Susan S Golden

List of Publications by Year
in descending order

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94
papers

8,435
citations

57631
44
h-index

54797
84
g-index

124
all docs

124
docs citations

124
times ranked

5310
citing authors

#	Article	IF	Citations
1	Circadian rhythms from multiple oscillators: lessons from diverse organisms. Nature Reviews Genetics, 2005, 6, 544-556.	7.7	1,205
2	Expression of a Gene Cluster kaiABC as a Circadian Feedback Process in Cyanobacteria. , 1998, 281, 1519-1523.		656
3	[12] Genetic engineering of the cyanobacterial chromosome. Methods in Enzymology, 1987, 153, 215-231.	0.4	378
4	CikA, a Bacteriophytochrome That Resets the Cyanobacterial Circadian Clock. Science, 2000, 289, 765-768.	6.0	295
5	A KaiC-Interacting Sensory Histidine Kinase, SasA, Necessary to Sustain Robust Circadian Oscillation in Cyanobacteria. Cell, 2000, 101, 223-233.	13.5	251
6	Guidelines for Genome-Scale Analysis of Biological Rhythms. Journal of Biological Rhythms, 2017, 32, 380-393.	1.4	237
7	Circadian Rhythms in Cyanobacteria. Microbiology and Molecular Biology Reviews, 2015, 79, 373-385.	2.9	222
8	Light-Driven Changes in Energy Metabolism Directly Entrain the Cyanobacterial Circadian Oscillator. Science, 2011, 331, 220-223.	6.0	205
9	CYANOBACTERIAL CIRCADIAN RHYTHMS. Annual Review of Plant Biology, 1997, 48, 327-354.	14.2	191
10	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.	3.3	190
11	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.	3.3	166
12	A protein fold switch joins the circadian oscillator to clock output in cyanobacteria. Science, 2015, 349, 324-328.	6.0	157
13	Circadian Gating of the Cell Cycle Revealed in Single Cyanobacterial Cells. Science, 2010, 327, 1522-1526.	6.0	152
14	Structural basis of the day-night transition in a bacterial circadian clock. Science, 2017, 355, 1174-1180.	6.0	144
15	Broad-host-range vector system for synthetic biology and biotechnology in cyanobacteria. Nucleic Acids Research, 2014, 42, e136-e136.	6.5	141
16	Circadian clocks in prokaryotes. Molecular Microbiology, 1996, 21, 5-11.	1.2	140
17	Elevated ATPase Activity of KaiC Applies a Circadian Checkpoint on Cell Division in Synechococcus elongatus. Cell, 2010, 140, 529-539.	13.5	136
18	Application of bioluminescence to the study of circadian rhythms in cyanobacteria. Methods in Enzymology, 2000, 305, 527-542.	0.4	131

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19	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.	3.3	126
20	Specialized Techniques for Site-Directed Mutagenesis in Cyanobacteria. Methods in Molecular Biology, 2007, 362, 155-171.	0.4	125
21	LdpA: a component of the circadian clock senses redox state of the cell. EMBO Journal, 2005, 24, 1202-1210.	3.5	119
22	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.	3.3	118
23	Circadian Programs in Cyanobacteria: Adaptiveness and Mechanism. Annual Review of Microbiology, 1999, 53, 389-409.	2.9	117
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.	3.3	113
25	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
26	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.	3.3	105
27	High-Throughput Functional Analysis of the Synechococcus elongatus PCC 7942 Genome. DNA Research, 2005, 12, 103-115.	1.5	97
28	Roles for Sigma Factors in Global Circadian Regulation of the Cyanobacterial Genome. Journal of Bacteriology, 2002, 184, 3530-3538.	1.0	94
29	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.	3.3	93
30	Cyanobacterial circadian clocks â€" timing is everything. Nature Reviews Microbiology, 2003, 1, 191-199.	13.6	91
31	A Hard Dayâ€™s Night: Cyanobacteria in Diel Cycles. Trends in Microbiology, 2019, 27, 231-242.	3.5	89
32	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.	1.6	86
33	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.	0.8	81
34	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.	3.3	76
35	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.	1.0	73
36	The circadian clock and darkness control natural competence in cyanobacteria. Nature Communications, 2020, 11, 1688.	5.8	72

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37	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.	3.3	62
38	Structure, function, and mechanism of the core circadian clock in cyanobacteria. Journal of Biological Chemistry, 2018, 293, 5026-5034.	1.6	62
39	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.	3.3	61
40	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.	3.3	60
41	Gene Transfer in Leptolyngbya sp. Strain BL0902, a Cyanobacterium Suitable for Production of Biomass and Bioproducts. PLoS ONE, 2012, 7, e30901.	1.1	59
42	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.	3.3	55
43	The Itty-Bitty Time Machine. Advances in Genetics, 2011, 74, 13-53.	0.8	54
44	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.	3.3	53
45	Detection of Rhythmic Bioluminescence From Luciferase Reporters in Cyanobacteria. Methods in Molecular Biology, 2007, 362, 115-129.	0.4	52
46	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.	3.3	51
47	Small secreted proteins enable biofilm development in the cyanobacterium Synechococcus elongatus. Scientific Reports, 2016, 6, 32209.	1.6	49
48	The pseudo-receiver domain of CikA regulates the cyanobacterial circadian input pathway. Molecular Microbiology, 2006, 60, 658-668.	1.2	48
49	Circadian expression of genes involved in the purine biosynthetic pathway of the cyanobacterium Synechococcus sp. strain PCC 7942. Molecular Microbiology, 1996, 20, 1071-1081.	1.2	46
50	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.	1.2	45
51	Dynamic Localization of the Cyanobacterial Circadian Clock Proteins. Current Biology, 2014, 24, 1836-1844.	1.8	45
52	NOT Gate Genetic Circuits to Control Gene Expression in Cyanobacteria. ACS Synthetic Biology, 2017, 6, 2175-2182.	1.9	43
53	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.	0.7	41
54	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.	0.7	40

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55	Simplicity and complexity in the cyanobacterial circadian clock mechanism. Current Opinion in Genetics and Development, 2010, 20, 619-625.	1.5	39
56	High-throughput interaction screens illuminate the role of c-di-AMP in cyanobacterial nighttime survival. PLoS Genetics, 2018, 14, e1007301.	1.5	39
57	Type 4 pili are dispensable for biofilm development in the cyanobacterium <i>Synechococcus elongatus</i>. Environmental Microbiology, 2017, 19, 2862-2872.	1.8	38
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.	1.0	34
59	Predicting the metabolic capabilities of Synechococcus elongatus PCC 7942 adapted to different light regimes. Metabolic Engineering, 2019, 52, 42-56.	3.6	34
60	Protein Extraction, Fractionation, and Purification From Cyanobacteria. Methods in Molecular Biology, 2007, 362, 365-373.	0.4	33
61	Giving Time Purpose: The <i>Synechococcus elongatus</i> Clock in a Broader Network Context. Annual Review of Genetics, 2015, 49, 485-505.	3.2	32
62	Reconstitution of an intact clock reveals mechanisms of circadian timekeeping. Science, 2021, 374, eabd4453.	6.0	32
63	Timekeeping in bacteria: the cyanobacterial circadian clock. Current Opinion in Microbiology, 2003, 6, 535-540.	2.3	31
64	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.	3.3	28
65	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.	3.3	26
66	Conserved relationship between psbH and petBD genes: presence of a shared upstream element in Prochlorothrix hollandica. Plant Molecular Biology, 1992, 19, 355-365.	2.0	24
67	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.	3.3	24
68	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.	3.3	23
69	PsfR, a factor that stimulates psbAI expression in the cyanobacterium Synechococcus elongatus PCC 7942. Microbiology (United Kingdom), 2004, 150, 1031-1040.	0.7	22
70	Detecting KaiC Phosphorylation Rhythms of the Cyanobacterial Circadian Oscillator In Vitro and In Vivo. Methods in Enzymology, 2015, 551, 153-173.	0.4	20
71	A Cyanobacterial Component Required for Pilus Biogenesis Affects the Exoproteome. MBio, 2021, 12, .	1.8	20
72	Nucleotide sequence of psbB from Prochlorothrix hollandica. Plant Molecular Biology, 1991, 17, 915-917.	2.0	18

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73	The international journeys and aliases of <i>Synechococcus elongatus</i>. New Zealand Journal of Botany, 2019, 57, 70-75.	0.8	18
74	A Combined Computational and Genetic Approach Uncovers Network Interactions of the Cyanobacterial Circadian Clock. Journal of Bacteriology, 2016, 198, 2439-2447.	1.0	16
75	Quantification of Chlorophyll as a Proxy for Biofilm Formation in the Cyanobacterium Synechococcus elongatus. Bio-protocol, 2017, 7, e2406.	0.2	16
76	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.	1.0	14
77	Functional Analysis of the Synechococcus elongatus PCC 7942 Genome. Advances in Photosynthesis and Respiration, 2012, , 119-137.	1.0	14
78	Comparative Genomics of Synechococcus elongatus Explains the Phenotypic Diversity of the Strains. MBio, 2022, 13, e0086222.	1.8	13
79	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.	1.0	11
80	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.	3.3	11
81	Photosynthetic bio-manufacturing: food, fuel, and medicine for the 21st century. Photosynthesis Research, 2015, 123, 225-226.	1.6	11
82	Mutations in Novel Lipopolysaccharide Biogenesis Genes Confer Resistance to Amoebal Grazing in Synechococcus elongatus. Applied and Environmental Microbiology, 2016, 82, 2738-2750.	1.4	11
83	Best Practices for Fluorescence Microscopy of the Cyanobacterial Circadian Clock. Methods in Enzymology, 2015, 551, 211-221.	0.4	9
84	Principles of rhythmicity emerging from cyanobacteria. European Journal of Neuroscience, 2020, 51, 13-18.	1.2	9
85	Systems biology of cellular rhythms: from cacophony to symphony. Current Opinion in Genetics and Development, 2010, 20, 571-573.	1.5	8
86	Time for Plants. Progress in Plant Chronobiology: Fig. 1.. Plant Physiology, 2001, 125, 98-101.	2.3	7
87	Stability and lability of circadian period of gene expression in the cyanobacterium Synechococcus elongatus. Microbiology (United Kingdom), 2009, 155, 635-641.	0.7	7
88	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.	1.6	6
89	Impairment of a cyanobacterial glycosyltransferase that modifies a pilin results in biofilm development. Environmental Microbiology Reports, 2022, 14, 218-229.	1.0	5
90	High-Throughput and Quantitative Approaches for Measuring Circadian Rhythms in Cyanobacteria Using Bioluminescence. Methods in Enzymology, 2015, 551, 53-72.	0.4	3

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91	Transcriptomic and Phenomic Investigations Reveal Elements in Biofilm Repression and Formation in the Cyanobacterium Synechococcus elongatus PCC 7942. Frontiers in Microbiology, 0, 13, .	1.5	3
92	Good old-fashioned (anti)sense. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6781-6782.	3.3	2
93	Mechanistic Aspects of the Cyanobacterial Circadian Clock. , 2021, , 67-77.		1
94	Circadian Rhythmicity in Prokaryotes â˜†. , 2019, , 681-681.		0