Nathan Nelson

List of Publications by Year
in descending order

116 papers	10,595 citations	31976 53 h-index	31849 101 g-index
181 all docs	181 docs citations	181 times ranked	7642 citing authors

#	Article	IF	Citations
1	STRUCTURE AND FUNCTION OF PHOTOSYSTEMS I AND II. Annual Review of Plant Biology, 2006, 57, 521-565.	18.7	830
2	Crystal structure of plant photosystem I. Nature, 2003, 426, 630-635.	27.8	785
3	The complex architecture of oxygenic photosynthesis. Nature Reviews Molecular Cell Biology, 2004, 5, 971-982.	37.0	504
4	The structure of a plant photosystem I supercomplex at 3.4â€‰Ã… resolution. Nature, 2007, 447, 58-63.	27.8	443
5	The NRAMP family of metal-ion transporters. Biochimica Et Biophysica Acta - Molecular Cell Research, 2006, 1763, 609-620.	4.1	427
6	Vacuolar and Plasma Membrane Proton-Adenosinetriphosphatases. Physiological Reviews, 1999, 79, 361-385.	28.8	392
7	The Family of Na⁺/Cl^{âˆ’} Neurotransmitter Transporters. Journal of Neurochemistry, 1998, 71, 1785-1803.	3.9	319
8	Structure and Energy Transfer in Photosystems of Oxygenic Photosynthesis. Annual Review of Biochemistry, 2015, 84, 659-683.	11.1	277
9	Subunit Structure of Chloroplast Photosystem I Reaction Center. Journal of Biological Chemistry, 1977, 252, 4564-4569.	3.4	275
10	Partial Resolution of the Enzymes Catalyzing Photophosphorylation. Journal of Biological Chemistry, 1972, 247, 7657-7662.	3.4	243
11	Structure Determination and Improved Model of Plant Photosystem I. Journal of Biological Chemistry, 2010, 285, 3478-3486.	3.4	238
12	Structure of the plant photosystem I supercomplex at 2.6â€…Ã… resolution. Nature Plants, 2017, 3, 17014.	9.3	205
13	Photosystem I gene cassettes are present in marine virus genomes. Nature, 2009, 461, 258-262.	27.8	195
14	Evolution of organellar proton-ATPases. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1100, 109-124.	1.0	180
15	Cloning and expression of a glycine transporter from mouse brain. FEBS Letters, 1992, 305, 110-114.	2.8	168
16	The structure of plant photosystem I super-complex at 2.8 Ã… resolution. ELife, 2015, 4, e07433.	6.0	168
17	The progenitor of ATP synthases was closely related to the current vacuolar H+-ATPase. FEBS Letters, 1989, 247, 147-153.	2.8	162
18	Cloning of the human brain GABA transporter. FEBS Letters, 1990, 269, 181-184.	2.8	162

#	Article	IF	Citations
19	Negative Control of Heavy Metal Uptake by the Saccharomyces cerevisiae BSD2 Gene. Journal of Biological Chemistry, 1997, 272, 11763-11769.	3.4	160
20	Evolution of photosystem I - from symmetry through pseudosymmetry to asymmetry. FEBS Letters, 2004, 564, 274-280.	2.8	154
21	Structure, molecular genetics, and evolution of vacuolar H+-ATPases. Journal of Bioenergetics and Biomembranes, 1989, 21, 553-571.	2.3	146
22	Yeast SMF1 Mediates H+-coupled Iron Uptake with Concomitant Uncoupled Cation Currents. Journal of Biological Chemistry, 1999, 274, 35089-35094.	3.4	137
23	Localization of Glycine Neurotransmitter Transporter (GLYT2) Reveals Correlation with the Distribution of Glycine Receptor. Journal of Neurochemistry, 1995, 64, 1026-1033.	3.9	133
24	Crystal structure of yeast Vâ€ATPase subunit C reveals its stator function. EMBO Reports, 2004, 5, 1148-1152.	4.5	131
25	Structure and function of wild-type and subunit-depleted photosystem I in Synechocystis. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 645-654.	1.0	113
26	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
27	Developmental Expression of the Glycine Transporters GLYT1 and GLYT2 in Mouse Brain. Journal of Neurochemistry, 1996, 67, 336-344.	3.9	97
28	Isolation of cDNA clones for fourteen nuclear-encoded thylakoid membrane proteins. Molecular Genetics and Genomics, 1986, 204, 258-265.	2.4	90
29	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
30	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	89
31	Plant Photosystem I Design in the Light of Evolution. Structure, 2009, 17, 637-650.	3.3	89
32	Photosystems and global effects of oxygenic photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 856-863.	1.0	87
33	Lysosomal H+-translocating ATPase has a similar subunit structure to chromaffin granule H+-ATPase complex. Biochimica Et Biophysica Acta - Biomembranes, 1989, 980, 241-247.	2.6	86
34	Picosecond Fluorescence of Intact and Dissolved PSI-LHCI Crystals. Biophysical Journal, 2008, 95, 5851-5861.	0.5	85
35	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
36	The structure of photosystem I and evolution of photosynthesis. BioEssays, 2005, 27, 914-922.	2.5	82

#	Article	IF	Citations
37	The significance of molecular slips in transport systems. Nature Reviews Molecular Cell Biology, 2002, 3, 876-881.	37.0	81
38	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.	7.1	79
39	A journey from mammals to yeast with vacuolar H+-ATPase (V-ATPase). Journal of Bioenergetics and Biomembranes, 2003, 35, 281-289.	2.3	78
40	Comparison of the Light-Harvesting Networks of Plant and Cyanobacterial Photosystem I. Biophysical Journal, 2005, 89, 1630-1642.	0.5	78
41	Reconstitution of Photosynthetic Energy Conservation. II. Photophosphorylation in Liposomes Containing Photosystem-I Reaction Center and Chloroplast Coupling-Factor Complex. FEBS Journal, 1980, 111, 535-543.	0.2	72
42	A rat brain cDNA encoding the neurotransmitter transporter with an unusual structure. FEBS Letters, 1993, 315, 114-118.	2.8	70
43	Characterization of yeast V-ATPase mutants lacking Vph1p or Stv1p and the effect on endocytosis. Journal of Experimental Biology, 2002, 205, 1209-19.	1.7	70
44	Crystal structures of virus-like photosystem I complexes from the mesophilic cyanobacterium Synechocystis PCC 6803. ELife, 2013, 3, e01496.	6.0	69
45	<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.	7.1	65
46	Structure and function of photosystem I in Cyanidioschyzon merolae. Photosynthesis Research, 2019, 139, 499-508.	2.9	65
47	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.	2.5	64
48	Vacuolar H+-ATPaseâ€"an enzyme for all seasons. Pflugers Archiv European Journal of Physiology, 2009, 457, 581-587.	2.8	63
49	Plant Photosystem I â€" The Most Efficient Nano-Photochemical Machine. Journal of Nanoscience and Nanotechnology, 2009, 9, 1709-1713.	0.9	61
50	The atp1 and atp2 operons of the cyanobacterium Synechocystis sp. PCC 6803. Plant Molecular Biology, 1991, 17, 641-652.	3.9	58
51	STRUCTURAL BIOLOGY: Nature's Rotary Electromotors. Science, 2005, 308, 642-644.	12.6	57
52	Functional organization of a plant Photosystem I: Evolution of a highly efficient photochemical machine. Plant Physiology and Biochemistry, 2008, 46, 228-237.	5.8	55
53	Developmental Expression of GABA Transporters GAT1 and GAT4 Suggests Involvement in Brain Maturation. Journal of Neurochemistry, 1996, 67, 857-867.	3.9	54
54	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, 254-264.	0.2	53

#	Article	IF	Citations
55	The nuclear-encoded polypeptide Cfo-II from spinach is a real, ninth subunit of chloroplast ATP synthase. FEBS Letters, 1993, 326, 192-198.	2.8	52
56	A transcription unit for the Rieske FeS-protein and cytochrome b in Chlorobium limicola. Photosynthesis Research, 1994, 39, 163-174.	2.9	52
57	Photosystem I reaction center: past and future. Photosynthesis Research, 2002, 73, 193-206.	2.9	50
58	Light-Harvesting Features Revealed by the Structure of Plant Photosystem I. Photosynthesis Research, 2004, 81, 239-250.	2.9	49
59	The role of Î´ subunit in the coupling activity of chloroplast coupling factor 1. FEBS Letters, 1976, 70, 249-253.	2.8	47
60	Structure of Plant Photosystem I Revealed by Theoretical Modeling. Journal of Biological Chemistry, 2005, 280, 33627-33636.	3.4	47
61	The Emerging Structure of Vacuolar ATPases. Physiology, 2006, 21, 317-325.	3.1	47
62	The Photosystem I-like P840-reaction center of Green S-bacteria is a homodimer. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1101, 154-156.	1.0	46
63	The little we know on the structure and machinery of V-ATPase. Journal of Experimental Biology, 2009, 212, 1604-1610.	1.7	46
64	Structure of the plant photosystem I. Biochemical Society Transactions, 2018, 46, 285-294.	3.4	46
65	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.	7.1	40
66	Structure of a minimal photosystem I from the green alga Dunaliella salina. Nature Plants, 2020, 6, 321-327.	9.3	40
67	Microalgal hydrogen production: prospects of an essential technology for a clean and sustainable energy economy. Photosynthesis Research, 2017, 133, 49-62.	2.9	37
68	Photosystem I reaction centers fromChlamydomonas and higher plant chloroplasts. Journal of Bioenergetics and Biomembranes, 1981, 13, 295-306.	2.3	36
69	Inhibition of vacuolar H+ -ATPases by fusidic acid and suramin. FEBS Letters, 1988, 234, 383-386.	2.8	35
70	The vacuolar proton-ATPase of eukaryotic cells. BioEssays, 1987, 7, 251-254.	2.5	34
71	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
72	P840â€Reaction Centers from <i>Chlorobium tepidum</i>â€"Quinone Analysis and Functional Reconstitution into Lipid Vesicles. Photochemistry and Photobiology, 1996, 64, 14-19.	2.5	33

#	Article	IF	Citations
73	The structure of a triple complex of plant photosystem I with ferredoxin and plastocyanin. Nature Plants, 2020, 6, 1300-1305.	9.3	33
74	Features of V-ATPases that distinguish them from F-ATPases. FEBS Letters, 2001, 504, 223-228.	2.8	30
75	The Mutation F227I Increases the Coupling of Metal Ion Transport in DCT1. Journal of Biological Chemistry, 2004, 279, 53056-53061.	3.4	30
76	Large Photovoltages Generated by Plant Photosystem I Crystals. Advanced Materials, 2012, 24, 2988-2991.	21.0	30
77	Crystal Structure of Photosystem I Monomer From Synechocystis PCC 6803. Frontiers in Plant Science, 2018, 9, 1865.	3.6	30
78	Evolution of photosystem I and the control of global enthalpy in an oxidizing world. Photosynthesis Research, 2013, 116, 145-151.	2.9	29
79	Temperature-sensitive PSII: a novel approach for sustained photosynthetic hydrogen production. Photosynthesis Research, 2016, 130, 113-121.	2.9	29
80	Structure and Flexibility of the C-Ring in the Electromotor of Rotary FoF1-ATPase of Pea Chloroplasts. PLoS ONE, 2012, 7, e43045.	2.5	28
81	Purification and composition of photosystem I reaction center of Prochloron sp., an oxygen-evolving prokaryote containing chlorophyll b. FEBS Letters, 1985, 191, 29-33.	2.8	27
82	Properties of a novel ATPase enzyme in chromaffin granules. Journal of Bioenergetics and Biomembranes, 1982, 14, 499-512.	2.3	25
83	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.	2.9	25
84	Photosystem I complex. Photosynthesis Research, 1988, 19, 73-84.	2.9	24
85	Developmental expression of the neurotransmitter transporter GAT3. Journal of Neuroscience Research, 1999, 55, 394-399.	2.9	24
86	Crystallization and initial X-ray diffraction studies of higher plant photosystem I. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 1824-1827.	2.5	23
87	Photosystem I reaction centers from maize bundle-sheath and mesophyll chloroplasts lack subunit III. FEBS Journal, 1986, 159, 157-161.	0.2	21
88	Structure and energy transfer pathways of the Dunaliella Salina photosystem I supercomplex. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148253.	1.0	21
89	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
90	Solving the structure of plant photosystem Iâ€"biochemistry is vital. Photochemical and Photobiological Sciences, 2005, 4, 1011.	2.9	19

#	Article	IF	Citations
91	The Plasticity of Photosystem I. Plant and Cell Physiology, 2021, 62, 1073-1081.	3.1	19
92	Cryo-EM photosystem I structure reveals adaptation mechanisms to extreme high light in Chlorella ohadii. Nature Plants, 2021, 7, 1314-1322.	9.3	18
93	Structural and functional features of yeast V-ATPase subunit C. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 297-303.	1.0	17
94	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.	4.0	17
95	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
96	Structure of plant photosystem I-plastocyanin complex reveals strong hydrophobic interactions. Biochemical Journal, 2021, 478, 2371-2384.	3.7	15
97	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.	1.0	13
98	Temperature-sensitive PSII and promiscuous PSI as a possible solution for sustainable photosynthetic hydrogen production. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1122-1126.	1.0	13
99	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.	13.7	13
100	Salt Inactivation as a Mechanistic Probe of Membrane-Bound Chloroplast Coupling Factor 1. FEBS Journal, 1976, 69, 203-208.	0.2	12
101	Excitation energy transfer kinetics of trimeric, monomeric and subunit-depleted Photosystem I from Synechocystis PCC 6803. Biochemical Journal, 2021, 478, 1333-1346.	3.7	11
102	Differential effect of pH on sodium binding by the various GABA transporters expressed inXenopusoocytes. FEBS Letters, 2002, 527, 125-132.	2.8	10
103	Developmental expression of the neurotransmitter transporter NTT4. , 1999, 55, 24-35.		9
104	Functional assembly of the chloroplast H+ -ATPase and photosynthetic reaction centres. Biochemical Society Transactions, 1986, 14, 5-7.	3.4	7
105	Expression, crystallization and phasing of vacuolar H+-ATPase subunit C (Vma5p) ofSaccharomyces cerevisiae. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 1906-1909.	2.5	6
106	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.	3.6	6
107	Dimeric and high-resolution structures of Chlamydomonas Photosystem I from a temperature-sensitive Photosystem II mutant. Communications Biology, 2021, 4, 1380.	4.4	6
108	Specific immunoprecipitation of ATPase fromEscherichia Coli. FEBS Letters, 1978, 91, 85-89.	2.8	4

#	Article	IF	Citations
109	Evidence for Deep Acceptor Centers in Plant Photosystem I Crystals. Journal of Physical Chemistry B, 2015, 119, 1374-1379.	2.6	4
110	Optoelectronic Devices: Large Photovoltages Generated by Plant Photosystem I Crystals (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	21.0	2
111	Joseph Neumann (1930â€"2017): a scientist and a philosopher. Photosynthesis Research, 2017, 134, 111-115.	2.9	1
112	A Quest for the Atomic Resolution of Plant Photosystem I. , 2017, , 149-157.		1
113	Structure, Function, and Regulation of Plant Photosystem I. , 2006, , 71-77.		1
114	Higher Plant and Cyanobacterial Photosystem I: Connected Cytochrome Pathways. Advances in Photosynthesis and Respiration, 2016, , 131-142.	1.0	0
115	Feasibility of Sustainable Photosynthetic Hydrogen Production. Advances in Photosynthesis and Respiration, 2021, , 567-587.	1.0	0
116	The Structure of Plant Photosystem I â€" The First Membrane Supercomplex Solved by Xâ€ray Crystallography. FASEB Journal, 2006, 20, A489.	0.5	0