Susan S Golden

List of Publications by Year
in descending order

94 papers	8,435 citations	57758 44 h-index	54911 84 g-index
124 all docs	124 docs citations	124 times ranked	5310 citing authors

#	Article	IF	Citations
1	Impairment of a cyanobacterial glycosyltransferase that modifies a pilin results in biofilm development. Environmental Microbiology Reports, 2022, 14, 218-229.	2.4	5
2	Comparative Genomics of Synechococcus elongatus Explains the Phenotypic Diversity of the Strains. MBio, 2022, 13, e0086222.	4.1	13
3	Mechanistic Aspects of the Cyanobacterial Circadian Clock. , 2021, , 67-77.		1
4	A Cyanobacterial Component Required for Pilus Biogenesis Affects the Exoproteome. MBio, 2021, 12, .	4.1	20
5	Reconstitution of an intact clock reveals mechanisms of circadian timekeeping. Science, 2021, 374, eabd4453.	12.6	32
6	Principles of rhythmicity emerging from cyanobacteria. European Journal of Neuroscience, 2020, 51, 13-18.	2.6	9
7	The circadian clock and darkness control natural competence in cyanobacteria. Nature Communications, 2020, 11, 1688.	12.8	72
8	Circadian Rhythmicity in Prokaryotes â˜†. , 2019, , 681-681.		0
9	A microcin processing peptidaseâ€like protein of the cyanobacterium <scp><i>Synechococcus elongatus</i></scp> is essential for secretion of biofilmâ€promoting proteins. Environmental Microbiology Reports, 2019, 11, 456-463.	2.4	14
10	The international journeys and aliases of <i>Synechococcus elongatus</i>. New Zealand Journal of Botany, 2019, 57, 70-75.	1.1	18
11	Predicting the metabolic capabilities of Synechococcus elongatus PCC 7942 adapted to different light regimes. Metabolic Engineering, 2019, 52, 42-56.	7.0	34
12	A Hard Dayâ€™s Night: Cyanobacteria in Diel Cycles. Trends in Microbiology, 2019, 27, 231-242.	7.7	89
13	Structure, function, and mechanism of the core circadian clock in cyanobacteria. Journal of Biological Chemistry, 2018, 293, 5026-5034.	3.4	62
14	Phototaxis in a wild isolate of the cyanobacterium <i>Synechococcus elongatus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12378-E12387.	7.1	61
15	High-throughput interaction screens illuminate the role of c-di-AMP in cyanobacterial nighttime survival. PLoS Genetics, 2018, 14, e1007301.	3.5	39
16	Roles for ClpXP in regulating the circadian clock in <i>Synechococcus elongatus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7805-E7813.	7.1	26
17	Genome-wide fitness assessment during diurnal growth reveals an expanded role of the cyanobacterial circadian clock protein KaiA. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7174-E7183.	7.1	55
18	Redox crisis underlies conditional lightâ€"dark lethality in cyanobacterial mutants that lack the circadian regulator, RpaA. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E580-E589.	7.1	53

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19	Type 4 pili are dispensable for biofilm development in the cyanobacterium <i>Synechococcus elongatus</i>. Environmental Microbiology, 2017, 19, 2862-2872.	3.8	38
20	Structural basis of the day-night transition in a bacterial circadian clock. Science, 2017, 355, 1174-1180.	12.6	144
21	NOT Gate Genetic Circuits to Control Gene Expression in Cyanobacteria. ACS Synthetic Biology, 2017, 6, 2175-2182.	3.8	43
22	Guidelines for Genome-Scale Analysis of Biological Rhythms. Journal of Biological Rhythms, 2017, 32, 380-393.	2.6	237
23	Quantification of Chlorophyll as a Proxy for Biofilm Formation in the Cyanobacterium Synechococcus elongatus. Bio-protocol, 2017, 7, e2406.	0.4	16
24	Unique attributes of cyanobacterial metabolism revealed by improved genome-scale metabolic modeling and essential gene analysis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8344-E8353.	7.1	113
25	Small secreted proteins enable biofilm development in the cyanobacterium Synechococcus elongatus. Scientific Reports, 2016, 6, 32209.	3.3	49
26	A Combined Computational and Genetic Approach Uncovers Network Interactions of the Cyanobacterial Circadian Clock. Journal of Bacteriology, 2016, 198, 2439-2447.	2.2	16
27	Mutations in Novel Lipopolysaccharide Biogenesis Genes Confer Resistance to Amoebal Grazing in Synechococcus elongatus. Applied and Environmental Microbiology, 2016, 82, 2738-2750.	3.1	11
28	Self-replicating shuttle vectors based on pANS, a small endogenous plasmid of the unicellular cyanobacterium Synechococcus elongatus PCC 7942. Microbiology (United Kingdom), 2016, 162, 2029-2041.	1.8	41
29	Best Practices for Fluorescence Microscopy of the Cyanobacterial Circadian Clock. Methods in Enzymology, 2015, 551, 211-221.	1.0	9
30	Detecting KaiC Phosphorylation Rhythms of the Cyanobacterial Circadian Oscillator In Vitro and In Vivo. Methods in Enzymology, 2015, 551, 153-173.	1.0	20
31	High-Throughput and Quantitative Approaches for Measuring Circadian Rhythms in Cyanobacteria Using Bioluminescence. Methods in Enzymology, 2015, 551, 53-72.	1.0	3
32	Photosynthetic bio-manufacturing: food, fuel, and medicine for the 21st century. Photosynthesis Research, 2015, 123, 225-226.	2.9	11
33	Cross-talk and regulatory interactions between the essential response regulator RpaB and cyanobacterial circadian clock output. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2198-2203.	7.1	51
34	A protein fold switch joins the circadian oscillator to clock output in cyanobacteria. Science, 2015, 349, 324-328.	12.6	157
35	The circadian oscillator in <i>Synechococcus elongatus</i> controls metabolite partitioning during diurnal growth. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1916-25.	7.1	118
36	The essential gene set of a photosynthetic organism. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6634-43.	7.1	166

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37	Giving Time Purpose: The <i>Synechococcus elongatus</i> Clock in a Broader Network Context. Annual Review of Genetics, 2015, 49, 485-505.	7.6	32
38	Circadian Rhythms in Cyanobacteria. Microbiology and Molecular Biology Reviews, 2015, 79, 373-385.	6.6	222
39	Broad-host-range vector system for synthetic biology and biotechnology in cyanobacteria. Nucleic Acids Research, 2014, 42, e136-e136.	14.5	141
40	Single mutations insasAenable a simpler Î”cikAgene network architecture with equivalent circadian properties. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5069-E5075.	7.1	11
41	Dynamic Localization of the Cyanobacterial Circadian Clock Proteins. Current Biology, 2014, 24, 1836-1844.	3.9	45
42	An allele of the <i>crm</i> gene blocks cyanobacterial circadian rhythms. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13950-13955.	7.1	24
43	Active output state of the <i>Synechococcus</i> Kai circadian oscillator. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3849-57.	7.1	28
44	Impairment of O-antigen production confers resistance to grazing in a model amoebaâ€“cyanobacterium predatorâ€“prey system. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16678-16683.	7.1	60
45	Oxidized quinones signal onset of darkness directly to the cyanobacterial circadian oscillator. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17765-17769.	7.1	93
46	Gene Transfer in Leptolyngbya sp. Strain BL0902, a Cyanobacterium Suitable for Production of Biomass and Bioproducts. PLoS ONE, 2012, 7, e30901.	2.5	59
47	Functional Analysis of the Synechococcus elongatus PCC 7942 Genome. Advances in Photosynthesis and Respiration, 2012, , 119-137.	1.0	14
48	Light-Driven Changes in Energy Metabolism Directly Entrain the Cyanobacterial Circadian Oscillator. Science, 2011, 331, 220-223.	12.6	205
49	The Itty-Bitty Time Machine. Advances in Genetics, 2011, 74, 13-53.	1.8	54
50	The KaiA protein of the cyanobacterial circadian oscillator is modulated by a redox-active cofactor. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5804-5809.	7.1	76
51	Circadian Gating of the Cell Cycle Revealed in Single Cyanobacterial Cells. Science, 2010, 327, 1522-1526.	12.6	152
52	Simplicity and complexity in the cyanobacterial circadian clock mechanism. Current Opinion in Genetics and Development, 2010, 20, 619-625.	3.3	39
53	Systems biology of cellular rhythms: from cacophony to symphony. Current Opinion in Genetics and Development, 2010, 20, 571-573.	3.3	8
54	Elevated ATPase Activity of KaiC Applies a Circadian Checkpoint on Cell Division in Synechococcus elongatus. Cell, 2010, 140, 529-539.	28.9	136

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55	A Novel Allele of kaiA Shortens the Circadian Period and Strengthens Interaction of Oscillator Components in the Cyanobacterium Synechococcus elongatus PCC 7942. Journal of Bacteriology, 2009, 191, 4392-4400.	2.2	11
56	Stability and lability of circadian period of gene expression in the cyanobacterium Synechococcus elongatus. Microbiology (United Kingdom), 2009, 155, 635-641.	1.8	7
57	The day/night switch in KaiC, a central oscillator component of the circadian clock of cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12825-12830.	7.1	126
58	Proteins Found in a CikA Interaction Assay Link the Circadian Clock, Metabolism, and Cell Division in <i>Synechococcus elongatus</i>. Journal of Bacteriology, 2008, 190, 3738-3746.	2.2	34
59	Specialized Techniques for Site-Directed Mutagenesis in Cyanobacteria. Methods in Molecular Biology, 2007, 362, 155-171.	0.9	125
60	Protein Extraction, Fractionation, and Purification From Cyanobacteria. Methods in Molecular Biology, 2007, 362, 365-373.	0.9	33
61	Detection of Rhythmic Bioluminescence From Luciferase Reporters in Cyanobacteria. Methods in Molecular Biology, 2007, 362, 115-129.	0.9	52
62	The pseudo-receiver domain of CikA regulates the cyanobacterial circadian input pathway. Molecular Microbiology, 2006, 60, 658-668.	2.5	48
63	Quinone sensing by the circadian input kinase of the cyanobacterial circadian clock. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17468-17473.	7.1	105
64	Good old-fashioned (anti)sense. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6781-6782.	7.1	2
65	LdpA: a component of the circadian clock senses redox state of the cell. EMBO Journal, 2005, 24, 1202-1210.	7.8	119
66	High-Throughput Functional Analysis of the Synechococcus elongatus PCC 7942 Genome. DNA Research, 2005, 12, 103-115.	3.4	97
67	Stability of the Synechococcus elongatus PCC 7942 circadian clock under directed anti-phase expression of the kai genes. Microbiology (United Kingdom), 2005, 151, 2605-2613.	1.8	40
68	Circadian rhythms from multiple oscillators: lessons from diverse organisms. Nature Reviews Genetics, 2005, 6, 544-556.	16.3	1,205
69	PsfR, a factor that stimulates psbAI expression in the cyanobacterium Synechococcus elongatus PCC 7942. Microbiology (United Kingdom), 2004, 150, 1031-1040.	1.8	22
70	NMR structure of the KaiC-interacting C-terminal domain of KaiA, a circadian clock protein: Implications for KaiA-KaiC interaction. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1479-1484.	7.1	62
71	Meshing the gears of the cyanobacterial circadian clock. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13697-13698.	7.1	23
72	Cyanobacterial circadian clocks â€" timing is everything. Nature Reviews Microbiology, 2003, 1, 191-199.	28.6	91

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73	Timekeeping in bacteria: the cyanobacterial circadian clock. Current Opinion in Microbiology, 2003, 6, 535-540.	5.1	31
74	ldpA Encodes an Iron-Sulfur Protein Involved in Light-Dependent Modulation of the Circadian Period in the Cyanobacterium Synechococcus elongatus PCC 7942. Journal of Bacteriology, 2003, 185, 1415-1422.	2.2	73
75	Biochemical Properties of CikA, an Unusual Phytochrome-like Histidine Protein Kinase That Resets the Circadian Clock in Synechococcus elongatus PCC 7942. Journal of Biological Chemistry, 2003, 278, 19102-19110.	3.4	86
76	Roles for Sigma Factors in Global Circadian Regulation of the Cyanobacterial Genome. Journal of Bacteriology, 2002, 184, 3530-3538.	2.2	94
77	Nonlinear partial differential equations and applications: Structure and function from the circadian clock protein KaiA of Synechococcus elongatus: A potential clock input mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15357-15362.	7.1	190
78	Sequence-specific 1H, 13C and 15N resonance assignments of the N-terminal, 135-residue domain of KaiA, a clock protein from Synechococcus elongatus. Journal of Biomolecular NMR, 2001, 21, 179-180.	2.8	6
79	Time for Plants. Progress in Plant Chronobiology: Fig. 1.. Plant Physiology, 2001, 125, 98-101.	4.8	7
80	A KaiC-Interacting Sensory Histidine Kinase, SasA, Necessary to Sustain Robust Circadian Oscillation in Cyanobacteria. Cell, 2000, 101, 223-233.	28.9	251
81	CikA, a Bacteriophytochrome That Resets the Cyanobacterial Circadian Clock. Science, 2000, 289, 765-768.	12.6	295
82	Application of bioluminescence to the study of circadian rhythms in cyanobacteria. Methods in Enzymology, 2000, 305, 527-542.	1.0	131
83	Circadian Programs in Cyanobacteria: Adaptiveness and Mechanism. Annual Review of Microbiology, 1999, 53, 389-409.	7.3	117
84	Expression of a Gene Cluster kaiABC as a Circadian Feedback Process in Cyanobacteria. , 1998, 281, 1519-1523.		656
85	CYANOBACTERIAL CIRCADIAN RHYTHMS. Annual Review of Plant Biology, 1997, 48, 327-354.	14.3	191
86	mRNA stability is regulated by a codingâ€region element and the unique 5â€² untranslated leader sequences of the three Synechococcus psbA transcripts. Molecular Microbiology, 1997, 24, 1131-1142.	2.5	45
87	Circadian clocks in prokaryotes. Molecular Microbiology, 1996, 21, 5-11.	2.5	140
88	Circadian expression of genes involved in the purine biosynthetic pathway of the cyanobacterium Synechococcus sp. strain PCC 7942. Molecular Microbiology, 1996, 20, 1071-1081.	2.5	46
89	Light-regulated expression of the psbD gene family in Synecbococcus sp. strain PCC 7942: evidence for the role of duplicated psbD genes in cyanobacteria. Molecular Genetics and Genomics, 1992, 232, 221-230.	2.4	109
90	Conserved relationship between psbH and petBD genes: presence of a shared upstream element in Prochlorothrix hollandica. Plant Molecular Biology, 1992, 19, 355-365.	3.9	24

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91	Sequence analysis and phylogenetic reconstruction of the genes encoding the large and small subunits of ribulose-1,5-bisphosphate carboxylase/oxygenase from the chlorophyllb-containing prokaryoteProchlorothrix hollandica. Journal of Molecular Evolution, 1991, 32, 379-395.	1.8	81
92	Nucleotide sequence of psbB from Prochlorothrix hollandica. Plant Molecular Biology, 1991, 17, 915-917.	3.9	18
93	[12] Genetic engineering of the cyanobacterial chromosome. Methods in Enzymology, 1987, 153, 215-231.	1.0	378
94	Transcriptomic and Phenomic Investigations Reveal Elements in Biofilm Repression and Formation in the Cyanobacterium Synechococcus elongatus PCC 7942. Frontiers in Microbiology, 0, 13, .	3.5	3