Nathan Nelson

List of Publications by Citations

117 papers	8,982 citations	50 h-index	94 g-index
181 ext. papers	9,706 ext. citations	8.3 avg, IF	6.41 L-index

#	Paper	IF	Citations
117	Structure and function of photosystems I and II. *Annual Review of Plant Biology*, **2006**, 57, 521-65	29.7	714
116	Crystal structure of plant photosystem I. *Nature*, **2003**, 426, 630-5	47.5	701
115	The complex architecture of oxygenic photosynthesis. *Nature Reviews Molecular Cell Biology*, **2004**, 5, 971-82	46.7	423
114	The structure of a plant photosystem I supercomplex at 3.4 A resolution. *Nature*, **2007**, 447, 58-63	47.5	401
113	Vacuolar and plasma membrane proton-adenosinetriphosphatases. *Physiological Reviews*, **1999**, 79, 361-85	46	351
112	The NRAMP family of metal-ion transporters. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2006**, 1763, 609-20	4.7	312
111	The family of Na+/Cl- neurotransmitter transporters. *Journal of Neurochemistry*, **1998**, 71, 1785-803	5.8	280
110	Subunit Structure of Chloroplast Photosystem I Reaction Center. *Journal of Biological Chemistry*, **1977**, 252, 4564-4569	5	224
109	Structure determination and improved model of plant photosystem I. *Journal of Biological Chemistry*, **2010**, 285, 3478-86	5	219
108	Partial Resolution of the Enzymes Catalyzing Photophosphorylation. *Journal of Biological Chemistry*, **1972**, 247, 7657-7662	5	203
107	Structure and energy transfer in photosystems of oxygenic photosynthesis. *Annual Review of Biochemistry*, **2015**, 84, 659-83	27.9	195
106	Photosystem I gene cassettes are present in marine virus genomes. *Nature*, **2009**, 461, 258-262	47.5	160
105	Evolution of organellar proton-ATPases. *Biochimica Et Biophysica Acta - Bioenergetics*, **1992**, 1100, 109-24	4.5	156
104	Structure of the plant photosystem I supercomplex at 2.6 Å resolution. *Nature Plants*, **2017**, 3, 17014	11.2	150
103	Cloning and expression of a glycine transporter from mouse brain. *FEBS Letters*, **1992**, 305, 110-4	3.6	147
102	The progenitor of ATP synthases was closely related to the current vacuolar H+-ATPase. *FEBS Letters*, **1989**, 247, 147-53	3.6	144
101	Cloning of the human brain GABA transporter. *FEBS Letters*, **1990**, 269, 181-4	3.6	144

100	Evolution of photosystem I - from symmetry through pseudo-symmetry to asymmetry. *FEBS Letters*, **2004**, 564, 274-80	3.6	140
99	Negative control of heavy metal uptake by the Saccharomyces cerevisiae BSD2 gene. *Journal of Biological Chemistry*, **1997**, 272, 11763-9	5	137
98	The structure of plant photosystem I super-complex at 2.8 Å resolution. *ELife*, **2015**, 4, e07433	8.6	136
97	Structure, molecular genetics, and evolution of vacuolar H+-ATPases. *Journal of Bioenergetics and Biomembranes*, **1989**, 21, 553-71	3.6	128
96	Yeast SMF1 mediates H(+)-coupled iron uptake with concomitant uncoupled cation currents. *Journal of Biological Chemistry*, **1999**, 274, 35089-94	5	125
95	Crystal structure of yeast V-ATPase subunit C reveals its stator function. *EMBO Reports*, **2004**, 5, 1148-52	6.3	118
94	Localization of glycine neurotransmitter transporter (GLYT2) reveals correlation with the distribution of glycine receptor. *Journal of Neurochemistry*, **1995**, 64, 1026-33	5.8	115
93	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	4.5	101
92	Isolation of cDNA clones for fourteen nuclear-encoded thylakoid membrane proteins. *Molecular Genetics and Genomics*, **1986**, 204, 258-265		86
91	Developmental expression of the glycine transporters GLYT1 and GLYT2 in mouse brain. *Journal of Neurochemistry*, **1996**, 67, 336-44	5.8	82
90	The Saccharomyces cerevisiae VMA10 is an intron-containing gene encoding a novel 13-kDa subunit of vacuolar H(+)-ATPase. *Journal of Biological Chemistry*, **1995**, 270, 13726-32	5	82
89	Lysosomal H+-translocating ATPase has a similar subunit structure to chromaffin granule H+-ATPase complex. *Biochimica Et Biophysica Acta - Biomembranes*, **1989**, 980, 241-7	3.6	78
88	Photosystems and global effects of oxygenic photosynthesis. *Biochimica Et Biophysica Acta - Bioenergetics*, **2011**, 1807, 856-63	4.5	77
87	Plant photosystem I design in the light of evolution. *Structure*, **2009**, 17, 637-50	5	77
86	Picosecond fluorescence of intact and dissolved PSI-LHCI crystals. *Biophysical Journal*, **2008**, 95, 5851-61	0.5	75
85	The significance of molecular slips in transport systems. *Nature Reviews Molecular Cell Biology*, **2002**, 3, 876-81	46.7	74
84	Comparison of the light-harvesting networks of plant and cyanobacterial photosystem I. *Biophysical Journal*, **2005**, 89, 1630-42	0.5	72
83	The structure of photosystem I and evolution of photosynthesis. *BioEssays*, **2005**, 27, 914-22	3.9	72

82	Zinc inhibition of gamma-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, 6154-9	11.1	72
81	Structure and function of wild-type and subunit-depleted photosystem I in Synechocystis. *Biochimica Et Biophysica Acta - Bioenergetics*, **2018**, 1859, 645-654	4.5	70
80	A novel family of yeast chaperons involved in the distribution of V-ATPase and other membrane proteins. *Journal of Biological Chemistry*, **1999**, 274, 26885-93	5	70
79	Reconstitution of photosynthetic energy conservation. II. Photophosphorylation in liposomes containing photosystem-I reaction center and chloroplast coupling-factor complex. *FEBS Journal*, **1980**, 111, 535-43		70
78	Genes and transcripts for the ATP synthase CF0 subunits I and II from spinach thylakoid membranes. *Molecular Genetics and Genomics*, **1985**, 199, 290-299		68
77	Characterization of yeast V-ATPase mutants lacking Vph1p or Stv1p and the effect on endocytosis. *Journal of Experimental Biology*, **2002**, 205, 1209-19	2.9	65
76	A journey from mammals to yeast with vacuolar H+-ATPase (V-ATPase). *Journal of Bioenergetics and Biomembranes*, **2003**, 35, 281-9	3.6	64
75	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, 9617-24	3.1	60
74	Crystal structures of virus-like photosystem I complexes from the mesophilic cyanobacterium Synechocystis PCC 6803. *ELife*, **2013**, 3, e01496	8.6	60
73	A rat brain cDNA encoding the neurotransmitter transporter with an unusual structure. *FEBS Letters*, **1993**, 315, 114-8	3.6	58
72	Plant photosystem I--the most efficient nano-photochemical machine. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 1709-13	1.2	54
71	Vacuolar H(+)-ATPase-an enzyme for all seasons. *Pflugers Archiv European Journal of Physiology*, **2009**, 457, 581-7	4.5	51
70	The atp1 and atp2 operons of the cyanobacterium Synechocystis sp. PCC 6803. *Plant Molecular Biology*, **1991**, 17, 641-52	4.5	51
69	Functional organization of a plant Photosystem I: evolution of a highly efficient photochemical machine. *Plant Physiology and Biochemistry*, **2008**, 46, 228-37	5.3	50
68	A transcription unit for the Rieske FeS-protein and cytochrome b in Chlorobium limicola. *Photosynthesis Research*, **1994**, 39, 163-74	3.6	50
67	Plasmodium falciparum 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, 3356-61	11.1	49
66	Structural biology. Nature's rotary electromotors. *Science*, **2005**, 308, 642-4	32.2	49
65	Photosystem I reaction center: past and future. *Photosynthesis Research*, **2002**, 73, 193-206	3.6	49

64	Developmental expression of GABA transporters GAT1 and GAT4 suggests involvement in brain maturation. *Journal of Neurochemistry*, **1996**, 67, 857-67	5.8	48
63	Rapid transbilayer movement of fluorescent phospholipid analogues in the plasma membrane of endocytosis-deficient yeast cells does not require the Drs2 protein. *FEBS Journal*, **1999**, 263, 254-63		48
62	The nuclear-encoded polypeptide Cfo-II from spinach is a real, ninth subunit of chloroplast ATP synthase. *FEBS Letters*, **1993**, 326, 192-8	3.6	47
61	Structure and function of photosystem I in Cyanidioschyzon merolae. *Photosynthesis Research*, **2019**, 139, 499-508	3.6	46
60	Light-harvesting features revealed by the structure of plant photosystem I. *Photosynthesis Research*, **2004**, 81, 239-50	3.6	42
59	Structure of plant photosystem I revealed by theoretical modeling. *Journal of Biological Chemistry*, **2005**, 280, 33627-36	5	42
58	The role of delta subunit in the coupling activity of chloroplast coupling factor 1. *FEBS Letters*, **1976**, 70, 249-53	3.6	42
57	The Photosystem I-like P840-reaction center of Green S-bacteria is a homodimer. *Biochimica Et Biophysica Acta - Bioenergetics*, **1992**, 1101, 154-156	4.5	41
56	The little we know on the structure and machinery of V-ATPase. *Journal of Experimental Biology*, **2009**, 212, 1604-10	2.9	40
55	The emerging structure of vacuolar ATPases. *Physiology*, **2006**, 21, 317-25	9.4	40
54	Photosystem I reaction centers from Chlamydomonas and higher plant chloroplasts. *Journal of Bioenergetics and Biomembranes*, **1981**, 13, 295-306	3.6	35
53	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, 10694-9	11.1	34
52	Inhibition of vacuolar H+-ATPases by fusidic acid and suramin. *FEBS Letters*, **1988**, 234, 383-6	3.6	32
51	P840-Reaction Centers from Chlorobium tepidum□Quinone Analysis and Functional Reconstitution into Lipid Vesicles. *Photochemistry and Photobiology*, **1996**, 64, 14-19	3.5	31
50	The vacuolar proton-ATPase of eukaryotic cells. *BioEssays*, **1987**, 7, 251-4	3.9	30
49	Structure of the plant photosystem I. *Biochemical Society Transactions*, **2018**, 46, 285-294	5	27
48	Large photovoltages generated by plant photosystem I crystals. *Advanced Materials*, **2012**, 24, 2988-91, 2987	23.6	26
47	The mutation F227I increases the coupling of metal ion transport in DCT1. *Journal of Biological Chemistry*, **2004**, 279, 53056-61	5	26

46	Altered distribution of the yeast plasma membrane H+-ATPase as a feature of vacuolar H+-ATPase null mutants. *Journal of Biological Chemistry*, **2000**, 275, 40088-95	5	25
45	Structure and flexibility of the C-ring in the electromotor of rotary F(0)F(1)-ATPase of pea chloroplasts. *PLoS ONE*, **2012**, 7, e43045	3.6	25
44	Microalgal hydrogen production: prospects of an essential technology for a clean and sustainable energy economy. *Photosynthesis Research*, **2017**, 133, 49-62	3.6	24
43	Identification of the subunit carrying FeS-centers A and B in the P840-reaction center preparation of Chlorobium limicola. *Photosynthesis Research*, **1993**, 38, 111-4	3.6	24
42	Properties of a novel ATPase enzyme in chromaffin granules. *Journal of Bioenergetics and Biomembranes*, **1982**, 14, 499-512	3.6	24
41	Structure of a minimal photosystem I from the green alga Dunaliella salina. *Nature Plants*, **2020**, 6, 321-327	11.2	23
40	Evolution of photosystem I and the control of global enthalpy in an oxidizing world. *Photosynthesis Research*, **2013**, 116, 145-51	3.6	23
39	Purification and composition of photosystem I reaction center of Prochloron sp., an oxygen-evolving prokaryote containing chlorophyll b. *FEBS Letters*, **1985**, 191, 29-33	3.6	23
38	Features of V-ATPases that distinguish them from F-ATPases. *FEBS Letters*, **2001**, 504, 223-8	3.6	22
37	Photosystem I complex. *Photosynthesis Research*, **1988**, 19, 73-84	3.6	22
36	Temperature-sensitive PSII: a novel approach for sustained photosynthetic hydrogen production. *Photosynthesis Research*, **2016**, 130, 113-121	3.6	22
35	Crystallization and initial X-ray diffraction studies of higher plant photosystem I. *Acta Crystallographica Section D: Biological Crystallography*, **2003**, 59, 1824-7		21
34	Crystal Structure of Photosystem I Monomer From PCC 6803. *Frontiers in Plant Science*, **2018**, 9, 1865	6	21
33	Photosystem I reaction centers from maize bundle-sheath and mesophyll chloroplasts lack subunit III. *FEBS Journal*, **1986**, 159, 157-61		20
32	Solving the structure of plant photosystem I--biochemistry is vital. *Photochemical and Photobiological Sciences*, **2005**, 4, 1011-5	4.1	18
31	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, 431-43	4.3	18
30	The evolution of photosystem I in light of phage-encoded reaction centres. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2012**, 367, 3400-5	5.7	16
29	Developmental expression of the neurotransmitter transporter GAT3. *Journal of Neuroscience Research*, **1999**, 55, 394-9	4.2	16

28	The structure of a triple complex of plant photosystem I with ferredoxin and plastocyanin. *Nature Plants*, **2020**, 6, 1300-1305	11.2	15
27	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, 3227-37	2.9	14
26	Structural and functional features of yeast V-ATPase subunit C. *Biochimica Et Biophysica Acta - Bioenergetics*, **2006**, 1757, 297-303	4.5	13
25	Temperature-sensitive PSII and promiscuous PSI as a possible solution for sustainable photosynthetic hydrogen production. *Biochimica Et Biophysica Acta - Bioenergetics*, **2012**, 1817, 1122-6	4.5	12
24	Salt inactivation as a mechanistic probe of membrane-bound chloroplast coupling factor 1. *FEBS Journal*, **1976**, 69, 203-8		12
23	Structure and energy transfer pathways of the Dunaliella Salina photosystem I supercomplex. *Biochimica Et Biophysica Acta - Bioenergetics*, **2020**, 1861, 148253	4.5	11
22	Cloning and expression of cDNAs encoding plant V-ATPase subunits in the corresponding yeast null mutants. *Biochimica Et Biophysica Acta - Bioenergetics*, **2000**, 1459, 489-98	4.5	11
21	Differential effect of pH on sodium binding by the various GABA transporters expressed in Xenopus oocytes. *FEBS Letters*, **2002**, 527, 125-32	3.6	10
20	Developmental expression of the neurotransmitter transporter NTT4. *Journal of Neuroscience Research*, **1999**, 55, 24-35	4.2	8
19	Functional assembly of the chloroplast H+-ATPase and photosynthetic reaction centres. *Biochemical Society Transactions*, **1986**, 14, 5-7	5	6
18	Structure of plant photosystem I-plastocyanin complex reveals strong hydrophobic interactions. *Biochemical Journal*, **2021**, 478, 2371-2384	3.7	6
17	Expression, crystallization and phasing of vacuolar H(+)-ATPase subunit C (Vma5p) of Saccharomyces cerevisiae. *Acta Crystallographica Section D: Biological Crystallography*, **2004**, 60, 1906-9		5
16	The Plasticity of Photosystem I. *Plant and Cell Physiology*, **2021**, 62, 1073-1081	4.8	5
15	Specific immunoprecipitation of ATPase from Escherichia coli. *FEBS Letters*, **1978**, 91, 85-9	3.6	4
14	Cryo-EM photosystem I structure reveals adaptation mechanisms to extreme high light in Chlorella ohadii. *Nature Plants*, **2021**, 7, 1314-1322	11.2	4
13	Evidence for deep acceptor centers in plant photosystem I crystals. *Journal of Physical Chemistry B*, **2015**, 119, 1374-9	3.3	3
12	Optoelectronic Devices: Large Photovoltages Generated by Plant Photosystem I Crystals (Adv. Mater. 22/2012). *Advanced Materials*, **2012**, 24, 2987-2987	23.6	2
11	A Glimpse into the Atomic Structure of Plant Photosystem I65-81		2

10	Excitation energy transfer kinetics of trimeric, monomeric and subunit-depleted Photosystem I from Synechocystis PCC 6803. *Biochemical Journal*, **2021**, 478, 1333-1346	3.7	2
9	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	16	2
8	Dimeric and high-resolution structures of Chlamydomonas Photosystem I from a temperature-sensitive Photosystem II mutant. *Communications Biology*, **2021**, 4, 1380	6.5	2
7	Joseph Neumann (1930–2017): a scientist and a philosopher. *Photosynthesis Research*, **2017**, 134, 111-115	3.6	1
6	A Quest for the Atomic Resolution of Plant Photosystem I **2017**, 149-157		1
5	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	6	1
4	Structure, Function, and Regulation of Plant Photosystem I **2006**, 71-77		1
3	Higher Plant and Cyanobacterial Photosystem I: Connected Cytochrome Pathways. *Advances in Photosynthesis and Respiration*, **2016**, 131-142	1.5	
2	The Structure of Plant Photosystem I – The First Membrane Supercomplex Solved by X-ray Crystallography. *FASEB Journal*, **2006**, 20, A489	0.9	
1	Feasibility of Sustainable Photosynthetic Hydrogen Production. *Advances in Photosynthesis and Respiration*, **2021**, 567-587	1.5	