Yoshitaka Saga

List of Publications by Year
in descending order

96	1,528	331670	361022
papers	citations	21 h-index	35 g-index

97	97	97	732
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spectral properties of single light-harvesting complexes in bacterial photosynthesis. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2010, 11, 15-24.	11.6	171
2	Synthesis of homologously pure bacteriochlorophyll-e and f analogues from BChls-c/d via transformation of the 7-methyl to formyl group and self-aggregation of synthetic zinc methyl bacteriopheophorbides-c/d/e/f in non-polar organic solvent. Tetrahedron, 2003, 59, 4337-4350.	1.9	79
3	Transmission electron microscopic study on supramolecular nanostructures of bacteriochlorophyll self-aggregates in chlorosomes of green photosynthetic bacteria. Journal of Bioscience and Bioengineering, 2006, 102, 118-123.	2.2	60
4	Spectroscopic Studies on Self-aggregation of Bacteriochlorophyll-e in Nonpolar Organic Solvents: Effects of Stereoisomeric Configuration at the 31-Position and Alkyl Substituents at the 81-PositionÂ¶. Photochemistry and Photobiology, 2001, 74, 72.	2.5	59
5	Isolation and structure determination of a complete set of bacteriochlorophyll-d homologs and epimers from a green sulfur bacterium Chlorobium vibrioforme and their aggregation properties in hydrophobic solvents. Photochemical and Photobiological Sciences, 2002, 1, 780-787.	2.9	54
6	Mechanism of Photocurrent Generation from Bacteriorhodopsin on Gold Electrodes. Journal of Physical Chemistry B, 1999, 103, 234-238.	2.6	51
7	Molecular Design for a Pinpoint RNA Scission. Interposition of Oligoamines between Two DNA Oligomers1. Journal of Organic Chemistry, 1997, 62, 846-852.	3.2	50
8	Direct Counting of Submicrometer-Sized Photosynthetic Apparatus Dispersed in Medium at Cryogenic Temperature by Confocal Laser Fluorescence Microscopy:â€‰ Estimation of the Number of Bacteriochlorophyll c in Single Light-Harvesting Antenna Complexes Chlorosomes of Green Photosynthetic Bacteria. Journal of Physical Chemistry B, 2007, 111, 12605-12609.	2.6	50
9	Crystal Structures of BchU, a Methyltransferase Involved in Bacteriochlorophyll c Biosynthesis, and its Complex with S-adenosylhomocysteine: Implications for Reaction Mechanism. Journal of Molecular Biology, 2006, 360, 839-849.	4.2	34
10	Low-Temperature Fluorescence from Single Chlorosomes, Photosynthetic Antenna Complexes of Green Filamentous and Sulfur Bacteria. Biophysical Journal, 2006, 91, 3787-3796.	0.5	32
11	Spectral Heterogeneity in Single Light-harvesting Chlorosomes from Green Sulfur Photosynthetic Bacterium Chlorobium tepidumÂ¶. Photochemistry and Photobiology, 2002, 75, 433.	2.5	32
12	Polarized Fluorescence of Aggregated Bacteriochlorophyllcand Baseplate Bacteriochlorophyllain Single Chlorosomes Isolated fromChloroflexus aurantiacusâ€. Biochemistry, 2007, 46, 7062-7068.	2.5	31
13	Demetalation of Chlorophyll Pigments. Chemistry and Biodiversity, 2012, 9, 1659-1683.	2.1	29
14	Presence of Exclusively Bacteriochlorophyll-c Containing Substrain in the Culture of Green Sulfur Photosynthetic Bacterium Chlorobium vibrioforme Strain NCIB 8327 Producing Bacteriochlorophyll-d. Analytical Sciences, 2003, 19, 1575-1579.	1.6	28
15	Comparison between chlorosomes containing bacteriochlorophyll-c and chlorosomes containing bacteriochlorophyll-d isolated from two substrains of green sulfur photosynthetic bacterium Chlorobium vibrioforme NCIB 8327. Journal of Photochemistry and Photobiology B: Biology, 2004, 75, 89-97.	3.8	27
16	Self-Assembly of Natural Light-Harvesting Bacteriochlorophylls of Green Sulfur Photosynthetic Bacteria in Silicate Capsules as Stable Models of Chlorosomes. Bioconjugate Chemistry, 2006, 17, 988-994.	3.6	27
17	In vitro activity of C-20 methyltransferase, BchU, involved in bacteriochlorophyllcbiosynthetic pathway in green sulfur bacteria. FEBS Letters, 2005, 579, 1983-1987.	2.8	26
18	Anisotropic distribution of emitting transition dipoles in chlorosome from Chlorobium tepidum: fluorescence polarization anisotropy study of single chlorosomes. Photosynthesis Research, 2009, 100, 67-78.	2.9	26

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19	Demetalation kinetics of natural chlorophylls purified from oxygenic photosynthetic organisms: effect of the formyl groups conjugated directly to the chlorin Ï€-macrocycle. Photochemical and Photobiological Sciences, 2009, 8, 1701-1707.	2.9	26
20	Kinetic Analysis of Demetalation of Synthetic Zinc Cyclic Tetrapyrroles Possessing an Acetyl Group at the 3-Position: Effects of Tetrapyrrole Structures and Peripheral Substitution. Journal of Physical Chemistry B, 2011, 115, 11757-11762.	2.6	24
21	Fluorescence Emission Spectroscopy of Single Light-Harvesting Complex from Green Filamentous Photosynthetic Bacteria. Journal of Physical Chemistry B, 2002, 106, 1430-1433.	2.6	23
22	A Dual Role for Ca²⁺ in Expanding the Spectral Diversity and Stability of Light-Harvesting 1 Reaction Center Photocomplexes of Purple Phototrophic Bacteria. Biochemistry, 2019, 58, 2844-2852.	2.5	23
23	Kinetic analysis of demetalation of bacteriochlorophyllcandehomologs purified from green sulfur photosynthetic bacteria. FEBS Letters, 2007, 581, 1847-1850.	2.8	20
24	Physicochemical Studies of Demetalation of Lightâ€harvesting Bacteriochlorophyll Isomers Purified from Green Sulfur Photosynthetic Bacteria. Photochemistry and Photobiology, 2009, 85, 1140-1146.	2.5	20
25	Biosynthesis of Unnatural Bacteriochlorophyll c Derivatives Esterified with Î±,Ï‰-Diols in the Green Sulfur Photosynthetic Bacterium Chlorobaculum tepidum. Biochemistry, 2011, 50, 7756-7764.	2.5	20
26	Facile synthesis of chlorophyll analog possessing a disulfide bond and formation of self-assembled monolayer on gold surface. Journal of Photochemistry and Photobiology B: Biology, 2004, 73, 29-34.	3.8	19
27	Bacteriochlorophyll-c Homolog Composition in Green Sulfur Photosynthetic Bacterium Chlorobium vibrioformeDependent on the Concentration of Sodium Sulfide in Liquid Cultures. Photosynthesis Research, 2005, 86, 123-130.	2.9	18
28	Reversible Changes in the Structural Features of Photosynthetic Light-Harvesting Complex 2 by Removal and Reconstitution of B800 Bacteriochlorophyll a Pigments. Biochemistry, 2017, 56, 3484-3491.	2.5	18
29	Harvesting Far-Red Light with Plant Antenna Complexes Incorporating Chlorophyll d. Biomacromolecules, 2021, 22, 3313-3322.	5.4	18
30	Comparison of demetalation properties between zinc chlorin and zinc porphyrin derivatives: Effect of macrocyclic structures. Bioorganic and Medicinal Chemistry, 2010, 18, 5697-5700.	3.0	17
31	Characterization of 3â€Acetyl Chlorophyll a and 3â€Acetyl Protochlorophyll a Accommodated in the B800 Binding Sites of Photosynthetic Lightâ€Harvesting Complex 2 in the Purple Photosynthetic Bacterium Rhodoblastus acidophilus. Photochemistry and Photobiology, 2018, 94, 698-704.	2.5	16
32	In Vitro Enzymatic Activities of Bacteriochlorophyll a Synthase Derived from the Green Sulfur Photosynthetic Bacterium Chlorobaculum tepidum. Biochemistry, 2015, 54, 4998-5005.	2.5	15
33	Determination of the Molar Extinction Coefficients of the B800 and B850 Absorption Bands in Light-harvesting Complexes 2 Derived from Three Purple Photosynthetic Bacteria Rhodoblastus acidophilus, Rhodobacter sphaeroides, and Phaeospirillum molischianum by Extraction of Bacteriochlorophyll a. Analytical Sciences, 2016, 32, 801-804.	1.6	15
34	Fluorescence Spectroscopy of Single Photosynthetic Light-Harvesting Supramolecular Systems. Cell Biochemistry and Biophysics, 2004, 40, 149-165.	1.8	14
35	Temperature-dependent spectral changes of self-aggregates of zinc chlorophylls esterified by different linear alcohols at the 17-propionate. Supramolecular Chemistry, 2009, 21, 738-746.	1.2	14
36	Substitution Effects in the A- and B-Rings of the Chlorin Macrocycle on Demetalation Properties of Zinc Chlorophyll Derivatives. Journal of Physical Chemistry B, 2011, 115, 3240-3244.	2.6	13

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37	Reconstitution of Chlorophyll d into the Bacterial Photosynthetic Light-harvesting Protein LH2. Chemistry Letters, 2018, 47, 1071-1074.	1.3	13
38	Self-Assembly of synthetic zinc chlorins in a silicate micelle prepared by sol-gel process. Bioorganic and Medicinal Chemistry Letters, 2002, 12, 1229-1231.	2.2	12
39	Excitation energy transfer in individual light-harvesting chlorosome from green photosynthetic bacterium Chloroflexus aurantiacus at cryogenic temperature. Chemical Physics Letters, 2005, 409, 34-37.	2.6	12
40	Structureâ€Ðependent Demetalation Kinetics of Chlorophyll a Analogs under Acidic Conditions. Photochemistry and Photobiology, 2013, 89, 68-73.	2.5	12
41	Reconstitution of 3-Acetyl Chlorophyll a into Light-Harvesting Complex 2 from the Purple Photosynthetic Bacterium Phaeospirillum molischianum. ACS Omega, 2020, 5, 6817-6825.	3.5	12
42	Excitation Energy Transfer from Bacteriochlorophyll b in the B800 Site to B850 Bacteriochlorophyll a in Light-Harvesting Complex 2. Journal of Physical Chemistry B, 2021, 125, 2009-2017.	2.6	12
43	Excitation Energy Transfer from Self-aggregates of Zinc Chlorins to a Bacteriochlorin in a Silicate Nanocapsule. Chemistry Letters, 2004, 33, 544-545.	1.3	11
44	Assembly of extramembranous light-harvesting complexes of green sulfur photosynthetic bacterium Chlorobium tepidum on glass surface by electrostatic layer-by-layer adsorption. Thin Solid Films, 2006, 500, 278-282.	1.8	11
45	Spectroscopic properties and bacteriochlorophyll c isomer composition of extramembranous light-harvesting complexes in the green sulfur photosynthetic bacterium Chlorobium tepidum and its CT0388-deleted mutant under vitamin B12-limited conditions. Photochemical and Photobiological Sciences, 2008, 7, 1210-1215.	2.9	11
46	Demetalation Kinetics of Chlorophyll Derivatives Possessing Different Substituents at the 7â€Position Under Acidic Conditions. Photochemistry and Photobiology, 2011, 87, 302-307.	2.5	11
47	Biosynthesis of bacteriochlorophyll c derivatives possessing chlorine and bromine atoms at the terminus of esterifying chains in the green sulfur bacterium Chlorobaculum tepidum. Journal of Bioscience and Bioengineering, 2014, 118, 82-87.	2.2	11
48	Buffer Effect on the Photoelectrochemical Response of Bacteriorhodopsin.. Analytical Sciences, 1999, 15, 365-369.	1.6	10
49	Insertion of chlorophyll a derivatives into the binding sites of B800 bacteriochlorophyll a in light-harvesting complex 2 from the purple photosynthetic bacterium Rhodoblastus acidophilus. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 353, 591-596.	3.9	10
50	Selective oxidation of B800 bacteriochlorophyll a in photosynthetic light-harvesting protein LH2. Scientific Reports, 2019, 9, 3636.	3.3	10
51	Single Supramolecule Spectroscopy of Natural and Alkaline-Treated Chlorosomes from Green Sulfur Photosynthetic Bacteria. Journal of Nanoscience and Nanotechnology, 2006, 6, 1750-1757.	0.9	9
52	Systematic Analysis of the Demetalation Kinetics of Zinc Chlorophyll Derivatives Possessing Different Substituents at the 3-Position: Effects of the Electron-Withdrawing and Electron-Donating Strength of Peripheral Substituents. Inorganic Chemistry, 2013, 52, 204-210.	4.0	9
53	A novel phosphoramidite for the site-selective introduction of functional groups into oligonucleotides via versatile tethers. Tetrahedron Letters, 1994, 35, 5879-5882.	1.4	8
54	Changes of Aqueous Self-assemblies of Zinc Chlorophyll Derivatives Possessing a Hydrophilic Chain by Treatment with Organic Solvents. Chemistry Letters, 2009, 38, 882-883.	1.3	8

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55	Synthesis and self-assembly of amphiphilic zinc chlorophyll derivatives possessing a crown ether at the 17-propionate residue. Tetrahedron, 2013, 69, 3638-3645.	1.9	8
56	Scrambled Selfâ€Assembly of Bacteriochlorophylls c and e in Aqueous Triton Xâ€100 Micelles. Photochemistry and Photobiology, 2014, 90, 552-559.	2.5	8
57	Selective Removal of B800 Bacteriochlorophyll a from Light-Harvesting Complex 2 of the Purple Photosynthetic Bacterium Phaeospirillum molischianum. Biochemistry, 2018, 57, 3075-3083.	2.5	8
58	In situ Conversion of Chlorophyll b Reconstituted into Photosynthetic Protein LH2. Chemistry Letters, 2019, 48, 1270-1273.	1.3	8
59	In situ formation of photoactive B-ring reduced chlorophyll isomer in photosynthetic protein LH2. Scientific Reports, 2020, 10, 19383.	3.3	8
60	Structural effects on epimerization of bacteriochlorophyll a and chlorophyll a revealed using 3-acetyl chlorophyll a. Journal of Porphyrins and Phthalocyanines, 2020, 24, 499-504.	0.8	8
61	Self-Assembly of Zinc Bacteriochlorophyll d Derivative Possessing a Triethoxysilyl Group at the 17-Propionate Residue. Bulletin of the Chemical Society of Japan, 2012, 85, 989-994.	3.2	7
62	Introduction of perfluoroalkyl chain into the esterifying moiety of bacteriochlorophyll c in the green sulfur photosynthetic bacterium Chlorobaculum tepidum by pigment biosynthesis. Bioorganic and Medicinal Chemistry, 2016, 24, 4165-4170.	3.0	7
63	Spectral Heterogeneity in Single Light-harvesting Chlorosomes from Green Sulfur Photosynthetic Bacterium Chlorobium tepidumÂ¶. Photochemistry and Photobiology, 2002, 75, 433-436.	2.5	6
64	Modification of the esterifying farnesyl chain in light-harvesting bacteriochlorophylls in green sulfur photosynthetic bacteria by supplementation of 9-decyn-1-ol, 9-decen-1-ol, and decan-1-ol. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 313, 44-51.	3.9	6
65	pH-Dependent Photocurrent Response from Bacteriorhodopsin at Electrode-Electrolyte Interfaces. Chemistry Letters, 1998, 27, 961-962.	1.3	5
66	Kinetic Analysis of Reduction of Formyl Groups in Chlorophyll d and Pheophytin d. Chemistry Letters, 2010, 39, 567-569.	1.3	5
67	Effects of molecular structures on reduction properties of formyl groups in chlorophylls and pheophytins prepared from oxygenic photosynthetic organisms. Bioorganic and Medicinal Chemistry, 2011, 19, 3901-3905.	3.0	5
68	Pheophytinization kinetics of chlorophyll c under weakly acidic conditions: Effects of acrylic acid residue at the 17-position. Bioorganic and Medicinal Chemistry, 2013, 21, 6915-6919.	3.0	5
69	Different Sensitivities to Oxygen Between Two Strains of the Photosynthetic Green Sulfur Bacterium Chlorobium vibrioforme NCIB 8327 with Bacteriochlorophyll c and d. Photosynthesis Research, 2005, 86, 137-143.	2.9	4
70	Structural Change of Pheophorbide a Methyl Ester by Contact with Titanium Oxide Particles. Chemistry Letters, 2012, 41, 360-362.	1.3	4
71	In vitro self-assembly of bacteriochlorophyll c derivatives monoesterified with Î±,Ï‰-diols isolated from the green sulfur photosynthetic bacterium Chlorobaculum tepidum. Supramolecular Chemistry, 2015, 27, 28-36.	1.2	4
72	Energy Transfer Dynamics in Light-Harvesting Complex 2 Variants Containing Oxidized B800 Bacteriochlorophyll a. Journal of Physical Chemistry B, 2021, 125, 6830-6836.	2.6	4

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73	Spectral Properties of Chlorophyll f in the B800 Cavity of Lightâ€harvesting Complex 2 from the Purple Photosynthetic Bacterium Rhodoblastus acidophilus. Photochemistry and Photobiology, 2022, 98, 169-174.	2.5	4
74	Demetalation kinetics of the zinc chlorophyll derivative possessing two formyl groups: effects of formyl groups conjugated to the chlorin macrocycle on physicochemical properties of photosynthetic pigments. Journal of Porphyrins and Phthalocyanines, 2013, 17, 1120-1128.	0.8	3
75	Production of bacteriopurpurin-18 phytyl ester from bacteriopheophytin a via allomerization by contact with titanium oxides in the presence of molecular oxygen. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 639-641.	2.2	3
76	Synthesis of C3/C13â€Substituted Semiâ€Synthetic Bacteriochlorophyllâ€a Derivatives and Their Properties as Functional Dyes. ChemPhotoChem, 2020, 4, 5399-5407.	3.0	3
77	Effect of metal ion exchange on the photocurrent response from bacteriorhodopsin on tin oxide electrodes. Bioelectrochemistry, 2002, 57, 17-22.	4.6	2
78	Effects of the 13-Keto Group in the E-Ring of Zinc Chlorophyll Derivatives on Demetalation Kinetics under Acidic Conditions. Chemistry Letters, 2013, 42, 672-674.	1.3	2
79	Biosynthesis of unnatural glycolipids possessing diyne moiety in the acyl chain in the green sulfur photosynthetic bacterium Chlorobaculum tepidum grown by supplementation of 10,12-heptadecadiynic acid. Biochemistry and Biophysics Reports, 2017, 9, 42-46.	1.3	2
80	Identification of metal-sensitive structural changes in the Ca2+-binding photocomplex from Thermochromatium tepidum by isotope-edited vibrational spectroscopy. Journal of Chemical Physics, 2022, 156, 105101.	3.0	2
81	Effect of Lanthanum Ions on the Photoelectrochemical Response of Bacteriorhodopsin. Chemistry Letters, 2001, 30, 106-107.	1.3	1
82	Spectroscopic Studies on Self-aggregation of Bacteriochlorophyll-e in Nonpolar Organic Solvents: Effects of Stereoisomeric Configuration at the 31-Position and Alkyl Substituents at the 81-PositionÂ¶. Photochemistry and Photobiology, 2007, 74, 72-80.	2.5	1
83	Self-assembly of zinc chlorophyll derivatives possessing a pyrenyl group at the 17-propionate residue and effects of additional Î³-cyclodextrins on their optical properties. Supramolecular Chemistry, 2014, 26, 753-760.	1.2	1
84	Effects of the central metal on stretching vibrational bands of the peripheral carbonyl moieties in formylated chlorophyll derivatives studied by Fourier-transform infrared spectroscopy. Journal of Porphyrins and Phthalocyanines, 2014, 18, 506-512.	0.8	1
85	Facile transformation of the five-membered exocyclic E-ring in 13²-demethoxycarbonyl chlorophyll derivatives by molecular oxygen with titanium oxide in the dark. Journal of Porphyrins and Phthalocyanines, 2015, 19, 631-637.	0.8	1
86	Effects of palladium ions on light-harvesting complex 2 lacking B800 bacteriochlorophyll a. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 398, 112593.	3.9	1
87	Alterations of Bacteriochlorophyll d to c in Chlorosomes Seemed to Be Induced in vitro by Reverse Mutations of the Inactivated bchU Gene in a Photosynthetic Green Sulfur Bacterium Chlorobium vibrioforme NCIB8327. AIP Conference Proceedings, 2004, , .	0.4	0
88	3P-270 Sharp zero-phonon lines in fluorescence spectra of single antenna complexes, chlorosomes at cryogenic temperature(The 46th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2008, 48, S169.	0.1	0
89	Effects of exogenous isoprenoid diphosphates on inÂvivo attachment to bacteriochlorophyllide c in the green sulfur photosynthetic bacterium Chlorobaculum tepidum. Journal of Bioscience and Bioengineering, 2017, 124, 408-413.	2.2	0
90	Amphiphilic zinc bacteriochlorophyll a derivatives that function as artificial energy acceptors in photosynthetic antenna complexes chlorosomes of the green sulfur photosynthetic bacterium Chlorobaculum limnaeum. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 353, 612-617.	3.9	0

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91	Chlorosomal Self-aggregation of Zinc Chlorophyll Derivatives in the Presence of Cationic Surfactant Cetyltrimethylammonium Bromide and Organosilanes in Aqueous Phase. , 2008, , 315-318.		0
92	NMR SPECTROSCOPIC STUDIES OFLIGHT-HARVESTING BACTERIOCHLOROPHYLLS PURIFIED FROM GREEN SULFUR PHOTOSYNTHETIC BACTERIA. , 2012, , .		0
93	SPECTROSCOPIC STUDIES OF INDIVIDUAL EXTRAMEMBRANOUS LIGHT-HARVESTING COMPLEXES OF GREEN PHOTOSYNTHETIC BACTERIA. , 2012, , .		0
94	Functional Pigments in Photosynthetic Systems. Journal of the Japan Society of Colour Material, 2016, 89, 425-429.	0.1	0
95	Effects of peripheral substituents on epimerization kinetics of formylated chlorophylls. Journal of Porphyrins and Phthalocyanines, 0, , A-F.	0.8	0
96	Isomerization kinetics of bacteriochlorophyll b and bacteriopheophytin b under acidic conditions. Photochemical and Photobiological Sciences, 2022, , 1.	2.9	0