Alastair T Gardiner

List of Publications by Year
in descending order

38 papers	1,951 citations	361413 20 h-index	330143 37 g-index
42 all docs	42 docs citations	42 times ranked	1675 citing authors

#	Article	IF	Citations
1	Quantum chemical elucidation of a sevenfold symmetric bacterial antenna complex. Photosynthesis Research, 2023, 156, 75-87.	2.9	3
2	Vibrational Modes Promoting Exciton Relaxation in the B850 Band of LH2. Journal of Physical Chemistry Letters, 2022, 13, 1099-1106.	4.6	8
3	2.4-Ã... structure of the double-ring Gemmatimonas phototrophica photosystem. Science Advances, 2022, 8, eabk3139.	10.3	16
4	The 2.4 Ã... cryo-EM structure of a heptameric light-harvesting 2 complex reveals two carotenoid energy transfer pathways. Science Advances, 2021, 7, .	10.3	26
5	Time-Domain Line-Shape Analysis from 2D Spectroscopy to Precisely Determine Hamiltonian Parameters for a Photosynthetic Complex. Journal of Physical Chemistry B, 2021, 125, 2812-2820.	2.6	5
6	Low-Frequency Vibronic Mixing Modulates the Excitation Energy Flow in Bacterial Light-Harvesting Complex II. Journal of Physical Chemistry Letters, 2021, 12, 6292-6298.	4.6	8
7	Structure elucidation of the novel carotenoid gemmatoxanthin from the photosynthetic complex of Gemmatimonas phototrophica AP64. Scientific Reports, 2021, 11, 15964.	3.3	3
8	A comparative look at structural variation among RCâ€“LH1 â€˜Coreâ€™ complexes present in anoxygenic phototrophic bacteria. Photosynthesis Research, 2020, 145, 83-96.	2.9	22
9	Gemmatimonas groenlandica sp. nov. Is an Aerobic Anoxygenic Phototroph in the Phylum Gemmatimonadetes. Frontiers in Microbiology, 2020, 11, 606612.	3.5	48
10	Before FÃ¶rster. Initial excitation in photosynthetic light harvesting. Chemical Science, 2019, 10, 7923-7928.	7.4	38
11	Simulating Fluorescence-Detected Two-Dimensional Electronic Spectroscopy of Multichromophoric Systems. Journal of Physical Chemistry B, 2019, 123, 394-406.	2.6	26
12	The role of charge-transfer states in the spectral tuning of antenna complexes of purple bacteria. Photosynthesis Research, 2018, 137, 215-226.	2.9	59
13	Understanding/unravelling carotenoid excited singlet states. Journal of the Royal Society Interface, 2018, 15, 20180026.	3.4	81
14	Robust light harvesting by a noisy antenna. Physical Chemistry Chemical Physics, 2018, 20, 4360-4372.	2.8	13
15	Characterisation of a pucBA deletion mutant from Rhodopseudomonas palustris lacking all but the pucBAd genes. Photosynthesis Research, 2018, 135, 9-21.	2.9	15
16	Adaptation of Rhodopseudomonas acidophila strain 7050 to growth at different light intensities: what are the benefits to changing the type of LH2?. Faraday Discussions, 2018, 207, 471-489.	3.2	14
17	Spatially-resolved fluorescence-detected two-dimensional electronic spectroscopy probes varying excitonic structure in photosynthetic bacteria. Nature Communications, 2018, 9, 4219.	12.8	86
18	Energy transfer in purple bacterial photosynthetic units from cells grown in various light intensities. Photosynthesis Research, 2018, 137, 389-402.	2.9	8

#	Article	IF	Citations
19	Photocurrent Generation by Photosynthetic Purple Bacterial Reaction Centers Interfaced with a Porous Antimony-Doped Tin Oxide (ATO) Electrode. ACS Applied Materials & Interfaces, 2016, 8, 25104-25110.	8.0	15
20	An Ab Initio Description of the Excitonic Properties of LH2 and Their Temperature Dependence. Journal of Physical Chemistry B, 2016, 120, 11348-11359.	2.6	64
21	Towards quantification of vibronic coupling in photosynthetic antenna complexes. Journal of Chemical Physics, 2015, 142, 212446.	3.0	25
22	Activated OCP unlocks nonphotochemical quenching in cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12547-12548.	7.1	10
23	The Light Reactions of Photosynthesis as a Paradigm for Solar Fuel Production. Energy Procedia, 2014, 47, 283-289.	1.8	5
24	The use and misuse of photosynthesis in the quest for novel methods to harness solar energy to make fuel. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20110603.	3.4	14
25	Artificial photosynthesis â€“ solar fuels: current status and future prospects. Biofuels, 2010, 1, 861-876.	2.4	56
26	Single-Molecule Spectroscopy Reveals that Individual Low-Light LH2 Complexes from Rhodopseudomonas palustris 2.1.6. Have a Heterogeneous Polypeptide Composition. Biophysical Journal, 2009, 97, 1491-1500.	0.5	63
27	Peripheral Complexes of Purple Bacteria. Advances in Photosynthesis and Respiration, 2009, , 135-153.	1.0	37
28	Structures and functions of carotenoids bound to reaction centers from purple photosynthetic bacteria. Pure and Applied Chemistry, 2006, 78, 1505-1518.	1.9	8
29	Two-dimensional electronic spectroscopy of the B800-B820 light-harvesting complex. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12672-12677.	7.1	197
30	Electroabsorption spectroscopy ofÎ²-carotene homologs: Anomalous enhancement ofÎ”Î¼. Physical Review B, 2005, 71, .	3.2	25
31	Effect of inhomogeneous band broadening on the nonlinear optical properties of hydrazones. Physical Review B, 2004, 69, .	3.2	6
32	Rings, Ellipses and Horseshoes: How Purple Bacteria Harvest Solar Energy. Photosynthesis Research, 2004, 81, 207-214.	2.9	91
33	Crystal Structure of the RC-LH1 Core Complex from Rhodopseudomonas palustris. Science, 2003, 302, 1969-1972.	12.6	615
34	Structural factors which control the position of the Q(y) absorption band of bacteriochlorophyll a in purple bacterial antenna complexes. Photosynthesis Research, 2002, 74, 135-141.	2.9	88
35	The purple photosynthetic bacterium Rhodopseudomonas acidophila contains multiple puc peripheral antenna complex (LH2) genes: Cloning and initial characterisation of four ?/? pairs. Photosynthesis Research, 1996, 49, 223-235.	2.9	23
36	The effect of growth conditions on the light-harvesting apparatus in Rhodopseudomonas acidophila. Photosynthesis Research, 1993, 38, 159-167.	2.9	84

#	Article	IF	Citations
37	Antenna organization of Rhodopseudomonas acidophila: a study of the excitation migration. Biochimica Et Biophysica Acta - Bioenergetics, 1991, 1060, 125-131.	1.0	42
38	The Structure of Purple Bacterial Antenna Complexes. , 0, , 325-340.		4