Nathan Nelson

List of Publications by Year
in descending order

104 papers	10,891 citations	28718 52 h-index	26435 102 g-index
189 all docs	189 docs citations	189 times ranked	6807 citing authors

#	Article	IF	Citations
1	STRUCTURE AND FUNCTION OF PHOTOSYSTEMS I AND II. Annual Review of Plant Biology, 2006, 57, 521-565.	18.9	855
2	Crystal structure of plant photosystem I. Nature, 2003, 426, 630-635.	35.3	794
3	The complex architecture of oxygenic photosynthesis. Nature Reviews Molecular Cell Biology, 2004, 5, 971-982.	36.5	529
4	The structure of a plant photosystem I supercomplex at 3.4â€‰Ã… resolution. Nature, 2007, 447, 58-63.	35.3	452
5	The NRAMP family of metal-ion transporters. Biochimica Et Biophysica Acta - Molecular Cell Research, 2006, 1763, 609-620.	4.0	436
6	Vacuolar and Plasma Membrane Proton-Adenosinetriphosphatases. Physiological Reviews, 1999, 79, 361-385.	28.3	396
7	The Family of Na⁺/Cl^{âˆ’} Neurotransmitter Transporters. Journal of Neurochemistry, 1998, 71, 1785-1803.	4.0	326
8	Structure and Energy Transfer in Photosystems of Oxygenic Photosynthesis. Annual Review of Biochemistry, 2015, 84, 659-683.	10.9	290
9	Subunit Structure of Chloroplast Photosystem I Reaction Center. Journal of Biological Chemistry, 1977, 252, 4564-4569.	3.4	282
10	Partial Resolution of the Enzymes Catalyzing Photophosphorylation. Journal of Biological Chemistry, 1972, 247, 7657-7662.	3.4	250
11	Structure Determination and Improved Model of Plant Photosystem I. Journal of Biological Chemistry, 2010, 285, 3478-3486.	3.4	243
12	Structure of the plant photosystem I supercomplex at 2.6â€…Ã… resolution. Nature Plants, 2017, 3, 17014.	9.2	220
13	Photosystem I gene cassettes are present in marine virus genomes. Nature, 2009, 461, 258-262.	35.3	199
14	Evolution of organellar proton-ATPases. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1100, 109-124.	1.6	180
15	The structure of plant photosystem I super-complex at 2.8 Ã… resolution. ELife, 2015, 4, e07433.	5.8	179
16	Negative Control of Heavy Metal Uptake by the Saccharomyces cerevisiae BSD2 Gene. Journal of Biological Chemistry, 1997, 272, 11763-11769.	3.4	161
17	Structure, molecular genetics, and evolution of vacuolar H+-ATPases. Journal of Bioenergetics and Biomembranes, 1989, 21, 553-571.	2.2	146
18	Yeast SMF1 Mediates H+-coupled Iron Uptake with Concomitant Uncoupled Cation Currents. Journal of Biological Chemistry, 1999, 274, 35089-35094.	3.4	138

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19	Localization of Glycine Neurotransmitter Transporter (GLYT2) Reveals Correlation with the Distribution of Glycine Receptor. Journal of Neurochemistry, 1995, 64, 1026-1033.	4.0	136
20	Crystal structure of yeast Vâ€ATPase subunit C reveals its stator function. EMBO Reports, 2004, 5, 1148-1152.	4.5	132
21	Structure and function of wild-type and subunit-depleted photosystem I in Synechocystis. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 645-654.	1.6	123
22	Genes and transcripts for the P700 chlorophylla apoprotein and subunit 2 of the photosystem I reaction center complex from spinach thylakoid membranes. Plant Molecular Biology, 1983, 2, 95-107.	3.9	106
23	Developmental Expression of the Glycine Transporters GLYT1 and GLYT2 in Mouse Brain. Journal of Neurochemistry, 1996, 67, 336-344.	4.0	101
24	Plant Photosystem I Design in the Light of Evolution. Structure, 2009, 17, 637-650.	3.3	92
25	Photosystems and global effects of oxygenic photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 856-863.	1.6	92
26	Genes and transcripts for the ATP synthase CF0 subunits I and II from spinach thylakoid membranes. Molecular Genetics and Genomics, 1985, 199, 290-299.	2.4	91
27	Isolation of cDNA clones for fourteen nuclear-encoded thylakoid membrane proteins. Molecular Genetics and Genomics, 1986, 204, 258-265.	2.4	90
28	The SaccharomycescerevisiaeVMA10 Is an Intron-containing Gene Encoding a Novel 13-kDa Subunit of Vacuolar H+-ATPase. Journal of Biological Chemistry, 1995, 270, 13726-13732.	3.4	90
29	Lysosomal H+-translocating ATPase has a similar subunit structure to chromaffin granule H+-ATPase complex. Biochimica Et Biophysica Acta - Biomembranes, 1989, 980, 241-247.	2.7	87
30	The structure of photosystem I and evolution of photosynthesis. BioEssays, 2005, 27, 914-922.	2.5	85
31	Picosecond Fluorescence of Intact and Dissolved PSI-LHCI Crystals. Biophysical Journal, 2008, 95, 5851-5861.	0.5	85
32	A Novel Family of Yeast Chaperons Involved in the Distribution of V-ATPase and Other Membrane Proteins. Journal of Biological Chemistry, 1999, 274, 26885-26893.	3.4	83
33	The significance of molecular slips in transport systems. Nature Reviews Molecular Cell Biology, 2002, 3, 876-881.	36.5	81
34	A journey from mammals to yeast with vacuolar H+-ATPase (V-ATPase). Journal of Bioenergetics and Biomembranes, 2003, 35, 281-289.	2.2	79
35	Zinc inhibition of Â-aminobutyric acid transporter 4 (GAT4) reveals a link between excitatory and inhibitory neurotransmission. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6154-6159.	7.4	79
36	Comparison of the Light-Harvesting Networks of Plant and Cyanobacterial Photosystem I. Biophysical Journal, 2005, 89, 1630-1642.	0.5	79

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37	Crystal structures of virus-like photosystem I complexes from the mesophilic cyanobacterium Synechocystis PCC 6803. ELife, 2013, 3, e01496.	5.8	72
38	Structure and function of photosystem I in Cyanidioschyzon merolae. Photosynthesis Research, 2019, 139, 499-508.	2.8	69
39	<i>Plasmodium falciparum</i>chloroquine resistance transporter is a H⁺-coupled polyspecific nutrient and drug exporter. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3356-3361.	7.4	66
40	Stable photobleaching of P840 in Chlorobium reaction center preparations: Presence of the 42-kDa bacteriochlorophyll a protein and a 17-kDa polypeptide. Biochemistry, 1995, 34, 9617-9624.	2.6	64
41	Vacuolar H+-ATPaseâ€"an enzyme for all seasons. Pflugers Archiv European Journal of Physiology, 2009, 457, 581-587.	2.8	64
42	Plant Photosystem I â€" The Most Efficient Nano-Photochemical Machine. Journal of Nanoscience and Nanotechnology, 2009, 9, 1709-1713.	0.9	63
43	The atp1 and atp2 operons of the cyanobacterium Synechocystis sp. PCC 6803. Plant Molecular Biology, 1991, 17, 641-652.	3.9	59
44	STRUCTURAL BIOLOGY: Nature's Rotary Electromotors. Science, 2005, 308, 642-644.	19.6	58
45	Functional organization of a plant Photosystem I: Evolution of a highly efficient photochemical machine. Plant Physiology and Biochemistry, 2008, 46, 228-237.	5.9	58
46	Developmental Expression of GABA Transporters GAT1 and GAT4 Suggests Involvement in Brain Maturation. Journal of Neurochemistry, 1996, 67, 857-867.	4.0	54
47	A transcription unit for the Rieske FeS-protein and cytochrome b in Chlorobium limicola. Photosynthesis Research, 1994, 39, 163-174.	2.8	52
48	The Emerging Structure of Vacuolar ATPases. Physiology, 2006, 21, 317-325.	3.2	51
49	Photosystem I reaction center: past and future. Photosynthesis Research, 2002, 73, 193-206.	2.8	50
50	Light-Harvesting Features Revealed by the Structure of Plant Photosystem I. Photosynthesis Research, 2004, 81, 239-250.	2.8	49
51	Structure of Plant Photosystem I Revealed by Theoretical Modeling. Journal of Biological Chemistry, 2005, 280, 33627-33636.	3.4	48
52	Structure of the plant photosystem I. Biochemical Society Transactions, 2018, 46, 285-294.	3.4	48
53	The Photosystem I-like P840-reaction center of Green S-bacteria is a homodimer. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1101, 154-156.	1.6	46
54	The little we know on the structure and machinery of V-ATPase. Journal of Experimental Biology, 2009, 212, 1604-1610.	1.7	46

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55	Structure of a minimal photosystem I from the green alga Dunaliella salina. Nature Plants, 2020, 6, 321-327.	9.2	45
56	The first external loop of the metal ion transporter DCT1 is involved in metal ion binding and specificity. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10694-10699.	7.4	40
57	Microalgal hydrogen production: prospects of an essential technology for a clean and sustainable energy economy. Photosynthesis Research, 2017, 133, 49-62.	2.8	39
58	The structure of a triple complex of plant photosystem I with ferredoxin and plastocyanin. Nature Plants, 2020, 6, 1300-1305.	9.2	39
59	Photosystem I reaction centers fromChlamydomonas and higher plant chloroplasts. Journal of Bioenergetics and Biomembranes, 1981, 13, 295-306.	2.2	36
60	The vacuolar proton-ATPase of eukaryotic cells. BioEssays, 1987, 7, 251-254.	2.5	34
61	Altered Distribution of the Yeast Plasma Membrane H+-ATPase as a Feature of Vacuolar H+-ATPase Null Mutants. Journal of Biological Chemistry, 2000, 275, 40088-40095.	3.4	34
62	Crystal Structure of Photosystem I Monomer From Synechocystis PCC 6803. Frontiers in Plant Science, 2018, 9, 1865.	3.7	34
63	P840â€Reaction Centers from <i>Chlorobium tepidum</i>â€“Quinone Analysis and Functional Reconstitution into Lipid Vesicles. Photochemistry and Photobiology, 1996, 64, 14-19.	2.6	33
64	The Mutation F227I Increases the Coupling of Metal Ion Transport in DCT1. Journal of Biological Chemistry, 2004, 279, 53056-53061.	3.4	30
65	Large Photovoltages Generated by Plant Photosystem I Crystals. Advanced Materials, 2012, 24, 2988-2991.	23.6	30
66	Temperature-sensitive PSII: a novel approach for sustained photosynthetic hydrogen production. Photosynthesis Research, 2016, 130, 113-121.	2.8	30
67	Evolution of photosystem I and the control of global enthalpy in an oxidizing world. Photosynthesis Research, 2013, 116, 145-151.	2.8	29
68	Structure and Flexibility of the C-Ring in the Electromotor of Rotary FoF1-ATPase of Pea Chloroplasts. PLoS ONE, 2012, 7, e43045.	2.5	29
69	Properties of a novel ATPase enzyme in chromaffin granules. Journal of Bioenergetics and Biomembranes, 1982, 14, 499-512.	2.2	26
70	Identification of the subunit carrying FeS-centers A and B in the P840-reaction center preparation of Chlorobium limicola. Photosynthesis Research, 1993, 38, 111-114.	2.8	25
71	Developmental expression of the neurotransmitter transporter GAT3. Journal of Neuroscience Research, 1999, 55, 394-399.	3.0	25
72	Photosystem I complex. Photosynthesis Research, 1988, 19, 73-84.	2.8	24

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73	Structure and energy transfer pathways of the Dunaliella Salina photosystem I supercomplex. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148253.	1.6	24
74	Cryo-EM photosystem I structure reveals adaptation mechanisms to extreme high light in Chlorella ohadii. Nature Plants, 2021, 7, 1314-1322.	9.2	24
75	Crystallization and initial X-ray diffraction studies of higher plant photosystem I. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 1824-1827.	2.4	23
76	The Plasticity of Photosystem I. Plant and Cell Physiology, 2021, 62, 1073-1081.	3.1	22
77	Effect of sodium lithium and proton concentrations on the electrophysiological properties of the four mouse GABA transporters expressed in Xenopus oocytes. Neurochemistry International, 2003, 43, 431-443.	3.8	19
78	Solving the structure of plant photosystem Iâ€"biochemistry is vital. Photochemical and Photobiological Sciences, 2005, 4, 1011.	2.8	19
79	The evolution of photosystem I in light of phage-encoded reaction centres. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 3400-3405.	4.1	19
80	Two-Dimensional Electronic Spectroscopy of a Minimal Photosystem I Complex Reveals the Rate of Primary Charge Separation. Journal of the American Chemical Society, 2021, 143, 14601-14612.	14.1	19
81	Structural and functional features of yeast V-ATPase subunit C. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 297-303.	1.6	17
82	Biochemical support for the V-ATPase rotary mechanism: antibody against HA-tagged Vma7p or Vma16p but not Vma10p inhibits activity. Journal of Experimental Biology, 2003, 206, 3227-3237.	1.7	16
83	Structure of plant photosystem I-plastocyanin complex reveals strong hydrophobic interactions. Biochemical Journal, 2021, 478, 2371-2384.	3.7	16
84	Temperature-sensitive PSII and promiscuous PSI as a possible solution for sustainable photosynthetic hydrogen production. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1122-1126.	1.6	14
85	Cloning and expression of cDNAs encoding plant V-ATPase subunits in the corresponding yeast null mutants. Biochimica Et Biophysica Acta - Bioenergetics, 2000, 1459, 489-498.	1.6	13
86	Excitation energy transfer kinetics of trimeric, monomeric and subunit-depleted Photosystem I from Synechocystis PCC 6803. Biochemical Journal, 2021, 478, 1333-1346.	3.7	12
87	Developmental expression of the neurotransmitter transporter NTT4. Journal of Neuroscience Research, 1999, 55, 24-35.	3.0	10
88	Dimeric and high-resolution structures of Chlamydomonas Photosystem I from a temperature-sensitive Photosystem II mutant. Communications Biology, 2021, 4, 1380.	4.4	10
89	Temperature Sensitive Photosynthesis: Point Mutated CEF-G, PRK, or PsbO Act as Temperature-Controlled Switches for Essential Photosynthetic Processes. Frontiers in Plant Science, 2020, 11, 562985.	3.7	8
90	Functional assembly of the chloroplast H+ -ATPase and photosynthetic reaction centres. Biochemical Society Transactions, 1986, 14, 5-7.	3.4	7

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91	Structure of Dunaliella photosystem II reveals conformational flexibility of stacked and unstacked supercomplexes. ELife, 0, 12, .	5.8	7
92	Structure of Chlorella ohadii Photosystem II Reveals Protective Mechanisms against Environmental Stress. Cells, 2023, 12, 1971.	4.2	7
93	Expression, crystallization and phasing of vacuolar H+-ATPase subunit C (Vma5p) ofSaccharomyces cerevisiae. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 1906-1909.	2.4	6
94	Evidence for Deep Acceptor Centers in Plant Photosystem I Crystals. Journal of Physical Chemistry B, 2015, 119, 1374-1379.	2.6	4
95	A Glimpse into the Atomic Structure of Plant Photosystem I. , 2008, , 65-81.		2
96	Coupling and Slips in Photosynthetic Reactionsâ€"From Femtoseconds to Eons. Plants, 2023, 12, 3878.	3.6	2
97	Joseph Neumann (1930â€"2017): a scientist and a philosopher. Photosynthesis Research, 2017, 134, 111-115.	2.8	1
98	A Quest for the Atomic Resolution of Plant Photosystem I. , 2017, , 149-157.		1
99	Structure, Function, and Regulation of Plant Photosystem I. , 2006, , 71-77.		1
100	Investigating the Balance between Structural Conservation and Functional Flexibility in Photosystem I. International Journal of Molecular Sciences, 2024, 25, 5073.	4.1	1
101	Higher Plant and Cyanobacterial Photosystem I: Connected Cytochrome Pathways. Advances in Photosynthesis and Respiration, 2016, , 131-142.	0.0	0
102	Feasibility of Sustainable Photosynthetic Hydrogen Production. Advances in Photosynthesis and Respiration, 2021, , 567-587.	0.0	0
103	The Structure of Plant Photosystem I â€" The First Membrane Supercomplex Solved by Xâ€ray Crystallography. FASEB Journal, 2006, 20, A489.	0.4	0
104	Structure of plant photosystem I in a native assembly state defines PsaF as a regulatory checkpoint. Nature Plants, 2024, 10, 874-879.	9.2	0