

Takumi Noguchi

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

125
papers

4,820
citations

41
h-index

65
g-index

126
ext. papers

5,300
ext. citations

4.8
avg. IF

5.99
L-index

#	Paper	IF	Citations
125	Redox properties and regulatory mechanism of the iron-quinone electron acceptor in photosystem II as revealed by FTIR spectroelectrochemistry.. <i>Photosynthesis Research</i> , 2022 , 1	3.7	1
124	Effects of Stromal and Lumenal Side Perturbations on the Redox Potential of the Primary Quinone Electron Acceptor Q in Photosystem II. <i>Biochemistry</i> , 2021 , 60, 3697-3706	3.2	1
123	Rapid-Scan Time-Resolved ATR-FTIR Study on the Photoassembly of the Water-Oxidizing MnCaO Cluster in Photosystem II. <i>Journal of Physical Chemistry B</i> , 2021 , 125, 4031-4045	3.4	7
122	ATR-FTIR Spectroelectrochemical Study on the Mechanism of the pH Dependence of the Redox Potential of the Non-Heme Iron in Photosystem II. <i>Biochemistry</i> , 2021 , 60, 2170-2178	3.2	4
121	Proton and Water Transfer Pathways in the S ₁ Transition of the Water-Oxidizing Complex in Photosystem II: Time-Resolved Infrared Analysis of the Effects of D1-N298A Mutation and NO Substitution. <i>Journal of Physical Chemistry B</i> , 2021 , 125, 6864-6873	3.4	5
120	Molecular Mechanism of Asymmetric Electron Transfer on the Electron Donor Side of Photosystem II. <i>Advances in Photosynthesis and Respiration</i> , 2021 , 323-339	1.7	
119	Protonation State of a Key Histidine Ligand in the Iron-Quinone Complex of Photosystem II as Revealed by Light-Induced ATR-FTIR Spectroscopy. <i>Biochemistry</i> , 2020 , 59, 4336-4343	3.2	5
118	Molecular Structure of the S State with a = 5 Signal in the Oxygen Evolving Complex of Photosystem II. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 5531-5537	3.4	11
117	Structural Dynamics of a Protein Domain Relevant to the Water-Oxidizing Complex in Photosystem II as Visualized by High-Speed Atomic Force Microscopy. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 5847-5857	3.4	16
116	Gold nanoparticle conjugate with photosystem II and photosystem III for development of a biohybrid water-splitting photocatalyst. <i>Biomedical Spectroscopy and Imaging</i> , 2020 , 9, 73-81	1.3	1
115	Role of the O4 Channel in Photosynthetic Water Oxidation as Revealed by Fourier Transform Infrared Difference and Time-Resolved Infrared Analysis of the D1-S169A Mutant. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 1470-1480	3.4	12
114	FTIR Microspectroscopic Analysis of the Water Oxidation Reaction in a Single Photosystem II Microcrystal. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 121-127	3.4	1
113	Fourier transform infrared and mass spectrometry analyses of a site-directed mutant of D1-Asp170 as a ligand to the water-oxidizing MnCaO cluster in photosystem II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2020 , 1861, 148086	4.6	7
112	Protonation structure of the photosynthetic water oxidizing complex in the S state as revealed by normal mode analysis using quantum mechanics/molecular mechanics calculations. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 24213-24225	3.6	4
111	Formation of the High-Spin S State Related to the Extrinsic Proteins in the Oxygen Evolving Complex of Photosystem II. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 8908-8913	6.4	3
110	Proton Release Process during the S-to-S Transition of Photosynthetic Water Oxidation As Revealed by the pH Dependence of Kinetics Monitored by Time-Resolved Infrared Spectroscopy. <i>Biochemistry</i> , 2019 , 58, 4276-4283	3.2	12
109	Initial Mn ²⁺ binding site in photoassembly of the water-oxidizing Mn ₄ CaO ₅ cluster in photosystem II as studied by quantum mechanics/molecular mechanics calculations. <i>Chemical Physics Letters</i> , 2019 , 721, 62-67	2.5	8

108	Does the water-oxidizing MnCaO cluster regulate the redox potential of the primary quinone electron acceptor Q in photosystem II? A study by Fourier transform infrared spectroelectrochemistry. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2019 , 1860, 148082	4.6	7
107	Redox-state dependent blinking of single photosystem I trimers at around liquid-nitrogen temperature. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2019 , 1860, 30-40	4.6	5
106	pH-Dependent Regulation of the Relaxation Rate of the Radical Anion of the Secondary Quinone Electron Acceptor Q in Photosystem II As Revealed by Fourier Transform Infrared Spectroscopy. <i>Biochemistry</i> , 2018 , 57, 2828-2836	3.2	6
105	Fourier Transform Infrared Analysis of the S-State Cycle of Water Oxidation in the Microcrystals of Photosystem II. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 2121-2126	6.4	13
104	Mechanism of Methanol Inhibition of Photosynthetic Water Oxidation As Studied by Fourier Transform Infrared Difference and Time-Resolved Infrared Spectroscopies. <i>Biochemistry</i> , 2018 , 57, 4803-4815	3.2	12
103	Evaluation of photosynthetic activities in thylakoid membranes by means of Fourier transform infrared spectroscopy. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2018 , 1859, 129-136	4.6	3
102	Mechanism of Proton-Coupled Electron Transfer in the S-to-S Transition of Photosynthetic Water Oxidation As Revealed by Time-Resolved Infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 9460-9470	3.4	22
101	Monitoring the Reaction Process During the S -to-S Transition in Photosynthetic Water Oxidation Using Time-Resolved Infrared Spectroscopy. <i>Journal of the American Chemical Society</i> , 2017 , 139, 2022-2029	16.4	49
100	Light-induced structural changes and the site of O=O bond formation in PSII caught by XFEL. <i>Nature</i> , 2017 , 543, 131-135	50.4	400
99	Infrared Determination of the Protonation State of a Key Histidine Residue in the Photosynthetic Water Oxidizing Center. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9364-9375	16.4	38
98	Genetically introduced hydrogen bond interactions reveal an asymmetric charge distribution on the radical cation of the special-pair chlorophyll P680. <i>Journal of Biological Chemistry</i> , 2017 , 292, 7474-7486	5.4	15
97	D1-Asn-298 in photosystem II is involved in a hydrogen-bond network near the redox-active tyrosine Y for proton exit during water oxidation. <i>Journal of Biological Chemistry</i> , 2017 , 292, 20046-20057	5.4	32
96	Fluorescence property of photosystem II protein complexes bound to a gold nanoparticle. <i>Faraday Discussions</i> , 2017 , 198, 121-134	3.6	6
95	Comparative Analysis of the Interaction of the Primary Quinone Q in Intact and Mn-Depleted Photosystem II Membranes Using Light-Induced ATR-FTIR Spectroscopy. <i>Biochemistry</i> , 2016 , 55, 6355-6358	3.3	9
94	Mutation-induced perturbation of the special pair P840 in the homodimeric reaction center in green sulfur bacteria. <i>Scientific Reports</i> , 2016 , 6, 19878	4.9	6
93	Redox potential of the terminal quinone electron acceptor QB in photosystem II reveals the mechanism of electron transfer regulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 620-5	11.5	50
92	Role of a Water Network around the Mn4CaO5 Cluster in Photosynthetic Water Oxidation: A Fourier Transform Infrared Spectroscopy and Quantum Mechanics/Molecular Mechanics Calculation Study. <i>Biochemistry</i> , 2016 , 55, 597-607	3.2	33
91	Structure-Based Modeling of Fluorescence Kinetics of Photosystem II: Relation between Its Dimeric Form and Photoregulation. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 365-76	3.4	12

90	FTIR spectroelectrochemistry combined with a light-induced difference technique: Application to the iron-quinone electron acceptor in photosystem II. <i>Biomedical Spectroscopy and Imaging</i> , 2016 , 5, 269-282	1.3	7
89	Structural Coupling of Extrinsic Proteins with the Oxygen-Evolving Center in Photosystem II. <i>Frontiers in Plant Science</i> , 2016 , 7, 84	6.2	37
88	The N-terminal sequence of the extrinsic PsbP protein modulates the redox potential of Cyt b559 in photosystem II. <i>Scientific Reports</i> , 2016 , 6, 21490	4.9	21
87	Quantum mechanics/molecular mechanics simulation of the ligand vibrations of the water-oxidizing MnCaO cluster in photosystem II. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 12727-12732	11.5	41
86	Effects of extrinsic proteins on the protein conformation of the oxygen-evolving center in cyanobacterial photosystem II as revealed by Fourier transform infrared spectroscopy. <i>Biochemistry</i> , 2015 , 54, 2022-31	3.2	17
85	Infrared Detection of a Proton Released from Tyrosine YD to the Bulk upon Its Photo-oxidation in Photosystem II. <i>Biochemistry</i> , 2015 , 54, 5045-53	3.2	25
84	Fourier transform infrared difference and time-resolved infrared detection of the electron and proton transfer dynamics in photosynthetic water oxidation. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2015 , 1847, 35-45	4.6	75
83	Modified molecular interactions of the pheophytin and plastoquinone electron acceptors in photosystem II of chlorophyll D-containing <i>Acaryochloris marina</i> as revealed by FTIR spectroscopy. <i>Photosynthesis Research</i> , 2015 , 125, 105-14	3.7	5
82	Spectroscopic Analysis of the Redox Reactions of π -Conjugated Cofactors in Photosynthetic Reaction Center 2015 , 675-694		1
81	Fourier transform infrared detection of a polarizable proton trapped between photooxidized tyrosine YZ and a coupled histidine in photosystem II: relevance to the proton transfer mechanism of water oxidation. <i>Biochemistry</i> , 2014 , 53, 3131-44	3.2	52
80	Identification of the basic amino acid residues on the PsbP protein involved in the electrostatic interaction with photosystem II. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014 , 1837, 1447-53	4.6	17
79	Effects of hydrogen bonding interactions on the redox potential and molecular vibrations of plastoquinone as studied using density functional theory calculations. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 11864-76	3.6	24
78	Long-range interaction between the Mn ₄ CaO ₅ cluster and the non-heme iron center in photosystem II as revealed by FTIR spectroelectrochemistry. <i>Biochemistry</i> , 2014 , 53, 4914-23	3.2	14
77	Development of a novel cryogenic microscope with numerical aperture of 0.9 and its application to photosynthesis research. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014 , 1837, 880-7	4.6	11
76	Molecular interactions of the quinone electron acceptors Q(A), Q(B), and Q(C) in photosystem II as studied by the fragment molecular orbital method. <i>Photosynthesis Research</i> , 2014 , 120, 113-23	3.7	21
75	Structural coupling of extrinsic proteins with the oxygen-evolving center in red algal photosystem II as revealed by light-induced FTIR difference spectroscopy. <i>Biochemistry</i> , 2013 , 52, 5705-7	3.2	13
74	Functional roles of D2-Lys317 and the interacting chloride ion in the water oxidation reaction of photosystem II as revealed by fourier transform infrared analysis. <i>Biochemistry</i> , 2013 , 52, 4748-57	3.2	50
73	Monitoring the reactions of photosynthetic water oxidation using infrared spectroscopy. <i>Biomedical Spectroscopy and Imaging</i> , 2013 , 2, 115-128	1.3	26

72	The PsbQ protein stabilizes the functional binding of the PsbP protein to photosystem II in higher plants. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012 , 1817, 1346-51	4.6	41
71	Determination of the miss probabilities of individual S-state transitions during photosynthetic water oxidation by monitoring electron flow in photosystem II using FTIR spectroscopy. <i>Biochemistry</i> , 2012 , 51, 6776-85	3.2	23
70	Time-resolved infrared detection of the proton and protein dynamics during photosynthetic oxygen evolution. <i>Biochemistry</i> , 2012 , 51, 3205-14	3.2	68
69	The conserved His-144 in the PsbP protein is important for the interaction between the PsbP N-terminus and the Cyt b559 subunit of photosystem II. <i>Journal of Biological Chemistry</i> , 2012 , 287, 26377-87	5.4	30
68	Photosystem II-Gold Nanoparticle Conjugate as a Nanodevice for the Development of Artificial Light-Driven Water-Splitting Systems. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 2448-2452	6.4	40
67	How does the QB site influence propagate to the QA site in photosystem II?. <i>Biochemistry</i> , 2011 , 50, 5436-42	3.2	19
66	Herbicide effect on the photodamage process of photosystem II: fourier transform infrared study. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2011 , 1807, 1214-20	4.6	14
65	Structural coupling of an arginine side chain with the oxygen-evolving Mn4Ca cluster in photosystem II as revealed by isotope-edited Fourier transform infrared spectroscopy. <i>Journal of the American Chemical Society</i> , 2011 , 133, 3808-11	16.4	23
64	Interaction and inhibitory effect of ammonium cation in the oxygen evolving center of photosystem II. <i>Biochemistry</i> , 2011 , 50, 2506-14	3.2	27
63	Chapter 7:Photosynthetic O2 Evolution. <i>RSC Energy and Environment Series</i> , 2011 , 163-207	0.6	15
62	Structures and binding sites of phenolic herbicides in the Q(B) pocket of photosystem II. <i>Biochemistry</i> , 2010 , 49, 5445-54	3.2	41
61	Hydrogen bond interactions of the pheophytin electron acceptor and its radical anion in photosystem II as revealed by Fourier transform infrared difference spectroscopy. <i>Biochemistry</i> , 2010 , 49, 493-501	3.2	22
60	Orientations of carboxylate groups coupled to the Mn cluster in the photosynthetic oxygen-evolving center as studied by polarized ATR-FTIR spectroscopy. <i>Biochemistry</i> , 2010 , 49, 3074-82	3.2	24
59	2P287 The molecular mechanism of ammonia inhibition of photo-synthetic oxygen evolution(The 48th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2010 , 50, S133	0	
58	3P269 FTIR analysis of the photoreactions of red/green light sensor protein AnPixJ(Photobiology: Vision & Photoreception,The 48th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2010 , 50, S192-S193	0	
57	1P276 Estimation of the efficiencies of individual S-state transitions during photosynthetic water oxidation using FTIR spectroscopy(Photobiology:Photosynthesis,The 48th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2010 , 50, S68	0	
56	Fourier transform infrared spectroscopy of special pair bacteriochlorophylls in homodimeric reaction centers of heliobacteria and green sulfur bacteria. <i>Photosynthesis Research</i> , 2010 , 104, 321-31	3.7	11
55	1P-232 Molecular interaction of the primary quinone electron acceptor QA in photosystem II as studied by QA reconstitution and FTIR analysis(Photobiology:Photosynthesis, The 47th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2009 , 49, S98	0	

54	Structural coupling of a tyrosine side chain with the non-heme iron center in photosystem II as revealed by light-induced Fourier transform infrared difference spectroscopy. <i>Biochemistry</i> , 2009 , 48, 8994-9001	3.2	24
53	Effect of a single-amino acid substitution of the 43 kDa chlorophyll protein on the oxygen-evolving reaction of the cyanobacterium <i>Synechocystis</i> sp. PCC 6803: analysis of the Glu354Gln mutation. <i>Biochemistry</i> , 2009 , 48, 6095-103	3.2	44
52	FTIR evidence that the PsbP extrinsic protein induces protein conformational changes around the oxygen-evolving Mn cluster in photosystem II. <i>Biochemistry</i> , 2009 , 48, 6318-25	3.2	48
51	Monitoring proton release during photosynthetic water oxidation in photosystem II by means of isotope-edited infrared spectroscopy. <i>Journal of the American Chemical Society</i> , 2009 , 131, 7849-57	16.4	96
50	Detection of the D0-D1 transition of the carotene radical cation photoinduced in photosystem II. <i>Photochemical and Photobiological Sciences</i> , 2009 , 8, 157-161	4.2	2
49	1P-230 FTIR study on the structure of CP43-E354 in the photosynthetic oxygen-evolving center (Photobiology: Photosynthesis, The 47th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2009 , 49, S98	0	
48	Influence of histidine-198 of the D1 subunit on the properties of the primary electron donor, P680, of photosystem II in <i>Thermosynechococcus elongatus</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008 , 1777, 331-42	4.6	57
47	Monitoring water reactions during the S-state cycle of the photosynthetic water-oxidizing center: detection of the DOD bending vibrations by means of Fourier transform infrared spectroscopy. <i>Biochemistry</i> , 2008 , 47, 11024-30	3.2	66
46	Correlation between the hydrogen-bond structures and the C=O stretching frequencies of carboxylic acids as studied by density functional theory calculations: theoretical basis for interpretation of infrared bands of carboxylic groups in proteins. <i>Journal of Physical Chemistry B</i> , 2008 , 112, 6725-31	3.4	46
45	Effect of charge distribution over a chlorophyll dimer on the redox potential of P680 in photosystem II as studied by density functional theory calculations. <i>Biochemistry</i> , 2008 , 47, 6289-91	3.2	25
44	Flash-induced FTIR difference spectroscopy shows no evidence for the structural coupling of bicarbonate to the oxygen-evolving Mn cluster in photosystem II. <i>Biochemistry</i> , 2008 , 47, 2760-5	3.2	29
43	FTIR detection of water reactions in the oxygen-evolving centre of photosystem II. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2008 , 363, 1189-94; discussion 1194-5	5.8	122
42	Herbicide effect on the hydrogen-bonding interaction of the primary quinone electron acceptor QA in photosystem II as studied by Fourier transform infrared spectroscopy. <i>Photosynthesis Research</i> , 2008 , 98, 159-67	3.7	34
41	Fourier transform infrared analysis of the photosynthetic oxygen-evolving center. <i>Coordination Chemistry Reviews</i> , 2008 , 252, 336-346	23.2	91
40	Criteria for determining the hydrogen-bond structures of a tyrosine side chain by fourier transform infrared spectroscopy: density functional theory analyses of model hydrogen-bonded complexes of p-cresol. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 13833-44	3.4	35
39	Perturbation of the structure of P680 and the charge distribution on its radical cation in isolated reaction center complexes of photosystem II as revealed by fourier transform infrared spectroscopy. <i>Biochemistry</i> , 2007 , 46, 4390-7	3.2	54
38	Water molecules coupled to the redox-active tyrosine Y(D) in photosystem II as detected by FTIR spectroscopy. <i>Biochemistry</i> , 2007 , 46, 14245-9	3.2	24
37	Drastic changes in the ligand structure of the oxygen-evolving Mn cluster upon Ca ²⁺ depletion as revealed by FTIR difference spectroscopy. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2007 , 1767, 535-40	4.6	26

36	Selective detection of the structural changes upon photoreactions of several redox cofactors in photosystem II by means of light-induced ATR-FTIR difference spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007 , 66, 863-8	4.4	19
35	Light-induced FTIR difference spectroscopy as a powerful tool toward understanding the molecular mechanism of photosynthetic oxygen evolution. <i>Photosynthesis Research</i> , 2007 , 91, 59-69	3.7	75
34	Identification of the special pair of photosystem II in a chlorophyll d-dominated cyanobacterium. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 7283-8	11.5	105
33	Photooxidation pathway of chlorophyll Z in photosystem II as Studied by Fourier transform infrared spectroscopy. <i>Biochemistry</i> , 2006 , 45, 1938-45	3.2	14
32	Structural perturbation of the carboxylate ligands to the manganese cluster upon Ca ²⁺ /Sr ²⁺ exchange in the S-state cycle of photosynthetic oxygen evolution as studied by flash-induced FTIR difference spectroscopy. <i>Biochemistry</i> , 2006 , 45, 13454-64	3.2	46
31	Fourier transform infrared spectrum of the secondary quinone electron acceptor Q(B) in photosystem II. <i>Biochemistry</i> , 2005 , 44, 11323-8	3.2	30
30	pH dependence of the flash-induced S-state transitions in the oxygen-evolving center of photosystem II from <i>Thermosynechococcus elongatus</i> as revealed by Fourier transform infrared spectroscopy. <i>Biochemistry</i> , 2005 , 44, 1708-18	3.2	47
29	Density functional theory calculations on the dielectric constant dependence of the oxidation potential of chlorophyll: implication for the high potential of P680 in photosystem II. <i>Biochemistry</i> , 2005 , 44, 8865-72	3.2	42
28	Molecular Analysis by Vibrational Spectroscopy 2005 , 367-387		31
27	Site-directed mutagenesis of <i>Thermosynechococcus elongatus</i> photosystem II: the O ₂ -evolving enzyme lacking the redox-active tyrosine D. <i>Biochemistry</i> , 2004 , 43, 13549-63	3.2	65
26	Analysis of flash-induced FTIR difference spectra of the S-state cycle in the photosynthetic water-oxidizing complex by uniform ¹⁵ N and ¹³ C isotope labeling. <i>Biochemistry</i> , 2003 , 42, 6035-42	3.2	122
25	Protonation structures of Cys-sulfinic and Cys-sulfenic acids in the photosensitive nitrile hydratase revealed by Fourier transform infrared spectroscopy. <i>Biochemistry</i> , 2003 , 42, 11642-50	3.2	60
24	A new system for detection of thermoluminescence and delayed luminescence from photosynthetic apparatus with precise temperature control. <i>Spectroscopy</i> , 2002 , 16, 89-94		16
23	FTIR detection of water reactions during the flash-induced S-state cycle of the photosynthetic water-oxidizing complex. <i>Biochemistry</i> , 2002 , 41, 15706-12	3.2	95
22	Flash-induced FTIR difference spectra of the water oxidizing complex in moderately hydrated photosystem II core films: effect of hydration extent on S-state transitions. <i>Biochemistry</i> , 2002 , 41, 2322-30	3.2	146
21	Ab Initio Density Functional Theory Calculations and Vibrational Analysis of Zinc-Bound 4-Methylimidazole as a Model of a Histidine Ligand in Metalloenzymes \square <i>Journal of Physical Chemistry A</i> , 2002 , 106, 3377-3390	2.8	76
20	Dual role of triplet localization on the accessory chlorophyll in the photosystem II reaction center: photoprotection and photodamage of the D1 protein. <i>Plant and Cell Physiology</i> , 2002 , 43, 1112-6	4.9	60
19	Triplet formation on a monomeric chlorophyll in the photosystem II reaction center as studied by time-resolved infrared spectroscopy. <i>Biochemistry</i> , 2001 , 40, 2176-85	3.2	54

18	Flash-induced Fourier transform infrared detection of the structural changes during the S-state cycle of the oxygen-evolving complex in photosystem II. <i>Biochemistry</i> , 2001 , 40, 1497-502	3.2	91
17	An FTIR study on the structure of the oxygen-evolving Mn-cluster of Photosystem II in different spin forms of the S(2) state. <i>Photosynthesis Research</i> , 2000 , 63, 47-57	3.7	30
16	Structure of an active water molecule in the water-oxidizing complex of photosystem II as studied by FTIR spectroscopy. <i>Biochemistry</i> , 2000 , 39, 10943-9	3.2	94
15	Vibrational Spectra and Ab Initio DFT Calculations of 4-Methylimidazole and Its Different Protonation Forms: Infrared and Raman Markers of the Protonation State of a Histidine Side Chain. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 4253-4265	3.4	159
14	Hydrogen bonding interaction between the primary quinone acceptor QA and a histidine side chain in photosystem II as revealed by Fourier transform infrared spectroscopy. <i>Biochemistry</i> , 1999 , 38, 399-403	3.2	66
13	Structure of a histidine ligand in the photosynthetic oxygen-evolving complex as studied by light-induced fourier transform infrared difference spectroscopy. <i>Biochemistry</i> , 1999 , 38, 10187-95	3.2	120
12	Fourier transform infrared study of the cation radical of P680 in the photosystem II reaction center: evidence for charge delocalization on the chlorophyll dimer. <i>Biochemistry</i> , 1998 , 37, 13614-25	3.2	80
11	Structural coupling between the oxygen-evolving Mn cluster and a tyrosine residue in photosystem II as revealed by Fourier transform infrared spectroscopy. <i>Biochemistry</i> , 1997 , 36, 14705-11	3.2	101
10	Identification of Fourier transform infrared signals from the non-heme iron in photosystem II. <i>Journal of Biochemistry</i> , 1995 , 118, 9-12	3.1	49
9	XANES Spectroscopy for Monitoring Intermediate Reaction States of Cl-Depleted Mn Cluster in Photosynthetic Water Oxidation Enzyme. <i>Journal of the American Chemical Society</i> , 1995 , 117, 6386-6387	16.4	28
8	Direct detection of a carboxylate bridge between Mn and Ca ²⁺ in the photosynthetic oxygen-evolving center by means of Fourier transform infrared spectroscopy. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1995 , 1228, 189-200	4.6	126
7	Characteristic changes of function and structure of Photosystem II during strong-light photoinhibition under aerobic conditions. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1995 , 1229, 239-248	4.6	12
6	Photosensitive nitrile hydratase intrinsically possesses nitric oxide bound to the non-heme iron center: evidence by Fourier transform infrared spectroscopy. <i>FEBS Letters</i> , 1995 , 358, 9-12	3.8	78
5	Fourier transform infrared spectrum of the radical cation of beta-carotene photoinduced in photosystem II. <i>FEBS Letters</i> , 1994 , 356, 179-82	3.8	66
4	Study of the intermediate S-states for water oxidation in the normal and Ca-depleted photosynthetic oxygen-evolving enzyme by means of flash-induced X-ray absorption near edge structure spectroscopy. <i>Biochemical Society Transactions</i> , 1994 , 22, 331-5	5.1	5
3	Temperature dependence of the S1 → S2 transition in the oxygen-evolving complex of photosystem II studied by FT-IR spectroscopy. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1993 , 1143, 333-336	4.6	16
2	Flash induced XANES spectroscopy for the Ca-depleted Mn-cluster in the photosynthetic O ₂ -evolving enzyme. <i>FEBS Letters</i> , 1993 , 330, 28-30	3.8	11
1	Detection of structural changes upon S1-to-S2 transition in the oxygen-evolving manganese cluster in photosystem II by light-induced Fourier transform infrared difference spectroscopy. <i>Biochemistry</i> , 1992 , 31, 5953-6	3.2	91

