Seiji Akimoto

List of Publications by Year in Descending Order

108 papers	2,125 citations	26 h-index	40 g-index
115 ext. papers	2,492 ext. citations	5.1 avg, IF	4.99 L-index

#	Paper	IF	Citations
108	Characterization of photosystem II assembly complexes containing ONE-HELIX PROTEIN1 in Arabidopsis thaliana.. *Journal of Plant Research*, **2022**, 135, 361	2.6	0
107	Excitation-energy transfer in heterocysts isolated from the cyanobacterium Anabaena sp. PCC 7120 as studied by time-resolved fluorescence spectroscopy. *Biochimica Et Biophysica Acta - Bioenergetics* , **2022**, 1863, 148509	4.6	
106	Structure of a tetrameric photosystem I from a glaucophyte alga Cyanophora paradoxa.. *Nature Communications*, **2022**, 13, 1679	17.4	2
105	Structural basis for different types of hetero-tetrameric light-harvesting complexes in a diatom PSII-FCPII supercomplex.. *Nature Communications*, **2022**, 13, 1764	17.4	1
104	Mutations in hik26 and slr1916 lead to high-light stress tolerance in Synechocystis sp. PCC6803. *Communications Biology*, **2021**, 4, 343	6.7	4
103	High-light modification of excitation-energy-relaxation processes in the green flagellate Euglena gracilis. *Photosynthesis Research*, **2021**, 149, 303-311	3.7	1
102	Estimation of linear and cyclic electron flows in photosynthesis based on C-metabolic flux analysis. *Journal of Bioscience and Bioengineering*, **2021**, 131, 277-282	3.3	4
101	Basic pH-induced modification of excitation-energy dynamics in fucoxanthin chlorophyll a/c-binding proteins isolated from a pinguiophyte, Glossomastix chrysoplasta. *Biochimica Et Biophysica Acta - Bioenergetics*, **2021**, 1862, 148306	4.6	
100	Role of type I NADH dehydrogenase in Synechocystis sp. PCC 6803 under phycobilisome excited red light. *Plant Science*, **2021**, 304, 110798	5.3	4
99	Molecular organizations and function of iron-stress-induced-A protein family in Anabaena sp. PCC 7120. *Biochimica Et Biophysica Acta - Bioenergetics*, **2021**, 1862, 148327	4.6	2
98	Modification of Energy Distribution Between Photosystems I and II by Spillover Revealed by Time-Resolved Fluorescence Spectroscopy. *Advances in Photosynthesis and Respiration*, **2021**, 277-302	1.7	
97	Enhancement of excitation-energy quenching in fucoxanthin chlorophyll a/c-binding proteins isolated from a diatom Phaeodactylum tricornutum upon excess-light illumination. *Biochimica Et Biophysica Acta - Bioenergetics*, **2021**, 1862, 148350	4.6	3
96	Proteome analysis of response to different spectral light irradiation in Synechocystis sp. PCC 6803. *Journal of Proteomics*, **2021**, 246, 104306	3.9	1
95	Structural basis for assembly and function of a diatom photosystem I-light-harvesting supercomplex. *Nature Communications*, **2020**, 11, 2481	17.4	24
94	Photoprotection mechanisms under different CO regimes during photosynthesis in a green alga Chlorella variabilis. *Photosynthesis Research*, **2020**, 144, 397-407	3.7	3
93	Structure of a cyanobacterial photosystem I surrounded by octadecameric IsiA antenna proteins. *Communications Biology*, **2020**, 3, 232	6.7	10
92	Acidic pH-Induced Modification of Energy Transfer in Diatom Fucoxanthin Chlorophyll /-Binding Proteins. *Journal of Physical Chemistry B*, **2020**, 124, 4919-4923	3.4	6

91	Excitation-Energy Transfer and Quenching in Diatom PSI-FCPI upon P700 Cation Formation. *Journal of Physical Chemistry B*, **2020**, 124, 1481-1486	3.4	12
90	Changes in excitation relaxation of diatoms in response to fluctuating light, probed by fluorescence spectroscopies. *Photosynthesis Research*, **2020**, 146, 143-150	3.7	5
89	pH-Induced Regulation of Excitation Energy Transfer in the Cyanobacterial Photosystem I Tetramer. *Journal of Physical Chemistry B*, **2020**, 124, 1949-1954	3.4	5
88	Effects of CO and temperature on photosynthetic performance in the diatom Chaetoceros gracilis. *Photosynthesis Research*, **2020**, 146, 189-195	3.7	8
87	Structural basis for the adaptation and function of chlorophyll f in photosystem I. *Nature Communications*, **2020**, 11, 238	17.4	43
86	Adaptation of light-harvesting and energy-transfer processes of a diatom Phaeodactylum tricornutum to different light qualities. *Photosynthesis Research*, **2020**, 146, 227-234	3.7	8
85	Adaptation of light-harvesting and energy-transfer processes of a diatom Chaetoceros gracilis to different light qualities. *Photosynthesis Research*, **2020**, 146, 87-93	3.7	5
84	Reply to "Comment on UAcidic pH-Induced Modification of Energy Transfer in Diatom Fucoxanthin Chlorophyll /-Binding ProteinsU. *Journal of Physical Chemistry B*, **2020**, 124, 10588-10589	3.4	
83	Structure of a cyanobacterial photosystem I tetramer revealed by cryo-electron microscopy. *Nature Communications*, **2019**, 10, 4929	17.4	29
82	Formation of a PSI-PSII megacomplex containing LHCSR and PsbS in the moss Physcomitrella patens. *Journal of Plant Research*, **2019**, 132, 867-880	2.6	9
81	Ten antenna proteins are associated with the core in the supramolecular organization of the photosystem I supercomplex in. *Journal of Biological Chemistry*, **2019**, 294, 4304-4314	5.4	28
80	pH-Sensing Machinery of Excitation Energy Transfer in Diatom PSI-FCPI Complexes. *Journal of Physical Chemistry Letters*, **2019**, 10, 3531-3535	6.4	8
79	Effects of excess light energy on excitation-energy dynamics in a pennate diatom Phaeodactylum tricornutum. *Photosynthesis Research*, **2019**, 141, 355-365	3.7	13
78	Ultrafast Excitation Energy Dynamics in a Diatom Photosystem I-Antenna Complex: A Femtosecond Fluorescence Upconversion Study. *Journal of Physical Chemistry B*, **2019**, 123, 2673-2678	3.4	7
77	Adaptation of light-harvesting functions of unicellular green algae to different light qualities. *Photosynthesis Research*, **2019**, 139, 145-154	3.7	16
76	Regulation of excitation energy in Nannochloropsis photosystem II. *Photosynthesis Research*, **2019**, 139, 155-161	3.7	2
75	Spectral Properties and Excitation Relaxation of Novel Fucoxanthin Chlorophyll /-Binding Protein Complexes. *Journal of Physical Chemistry Letters*, **2019**, 10, 5148-5152	6.4	10
74	Structural basis for energy harvesting and dissipation in a diatom PSII-FCPII supercomplex. *Nature Plants*, **2019**, 5, 890-901	11.5	58

73	Exergonic Intramolecular Singlet Fission of an Adamantane-Linked Tetracene Dyad via Twin Quintet Multiexcitons. *Journal of Physical Chemistry C*, **2019**, 123, 18813-18823	3.8	26
72	The PSI-PSII Megacomplex in Green Plants. *Plant and Cell Physiology*, **2019**, 60, 1098-1108	4.9	23
71	Biochemical characterization of photosystem I complexes having different subunit compositions of fucoxanthin chlorophyll a/c-binding proteins in the diatom Chaetoceros gracilis. *Photosynthesis Research*, **2019**, 140, 141-149	3.7	17
70	Low-Energy Chlorophylls in Fucoxanthin Chlorophyll a/ c-Binding Protein Conduct Excitation Energy Transfer to Photosystem I in Diatoms. *Journal of Physical Chemistry B*, **2019**, 123, 66-70	3.4	18
69	Energy transfer and distribution in photosystem super/megacomplexes of plants. *Current Opinion in Biotechnology*, **2018**, 54, 50-56	11.4	12
68	Alterations of pigment composition and their interactions in response to different light conditions in the diatom Chaetoceros gracilis probed by time-resolved fluorescence spectroscopy. *Biochimica Et Biophysica Acta - Bioenergetics*, **2018**, 1859, 524-530	4.6	16
67	Light-Harvesting Strategy during CO-Dependent Photosynthesis in the Green Alga Chlamydomonas reinhardtii. *Journal of Physical Chemistry Letters*, **2018**, 9, 1028-1033	6.4	15
66	LHCSR1-dependent fluorescence quenching is mediated by excitation energy transfer from LHCII to photosystem I in. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 3722-3727	11.5	32
65	Biochemical and Spectroscopic Characterizations of a Hybrid Light-Harvesting Reaction Center Core Complex. *Biochemistry*, **2018**, 57, 4496-4503	3.2	4
64	Charge-Transfer Character Drives Möbius Antiaromaticity in the Excited Triplet State of Twisted [28]Hexaphyrin. *Journal of Physical Chemistry Letters*, **2018**, 9, 2685-2690	6.4	12
63	Singlet-Fission-Born Quintet State: Sublevel Selections and Trapping by Multiexciton Thermodynamics. *Journal of Physical Chemistry Letters*, **2018**, 9, 5855-5861	6.4	39
62	Energy transfer in Anabaena variabilis filaments adapted to nitrogen-depleted and nitrogen-enriched conditions studied by time-resolved fluorescence. *Photosynthesis Research*, **2017**, 133, 317-326	3.7	2
61	Variety in excitation energy transfer processes from phycobilisomes to photosystems I and II. *Photosynthesis Research*, **2017**, 133, 235-243	3.7	9
60	How Light-Harvesting and Energy-Transfer Processes Are Modified Under Different Light Conditions: STUDIES by Time-Resolved Fluorescence Spectroscopy **2017**, 169-184		2
59	Adaptation of Divinyl Chlorophyll a/b-Containing Cyanobacterium to Different Light Conditions: Three Strains of Prochlorococcus marinus. *Journal of Physical Chemistry B*, **2017**, 121, 9081-9090	3.4	20
58	Fluorescence lifetime analyses reveal how the high light-responsive protein LHCSR3 transforms PSII light-harvesting complexes into an energy-dissipative state. *Journal of Biological Chemistry*, **2017**, 292, 18951-18960	5.4	24
57	An Acid-Responsive Single Trichromatic Luminescent Dye That Provides Pure White-Light Emission. *ChemPhotoChem*, **2017**, 1, 427-431	3.3	7
56	Deficiency of the Stroma-Lamellar Protein LIL8/PSB33 Affects Energy Transfer Around PSI in Arabidopsis. *Plant and Cell Physiology*, **2017**, 58, 2026-2039	4.9	10

55	Energy Transfer in Cyanobacteria and Red Algae: Confirmation of Spillover in Intact Megacomplexes of Phycobilisome and Both Photosystems. *Journal of Physical Chemistry Letters*, **2016**, 7, 3567-71	6.4	17
54	Excitation relaxation dynamics and energy transfer in pigment-protein complexes of a dinoflagellate, revealed by ultrafast fluorescence spectroscopy. *Photosynthesis Research*, **2016**, 130, 183-191	3.7	3
53	Diversity in photosynthetic electron transport under [CO]-limitation: the cyanobacterium Synechococcus sp. PCC 7002 and green alga Chlamydomonas reinhardtii drive an O-dependent alternative electron flow and non-photochemical quenching of chlorophyll fluorescence during CO-limited photosynthesis. *Photosynthesis Research*, **2016**, 130, 293-305	3.7	19
52	Regulation of excitation energy transfer in diatom PSII dimer: How does it change the destination of excitation energy?. *Biochimica Et Biophysica Acta - Bioenergetics*, **2015**, 1847, 1274-82	4.6	26
51	Light-harvesting complex Lhcb9 confers a green alga-type photosystem I supercomplex to the moss Physcomitrella patens. *Nature Plants*, **2015**, 1, 14008	11.5	17
50	Comparative Analysis of Ultrafast Excitation Energy-Transfer Pathways in Three Strains of Divinyl Chlorophyll a/b-Containing Cyanobacterium, Prochlorococcus marinus. *Journal of Physical Chemistry B*, **2015**, 119, 15593-600	3.4	8
49	Energy transfer in the chlorophyll f-containing cyanobacterium, Halomicronema hongdechloris, analyzed by time-resolved fluorescence spectroscopies. *Photosynthesis Research*, **2015**, 125, 115-22	3.7	21
48	Light adaptation of the unicellular red alga, Cyanidioschyzon merolae, probed by time-resolved fluorescence spectroscopy. *Photosynthesis Research*, **2015**, 125, 211-8	3.7	14
47	Differences in energy transfer of a cyanobacterium, Synechococcus sp. PCC 7002, grown in different cultivation media. *Photosynthesis Research*, **2015**, 125, 201-10	3.7	2
46	Energy transfer in Anabaena variabilis filaments under nitrogen depletion, studied by time-resolved fluorescence. *Photosynthesis Research*, **2015**, 125, 191-9	3.7	6
45	Short-term light adaptation of a cyanobacterium, Synechocystis sp. PCC 6803, probed by time-resolved fluorescence spectroscopy. *Plant Physiology and Biochemistry*, **2014**, 81, 149-54	5.4	12
44	O2-dependent large electron flow functioned as an electron sink, replacing the steady-state electron flux in photosynthesis in the cyanobacterium Synechocystis sp. PCC 6803, but not in the cyanobacterium Synechococcus sp. PCC 7942. *Bioscience, Biotechnology and Biochemistry*, **2014**, 78, 384-93	2.1	27
43	Control Mechanism of Excitation Energy Transfer in a Complex Consisting of Photosystem II and Fucoxanthin Chlorophyll a/c-Binding Protein. *Journal of Physical Chemistry Letters*, **2014**, 5, 2983-7	6.4	27
42	Energy transfer processes in chlorophyll f-containing cyanobacteria using time-resolved fluorescence spectroscopy on intact cells. *Biochimica Et Biophysica Acta - Bioenergetics*, **2014**, 1837, 1484-9	4.6	22
41	Excitation relaxation dynamics and energy transfer in fucoxanthin-chlorophyll a/c-protein complexes, probed by time-resolved fluorescence. *Biochimica Et Biophysica Acta - Bioenergetics*, **2014**, 1837, 1514-21	4.6	33
40	Light-harvesting ability of the fucoxanthin chlorophyll a/c-binding protein associated with photosystem II from the Diatom Chaetoceros gracilis as revealed by picosecond time-resolved fluorescence spectroscopy. *Journal of Physical Chemistry B*, **2014**, 118, 5093-100	3.4	34
39	Differences in excitation energy transfer of Arthrospira platensis cells grown in seawater medium and freshwater medium, probed by time-resolved fluorescence spectroscopy. *Chemical Physics Letters*, **2013**, 588, 231-236	2.5	5
38	Modification of energy-transfer processes in the cyanobacterium, Arthrospira platensis, to adapt to light conditions, probed by time-resolved fluorescence spectroscopy. *Photosynthesis Research*, **2013**, 117, 235-43	3.7	20

37	High excitation energy quenching in fucoxanthin chlorophyll a/c-binding protein complexes from the diatom Chaetoceros gracilis. *Journal of Physical Chemistry B*, **2013**, 117, 6888-95	3.4	43
36	Adaptation of light-harvesting systems of Arthrospira platensis to light conditions, probed by time-resolved fluorescence spectroscopy. *Biochimica Et Biophysica Acta - Bioenergetics*, **2012**, 1817, 1483-9	4.6	64
35	Alterations in photosynthetic pigments and amino acid composition of D1 protein change energy distribution in photosystem II. *Biochimica Et Biophysica Acta - Bioenergetics*, **2012**, 1817, 754-9	4.6	17
34	Luminescence of singlet oxygen in photosystem II complexes isolated from cyanobacterium Synechocystis sp. PCC6803 containing monovinyl or divinyl chlorophyll a. *Biochimica Et Biophysica Acta - Bioenergetics*, **2012**, 1817, 1299-305	4.6	9
33	Artificially produced [7-formyl]-chlorophyll d functions as an antenna pigment in the photosystem II isolated from the chlorophyllide a oxygenase-expressing Acaryochloris marina. *Biochimica Et Biophysica Acta - Bioenergetics*, **2012**, 1817, 1285-91	4.6	15
32	Excitation energy relaxation in a symbiotic cyanobacterium, Prochloron didemni, occurring in coral-reef ascidians, and in a free-living cyanobacterium, Prochlorothrix hollandica. *Biochimica Et Biophysica Acta - Bioenergetics*, **2012**, 1817, 1992-7	4.6	14
31	Molecular environments of divinyl chlorophylls in Prochlorococcus and Synechocystis: differences in fluorescence properties with chlorophyll replacement. *Biochimica Et Biophysica Acta - Bioenergetics*, **2011**, 1807, 471-81	4.6	13
30	Excitation energy transfer between photosystem II and photosystem I in red algae: larger amounts of phycobilisome enhance spillover. *Biochimica Et Biophysica Acta - Bioenergetics*, **2011**, 1807, 847-53	4.6	54
29	Variations in photosystem I properties in the primordial cyanobacterium Gloeobacter violaceus PCC 7421. *Photochemistry and Photobiology*, **2010**, 86, 62-9	3.6	36
28	Replacement of chlorophyll with di-vinyl chlorophyll in the antenna and reaction center complexes of the cyanobacterium Synechocystis sp. PCC 6803: characterization of spectral and photochemical properties. *Biochimica Et Biophysica Acta - Bioenergetics*, **2009**, 1787, 191-200	4.6	22
27	Energy transfer processes in Gloeobacter violaceus PCC 7421 that possesses phycobilisomes with a unique morphology. *Biochimica Et Biophysica Acta - Bioenergetics*, **2008**, 1777, 55-65	4.6	46
26	Seasonal changes of excitation energy transfer and thylakoid stacking in the evergreen tree Taxus cuspidata: how does it divert excess energy from photosynthetic reaction center?. *Biochimica Et Biophysica Acta - Bioenergetics*, **2008**, 1777, 379-87	4.6	19
25	Oxygen evolution in the thylakoid-lacking cyanobacterium Gloeobacter violaceus PCC 7421. *Biochimica Et Biophysica Acta - Bioenergetics*, **2008**, 1777, 369-78	4.6	14
24	Solvent effects on excitation relaxation dynamics of a keto-carotenoid, siphonaxanthin. *Photochemical and Photobiological Sciences*, **2008**, 7, 1206-9	4.2	22
23	Characterization of highly purified photosystem I complexes from the chlorophyll d-dominated cyanobacterium Acaryochloris marina MBIC 11017. *Journal of Biological Chemistry*, **2008**, 283, 18198-209	5.4	55
22	Spectral properties of the CP43-deletion mutant of Synechocystis sp. PCC 6803. *Photosynthesis Research*, **2008**, 98, 303-14	3.7	14
21	Ultrafast Relaxation Dynamics of a Keto-Carotenoid, Siphonaxanthin, Probed by Time-Resolved Fluorescence **2008**, 319-322		
20	Unique Optical Properties of LHC II Isolated from Codium fragile Its Correlation to Protein Environment **2008**, 343-346		2

19	Identification of a new excited state responsible for the in vivo unique absorption band of siphonaxanthin in the green alga Codium fragile. *Journal of Physical Chemistry B*, **2007**, 111, 9179-81	3.4	32
18	Delayed fluorescence observed in the nanosecond time region at 77 K originates directly from the photosystem II reaction center. *Biochimica Et Biophysica Acta - Bioenergetics*, **2007**, 1767, 327-34	4.6	55
17	Identification of the special pair of photosystem II in a chlorophyll d-dominated cyanobacterium. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 7283-8	11.5	105
16	Application of time-resolved polarization fluorescence spectroscopy in the femtosecond range to photosynthetic systems. *Photochemistry and Photobiology*, **2007**, 83, 163-70	3.6	17
15	New linker proteins in phycobilisomes isolated from the cyanobacterium Gloeobacter violaceus PCC 7421. *FEBS Letters*, **2006**, 580, 3457-61	3.8	18
14	Ultrafast excitation relaxation dynamics of lutein in solution and in the light-harvesting complexes II isolated from Arabidopsis thaliana. *Journal of Physical Chemistry B*, **2005**, 109, 12612-9	3.4	27
13	Excitation energy transfer in the antenna system with divinyl-chlorophylls in the vinyl reductase-expressing Arabidopsis. *Chemical Physics Letters*, **2005**, 409, 167-171	2.5	14
12	Ultrafast excitation relaxation dynamics and energy transfer in the siphonaxanthin-containing green alga Codium fragile. *Chemical Physics Letters*, **2004**, 390, 45-49	2.5	25
11	Vibrational Energy Relaxation of S1 Perylene in Solution. *Journal of Physical Chemistry A*, **2004**, 108, 3268-3275	2.8	18
10	Identification of the primary electron donor in PS II of the Chl d-dominated cyanobacterium Acaryochloris marina. *FEBS Letters*, **2004**, 556, 95-8	3.8	59
9	Excitataion Energy Transfer Processes and Mechanisms in Photosynthetic Antenna System. "Analyses by Femtosecond and Picosecond Time-Resolved Fluorescence Spectroscopy".. *The Review of Laser Engineering*, **2003**, 31, 212-218	0	
8	Excitation Relaxation Dynamics of Carotenoids in Solutions and in Photosynthetic Pigment Protein Complexes.. *The Review of Laser Engineering*, **2003**, 31, 207-211	0	
7	Unique fluorescence properties of a cyanobacterium Gloeobacter violaceus PCC 7421: reasons for absence of the long-wavelength PSI Chl a fluorescence at -196 degrees C. *Plant and Cell Physiology*, **2002**, 43, 587-94	4.9	22
6	Excitation relaxation of zinc and free-base porphyrin probed by femtosecond fluorescence spectroscopy. *Chemical Physics Letters*, **1999**, 309, 177-182	2.5	75
5	Fluorescence properties of chlorophyll d-dominating prokaryotic alga, acaryochloris marina: studies using time-resolved fluorescence spectroscopy on intact cells. *Biochimica Et Biophysica Acta - Bioenergetics*, **1999**, 1412, 37-46	4.6	67
4	Effect of Molecular Structures and Solvents on the Excited State Dynamics of the S2 State of Carotenoids Analyzed by the Femtosecond Up-Conversion Method?,?. *Journal of the American Chemical Society*, **1997**, 119, 1452-1453	16.4	38
3	Dimer Formation and Excitation Relaxation of Perylene in Langmuir-Blodgett Films. *Journal of Physical Chemistry B*, **1997**, 101, 3753-3758	3.4	71
2	Excitation energy transfer in carotenoid-chlorophyll protein complexes probed by femtosecond fluorescence decays. *Chemical Physics Letters*, **1996**, 260, 147-152	2.5	89

1 Time-Resolved Fluorescence Spectrophotometer Using a Traveling Wave Plate Type Streak Camera.. *The Review of Laser Engineering*, **1996**, 24, 609-614 0