James Allen

List of Publications by Year
in descending order

106 papers	8,731 citations	76031 42 h-index	46524 93 g-index
109 all docs	109 docs citations	109 times ranked	3318 citing authors

#	Article	IF	Citations
1	A bound iron porphyrin is redox active in hybrid bacterial reaction centers modified to possess a four-helix bundle domain. Photochemical and Photobiological Sciences, 2022, 21, 91-99.	1.6	2
2	Bound manganese oxides capable of reducing the bacteriochlorophyll dimer of modified reaction centers from Rhodobacter sphaeroides. Photosynthesis Research, 2020, 143, 129-141.	1.6	5
3	Influence of Hydrogen Bonds on the Electronâ€“Phonon Coupling Strength/Marker Mode Structure and Charge Separation Rates in Reaction Centers from Rhodobacter sphaeroides. Journal of Physical Chemistry B, 2019, 123, 8717-8726.	1.2	2
4	Recent innovations in membrane-protein structural biology. F1000Research, 2019, 8, 211.	0.8	15
5	Influence of the Electrochemical Properties of the Bacteriochlorophyll Dimer on Triplet Energy-Transfer Dynamics in Bacterial Reaction Centers. Journal of Physical Chemistry B, 2018, 122, 10097-10107.	1.2	3
6	Remembering George Feher (1924â€“2017). Photosynthesis Research, 2018, 137, 361-375.	1.6	1
7	Mechanism of Triplet Energy Transfer in Photosynthetic Bacterial Reaction Centers. Journal of Physical Chemistry B, 2017, 121, 6499-6510.	1.2	11
8	Design of energy-transducing artificial cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3790-3791.	3.3	7
9	Biochemical and spectroscopic characterization of dinuclear Mn-sites in artificial four-helix bundle proteins. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 945-954.	0.5	14
10	Binding and Energetics of Electron Transfer between an Artificial Four-Helix Mn-Protein and Reaction Centers from <i>Rhodobacter sphaeroides</i>. Biochemistry, 2017, 56, 6460-6469.	1.2	4
11	Design of dinuclear manganese cofactors for bacterial reaction centers. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 539-547.	0.5	18
12	Copper Environment in Artificial Metalloproteins Probed by Electron Paramagnetic Resonance Spectroscopy. Journal of Physical Chemistry B, 2015, 119, 13825-13833.	1.2	13
13	Identification of Amino Acids at the Catalytic Site of a Ferredoxin-Dependent Cyanobacterial Nitrate Reductase. Biochemistry, 2015, 54, 5557-5568.	1.2	7
14	Electronic structure of the Mn-cofactor of modified bacterial reaction centers measured by electron paramagnetic resonance and electron spin echo envelope modulation spectroscopies. Photosynthesis Research, 2014, 120, 207-220.	1.6	0
15	The three-dimensional structures of bacterial reaction centers. Photosynthesis Research, 2014, 120, 87-98.	1.6	16
16	Interface for Light-Driven Electron Transfer by Photosynthetic Complexes Across Block Copolymer Membranes. Journal of Physical Chemistry Letters, 2014, 5, 787-791.	2.1	14
17	Energetics of Cofactors in Photosynthetic Complexes: Relationship Between Proteinâ€“Cofactor Interactions and Midpoint Potentials. , 2014, , 275-295.		8
18	Influence of protein interactions on oxidation/reduction midpoint potentials of cofactors in natural and de novo metalloproteins. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 914-922.	0.5	21

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19	Light-driven oxygen production from superoxide by Mn-binding bacterial reaction centers. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2314-2318.	3.3	26
20	<scp>pH</scp>â€dependent structural conformations of <scp>B</scp>â€phycoerythrin from <i><scp>P</scp>orphyridiumÂcruentum</i>. FEBS Journal, 2012, 279, 3680-3691.	2.2	32
21	Reinterpretation of the electron density at the site of the eighth bacteriochlorophyll in the FMO protein from Pelodictyon phaeum. Photosynthesis Research, 2012, 112, 71-74.	1.6	13
22	Light-Induced Conformational Changes in Photosynthetic Reaction Centers: Dielectric Relaxation in the Vicinity of the Dimer. Biochemistry, 2011, 50, 340-348.	1.2	27
23	Light-Induced Conformational Changes in Photosynthetic Reaction Centers: Redox-Regulated Proton Pathway near the Dimer. Biochemistry, 2011, 50, 3321-3331.	1.2	21
24	Energetics for Oxidation of a Bound Manganese Cofactor in Modified Bacterial Reaction Centers. Biochemistry, 2011, 50, 3310-3320.	1.2	19
25	The evolutionary pathway from anoxygenic to oxygenic photosynthesis examined by comparison of the properties of photosystem II and bacterial reaction centers. Photosynthesis Research, 2011, 107, 59-69.	1.6	35
26	The three-dimensional structure of the FMO protein from Pelodictyon phaeum and the implications for energy transfer. Photosynthesis Research, 2011, 107, 139-150.	1.6	30
27	Electronic Structure of Fe3+ at a Metal-Binding Site Introduced in Modified Bacterial Reaction Centers. Applied Magnetic Resonance, 2010, 37, 27-37.	0.6	2
28	The Influence of Hydrogen Bonds on the Electronic Structure of Light-Harvesting Complexes from Photosynthetic Bacteria. Biochemistry, 2010, 49, 1146-1159.	1.2	30
29	Electron transfer in the Rhodobacter sphaeroides reaction center assembled with zinc bacteriochlorophyll. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8537-8542.	3.3	24
30	EPR, ENDOR, and Special TRIPLE measurements of Pâ€¢+ in wild type and modified reaction centers from Rb.Âsphaeroides. Photosynthesis Research, 2009, 99, 1-10.	1.6	13
31	Structures of proteins and cofactors: X-ray crystallography. Photosynthesis Research, 2009, 102, 231-240.	1.6	7
32	Effect of Anions on the Binding and Oxidation of Divalent Manganese and Iron in Modified Bacterial Reaction Centers. Biophysical Journal, 2009, 96, 3295-3304.	0.2	12
33	Unusual Temperature Dependence of Photosynthetic Electron Transfer due to Protein Dynamics. Journal of Physical Chemistry B, 2009, 113, 818-824.	1.2	35
34	Directed Modification of Reaction Centers from Purple Bacteria. Advances in Photosynthesis and Respiration, 2009, , 337-353.	1.0	17
35	Comparison of bacterial reaction centers and photosystem II. Photosynthesis Research, 2008, 98, 643-655.	1.6	20
36	Reduction of the oxidized bacteriochlorophyll dimer in reaction centers by ferrocene is dependent upon the driving force. Journal of Porphyrins and Phthalocyanines, 2007, 11, 205-211.	0.4	4

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37	Protein Dynamics Control the Kinetics of Initial Electron Transfer in Photosynthesis. Science, 2007, 316, 747-750.	6.0	222
38	Changes in metal specificity due to iron ligand substitutions in reaction centers fromRhodobacter sphaeroides. Applied Magnetic Resonance, 2007, 31, 45-58.	0.6	5
39	Iron as a Bound Secondary Electron Donor in Modified Bacterial Reaction Centersâ€. Biochemistry, 2006, 45, 13869-13874.	1.2	9
40	The Infl uence of Protein Interactions on the Properties of the Bacteriochlorophyll Dimer in Reaction Centers. , 2006, , 283-295.		6
41	New tetragonal form of reaction centers fromRhodobacter sphaeroidesand the involvement of a manganese ion at a crystal contact point. Acta Crystallographica Section F: Structural Biology Communications, 2005, 61, 733-736.	0.7	0
42	Design of a Redox-Linked Active Metal Site:Â Manganese Bound to Bacterial Reaction Centers at a Site Resembling That of Photosystem IIâ€,â€¡. Biochemistry, 2005, 44, 7389-7394.	1.2	65
43	Proton Release Due to Manganese Binding and Oxidation in Modified Bacterial Reaction Centersâ€. Biochemistry, 2005, 44, 13266-13273.	1.2	20
44	Mimicking the Properties of Photosystem II in Bacterial Reaction Centers. , 2005, , 715-727.		5
45	My Daily Constitutional in Martinsried. Photosynthesis Research, 2004, 80, 157-163.	1.6	8
46	Comparative Analyses of Three-Dimensional Models of Bacterial Reaction Centers. Photosynthesis Research, 2004, 81, 227-237.	1.6	10
47	Introduction. Photosynthesis Research, 2004, 81, 205-206.	1.6	1
48	Trapped Tyrosyl Radical Populations in Modified Reaction Centers from Rhodobacter sphaeroides. Biochemistry, 2004, 43, 14379-14384.	1.2	16
49	Controlling the Pathway of Photosynthetic Charge Separation in Bacterial Reaction Centers. Journal of Physical Chemistry B, 2004, 108, 4-7.	1.2	43
50	Dependence of Tyrosine Oxidation in Highly Oxidizing Bacterial Reaction Centers on pH and Free-Energy Difference. Biochemistry, 2004, 43, 12905-12912.	1.2	7
51	High resolution crystal structure of ferricytochrome câ€² from Rhodobacter sphaeroides. Journal of Chemical Crystallography, 2003, 33, 413-424.	0.5	13
52	The structure of the FMO protein from Chlorobium tepidum at 2.2 A resolution. Photosynthesis Research, 2003, 75, 49-55.	1.6	107
53	High Yield of Long-Lived B-Side Charge Separation at Room Temperature in Mutant Bacterial Reaction Centers. Journal of Physical Chemistry B, 2003, 107, 12503-12510.	1.2	27
54	Manganese Oxidation by Modified Reaction Centers from Rhodobacter sphaeroides. Biochemistry, 2003, 42, 11016-11022.	1.2	36

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55	Proton release upon oxidation of tyrosine in reaction centers from Rhodobacter sphaeroides. FEBS Letters, 2003, 545, 193-198.	1.3	6
56	Correlation of Proton Release and Electrochromic Shifts of the Optical Spectrum Due to Oxidation of Tyrosine in Reaction Centers fromRhodobacter sphaeroidesâ€. Biochemistry, 2003, 42, 13280-13286.	1.2	16
57	Interactions between lipids and bacterial reaction centers determined by protein crystallography. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 11055-11060.	3.3	135
58	Influence of the Protein Environment on the Properties of a Tyrosyl Radical in Reaction Centers fromRhodobacter sphaeroidesâ€. Biochemistry, 2002, 41, 15253-15258.	1.2	26
59	Electronic and Vibronic Coupling of the Special Pair of Bacteriochlorophylls in Photosynthetic Reaction Centers from Wild-Type and Mutant Strains ofRhodobacter Sphaeroides. Journal of Physical Chemistry B, 2002, 106, 11859-11869.	1.2	49
60	Pigmentâ˜'Protein Interactions in Bacterial Reaction Centers and Their Influence on Oxidation Potential and Spin Density Distribution of the Primary Donor. Journal of Physical Chemistry B, 2002, 106, 3226-3236.	1.2	61
61	The Dependence of the Initial Electron-Transfer Rate on Driving Force in Rhodobacter sphaeroides Reaction Centers. Journal of Physical Chemistry B, 2002, 106, 7376-7384.	1.2	60
62	The structure of the heterodimer reaction center from Rhodobacter sphaeroides at 2.55 Ã¥ resolution. Photosynthesis Research, 2002, 74, 87-93.	1.6	24
63	Electrostatic Interactions between Charged Amino Acid Residues and the Bacteriochlorophyll Dimer in Reaction Centers from Rhodobacter sphaeroides. Biochemistry, 2001, 40, 15403-15407.	1.2	51
64	Individual interactions influence the crystalline order for membrane proteins. Acta Crystallographica Section D: Biological Crystallography, 2001, 57, 1281-1286.	2.5	10
65	Modified reaction centres oxidize tyrosine in reactions that mirror photosystem II. Nature, 1999, 402, 696-699.	13.7	79
66	Symposia lectures. Journal of Biosciences, 1999, 24, 5-31.	0.5	0
67	P+HA- Charge Recombination Reaction Rate Constant in Rhodobacter sphaeroides Reaction Centers Is Independent of the P/P+ Midpoint Potential. Biochemistry, 1999, 38, 8794-8799.	1.2	43
68	Title is missing!. Photosynthesis Research, 1998, 55, 227-233.	1.6	43
69	Title is missing!. Photosynthesis Research, 1998, 56, 315-328.	1.6	20
70	Photosynthetic reaction centers. FEBS Letters, 1998, 438, 5-9.	1.3	119
71	Effects of Hydrogen Bonds on the Redox Potential and Electronic Structure of the Bacterial Primary Electron Donorâ€. Biochemistry, 1998, 37, 11812-11820.	1.2	84
72	Relationship between the oxidation potential and electron spin density of the primary electron donor in reaction centers from Rhodobacter sphaeroides. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 13582-13587.	3.3	75

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73	Crystal structure of the bacteriochlorophyll a protein from Chlorobium tepidum 1 1Edited by R. Huber. Journal of Molecular Biology, 1997, 271, 456-471.	2.0	196
74	Effects of Hydrogen Bonding to a Bacteriochlorophyllâˆ'Bacteriopheophytin Dimer in Reaction Centers fromRhodobacter sphaeroidesâ€. Biochemistry, 1996, 35, 6612-6619.	1.2	84
75	Temperature Dependence of the Reorganization Energy for Charge Recombination in the Reaction Center fromRhodobacter sphaeroidesâ€. Biochemistry, 1996, 35, 3354-3361.	1.2	63
76	Energy trapping and detrapping by wild type and mutant reaction centers of purple non-sulfur bacteria. Photosynthesis Research, 1996, 48, 309-319.	1.6	42
77	Reaction Center Heterogeneity Probed by Multipulse Photoselection Experiments With Picosecond Time Resolution. , 1996, , 217-223.		2
78	Effect of Orbital Asymmetry in Pâ€¢+ on Electron Transfer in Reaction Centers of Rb. sphaeroides. , 1996, , 37-50.		11
79	The role of reaction center excited state evolution during charge separation in a Rb. sphaeroides mutant with an initial electron donor midpoint potential 260 mV above wild type. Chemical Physics, 1995, 197, 405-421.	0.9	48
80	Relationship between the oxidation potential of the bacteriochlorophyll dimer and electron transfer in photosynthetic reaction centers. Journal of Bioenergetics and Biomembranes, 1995, 27, 275-283.	1.0	95
81	ENDOR Studies of the Primary Donor Cation Radical in Mutant Reaction Centers of Rhodobacter sphaeroides with Altered Hydrogen-Bond Interactions. Biochemistry, 1995, 34, 8130-8143.	1.2	114
82	Correlation between Multiple Hydrogen Bonding and Alteration of the Oxidation Potential of the Bacteriochlorophyll Dimer of Reaction Centers from Rhodobacter sphaeroides. Biochemistry, 1995, 34, 6142-6152.	1.2	90
83	The Pathway, Kinetics and Thermodynamics of Electron Transfer in Wild Type and Mutant Reaction Centers of Purple Nonsulfur Bacteria. , 1995, , 527-557.		37
84	Crystallization of the reaction center fromRhodobacter sphaeroides in a new tetragonal form. Proteins: Structure, Function and Bioinformatics, 1994, 20, 283-286.	1.5	23
85	Crystallization and X-ray structure determination of cytochrome c2 from Rhodobacter sphaeroides in three crystal forms. Acta Crystallographica Section D: Biological Crystallography, 1994, 50, 596-602.	2.5	53
86	Changes in primary donor hydrogen-bonding interactions in mutant reaction centers from Rhodobacter sphaeroides : identification of the vibrational frequencies of all the conjugated carbonyl groups.. Biochemistry, 1994, 33, 1636-1643.	1.2	108
87	Crystallographic Analyses of Site-Directed Mutants of the Photosynthetic Reaction Center from Rhodobacter sphaeroides. Biochemistry, 1994, 33, 4584-4593.	1.2	174
88	Comparative Study of Reaction Centers from Photosynthetic Purple Bacteria: Electron Paramagnetic Resonance and Electron Nuclear Double Resonance Spectroscopy. Biochemistry, 1994, 33, 12077-12084.	1.2	90
89	Relationship between rate and free energy difference for electron transfer from cytochrome c2 to the reaction center in Rhodobacter sphaeroides. Biochemistry, 1994, 33, 13517-13523.	1.2	99
90	Specific alteration of the oxidation potential of the electron donor in reaction centers from Rhodobacter sphaeroides.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 10265-10269.	3.3	291

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91	Fourier transform infrared study of the primary electron donor in chromatophores of Rhodobacter sphaeroides with reaction centers genetically modified at residues M160 and L131. Biochemistry, 1993, 32, 13879-13885.	1.2	92
92	Mutations designed to modify the environment of the primary electron donor of the reaction center from Rhodobacter sphaeroides: Phenylalanine to leucine at L167 and histidine to phenylalanine at L168. Biochemistry, 1993, 32, 3498-3505.	1.2	107
93	Effects of mutations near the bacteriochlorophylls in reaction centers from Rhodobacter sphaeroides. Biochemistry, 1992, 31, 11029-11037.	1.2	231
94	Structure and function of bacterial photosynthetic reaction centres. Nature, 1989, 339, 111-116.	13.7	891
95	Structure of the reaction center from Rhodobacter sphaeroides R-26 and 2.4.1: symmetry relations and sequence comparisons between different species.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 9012-9016.	3.3	296
96	Structure of the reaction center from Rhodobacter sphaeroides R-26 and 2.4.1: protein-cofactor (bacteriochlorophyll, bacteriopheophytin, and carotenoid) interactions.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 7993-7997.	3.3	354
97	Structure of the reaction center from Rhodobacter sphaeroides R-26: protein-cofactor (quinones and) Tj ETQq1 1 0.784314 rgBT /Overl 1988, 85, 8487-8491.	3.3	350
98	Structure of the reaction center from Rhodobacter sphaeroides R-26: membrane-protein interactions.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 6438-6442.	3.3	254
99	Structure of the reaction center from Rhodobacter sphaeroides R-26: the cofactors.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 5730-5734.	3.3	973
100	Structure of the reaction center from Rhodobacter sphaeroides R-26: the protein subunits.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 6162-6166.	3.3	653
101	Structural homology of reaction centers from Rhodopseudomonas sphaeroides and Rhodopseudomonas viridis as determined by x-ray diffraction.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 8589-8593.	3.3	364
102	Fractal models of protein structure, dynamics and magnetic relaxation. Journal of the American Chemical Society, 1985, 107, 5589-5594.	6.6	67
103	Crystallization of reaction center from Rhodopseudomonas sphaeroides: preliminary characterization.. Proceedings of the National Academy of Sciences of the United States of America, 1984, 81, 4795-4799.	3.3	124
104	Protein conformation from electron spin relaxation data. Biophysical Journal, 1982, 38, 299-310.	0.2	119
105	Fractal Form of Proteins. Physical Review Letters, 1980, 45, 1456-1459.	2.9	188
106	Reaction Centers from Purple Bacteria. , 0, , 275-293.		5