Johannes Messinger

List of Publications by Year
in descending order

164 papers	12,066 citations	28274 55 h-index	27406 106 g-index
171 all docs	171 docs citations	171 times ranked	7104 citing authors

#	Article	IF	Citations
1	Reversible Structural Isomerization of Natureâ€™s Water Oxidation Catalyst Prior to Oâ€“O Bond Formation. Journal of the American Chemical Society, 2022, 144, 11736-11747.	13.7	15
2	Water Oxidation by Pentapyridyl Base Metal Complexes? A Case Study. Inorganic Chemistry, 2022, 61, 9104-9118.	4.0	5
3	Molecular basis for turnover inefficiencies (misses) during water oxidation in photosystem II. Chemical Science, 2022, 13, 8667-8678.	7.4	9
4	The D1-V185N mutation alters substrate water exchange by stabilizing alternative structures of the Mn4Ca-cluster in photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148319.	1.0	6
5	Electronic and geometric structure effects on one-electron oxidation of first-row transition metals in the same ligand framework. Dalton Transactions, 2021, 50, 660-674.	3.3	3
6	The exchange of the fast substrate water in the S₂ state of photosystem II is limited by diffusion of bulk water through channels â€“ implications for the water oxidation mechanism. Chemical Science, 2021, 12, 12763-12775.	7.4	18
7	Reply to Wang et al.: Clear evidence of binding of Ox to the oxygen-evolving complex of photosystem II is best observed in the omit map. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2102342118.	7.1	7
8	Electrochemical N2 reduction at ambient condition â€“ Overcoming the selectivity issue via control of reactantsâ€™ availabilities. International Journal of Hydrogen Energy, 2021, 46, 30366-30372.	7.1	4
9	Solar-Driven Water Splitting at 13.8% Solar-to-Hydrogen Efficiency by an Earth-Abundant Electrolyzer. ACS Sustainable Chemistry and Engineering, 2021, 9, 14070-14078.	6.7	15
10	Room temperature XFEL crystallography reveals asymmetry in the vicinity of the two phylloquinones in photosystem I. Scientific Reports, 2021, 11, 21787.	3.3	11
11	Effects of x-ray free-electron laser pulse intensity on the Mn K<i>Î²</i>_{1,3} x-ray emission spectrum in photosystem IIâ€”A case study for metalloprotein crystals and solutions. Structural Dynamics, 2021, 8, 064302.	2.3	10
12	Structural dynamics in the water and proton channels of photosystem II during the S2 to S3 transition. Nature Communications, 2021, 12, 6531.	12.8	73
13	Water oxidation by photosystem II is the primary source of electrons for sustained H ₂ photoproduction in nutrient-replete green algae. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29629-29636.	7.1	27
14	Substrate water exchange in the S₂ state of photosystem II is dependent on the conformation of the Mn₄Ca cluster. Physical Chemistry Chemical Physics, 2020, 22, 12894-12908.	2.8	24
15	Toward Sustainable H2 Production: Linking Hydrogenase with Photosynthesis. Joule, 2020, 4, 1157-1159.	24.0	25
16	Bicarbonate-Mediated CO₂ Formation on Both Sides of PhotosystemÂII. Biochemistry, 2020, 59, 2442-2449.	2.5	28
17	Assessment of the manganese clusterâ€™s oxidation state via photoactivation of photosystem II microcrystals. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 141-145.	7.1	34
18	Spin transition in a ferrous chloride complex supported by a pentapyridine ligand. Chemical Communications, 2020, 56, 2703-2706.	4.1	3

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19	More than protection: the function of TiO₂ interlayers in hematite functionalized Si photoanodes. Physical Chemistry Chemical Physics, 2020, 22, 28459-28467.	2.8	3
20	Untangling the sequence of events during the S ₂ â†’ S ₃ transition in photosystem II and implications for the water oxidation mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12624-12635.	7.1	149
21	Five-coordinate Mn ^{IV} intermediate in the activation of natureâ€™s water splitting cofactor. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16841-16846.	7.1	54
22	XANES and EXAFS of dilute solutions of transition metals at XFELs. Journal of Synchrotron Radiation, 2019, 26, 1716-1724.	2.4	16
23	A microstructured p-Si photocathode outcompetes Pt as a counter electrode to hematite in photoelectrochemical water splitting. Dalton Transactions, 2019, 48, 1166-1170.	3.3	6
24	Photosynthesisâ€"European Congress on Photosynthesis Research. Physiologia Plantarum, 2019, 166, 4-6.	5.2	1
25	Structural isomers of the S₂ state in photosystem II: do they exist at room temperature and are they important for function?. Physiologia Plantarum, 2019, 166, 60-72.	5.2	30
26	Cobalt-doped hematite thin films for electrocatalytic water oxidation in highly acidic media. Chemical Communications, 2019, 55, 5017-5020.	4.1	24
27	â€˜Birth defectsâ€™ of photosystem II make it highly susceptible to photodamage during chloroplast biogenesis. Physiologia Plantarum, 2019, 166, 165-180.	5.2	15
28	Thomas John Wydrzynski (8 July 1947â€"16 March 2018). Photosynthesis Research, 2019, 140, 253-261.	2.9	5
29	We remember those who left us in the recent past. Physiologia Plantarum, 2019, 166, 7-11.	5.2	3
30	Unequal misses during the flash-induced advancement of photosystem II: effects of the S state and acceptor side cycles. Photosynthesis Research, 2019, 139, 93-106.	2.9	10
31	Structure of intermediates of the water oxidation reaction in photosystem II. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a140-a140.	0.1	0
32	Quantification of bound bicarbonate in photosystem II. Photosynthetica, 2018, 56, 210-216.	1.7	15
33	Structures of the intermediates of Kokâ€™s photosynthetic water oxidation clock. Nature, 2018, 563, 421-425.	27.8	386
34	Photo-electrochemical hydrogen production from neutral phosphate buffer and seawater using micro-structured p-Si photo-electrodes functionalized by solution-based methods. Sustainable Energy and Fuels, 2018, 2, 2215-2223.	4.9	14
35	High-performance iron (III) oxide electrocatalyst for water oxidation in strongly acidic media. Journal of Catalysis, 2018, 365, 29-35.	6.2	44
36	Liquid-Phase Measurements of Photosynthetic Oxygen Evolution. Methods in Molecular Biology, 2018, 1770, 197-211.	0.9	8

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37	Artificial photosynthesis â€“ from sunlight to fuels and valuable products for a sustainable future. Sustainable Energy and Fuels, 2018, 2, 1891-1892.	4.9	11
38	Drop-on-demand sample delivery for studying biocatalysts in action at X-ray free-electron lasers. Nature Methods, 2017, 14, 443-449.	19.0	150
39	Scalable Two-Step Synthesis of Nickelâ€“Iron Phosphide Electrodes for Stable and Efficient Electrocatalytic Hydrogen Evolution. Journal of Physical Chemistry C, 2017, 121, 284-292.	3.1	31
40	Cationic Vacancy Defects in Iron Phosphide: A Promising Route toward Efficient and Stable Hydrogen Evolution by Electrochemical Water Splitting. ChemSusChem, 2017, 10, 4544-4551.	6.8	63
41	Soft x-ray absorption spectroscopy of metalloproteins and high-valent metal-complexes at room temperature using free-electron lasers. Structural Dynamics, 2017, 4, 054307.	2.3	34
42	Electrocatalytic Water Oxidation by MnO_{<i>x</i>}/C: In Situ Catalyst Formation, Carbon Substrate Variations, and Direct O₂/CO₂ Monitoring by Membraneâ€Inlet Mass Spectrometry. ChemSusChem, 2017, 10, 4491-4502.	6.8	26
43	Tumor antigen glycosaminoglycan modification regulates antibody-drug conjugate delivery and cytotoxicity. Oncotarget, 2017, 8, 66960-66974.	1.8	17
44	Changes in local electronic structure on the Si/TiO₂/Fe₂O₃ photocatalysts. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C1307-C1307.	0.1	0
45	Taking snapshots of photosynthetic water oxidation with an X-ray laser. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C14-C14.	0.1	0
46	Biogenesis of water splitting by photosystem II during deâ€etiolation of barley (<i>Hordeum vulgare</i>) Tj ETQq0 0 0 rgBT /Overlock 10	5.7	12
47	Transparent Nanoparticulate FeOOH Improves the Performance of a WO₃ Photoanode in a Tandem Water-Splitting Device. Journal of Physical Chemistry C, 2016, 120, 10941-10950.	3.1	52
48	No observable conformational changes in PSII. Nature, 2016, 533, E1-E2.	27.8	40
49	Structure of photosystem II and substrate binding at room temperature. Nature, 2016, 540, 453-457.	27.8	323
50	Toward a Lowâ€Cost Artificial Leaf: Driving Carbonâ€Based and Bifunctional Catalyst Electrodes with Solutionâ€Processed Perovskite Photovoltaics. Advanced Energy Materials, 2016, 6, 1600738.	19.5	28
51	Photovoltaics: Toward a Lowâ€Cost Artificial Leaf: Driving Carbonâ€Based and Bifunctional Catalyst Electrodes with Solutionâ€Processed Perovskite Photovoltaics (Adv. Energy Mater. 20/2016). Advanced Energy Materials, 2016, 6, .	19.5	0
52	Towards characterization of photo-excited electron transfer and catalysis in natural and artificial systems using XFELs. Faraday Discussions, 2016, 194, 621-638.	3.2	19
53	Gernot Renger (1937â€“2013): his life, Max-Volmer Laboratory, and photosynthesis research. Photosynthesis Research, 2016, 129, 109-127.	2.9	4
54	Probing S-state advancements and recombination pathways in photosystem II with a global fit program for flash-induced oxygen evolution pattern. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 848-859.	1.0	9

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55	Estimation of the driving force for dioxygen formation in photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 23-33.	1.0	19
56	Maghemite nanorods anchored on a 3D nitrogen-doped carbon nanotubes substrate as scalable direct electrode for water oxidation. International Journal of Hydrogen Energy, 2016, 41, 69-78.	7.1	19
57	Metal oxidation states in biological water splitting. Chemical Science, 2015, 6, 1676-1695.	7.4	275
58	Crystal Structure and Functional Characterization of Photosystem II-Associated Carbonic Anhydrase CAH3 in <i>Chlamydomonas reinhardtii</i>. Plant Physiology, 2015, 167, 950-962.	4.8	26
59	First turnover analysis of water-oxidation catalyzed by Co-oxide nanoparticles. Energy and Environmental Science, 2015, 8, 2492-2503.	30.8	43
60	Light-Dependent Production of Dioxygen in Photosynthesis. Metal Ions in Life Sciences, 2015, 15, 13-43.	2.8	11
61	Mobile hydrogen carbonate acts as proton acceptor in photosynthetic water oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6299-6304.	7.1	55
62	Warwick Hillier: a tribute. Photosynthesis Research, 2014, 122, 1-11.	2.9	3
63	Electrochemically produced hydrogen peroxide affects Joliot-type oxygen-evolution measurements of photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1411-1416.	1.0	16
64	Accurate macromolecular structures using minimal measurements from X-ray free-electron lasers. Nature Methods, 2014, 11, 545-548.	19.0	140
65	Substrate water exchange in photosystem II core complexes of the extremophilic red alga Cyanidioschyzon merolae. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1257-1262.	1.0	59
66	Dinuclear manganese complexes for water oxidation: evaluation of electronic effects and catalytic activity. Physical Chemistry Chemical Physics, 2014, 16, 11950.	2.8	64
67	Improving BiVO4 photoanodes for solar water splitting through surface passivation. Physical Chemistry Chemical Physics, 2014, 16, 12014.	2.8	55
68	Hydration of the oxygen-evolving complex of photosystem II probed in the dark-stable S1 state using proton NMR dispersion profiles. Physical Chemistry Chemical Physics, 2014, 16, 11924.	2.8	3
69	Substrateâ€“water exchange in photosystem II is arrested before dioxygen formation. Nature Communications, 2014, 5, 4305.	12.8	79
70	Photosynthesis: from natural to artificial. Physical Chemistry Chemical Physics, 2014, 16, 11810.	2.8	16
71	Taking snapshots of photosynthetic water oxidation using femtosecond X-ray diffraction and spectroscopy. Nature Communications, 2014, 5, 4371.	12.8	206
72	The Mn ₄ Ca photosynthetic water-oxidation catalyst studied by simultaneous X-ray spectroscopy and crystallography using an X-ray free-electron laser. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130324.	4.0	17

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73	Efficiency of photosynthetic water oxidation at ambient and depleted levels of inorganic carbon. Photosynthesis Research, 2013, 117, 401-412.	2.9	18
74	Ammonia binding to the oxygen-evolving complex of photosystem II identifies the solvent-exchangeable oxygen bridge (Î¼-oxo) of the manganese tetramer. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15561-15566.	7.1	148
75	L-Edge X-ray Absorption Spectroscopy of Dilute Systems Relevant to Metalloproteins Using an X-ray Free-Electron Laser. Journal of Physical Chemistry Letters, 2013, 4, 3641-3647.	4.6	64
76	Simultaneous Femtosecond X-ray Spectroscopy and Diffraction of Photosystem II at Room Temperature. Science, 2013, 340, 491-495.	12.6	378
77	Reflections on substrate water and dioxygen formation. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 1020-1030.	1.0	234
78	Artificial photosynthesis as a frontier technology for energy sustainability. Energy and Environmental Science, 2013, 6, 1074.	30.8	284
79	Electronic Structural Changes of Mn in the Oxygen-Evolving Complex of Photosystem II during the Catalytic Cycle. Inorganic Chemistry, 2013, 52, 5642-5644.	4.0	57
80	Studying the oxidation of water to molecular oxygen in photosynthetic and artificial systems by time-resolved membrane-inlet mass spectrometry. Frontiers in Plant Science, 2013, 4, 473.	3.6	33
81	An EPR and ENDOR Spectroscopic Investigation of the Ca2+-Depleted Oxygen-Evolving Complex of Photosystem II. Advanced Topics in Science and Technology in China, 2013, , 239-243.	0.1	0
82	Energy-dispersive X-ray emission spectroscopy using an X-ray free-electron laser in a shot-by-shot mode. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19103-19107.	7.1	113
83	Nanoflow electrospinning serial femtosecond crystallography. Acta Crystallographica Section D: Biological Crystallography, 2012, 68, 1584-1587.	2.5	167
84	An Institutional Approach to Solar Fuels Research. Australian Journal of Chemistry, 2012, 65, 573.	0.9	5
85	Detection of the Water-Binding Sites of the Oxygen-Evolving Complex of Photosystem II Using W-Band ¹⁷O Electronâ€“Electron Double Resonance-Detected NMR Spectroscopy. Journal of the American Chemical Society, 2012, 134, 16619-16634.	13.7	248
86	The Basic Properties of the Electronic Structure of the Oxygen-evolving Complex of Photosystem II Are Not Perturbed by Ca2+ Removal. Journal of Biological Chemistry, 2012, 287, 24721-24733.	3.4	56
87	Room temperature femtosecond X-ray diffraction of photosystem II microcrystals. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9721-9726.	7.1	144
88	Probing the turnover efficiency of photosystem II membrane fragments with different electron acceptors. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1208-1212.	1.0	29
89	Electronic Structure of a Weakly Antiferromagnetically Coupled Mn^{II}Mn^{III}Model Relevant to Manganese Proteins: A Combined EPR,⁵⁵Mn-ENDOR, and DFT Study. Inorganic Chemistry, 2011, 50, 8238-8251.	4.0	55
90	Effect of Ca²⁺/Sr²⁺ Substitution on the Electronic Structure of the Oxygen-Evolving Complex of Photosystem II: A Combined Multifrequency EPR, ⁵⁵Mn-ENDOR, and DFT Study of the S₂ State. Journal of the American Chemical Society, 2011, 133, 3635-3648.	13.7	211

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91	Theoretical Evaluation of Structural Models of the S₂ State in the Oxygen Evolving Complex of Photosystem II: Protonation States and Magnetic Interactions. Journal of the American Chemical Society, 2011, 133, 19743-19757.	13.7	271
92	The electronic structures of the S2 states of the oxygen-evolving complexes of photosystem II in plants and cyanobacteria in the presence and absence of methanol. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 829-840.	1.0	81
93	Calcium Manganese Oxides as Oxygen Evolution Catalysts: O₂ Formation Pathways Indicated by ¹⁸Oâ€Labelling Studies. Chemistry - A European Journal, 2011, 17, 5415-5423.	3.3	95
94	Importance of Post-Translational Modifications for Functionality of a Chloroplast-Localized Carbonic Anhydrase (CAH1) in Arabidopsis thaliana. PLoS ONE, 2011, 6, e21021.	2.5	64
95	Membrane-inlet mass spectrometry reveals a high driving force for oxygen production by photosystem II. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3602-3607.	7.1	49
96	Photosynthetic O2 Evolution. RSC Energy and Environment Series, 2011, , 163-207.	0.5	17
97	Is Mn-Bound Substrate Water Protonated in the S 2 State of Photosystem II?. Applied Magnetic Resonance, 2010, 37, 123-136.	1.2	29
98	Photo-catalytic oxidation of a di-nuclear manganese centre in an engineered bacterioferritin â€˜reaction centreâ€™. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 1112-1121.	1.0	42
99	A New Quantum Chemical Approach to the Magnetic Properties of Oligonuclear Transitionâ€Metal Complexes: Application to a Model for the Tetranuclear Manganese Cluster of Photosystemâ€…II. Chemistry - A European Journal, 2009, 15, 5108-5123.	3.3	123
100	Catalysts for Solar Water Splitting. ChemSusChem, 2009, 2, 47-48.	6.8	12
101	Special educational issue on â€˜Basics and application of biophysical techniques in photosynthesis and related processesâ€™. Photosynthesis Research, 2009, 101, 89-92.	2.9	5
102	On-line mass spectrometry: membrane inlet sampling. Photosynthesis Research, 2009, 102, 511-522.	2.9	117
103	Special educational issue on â€˜Basics and application of biophysical techniques in photosynthesis and related processesâ€™â€"Part B. Photosynthesis Research, 2009, 102, 103-106.	2.9	2
104	X-ray Emission Spectroscopy To Study Ligand Valence Orbitals in Mn Coordination Complexes. Journal of the American Chemical Society, 2009, 131, 13161-13167.	13.7	135
105	Structure of the oxygen-evolving complex of photosystem II: information on the S2 state through quantum chemical calculation of its magnetic properties. Physical Chemistry Chemical Physics, 2009, 11, 6788.	2.8	121
106	Effects of methanol on the S i -state transitions in photosynthetic water-splitting. Photosynthesis Research, 2008, 98, 251-260.	2.9	25
107	S2.9 Hydrogencarbonate is not a structural part of the Mn4OxCa cluster in photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, S23.	1.0	0
108	Formation of stoichiometrically 18O-labelled oxygen from the oxidation of 18O-enriched water mediated by a dinuclear manganese complexâ€"a mass spectrometry and EPR study. Energy and Environmental Science, 2008, 1, 668.	30.8	102

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109	Hydrogencarbonate is not a tightly bound constituent of the water-oxidizing complex in photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 532-539.	1.0	35
110	Solar water-splitting into H2 and O2: design principles of photosystem II and hydrogenases. Energy and Environmental Science, 2008, 1, 15.	30.8	388
111	Probing Mode and Site of Substrate Water Binding to the Oxygen-Evolving Complex in the S₂ State of Photosystem II by ¹⁷O-HYSCORE Spectroscopy. Journal of the American Chemical Society, 2008, 130, 786-787.	13.7	27
112	High-resolution structure of the photosynthetic Mn₄Ca catalyst from X-ray spectroscopy. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1139-1147.	4.0	42
113	Focusing the view on nature's water-splitting catalyst. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1167-1177.	4.0	60
114	Formate-Induced Release of Carbon Dioxide/ Hydrogencarbonate from Photosystem II. , 2008, , 495-498.		1
115	Mass Spectrometry-Based Methods for Studying Kinetics and Dynamics in Biological Systems. Advances in Photosynthesis and Respiration, 2008, , 167-190.	1.0	13
116	Structure of the Photosynthetic Mn4Ca Cluster Using X-ray Spectroscopy. , 2008, , 533-538.		0
117	Electronic Structure and Oxidation State Changes in the Mn4Ca Cluster of Photosystem II. , 2008, , 529-532.		0
118	Effects of Chloride/Bromide Substitution on Substrate Water Exchange Rates in Photosystem II. , 2008, , 369-371.		0
119	Substrate Water Bound to the S2-State of the Mn4OxCa Cluster in Photosystem II Studied by Advanced Pulse EPR Spectroscopy. , 2008, , 503-507.		0
120	Structure and Orientation of the Mn4Ca Cluster in Plant Photosystem II Membranes Studied by Polarized Range-extended X-ray Absorption Spectroscopy*. Journal of Biological Chemistry, 2007, 282, 7198-7208.	3.4	91
121	Electronic Structure of the Mn₄O<i>_x</i>Ca Cluster in the S₀and S₂States of the Oxygen-Evolving Complex of Photosystem II Based on Pulse⁵⁵Mn-ENDOR and EPR Spectroscopy. Journal of the American Chemical Society, 2007, 129, 13421-13435.	13.7	230
122	Chapter 17. Photosynthetic Water Splitting. Comprehensive Series in Photochemical and Photobiological Sciences, 2007, , 291-349.	0.3	13
123	Electronic Structure of the Mn4Ca Cluster in the Oxygen-Evolving Complex of Photosystem II Studied by Resonant Inelastic X-Ray Scattering. AIP Conference Proceedings, 2007, , .	0.4	0
124	Valence-to-Core X-Ray Emission Spectroscopy as a Tool for Investigation of Organometallic Systems. AIP Conference Proceedings, 2007, , .	0.4	0
125	Interactions of photosystem II with bicarbonate, formate and acetate. Photosynthesis Research, 2007, 94, 247-264.	2.9	28
126	Characterization of the water oxidizing complex of photosystem II of the Chl d-containing cyanobacterium Acaryochloris marina via its reactivity towards endogenous electron donors and acceptors. Physical Chemistry Chemical Physics, 2006, 8, 3460-3466.	2.8	37

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127	Where Water Is Oxidized to Dioxygen: Structure of the Photosynthetic Mn4Ca Cluster. Science, 2006, 314, 821-825.	12.6	782
128	Pulse EPR, 55Mn-ENDOR and ELDOR-detected NMR of the S2-state of the oxygen evolving complex in Photosystem II. Photosynthesis Research, 2005, 84, 347-353.	2.9	37
129	Evidence That Bicarbonate Is Not the Substrate in Photosynthetic Oxygen Evolution. Plant Physiology, 2005, 139, 1444-1450.	4.8	53
130	X-ray damage to the Mn4Ca complex in single crystals of photosystem II: A case study for metalloprotein crystallography. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12047-12052.	7.1	585
131	Enzymatic Characterization of Membrane-Associated Hepatitis C Virus NS3-4A Heterocomplex Serine Protease Activity Expressed in Human Cellsâ€. Biochemistry, 2005, 44, 6586-6596.	2.5	16
132	High-Resolution Mn EXAFS of the Oxygen-Evolving Complex in Photosystem II:Â Structural Implications for the Mn4Ca Cluster. Journal of the American Chemical Society, 2005, 127, 14974-14975.	13.7	189
133	Electron Spinâ˘'Lattice Relaxation of the S0 State of the Oxygen-Evolving Complex in Photosystem II and of Dinuclear Manganese Model Complexes. Biochemistry, 2005, 44, 9368-9374.	2.5	57
134	55Mn Pulse ENDOR at 34 GHz of the S0and S2States of the Oxygen-Evolving Complex in Photosystem II. Journal of the American Chemical Society, 2005, 127, 2392-2393.	13.7	174
135	Mechanism of Photosynthetic Oxygen Production. , 2005, , 567-608.		78
136	Biophysical studies of Photosystem II and related model systems. Physical Chemistry Chemical Physics, 2004, 6, E11-E12.	2.8	2
137	Orientation of Calcium in the Mn4Ca Cluster of the Oxygen-Evolving Complex Determined Using Polarized Strontium EXAFS of Photosystem II Membranesâ€. Biochemistry, 2004, 43, 13271-13282.	2.5	62
138	Evaluation of different mechanistic proposals for water oxidation in photosynthesis on the basis of Mn4OxCa structures for the catalytic site and spectroscopic data. Physical Chemistry Chemical Physics, 2004, 6, 4764.	2.8	193
139	Recent pulsed EPR studies of the Photosystem II oxygen-evolving complex: implications as to water oxidation mechanisms. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1655, 158-171.	1.0	204
140	Nitric Oxide-Induced Formation of the S-2State in the Oxygen-Evolving Complex of Photosystem II fromSynechococcus elongatusâ€. Biochemistry, 2003, 42, 1016-1023.	2.5	15
141	Functional Differences of Photosystem II fromSynechococcus elongatusand Spinach Characterized by Flash Induced Oxygen Evolution Patternsâ€. Biochemistry, 2003, 42, 8929-8938.	2.5	54
142	The Mn Cluster in the S0 State of the Oxygen-Evolving Complex of Photosystem II Studied by EXAFS Spectroscopy:â€‰ Are There Three Di-Î¼-oxo-bridged Mn2 Moieties in the Tetranuclear Mn Complex?. Journal of the American Chemical Society, 2002, 124, 7459-7471.	13.7	175
143	Absence of Mn-Centered Oxidation in the S2â†' S3Transition:Â Implications for the Mechanism of Photosynthetic Water Oxidation. Journal of the American Chemical Society, 2001, 123, 7804-7820.	13.7	295
144	High-resolution X-ray spectroscopy of rare events: a different look at local structure and chemistry. Journal of Synchrotron Radiation, 2001, 8, 199-203.	2.4	45

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145	Towards understanding the chemistry of photosynthetic oxygen evolution: dynamic structural changes, redox states and substrate water binding of the Mn cluster in photosystem II. Biochimica Et Biophysica Acta - Bioenergetics, 2000, 1459, 481-488.	1.0	41
146	Kinetic Determination of the Fast Exchanging Substrate Water Molecule in the S3 State of Photosystem II,. Biochemistry, 1998, 37, 16908-16914.	2.5	126
147	Refined Model of the Oxidation States and Structures of the Mn/Ca/Cl Cluster of the Oxygen Evolving Complex of Photosystem II. , 1998, , 1273-1278.		3
148	Substrate Water 18O Exchange Kinetics in the S2 State of Photosystem II. , 1998, , 1307-1310.		5
149	Calcium and Chloride Cofactors of the Oxygen Evolving Complex - X-Ray Absorption Spectroscopy Evidence for A Mn/Ca/Cl Heteronuclear Cluster. , 1998, , 1399-1402.		10
150	Detection of an EPR Multiline Signal for the S0* State in Photosystem II. Biochemistry, 1997, 36, 11055-11060.	2.5	183
151	S-3State of the Water Oxidase in Photosystem IIâ€. Biochemistry, 1997, 36, 6862-6873.	2.5	90
152	The S0 State of the Oxygen-Evolving Complex in Photosystem II Is Paramagnetic:â€‰ Detection of an EPR Multiline Signal. Journal of the American Chemical Society, 1997, 119, 11349-11350.	13.7	192
153	On the functional significance of substrate accessibility in the photosynthetic water oxidation mechanism. Physiologia Plantarum, 1996, 96, 342-350.	5.2	74
154	On the functional significance of substrate accessibility in the photosynthetic water oxidation mechanism. Physiologia Plantarum, 1996, 96, 342-350.	5.2	66
155	Detection of one slowly exchanging substrate water molecule in the S3 state of photosystem II.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 3209-3213.	7.1	270
156	Structural Changes in the Water-Oxidizing Complex Monitored via the pH Dependence of the Reduction Rate of Redox State S1 by Hydrazine and Hydroxylamine in Isolated Spinach Thylakoids. Biochemistry, 1995, 34, 6175-6182.	2.5	16
157	Analyses of pH-Induced Modifications of the Period Four Oscillation of Flash-Induced Oxygen Evolution Reveal Distinct Structural Changes of the Photosystem II Donor Side at Characteristic pH Values. Biochemistry, 1994, 33, 10896-10905.	2.5	57
158	Structure-function relationships in photosynthetic water oxidation. Biochemical Society Transactions, 1994, 22, 318-322.	3.4	31
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