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	Crystal Structure of the RC-LH1 Core Complex from Rhodopseudomonas palustris. Science, 2003, 302, 1969-1972.	12.6	615
2	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
3	Rings, Ellipses and Horseshoes: How Purple Bacteria Harvest Solar Energy. Photosynthesis Research, 2004, 81, 207-214.	2.9	91
4	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
5	Spatially-resolved fluorescence-detected two-dimensional electronic spectroscopy probes varying excitonic structure in photosynthetic bacteria. Nature Communications, 2018, 9, 4219.	12.8	86
6	The effect of growth conditions on the light-harvesting apparatus in Rhodopseudomonas acidophila. Photosynthesis Research, 1993, 38, 159-167.	2.9	84
7	Understanding/unravelling carotenoid excited singlet states. Journal of the Royal Society Interface, 2018, 15, 20180026.	3.4	81
8	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
9	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
10	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
11	Artificial photosynthesis â€“ solar fuels: current status and future prospects. Biofuels, 2010, 1, 861-876.	2.4	56
12	Gemmatimonas groenlandica sp. nov. Is an Aerobic Anoxygenic Phototroph in the Phylum Gemmatimonadetes. Frontiers in Microbiology, 2020, 11, 606612.	3.5	48
13	Antenna organization of Rhodopseudomonas acidophila: a study of the excitation migration. Biochimica Et Biophysica Acta - Bioenergetics, 1991, 1060, 125-131.	1.0	42
14	Before FÃ¶rster. Initial excitation in photosynthetic light harvesting. Chemical Science, 2019, 10, 7923-7928.	7.4	38
15	Peripheral Complexes of Purple Bacteria. Advances in Photosynthesis and Respiration, 2009, , 135-153.	1.0	37
16	Simulating Fluorescence-Detected Two-Dimensional Electronic Spectroscopy of Multichromophoric Systems. Journal of Physical Chemistry B, 2019, 123, 394-406.	2.6	26
17	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
18	Electroabsorption spectroscopy ofÎ²-carotene homologs: Anomalous enhancement ofÎ”Î¼. Physical Review B, 2005, 71, .	3.2	25

#	Article	IF	Citations
19	Towards quantification of vibronic coupling in photosynthetic antenna complexes. Journal of Chemical Physics, 2015, 142, 212446.	3.0	25
20	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
21	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
22	2.4-Ã… structure of the double-ring Gemmatimonas phototrophica photosystem. Science Advances, 2022, 8, eabk3139.	10.3	16
23	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
24	Characterisation of a pucBA deletion mutant from Rhodopseudomonas palustris lacking all but the pucBAd genes. Photosynthesis Research, 2018, 135, 9-21.	2.9	15
25	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
26	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
27	Robust light harvesting by a noisy antenna. Physical Chemistry Chemical Physics, 2018, 20, 4360-4372.	2.8	13
28	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
29	Structures and functions of carotenoids bound to reaction centers from purple photosynthetic bacteria. Pure and Applied Chemistry, 2006, 78, 1505-1518.	1.9	8
30	Energy transfer in purple bacterial photosynthetic units from cells grown in various light intensities. Photosynthesis Research, 2018, 137, 389-402.	2.9	8
31	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
32	Vibrational Modes Promoting Exciton Relaxation in the B850 Band of LH2. Journal of Physical Chemistry Letters, 2022, 13, 1099-1106.	4.6	8
33	Effect of inhomogeneous band broadening on the nonlinear optical properties of hydrazones. Physical Review B, 2004, 69, .	3.2	6
34	The Light Reactions of Photosynthesis as a Paradigm for Solar Fuel Production. Energy Procedia, 2014, 47, 283-289.	1.8	5
35	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
36	The Structure of Purple Bacterial Antenna Complexes. , 0, , 325-340.		4

#	Article	IF	Citations
37	Structure elucidation of the novel carotenoid gemmatoxanthin from the photosynthetic complex of Gemmatimonas phototrophica AP64. Scientific Reports, 2021, 11, 15964.	3.3	3
38	Quantum chemical elucidation of a sevenfold symmetric bacterial antenna complex. Photosynthesis Research, 2023, 156, 75-87.	2.9	3