Rei Narikawa

List of Publications by Year
in descending order

63 papers	2,971 citations	159585 30 h-index	175258 52 g-index
67 all docs	67 docs citations	67 times ranked	1805 citing authors

#	Article	IF	Citations
1	Cyanobacteriochrome CcaS is the green light receptor that induces the expression of phycobilisome linker protein. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9528-9533.	7.1	227
2	Structures of cyanobacteriochromes from phototaxis regulators AnPixJ and TePixJ reveal general and specific photoconversion mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 918-923.	7.1	154
3	Attachment of phycobilisomes in an antennaâ€“photosystem I supercomplex of cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2512-2517.	7.1	152
4	Green/red cyanobacteriochromes regulate complementary chromatic acclimation via a protochromic photocycle. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4974-4979.	7.1	147
5	A Novel Photoactive GAF Domain of Cyanobacteriochrome AnPixJ That Shows Reversible Green/Red Photoconversion. Journal of Molecular Biology, 2008, 380, 844-855.	4.2	135
6	Cyanobacteriochrome CcaS regulates phycoerythrin accumulation in <i>Nostoc punctiforme</i> , a group II chromatic adapter. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8854-8859.	7.1	128
7	Genomic Structure of an Economically Important Cyanobacterium, Arthrospira (Spirulina) platensis NIES-39. DNA Research, 2010, 17, 85-103.	3.4	107
8	The Cyanobacteriochrome, TePixJ, Isomerizes Its Own Chromophore by Converting Phycocyanobilin to Phycoviolobilin. Biochemistry, 2011, 50, 953-961.	2.5	105
9	Cyanobacteriochrome SesA Is a Diguanylate Cyclase That Induces Cell Aggregation in Thermosynechococcus. Journal of Biological Chemistry, 2014, 289, 24801-24809.	3.4	103
10	Three cyanobacteriochromes work together to form a light color-sensitive input system for c-di-GMP signaling of cell aggregation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8082-8087.	7.1	102
11	Cyanobacteriochrome TePixJ of Thermosynechococcus elongatus Harbors Phycoviolobilin as a Chromophore. Plant and Cell Physiology, 2007, 48, 1385-1390.	3.1	99
12	CyanoBase:Âa large-scale update on its 20th anniversary. Nucleic Acids Research, 2017, 45, D551-D554.	14.5	95
13	Cyanobacteriochromes: photoreceptors covering the entire UV-to-visible spectrum. Current Opinion in Structural Biology, 2019, 57, 39-46.	5.7	92
14	A biliverdin-binding cyanobacteriochrome from the chlorophyll dâ€“bearing cyanobacterium Acaryochloris marina. Scientific Reports, 2015, 5, 7950.	3.3	91
15	Novel Photosensory Two-Component System (PixAâ€“NixBâ€“NixC) Involved in the Regulation of Positive and Negative Phototaxis of Cyanobacterium Synechocystis sp. PCC 6803. Plant and Cell Physiology, 2011, 52, 2214-2224.	3.1	88
16	Cellulose Accumulation and a Cellulose Synthase Gene are Responsible for Cell Aggregation in the Cyanobacterium Thermosynechococcus vulcanus RKN. Plant and Cell Physiology, 2011, 52, 957-966.	3.1	73
17	Novel Supercomplex Organization of Photosystem I in Anabaena and Cyanophora paradoxa. Plant and Cell Physiology, 2011, 52, 162-168.	3.1	68
18	Thiol-Based Photocycle of the Blue and Teal Light-Sensing Cyanobacteriochrome Tlr1999. Biochemistry, 2012, 51, 3050-3058.	2.5	68

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19	Photoconversion Mechanism of the Second GAF Domain of Cyanobacteriochrome AnPixJ and the Cofactor Structure of Its Green-Absorbing State. Biochemistry, 2013, 52, 4871-4880.	2.5	68
20	A New Type of Dual-Cys Cyanobacteriochrome GAF Domain Found in Cyanobacterium <i>Acaryochloris marina</i>, Which Has an Unusual Red/Blue Reversible Photoconversion Cycle. Biochemistry, 2014, 53, 5051-5059.	2.5	66
21	Photoconversion Mechanism of a Green/Red Photosensory Cyanobacteriochrome AnPixJ: Time-Resolved Optical Spectroscopy and FTIR Analysis of the AnPixJ-GAF2 Domain. Biochemistry, 2011, 50, 6328-6339.	2.5	61
22	Is the Photosystem II Complex a Monomer or a Dimer?. Plant and Cell Physiology, 2009, 50, 1674-1680.	3.1	57
23	Characterization of the photoactive GAF domain of the CikA homolog (SyCikA, Slr1969) of the cyanobacterium Synechocystis sp. PCC 6803. Photochemical and Photobiological Sciences, 2008, 7, 1253-1259.	2.9	54
24	Rational conversion of chromophore selectivity of cyanobacteriochromes to accept mammalian intrinsic biliverdin. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8301-8309.	7.1	46
25	A Red/Green Cyanobacteriochrome Sustains Its Color Despite a Change in the Bilin Chromophoreâ€™s Protonation State. Biochemistry, 2015, 54, 5839-5848.	2.5	44
26	Photoconversion and Fluorescence Properties of a Red/Green-Type Cyanobacteriochrome AM1_C0023g2 That Binds Not Only Phycocyanobilin But Also Biliverdin. Frontiers in Microbiology, 2016, 7, 588.	3.5	44
27	Distinctive Properties of Dark Reversion Kinetics between Two Red/Greenâ€Type Cyanobacteriochromes and their Application in the Photoregulation of cAMP Synthesis. Photochemistry and Photobiology, 2017, 93, 681-691.	2.5	39
28	Red-shifted red/green-type cyanobacteriochrome AM1_1870g3 from the chlorophyll d-bearing cyanobacterium Acaryochloris marina. Biochemical and Biophysical Research Communications, 2015, 461, 390-395.	2.1	35
29	Cyanobacteriochrome Photoreceptors Lacking the Canonical Cys Residue. Biochemistry, 2016, 55, 6981-6995.	2.5	34
30	Color Tuning in Red/Green Cyanobacteriochrome AnPixJ: Photoisomerization at C15 Causes an Excited-State Destabilization. Journal of Physical Chemistry B, 2015, 119, 9688-9695.	2.6	32
31	The Expanded Red/Green Cyanobacteriochrome Lineage: An Evolutionary Hot Spot. Photochemistry and Photobiology, 2017, 93, 903-906.	2.5	26
32	Molecular characterization of DXCF cyanobacteriochromes from the cyanobacterium Acaryochloris marina identifies a blue-light power sensor. Journal of Biological Chemistry, 2018, 293, 1713-1727.	3.4	25
33	Use of segment-based microarray in the analysis of global gene expression in response to various environmental stresses in the cyanobacterium Anabaena sp. PCC 7120. Journal of General and Applied Microbiology, 2004, 50, 1-8.	0.7	22
34	Structural heterogeneity in a parent ground-state structure of AnPixJg2 revealed by theory and spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 13882-13894.	2.8	21
35	Molecular Evolution of PAS Domain-Containing Proteins of Filamentous Cyanobacteria Through Domain Shuffling and Domain Duplication. DNA Research, 2004, 11, 69-81.	3.4	20
36	DNA replication depends on photosynthetic electron transport in cyanobacteria. FEMS Microbiology Letters, 2013, 344, 138-144.	1.8	19

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37	CugP Is a Novel Ubiquitous Non-GalU-Type Bacterial UDP-Glucose Pyrophosphorylase Found in Cyanobacteria. Journal of Bacteriology, 2014, 196, 2348-2354.	2.2	19
38	Genetic identification of factors for extracellular cellulose accumulation in the thermophilic cyanobacterium <i>Thermosynechococcus vulcanus</i>: proposal of a novel tripartite secretion system. Molecular Microbiology, 2018, 109, 121-134.	2.5	19
39	Evolution-inspired design of multicolored photoswitches from a single cyanobacteriochrome scaffold. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15573-15580.	7.1	16
40	Phytochromes and Cyanobacteriochromes: Photoreceptor Molecules Incorporating a Linear Tetrapyrrole Chromophore. Advances in Experimental Medicine and Biology, 2021, 1293, 167-187.	1.6	16
41	Three Putative Photosensory Light, Oxygen or Voltage (LOV) Domains with Distinct Biochemical Properties from the Filamentous Cyanobacterium Anabaena sp. PCC 7120. Photochemistry and Photobiology, 2006, 82, 1627-1633.	2.5	15
42	Functional diversification of two bilin reductases for light perception and harvesting in unique cyanobacterium <i>AcaryochlorisÂmarina</i> MBIC 11017. FEBS Journal, 2020, 287, 4016-4031.	4.7	15
43	An Rrf2-Type Transcriptional Regulator Is Required for Expression of <i>psaAB</i> Genes in the Cyanobacterium <i>Synechocystis</i> sp. PCC 6803 Â Â. Plant Physiology, 2009, 151, 882-892.	4.8	13
44	Lightâ€independent biosynthesis and assembly of the photosystem II complex in the diatom <i>Chaetoceros gracilis</i>. FEBS Letters, 2013, 587, 1340-1345.	2.8	13
45	Protein Engineering of Dual-Cys Cyanobacteriochrome AM1_1186g2 for Biliverdin Incorporation and Far-Red/Blue Reversible Photoconversion. International Journal of Molecular Sciences, 2019, 20, 2935.	4.1	11
46	Conversion of photosystem II dimer to monomers during photoinhibition is tightly coupled with decrease in oxygen-evolving activity in the diatom Chaetoceros gracilis. Photosynthesis Research, 2016, 130, 83-91.	2.9	10
47	Crystallization and preliminary X-ray studies of the chromophore-binding domain of cyanobacteriochrome AnPixJ fromAnabaenasp. PCC 7120. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 159-162.	0.7	9
48	Comparison of the Forward and Reverse Photocycle Dynamics of Two Highly Similar Canonical Red/Green Cyanobacteriochromes Reveals Unexpected Differences. Biochemistry, 2021, 60, 274-288.	2.5	9
49	An Engineered Biliverdin-Compatible Cyanobacteriochrome Enables a Unique Ultrafast Reversible Photoswitching Pathway. International Journal of Molecular Sciences, 2021, 22, 5252.	4.1	9
50	Three Putative Photosensory Light, Oxygen or Voltage (LOV) Domains with Distinct Biochemical Properties from the Filamentous Cyanobacterium Anabaena sp. PCC 7120. Photochemistry and Photobiology, 2006, 82, 1627.	2.5	9
51	Identification of a dual orange/far-red and blue light photoreceptor from an oceanic green picoplankton. Nature Communications, 2021, 12, 3593.	12.8	8
52	Transient electronic and vibrational signatures during reversible photoswitching of a cyanobacteriochrome photoreceptor. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 250, 119379.	3.9	7
53	A Deletion Mutation in the Spacing Within the psaA Core Promoter Enhances Transcription in a Cyanobacterium Synechocystis sp. PCC 6803. Plant and Cell Physiology, 2012, 53, 164-172.	3.1	6
54	Tlr0485 is a cAMP-activated c-di-GMP phosphodiesterase in a cyanobacterium <i>Thermosynechococcus</i>. Journal of General and Applied Microbiology, 2020, 66, 147-152.	0.7	6

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55	Acclimation process of the chlorophyll <i>d</i>-bearing cyanobacterium <i>Acaryochloris marina</i> to an orange light environment revealed by transcriptomic analysis and electron microscopic observation. Journal of General and Applied Microbiology, 2020, 66, 106-115.	0.7	5
56	The Cruciality of Single Amino Acid Replacement for the Spectral Tuning of Biliverdin-Binding Cyanobacteriochromes. International Journal of Molecular Sciences, 2020, 21, 6278.	4.1	4
57	Unusual ring D fixation by three crucial residues promotes phycoviolobilin formation in the DXCF-type cyanobacteriochrome without the second Cys. Biochemical Journal, 2021, 478, 1043-1059.	3.7	3
58	Identification of significant residues for intermediate accumulation in phycocyanobilin synthesis. Photochemical and Photobiological Sciences, 2022, 21, 437-446.	2.9	2
59	3Q1446 Mechanism of green/red photoconversion of phytochromerelated photoreceptor(Photobiology : Vision & Photoreception4,The 49th Annual Meeting of the Biophysical) Tj ETQq1 1 0.784314 rg BT /Overlo	0.1	[illegible]
60	Sustainable Bioenergy Production Using Cyanobacteria With Multifarious Strategies. Kagaku To Seibutsu, 2017, 55, 88-97.	0.0	0
61	A photoproduct of DXCF cyanobacteriochromes without reversible Cys ligation is destabilized by rotating ring twist of the chromophore. Photochemical and Photobiological Sciences, 2020, 19, 1289-1299.	2.9	0
62	Linear Tetrapyrrole-binding Photoreceptors. Seibutsu Butsuri, 2018, 58, 303-307.	0.1	0
63	Cyanobacterial photoreceptors and their applications. , 2022, , 201-210.		0