cyanobacteria) can degrade methylphosphonate and release methane. ISME Journal, 2018, 12, 1619-1630.	4.4	75
22	The host-encoded RNase E endonuclease as the crRNA maturation enzyme in a CRISPRâ€“Cas subtype III-Bv system. Nature Microbiology, 2018, 3, 367-377.	5.9	73
23	Small RNAâ€mediated control of the Agrobacterium tumefaciens GABA binding protein. Molecular Microbiology, 2011, 80, 492-506.	1.2	65
24	Cyanobacterial genomics for ecology and biotechnology. Current Opinion in Microbiology, 2011, 14, 608-614.	2.3	64
25	Phylogenetic analysis of freshwater sponges provide evidence for endemism and radiation in ancient lakes. Molecular Phylogenetics and Evolution, 2007, 45, 875-886.	1.2	63
26	Heterocyst-Specific Transcription of NsiR1, a Non-Coding RNA Encoded in a Tandem Array of Direct Repeats in Cyanobacteria. Journal of Molecular Biology, 2010, 398, 177-188.	2.0	56
27	Structural constraints and enzymatic promiscuity in the Cas6-dependent generation of crRNAs. Nucleic Acids Research, 2017, 45, 915-925.	6.5	53
28	A glutamine riboswitch is a key element for the regulation of glutamine synthetase in cyanobacteria. Nucleic Acids Research, 2018, 46, 10082-10094.	6.5	51
29	The primary transcriptome of the fast-growing cyanobacterium Synechococcus elongatus UTEX 2973. Biotechnology for Biofuels, 2018, 11, 218.	6.2	50
30	OxyS small <scp>RNA</scp> induces cell cycle arrest to allow <scp>DNA</scp> damage repair. EMBO Journal, 2018, 37, 413-426.	3.5	49
31	A green light-absorbing phycoerythrin is present in the high-light-adapted marine cyanobacterium Prochlorococcus sp. MED4. Environmental Microbiology, 2005, 7, 1611-1618.	1.8	46
32	Hemin and Magnesium-Protoporphyrin IX Induce Global Changes in Gene Expression in Chlamydomonas reinhardtii Â Â. Plant Physiology, 2011, 155, 892-905.	2.3	46
33	Comparative Genome Analysis of the Closely Related Synechocystis Strains PCC 6714 and PCC 6803. DNA Research, 2014, 21, 255-266.	1.5	46
34	Structure of transcription factor HetR required for heterocyst differentiation in cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10109-10114.	3.3	44
35	Small RNAs of theBradyrhizobium/Rhodopseudomonaslineage and their analysis. RNA Biology, 2012, 9, 47-58.	1.5	41
36	mRNA localization, reaction centre biogenesis and thylakoid membrane targeting in cyanobacteria. Nature Plants, 2020, 6, 1179-1191.	4.7	39

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37	Non-coding RNAs in marine Synechococcus and their regulation under environmentally relevant stress conditions. ISME Journal, 2012, 6, 1544-1557.	4.4	38
38	Toxin-Antitoxin Systems on the Large Defense Plasmid pSYSA of Synechocystis sp. PCC 6803. Journal of Biological Chemistry, 2013, 288, 7399-7409.	1.6	37
39	Genetic and metabolic advances in the engineering of cyanobacteria. Current Opinion in Biotechnology, 2019, 59, 150-156.	3.3	35
40	Genomic and transcriptomic insights into the survival of the subaerial cyanobacterium Nostoc flagelliforme in arid and exposed habitats. Environmental Microbiology, 2019, 21, 845-863.	1.8	32
41	CRISPR-Cas systems in multicellular cyanobacteria. RNA Biology, 2019, 16, 518-529.	1.5	31
42	Cytosine N4-Methylation via M.Ssp6803II Is Involved in the Regulation of Transcription, Fine- Tuning of DNA Replication and DNA Repair in the Cyanobacterium Synechocystis sp. PCC 6803. Frontiers in Microbiology, 2019, 10, 1233.	1.5	31
43	Benefit from decline: the primary transcriptome of Alteromonas macleodii str. Te101 during Trichodesmium demise. ISME Journal, 2018, 12, 981-996.	4.4	30
44	Dinitrogen fixation in a unicellular chlorophyll d-containing cyanobacterium. ISME Journal, 2012, 6, 1367-1377.	4.4	29
45	Riboregulators and the role of Hfq in photosynthetic bacteria. RNA Biology, 2014, 11, 413-426.	1.5	29
46	Biocomputational Analyses and Experimental Validation Identify the Regulon Controlled by the Redox-Responsive Transcription Factor RpaB. IScience, 2019, 15, 316-331.	1.9	29
47	The power of cooperation: Experimental and computational approaches in the functional characterization of bacterial sRNAs. Molecular Microbiology, 2020, 113, 603-612.	1.2	27
48	Analysis of a photosynthetic cyanobacterium rich in internal membrane systems via gradient profiling by sequencing (Grad-seq). Plant Cell, 2021, 33, 248-269.	3.1	26
49	Type II Toxinâ€“Antitoxin Systems in the Unicellular Cyanobacterium Synechocystis sp. PCC 6803. Toxins, 2016, 8, 228.	1.5	25
50	Discovery of a small protein factor involved in the coordinated degradation of phycobilisomes in cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	25
51	The Yfr2 ncRNA family, a group of abundant RNA molecules widely conserved in cyanobacteria. RNA Biology, 2009, 6, 222-227.	1.5	24
52	Elements of the heterocystâ€specific transcriptome unravelled by coâ€expression analysis in Nostoc sp. PCC 7120. Environmental Microbiology, 2019, 21, 2544-2558.	1.8	24
53	AtpÎ˜ is an inhibitor of F0F1 ATP synthase to arrest ATP hydrolysis during low-energy conditions in cyanobacteria. Current Biology, 2022, 32, 136-148.e5.	1.8	22
54	Discovery of Cyanophage Genomes Which Contain Mitochondrial DNA Polymerase. Molecular Biology and Evolution, 2011, 28, 2269-2274.	3.5	20

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55	Integrative analysis of the salt stress response in cyanobacteria. Biology Direct, 2021, 16, 26.	1.9	20
56	The Ssl2245-Sll1130 Toxin-Antitoxin System Mediates Heat-induced Programmed Cell Death in Synechocystis sp. PCC6803. Journal of Biological Chemistry, 2017, 292, 4222-4234.	1.6	19
57	FOXG1 Regulates PRKAR2B Transcriptionally and Posttranscriptionally via miR200 in the Adult Hippocampus. Molecular Neurobiology, 2019, 56, 5188-5201.	1.9	19
58	Inactivation of the RNA helicase CrhR impacts a specific subset of the transcriptome in the cyanobacterium Synechocystis sp. PCC 6803. RNA Biology, 2019, 16, 1205-1214.	1.5	18
59	Approaches to study CRISPR RNA biogenesis and the key players involved. Methods, 2020, 172, 12-26.	1.9	18
60	Inverse regulation of light harvesting and photoprotection is mediated by a 3â€²-end-derived sRNA in cyanobacteria. Plant Cell, 2021, 33, 358-380.	3.1	18
61	Customized workflow development and data modularization concepts for RNA-Sequencing and metatranscriptome experiments. Journal of Biotechnology, 2017, 261, 85-96.	1.9	16
62	Biochemical analysis of the Cas6-1 RNA endonuclease associated with the subtype I-D CRISPR-Cas system in Synechocystis sp. PCC 6803. RNA Biology, 2019, 16, 481-491.	1.5	16
63	The ironâ€stress activated RNA 1 (IsaR1) coordinates osmotic acclimation and iron starvation responses in the cyanobacterium Synechocystis sp. PCC 6803. Environmental Microbiology, 2018, 20, 2757-2768.	1.8	15
64	Comparative Genomics of the Baltic Sea Toxic Cyanobacteria Nodularia spumigena UHCC 0039 and Its Response to Varying Salinity. Frontiers in Microbiology, 2018, 9, 356.	1.5	15
65	The impact of the cyanobacterial carbonâ€regulator protein SbtBÂand of the second messengers cAMP and câ€diâ€AMP on CO₂â€dependent gene expression. New Phytologist, 2022, 234, 1801-1816.	3.5	15
66	Transcriptomic responses of the marine cyanobacterium Prochlorococcus to viral lysis products. Environmental Microbiology, 2019, 21, 2015-2028.	1.8	14
67	RNA helicaseâ€“regulated processing of the Synechocystis rimOâ€“crhR operon results in differential cistron expression and accumulation of two sRNAs. Journal of Biological Chemistry, 2020, 295, 6372-6386.	1.6	14
68	Regulatory RNAs in cyanobacteria: developmental decisions, stress responses and a plethora of chromosomally encoded cis-antisense RNAs. Biological Chemistry, 2011, 392, 291-7.	1.2	13
69	â€œLife is short, and art is longâ€: RNA degradation in cyanobacteria and model bacteria. , 2022, 1, 21-39.		13
70	Depletion of the FtsH1/3 Proteolytic Complex Suppresses the Nutrient Stress Response in the Cyanobacterium Synechocystis sp strain PCC 6803. Plant Cell, 2019, 31, 2912-2928.	3.1	12
71	Draft Genome Sequences of Nine Cyanobacterial Strains from Diverse Habitats. Genome Announcements, 2017, 5, .	0.8	11
72	A minimum set of regulators to thrive in the ocean. FEMS Microbiology Reviews, 2020, 44, 232-252.	3.9	8

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73	Genome of a giant bacteriophage from a decaying Trichodesmium bloom. Marine Genomics, 2017, 33, 21-25.	0.4	7
74	Divergent methylation of CRISPR repeats and cas genes in a subtype I-D CRISPR-Cas-system. BMC Microbiology, 2019, 19, 147.	1.3	7
75	Specificities and functional coordination between the two Cas6 maturation endonucleases in Anabaena sp. PCC 7120 assign orphan CRISPR arrays to three groups. RNA Biology, 2020, 17, 1442-1453.	1.5	7
76	The temperature-regulated DEAD-box RNA helicase CrhR interactome: autoregulation and photosynthesis-related transcripts. Journal of Experimental Botany, 2021, , .	2.4	7
77	The transcriptional regulator RbcR controls ribuloseâ€1,5â€bisphosphate carboxylase/oxygenase (RuBisCO) genes in the cyanobacterium Synechocystis sp. PCC 6803. New Phytologist, 2022, 235, 432-445.	3.5	7
78	The sRNA NsiR4 fine-tunes arginine synthesis in the cyanobacterium Synechocystis sp. PCC 6803 by post-transcriptional regulation of PirA. RNA Biology, 2022, 19, 811-818.	1.5	6
79	Expression of the Cyanobacterial F _o F ₁ ATP Synthase Regulator AtpÎ˜ Depends on Small DNA-Binding Proteins and Differential mRNA Stability. Microbiology Spectrum, 2022, 10, e0256221.	1.2	5
80	A framework for the computational prediction and analysis of non-coding RNAs in microbial environmental populations and their experimental validation. ISME Journal, 2020, 14, 1955-1965.	4.4	4
81	NsiR3, a nitrogen stressâ€inducible small RNA, regulates proline oxidase expression in the cyanobacterium Nostoc sp. PCC 7120. FEBS Journal, 2021, 288, 1614-1629.	2.2	3
82	Phycobilisome Breakdown Effector NblD Is Required To Maintain Cellular Amino Acid Composition during Nitrogen Starvation. Journal of Bacteriology, 2022, 204, JB0015821.	1.0	2
83	Genome-wide identification and characterization of Fur-binding sites in the cyanobacteria Synechocystis sp. PCC 6803 and PCC 6714. DNA Research, 2021, 28, .	1.5	2