William W Parson

List of Publications by Citations

55 papers	4,823 citations	31 h-index	56 g-index
56 ext. papers	4,967 ext. citations	6.5 avg, IF	5.44 L-index

#	Paper	IF	Citations
55	Modeling electrostatic effects in proteins. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2006**, 1764, 1647-76	4	433
54	Picosecond kinetics of the initial photochemical electron-transfer reaction in bacterial photosynthetic reaction centers. *Biochemistry*, **1985**, 24, 7516-21	3.2	328
53	Dynamical contributions to enzyme catalysis: critical tests of a popular hypothesis. *Chemical Reviews*, **2006**, 106, 1737-56	68.1	261
52	Dynamics of biochemical and biophysical reactions: insight from computer simulations. *Quarterly Reviews of Biophysics*, **2001**, 34, 563-679	7	240
51	Spectroscopic properties of photosynthetic reaction centers. 2. Application of the theory to Rhodopseudomonas viridis. *Journal of the American Chemical Society*, **1987**, 109, 6152-6163	16.4	230
50	Nanosecond fluorescence from isolated photosynthetic reaction centers of Rhodopseudomonas sphaeroides. *Biochimica Et Biophysica Acta - Bioenergetics*, **1984**, 767, 345-61	4.6	229
49	Excited states of photosynthetic reaction centers at low recox potentials. *Biochimica Et Biophysica Acta - Bioenergetics*, **1975**, 387, 265-78	4.6	225
48	Spectroscopic properties of photosynthetic reaction centers. 1. Theory. *Journal of the American Chemical Society*, **1987**, 109, 6143-6152	16.4	217
47	Electrostatic control of charge separation in bacterial photosynthesis. *Biochimica Et Biophysica Acta - Bioenergetics*, **1990**, 1017, 251-72	4.6	203
46	Temperature and detection-wavelength dependence of the picosecond electron-transfer kinetics measured in Rhodopseudomonas sphaeroides reaction centers. Resolution of new spectral and kinetic components in the primary charge-separation process. *Biochimica Et Biophysica Acta - Bioenergetics*, **1985**, 810, 33-48	4.6	191
45	Primary photochemical processes in isolated reaction centers of Rhodopseudomonas viridis. *Biochimica Et Biophysica Acta - Bioenergetics*, **1978**, 501, 112-26	4.6	185
44	Carotenoid triplet states in reaction centers from Rhodopseudomonas sphaeroides and Rhodospirillum rubrum. *Biochimica Et Biophysica Acta - Bioenergetics*, **1975**, 408, 189-99	4.6	160
43	Electron-transfer pathways in the primary event of bacterial photosynthesis. *The Journal of Physical Chemistry*, **1988**, 92, 2696-2701		133
42	Magnetic field effects on radical pair intermediates in bacterial photosynthesis. *Biochimica Et Biophysica Acta - Bioenergetics*, **1977**, 461, 297-305	4.6	133
41	In Chromatium, a single photochemical reaction center oxidizes both cytochrome C552 and cytochrome C555. *Biochimica Et Biophysica Acta - Bioenergetics*, **1970**, 205, 232-45	4.6	129
40	Calculations of Electrostatic Energies in Photosynthetic Reaction Centers. *Journal of the American Chemical Society*, **1995**, 117, 12284-12298	16.4	127
39	The role of P870 in bacterial photosynthesis. *Biochimica Et Biophysica Acta - Bioenergetics*, **1968**, 153, 248-59	4.6	124

38	The reaction between primary and secondary electron acceptors in bacterial photosynthesis. *Biochimica Et Biophysica Acta - Bioenergetics*, **1969**, 189, 384-96	4.6	89
37	Electron transfer from photoexcited singlet and triplet bacteriopheophytin. *Photochemistry and Photobiology*, **1976**, 23, 415-20	3.6	88
36	Orientation of the OH Dipole of Tyrosine (M)210 and Its Effect on Electrostatic Energies in Photosynthetic Bacterial Reaction Centers. *The Journal of Physical Chemistry*, **1996**, 100, 16761-16770		84
35	Modern Optical Spectroscopy **2007**,		84
34	Reorganization energy of the initial electron-transfer step in photosynthetic bacterial reaction centers. *Biophysical Journal*, **1998**, 74, 182-91	2.9	84
33	Identification of ubiquinone as the secondary electron acceptor in the photosynthetic apparatus of Chromatium vinosum. *Biochimica Et Biophysica Acta - Bioenergetics*, **1974**, 347, 404-16	4.6	79
32	Flash-induced absorbance changes in Rhodospirillum rubrum chromatophores. *Biochimica Et Biophysica Acta - Bioenergetics*, **1967**, 131, 154-172	4.6	76
31	Resonance Raman Scattering by the Green Fluorescent Protein and an Analogue of Its Chromophore?. *Journal of Physical Chemistry B*, **2001**, 105, 5316-5322	3.4	72
30	A density-matrix model of photosynthetic electron transfer with microscopically estimated vibrational relaxation times. *Chemical Physics*, **2004**, 296, 201-216	2.3	70
29	Photooxidation of cytochromes in reaction center preparations from Chromatium and Rhodopseudomonas viridis. *Biochimica Et Biophysica Acta - Bioenergetics*, **1970**, 223, 122-8	4.6	66
28	Dependence of Photosynthetic Electron-Transfer Kinetics on Temperature and Energy in a Density-Matrix Model *Journal of Physical Chemistry B*, **2004**, 108, 10474-10483	3.4	65
27	THERMODYNAMICS OF THE PRIMARY REACTIONS OF PHOTOSYNTHESIS. *Photochemistry and Photobiology*, **1978**, 28, 389-393	3.6	48
26	The question of the intermediate state P+Chl-in bacterial photosynthesis. *FEBS Letters*, **1985**, 185, 76-82	3.8	47
25	Mechanism of Charge Separation in Purple Bacterial Reaction Centers. *Advances in Photosynthesis and Respiration*, **2009**, 355-377	1.7	36
24	Temperature dependence of the flexibility of thermophilic and mesophilic flavoenzymes of the nitroreductase fold. *Protein Engineering, Design and Selection*, **2010**, 23, 327-36	1.9	31
23	Cytochrome photooxidations in Chromatiumchromatophores. Each P870 oxidizes two cytochrome C422 hemes. *Biochimica Et Biophysica Acta - Bioenergetics*, **1969**, 189, 397-403	4.6	31
22	Electron donors and acceptors in the initial steps of photosynthesis in purple bacteria: a personal account. *Photosynthesis Research*, **2003**, 76, 81-92	3.7	29
21	Modern Optical Spectroscopy **2015**,		26

20	Fluorescence of tryptophan in designed hairpin and Trp-cage miniproteins: measurements of fluorescence yields and calculations by quantum mechanical molecular dynamics simulations. *Journal of Physical Chemistry B*, **2013**, 117, 1790-809	3.4	25
19	Entropy production and the Second Law in photosynthesis. *Biochimica Et Biophysica Acta - Bioenergetics*, **2007**, 1767, 1189-93	4.6	20
18	Oscillations of the energy gap for the initial electron-transfer step in bacterial reaction centers. *Photosynthesis Research*, **1998**, 55, 147-152	3.7	15
17	Biophysics. Long live electronic coherence!. *Science*, **2007**, 316, 1438-9	33.3	15
16	Electron-Transfer Dynamics in a Zn-Porphyrin-Quinone Cyclophane: Effects of Solvent, Vibrational Relaxations, and Conical Intersections. *Journal of Physical Chemistry B*, **2018**, 122, 3854-3863	3.4	14
15	Vibrational Relaxations and Dephasing in Electron-Transfer Reactions. *Journal of Physical Chemistry B*, **2016**, 120, 11412-11418	3.4	13
14	Microscopic simulation of quantum dynamics and nuclear tunneling in bacterial reaction centers. *Photosynthesis Research*, **1989**, 22, 39-46	3.7	13
13	Temperature Dependence of the Rate of Intramolecular Electron Transfer. *Journal of Physical Chemistry B*, **2018**, 122, 8824-8833	3.4	12
12	Effects of Free Energy and Solvent on Rates of Intramolecular Electron Transfer in Organic Radical Anions. *Journal of Physical Chemistry A*, **2017**, 121, 7297-7306	2.8	10
11	Mesoscopic to Macroscopic Electron Transfer by Hopping in a Crystal Network of Cytochromes. *Journal of the American Chemical Society*, **2020**, 142, 10459-10467	16.4	8
10	Competition between tryptophan fluorescence and electron transfer during unfolding of the villin headpiece. *Biochemistry*, **2014**, 53, 4503-9	3.2	6
9	A temperature-dependent conformational change of NADH oxidase from Thermus thermophilus HB8. *Proteins: Structure, Function and Bioinformatics*, **2012**, 80, 546-55	4.2	6
8	Calculations of Electrostatic Energies in Proteins Using Microscopic, Semimicroscopic and Macroscopic Models and Free-Energy Perturbation Approaches. *Advances in Photosynthesis and Respiration*, **2008**, 401-420	1.7	6
7	Generalizing the Marcus equation. *Journal of Chemical Physics*, **2020**, 152, 184106	3.9	3
6	Reorganization Energies, Entropies, and Free Energy Surfaces for Electron Transfer. *Journal of Physical Chemistry B*, **2021**, 125, 7940-7945	3.4	2
5	Dynamics of the Excited State in Photosynthetic Bacterial Reaction Centers. *Journal of Physical Chemistry B*, **2020**, 124, 1733-1739	3.4	1
4	Picosecond Measurements of Electron Transfer in Bacterial Photosynthetic Reaction Centers. *ACS Symposium Series*, **1986**, 205-218	0.4	1
3	Coherence and Dephasing **2015**, 417-462		

List of Publications

2 Pump-Probe Spectroscopy, Photon Echoes and Vibrational Wavepackets **2015**, 463-512

1 Fluorescence **2015**, 225-296