Shinichi Takaichi

List of Publications by Year
in descending order

80 papers	3,329 citations	201674 27 h-index	155660 55 g-index
84 all docs	84 docs citations	84 times ranked	3422 citing authors

#	Article	IF	Citations
1	Carotenoids in Algae: Distributions, Biosyntheses and Functions. Marine Drugs, 2011, 9, 1101-1118.	4.6	617
2	Roseiflexus castenholzii gen. nov., sp. nov., a thermophilic, filamentous, photosynthetic bacterium that lacks chlorosomes.. International Journal of Systematic and Evolutionary Microbiology, 2002, 52, 187-193.	1.7	340
3	Novel hydroxycarotenoids with improved antioxidative properties produced by gene combination in Escherichia coli. Nature Biotechnology, 2000, 18, 843-846.	17.5	128
4	Quinones in chlorosomes of green sulfur bacteria and their role in the redox-dependent fluorescence studied in chlorosome-like bacteriochlorophyll c aggregates. Archives of Microbiology, 1997, 167, 343-349.	2.2	123
5	[35] Characterization of carotenoids in photosynthetic bacteria. Methods in Enzymology, 1992, 213, 374-385.	1.0	121
6	Genomic Structure of an Economically Important Cyanobacterium, Arthrospira (Spirulina) platensis NIES-39. DNA Research, 2010, 17, 85-103.	3.4	107
7	Myxoxanthophyll in Synechocystis sp. PCC 6803 is Myxol 2â€²-Dimethyl-Fucoside, (3R,2â€²S)-Myxol 2â€²-(2,4-di-O-Methyl-Î±-l-Fucoside), not Rhamnoside. Plant and Cell Physiology, 2001, 42, 756-762.	3.1	95
8	Roseateles depolymerans gen. nov., sp. nov., a new bacteriochlorophyll a-containing obligate aerobe belonging to the Î²-subclass of the Proteobacteria. International Journal of Systematic and Evolutionary Microbiology, 1999, 49, 449-457.	1.7	92
9	Complete Biosynthetic Pathway of the C₅₀Carotenoid Bacterioruberin from Lycopene in the Extremely Halophilic Archaeon Haloarcula japonica. Journal of Bacteriology, 2015, 197, 1614-1623.	2.2	81
10	Myxol and 4-Ketomyxol 2â€²-Fucosides, not Rhamnosides, from Anabaena sp. PCC 7120 and Nostoc punctiforme PCC 73102, and Proposal for the Biosynthetic Pathway of Carotenoids. Plant and Cell Physiology, 2005, 46, 497-504.	3.1	79
11	Characterization of carotenes in a combination of a C(18) HPLC column with isocratic elution and absorption spectra with a photodiode-array detector. , 2000, 65, 93-99.		74
12	Carotenoids of Gemmatimonas aurantiaca (Gemmatimonadetes): identification of a novel carotenoid, deoxyoscillol 2-rhamnoside, and proposed biosynthetic pathway of oscillol 2,2â€²-dirhamnoside. Microbiology (United Kingdom), 2010, 156, 757-763.	1.8	73
13	ISOLATION AND CHARACTERIZATION OF PARMALES (HETEROKONTA/HETEROKONTOPHYTA/STRAMENOPILES) FROM THE OYASHIO REGION, WESTERN NORTH PACIFIC¹. Journal of Phycology, 2011, 47, 144-151.	2.3	69
14	Zeaxanthin and Echinenone Protect the Repair of Photosystem II from Inhibition by Singlet Oxygen in Synechocystis sp. PCC 6803. Plant and Cell Physiology, 2015, 56, 906-916.	3.1	61
15	A highly selective biosynthetic pathway to non-natural C50 carotenoids assembled from moderately selective enzymes. Nature Communications, 2015, 6, 7534.	12.8	61
16	Fatty acids of astaxanthin esters in krill determined by mild mass spectrometry. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2003, 136, 317-322.	1.6	60
17	Detailed biosynthetic pathway to decaprenoxanthin diglucoside in Corynebacterium glutamicum and identification of novel intermediates. Archives of Microbiology, 2001, 176, 217-223.	2.2	59
18	The Carotenoid 7, 8-Dihydro-psi end Group can be Cyclized by the Lycopene Cyclases from the Bacterium Erwinia Uredovora and the Higher Plant Capsicum Annuum. FEBS Journal, 1996, 241, 291-296.	0.2	56

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19	The tillering phenotype of the rice plastid terminal oxidase (<scp>PTOX</scp>) lossâ€ofâ€function mutant is associated with strigolactone deficiency. New Phytologist, 2014, 202, 116-131.	7.3	52
20	Acetonitrile degradation under haloalkaline conditions by Natronocella acetinitrilica gen. nov., sp. nov.. Microbiology (United Kingdom), 2007, 153, 1157-1164.	1.8	49
21	Usefulness of field desorption mass spectrometry in determining molecular masses of carotenoids, natural carotenoid derivatives and their chemical derivatives. Organic Mass Spectrometry, 1993, 28, 785-788.	1.3	46
22	Presence of Free Myxol and 4-Hydroxymyxol and Absence of Myxol Glycosides in Anabaena variabilis ATCC 29413, and Proposal of a Biosynthetic Pathway of Carotenoids. Plant and Cell Physiology, 2006, 47, 211-216.	3.1	46
23	Catalytic properties of an expressed and purified higher plant typezeta-carotene desaturase from Capsicum annuum. FEBS Journal, 1999, 265, 376-383.	0.2	40
24	In vivo states and functions of carotenoids in an aerobic photosynthetic bacterium, Erythrobacter longus. Photosynthesis Research, 1992, 31, 21-30.	2.9	31
25	Novel carotenoid glucoside esters from alkaliphilic heliobacteria. Archives of Microbiology, 2003, 179, 95-100.	2.2	30
26	Identification and functional analysis of the geranylgeranyl pyrophosphate synthase gene (crtE) and phytoene synthase gene (crtB) for carotenoid biosynthesis in Euglena gracilis. BMC Plant Biology, 2016, 16, 4.	3.6	30
27	Unique Carotenoids in the Terrestrial Cyanobacterium Nostoc commune NIES-24: 2-Hydroxymyxol 2â€²-Fucoside, Nostoxanthin and Canthaxanthin. Current Microbiology, 2009, 59, 413-419.	2.2	29
28	Suppression of the phytoene synthase gene (EgcrtB) alters carotenoid content and intracellular structure of Euglena gracilis. BMC Plant Biology, 2017, 17, 125.	3.6	29
29	Accumulation of unusual carotenoids in the spheroidene pathway, demethylspheroidene and demethylspheroidenone, in an alkaliphilic purple nonsulfur bacterium Rhodobaca bogoriensis. Photosynthesis Research, 2001, 67, 207-214.	2.9	28
30	VARIATION OF SIPHONAXANTHIN SERIES AMONG THE GENUS NEPHROSELMIS (PRASINOPHYCEAE,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 827-834.	2.3	28
31	Dihydroxylycopene diglucoside diesters: a novel class of carotenoids from the phototrophic purple sulfur bacteria Halorhodospira abdelmalekii and Halorhodospira halochloris. Archives of Microbiology, 2001, 175, 161-167.	2.2	27
32	PHOTOSYNTHETIC PIGMENT COMPOSITION IN THE PRIMITIVE GREEN ALGA MESOSTIGMA VIRIDE (PRASINOPHYCEAE): PHYLOGENETIC AND EVOLUTIONARY IMPLICATIONS1. Journal of Phycology, 2003, 39, 570-576.	2.3	26
33	Opposite Chilarity of Î±-Carotene in Unusual Cyanobacteria with Unique Chlorophylls, Acaryochloris and Prochlorococcus. Plant and Cell Physiology, 2012, 53, 1881-1888.	3.1	26
34	Carotenogenesis diversification in phylogenetic lineages of Rhodophyta. Journal of Phycology, 2016, 52, 329-338.	2.3	25
35	Low Temperature Stress Alters the Expression of Phytoene Desaturase Genes (<i>crtP1</i>and<i>crtP2</i>) and the Î¶-Carotene Desaturase Gene (<i>crtQ</i>) Together with the Cellular Carotenoid Content of<i>Euglena gracilis</i>. Plant and Cell Physiology, 2019, 60, 274-284.	3.1	25
36	CHARACTERIZATION OF TWO UNIQUE CAROTENOID FATTY ACID ESTERS FROM PTEROSPERMA CRISTATUM (PRASINOPHYCEAE, CHLOROPHYTA) 1. Journal of Phycology, 2002, 38, 297-303.	2.3	23

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37	Effects of Calcium Ions on the Thermostability and Spectroscopic Properties of the LH1-RC Complex from a New Thermophilic Purple Bacterium <i>Allochromatium tepidum</i>. Journal of Physical Chemistry B, 2017, 121, 5025-5032.	2.6	23
38	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
39	Probing structureâ€“function relationships in early events in photosynthesis using a chimeric photocomplex. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10906-10911.	7.1	22
40	Blastochloris tepida, sp. nov., a thermophilic species of the bacteriochlorophyll b-containing genus Blastochloris. Archives of Microbiology, 2019, 201, 1351-1359.	2.2	18
41	Light dependent accumulation of Î²-carotene enhances photo-acclimation of Euglena gracilis. Journal of Photochemistry and Photobiology B: Biology, 2020, 209, 111950.	3.8	18
42	Carotenoids in a Corynebacterineae,Gordonia terraeAIST-1: Carotenoid Glucosyl Mycoloyl Esters. Bioscience, Biotechnology and Biochemistry, 2008, 72, 2615-2622.	1.3	17
43	FLUCTUATING-LIGHT-ACCLIMATION PROTEIN1, Conserved in Oxygenic Phototrophs, Regulates H+ Homeostasis and Non-Photochemical Quenching in Chloroplasts. Plant and Cell Physiology, 2017, 58, 1622-1630.	3.1	15
44	Oxygenic Phototrophs Need Î¶-Carotene Isomerase (Z-ISO) for Carotene Synthesis: Functional Analysis in Arthrospira and Euglena. Plant and Cell Physiology, 2020, 61, 276-282.	3.1	15
45	Lycopene-Family Carotenoids Confer Thermostability on Photocomplexes from a New Thermophilic Purple Bacterium. Biochemistry, 2020, 59, 2351-2358.	2.5	15
46	Water-soluble astaxanthin-binding protein (AstaP) from Coelastrella astaxanthina Ki-4 (Scenedesmaceae) involving in photo-oxidative stress tolerance. Algal Research, 2020, 50, 101988.	4.6	15
47	Carotenogenesis in cyanobacteria: CruA/CruP-type and CrtL-type lycopene cyclases. Journal of General and Applied Microbiology, 2020, 66, 53-58.	0.7	15
48	Aquabacterium pictum sp. nov., the first aerobic bacteriochlorophyll a-containing fresh water bacterium in the genus Aquabacterium of the class Betaproteobacteria. International Journal of Systematic and Evolutionary Microbiology, 2020, 70, 596-603.	1.7	15
49	Carotenoids in Rhodoplanes Species: Variation of Compositions and Substrate Specificity of Predicted Carotenogenesis Enzymes. Current Microbiology, 2012, 65, 150-155.	2.2	14
50	Tetraterpenes: Carotenoids. , 2013, , 3251-3283.		14
51	Overexpression of Orange Carotenoid Protein Protects the Repair of PSII under Strong Light in <i>Synechocystis</i> sp. PCC 6803. Plant and Cell Physiology, 2019, 60, 367-375.	3.1	14
52	The effect of changes in light intensity and temperature on the peripheral antenna of <u>Rhodopseudomonas acidophila</u>. Biochemical Society Transactions, 1993, 21, 6S-6S.	3.4	13
53	Major Carotenoid Isolated fromParacoccus schoinaiNBRC 100637TIs Adonixanthin Diglucoside. Journal of Natural Products, 2006, 69, 1823-1825.	3.0	13
54	DAY-LENGTH-DEPENDENT DELAYED-GREENING1, the Arabidopsis Homolog of the Cyanobacterial H+-Extrusion Protein, Is Essential for Chloroplast pH Regulation and Optimization of Non-Photochemical Quenching. Plant and Cell Physiology, 2019, 60, 2660-2671.	3.1	13

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55	Imhoffiella gen. nov., a marine phototrophic member of the family Chromatiaceae including the description of Imhoffiella purpurea sp. nov. and the reclassification of Thiorhodococcus bheemlicus Anil Kumar et al. 2007 as Imhoffiella bheemlica comb. nov.. International Journal of Systematic and Evolutionary Microbiology, 2017, 67, 1949-1956.	1.7	12
56	Abundance of picophytoplankton in the halocline of a meromictic lake, Lake Suigetsu, Japan. Limnology, 2007, 8, 271-280.	1.5	11
57	Functional Lycopene Cyclase (CruA) in Cyanobacterium, Arthrospira platensis NIES-39, and its Role in Carotenoid Synthesis. Plant and Cell Physiology, 2017, 58, 831-838.	3.1	11
58	Astaxanthin production in a model cyanobacterium <i>Synechocystis</i> sp. PCC 6803. Journal of General and Applied Microbiology, 2020, 66, 116-120.	0.7	10
59	A non-photosynthetic green alga illuminates the reductive evolution of plastid electron transport systems. BMC Biology, 2020, 18, 126.	3.8	9
60	Allochromatium tepidum, sp. nov., a hot spring species of purple sulfur bacteria. Archives of Microbiology, 2022, 204, 115.	2.2	9
61	Lack of plastidâ€encoded Ycf10, a homolog of the nuclearâ€encoded DLDG1 and the cyanobacterial PxcA, enhances the induction of nonâ€photochemical quenching in tobacco. Plant Direct, 2021, 5, e368.	1.9	9
62	Identification and spectroscopic characterization of neurosporene. Biotechnology Letters, 2015, 37, 2027-2031.	2.2	8
63	Elevated Levels of Specific Carotenoids During Acclimation to Strong Light Protect the Repair of Photosystem II in Synechocystis sp. PCC 6803. Frontiers in Plant Science, 2020, 11, 1030.	3.6	8
64	Distribution of the Water-Soluble Astaxanthin Binding Carotenoprotein (AstaP) in Scenedesmaceae. Marine Drugs, 2021, 19, 349.	4.6	8
65	Genus Specific Unusual Carotenoids in Purple Bacteria, Phaeospirillum and Roseospira: Structures and Biosyntheses. Current Microbiology, 2011, 63, 75-80.	2.2	7
66	General methods for identification of carotenoids. Biotechnology Letters, 2014, 36, 1127-1128.	2.2	6
67	Roseobacter cerasinus sp. nov., isolated from a fish farm. International Journal of Systematic and Evolutionary Microbiology, 2020, 70, 4920-4926.	1.7	6
68	Title is missing!. Photosynthesis Research, 1999, 59, 255-256.	2.9	5
69	Structural Confirmation of a Unique Carotenoid Lactoside, P457, in <i>Symbiodinium</i> sp. Strain nbrc 104787 Isolated from a Sea Anemone and its Distribution in Dinoflagellates and Various Marine Organisms. Journal of Phycology, 2012, 48, 1392-1402.	2.3	5
70	Excitation relaxation dynamics and energy transfer in pigmentâ€“protein complexes of a dinoflagellate, revealed by ultrafast fluorescence spectroscopy. Photosynthesis Research, 2016, 130, 183-191.	2.9	5
71	Litoreibacter roseus sp. nov., a novel bacteriochlorophyll a-containing bacterium. International Journal of Systematic and Evolutionary Microbiology, 2019, 71, .	1.7	5
72	Carotenoids in Phototrophic Microalgae: Distributions and Biosynthesis. , 2020, , 19-41.		5

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73	Morphology and molecular phylogeny of Umbraulva spp. (Ulvales, Ulvophyceae), and proposal of Ryuguphycus gen. nov. and R. kuaweuweu comb. nov.. European Journal of Phycology, 2021, 56, 1-11.	2.0	4
74	Direct injection of pigmentâ€"protein complexes and membrane fragments suspended in water from phototrophs to C18 HPLC. Photosynthesis Research, 2020, 144, 101-107.	2.9	2
75	Heterogeneous Position of the Double Bonds of Unsaturated Fatty Acids in Carotenoid Glucoside Esters fromRhodococcus rhodochrousRNMSl. Agricultural and Biological Chemistry, 1990, 54, 2139-2140.	0.3	1
76	The role of the carotenoids in the photoadaptation of the brownâ€colored sulfur bacterium <i>Chlorobium phaerobacteroides</i>. Photochemistry and Photobiology, 2004, 79, 280-285.	2.5	0
77	Photophysical Characterization of Natural cis-CarotenoidsÂ¶. Photochemistry and Photobiology, 2007, 74, 549-557.	2.5	0
78	Total synthesis of myxol and deoxymyxol stereoisomers and their application to determining the absolute configurations of the natural products. Tetrahedron, 2018, 74, 1533-1539.	1.9	0
79	Carotenoids and Human Health. Nihon Ika Daigaku Igakkai Zasshi, 2012, 8, 264-267.	0.0	0
80	Î±-Carotene and its derivatives have a sole chirality in phototrophic organisms?. Acta Biochimica Polonica, 2012, 59, 159-61.	0.5	0