Gary W Brudvig

List of Publications by Citations

255 papers	19,273 citations	73 h-index	133 g-index
276 ext. papers	21,270 ext. citations	10.1 avg, IF	7.05 L-index

#	Paper	IF	Citations
255	Water-splitting chemistry of photosystem II. *Chemical Reviews*, **2006**, 106, 4455-83	68.1	1306
254	Comparing photosynthetic and photovoltaic efficiencies and recognizing the potential for improvement. *Science*, **2011**, 332, 805-9	33.3	1143
253	Molecular Catalysts for Water Oxidation. *Chemical Reviews*, **2015**, 115, 12974-3005	68.1	787
252	A functional model for O-O bond formation by the O2-evolving complex in photosystem II. *Science*, **1999**, 283, 1524-7	33.3	646
251	Highly active and robust Cp* iridium complexes for catalytic water oxidation. *Journal of the American Chemical Society*, **2009**, 131, 8730-1	16.4	516
250	Half-sandwich iridium complexes for homogeneous water-oxidation catalysis. *Journal of the American Chemical Society*, **2010**, 132, 16017-29	16.4	468
249	Active sites of copper-complex catalytic materials for electrochemical carbon dioxide reduction. *Nature Communications*, **2018**, 9, 415	17.4	338
248	Electrochemical CO2 Reduction to Hydrocarbons on a Heterogeneous Molecular Cu Catalyst in Aqueous Solution. *Journal of the American Chemical Society*, **2016**, 138, 8076-9	16.4	329
247	Quantum mechanics/molecular mechanics study of the catalytic cycle of water splitting in photosystem II. *Journal of the American Chemical Society*, **2008**, 130, 3428-42	16.4	316
246	Energy conversion in natural and artificial photosynthesis. *Chemistry and Biology*, **2010**, 17, 434-47		315
245	Light-driven water oxidation for solar fuels. *Coordination Chemistry Reviews*, **2012**, 256, 2503-2520	23.2	307
244	Oxidation of Organic Compounds in Water by Unactivated Peroxymonosulfate. *Environmental Science & Technology*, **2018**, 52, 5911-5919	10.3	306
243	Characterization of the O(2)-evolving reaction catalyzed by [(terpy)(H2O)Mn(III)(O)2Mn(IV)(OH2)(terpy)](NO3)3 (terpy = 2,2′:6′,2"-terpyridine). *Journal of the American Chemical Society*, **2001**, 123, 423-30	16.4	306
242	Distinguishing homogeneous from heterogeneous catalysis in electrode-driven water oxidation with molecular iridium complexes. *Journal of the American Chemical Society*, **2011**, 133, 10473-81	16.4	263
241	Artificial photosynthesis as a frontier technology for energy sustainability. *Energy and Environmental Science*, **2013**, 6, 1074	35.4	251
240	A visible light water-splitting cell with a photoanode formed by codeposition of a high-potential porphyrin and an iridium water-oxidation catalyst. *Energy and Environmental Science*, **2011**, 4, 2389	35.4	237
239	A molecular catalyst for water oxidation that binds to metal oxide surfaces. *Nature Communications* , **2015**, 6, 6469	17.4	218

238	Electron transfer in photosystem II at cryogenic temperatures. *Biochemistry*, **1985**, 24, 8114-20	3.2	213
237	Facet-dependent photoelectrochemical performance of TiO2 nanostructures: an experimental and computational study. *Journal of the American Chemical Society*, **2015**, 137, 1520-9	16.4	205
236	Comparison of primary oxidants for water-oxidation catalysis. *Chemical Society Reviews*, **2013**, 42, 2247-53	58.5	204
235	Anodic deposition of a robust iridium-based water-oxidation catalyst from organometallic precursors. *Chemical Science*, **2011**, 2, 94-98	9.4	199
234	S1-state model of the O2-evolving complex of photosystem II. *Biochemistry*, **2011**, 50, 6308-11	3.2	196
233	Structure-based mechanism of photosynthetic water oxidation. *Physical Chemistry Chemical Physics*, **2004**, 6, 4754	3.6	195
232	Precursor transformation during molecular oxidation catalysis with organometallic iridium complexes. *Journal of the American Chemical Society*, **2013**, 135, 10837-51	16.4	176
231	Water oxidation chemistry of photosystem II. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2008**, 363, 1211-8; discussion 1218-9	5.8	173
230	A guide to electron paramagnetic resonance spectroscopy of Photosystem II membranes. *Biochimica Et Biophysica Acta - Bioenergetics*, **1991**, 1056, 1-18	4.6	173
229	Stable iridium dinuclear heterogeneous catalysts supported on metal-oxide substrate for solar water oxidation. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 2902-2907	11.5	156
228	Quantifying the ion selectivity of the Ca2+ site in photosystem II: evidence for direct involvement of Ca2+ in O2 formation. *Biochemistry*, **2001**, 40, 7937-45	3.2	154
227	Anchoring groups for photocatalytic water oxidation on metal oxide surfaces. *Chemical Society Reviews*, **2017**, 46, 6099-6110	58.5	146
226	Acetylacetonate anchors for robust functionalization of TiO2 nanoparticles with Mn(II)-terpyridine complexes. *Journal of the American Chemical Society*, **2008**, 130, 14329-38	16.4	137
225	The O-Evolving Complex of Photosystem II: Recent Insights from Quantum Mechanics/Molecular Mechanics (QM/MM), Extended X-ray Absorption Fine Structure (EXAFS), and Femtosecond X-ray Crystallography Data. *Accounts of Chemical Research*, **2017**, 50, 41-48	24.3	134
224	Computational studies of the O(2)-evolving complex of photosystem II and biomimetic oxomanganese complexes. *Coordination Chemistry Reviews*, **2008**, 252, 395-415	23.2	134
223	Iridium-based complexes for water oxidation. *Dalton Transactions*, **2015**, 44, 12452-72	4.3	133
222	Ammonia binds to the manganese site of the oxygen-evolving complex of photosystem II in the S2 state. *Journal of the American Chemical Society*, **1986**, 108, 4018-4022	16.4	132
221	The effect of temperature on the formation and decay of the multiline EPR signal species associated with photosynthetic oxygen evolution. *Biochimica Et Biophysica Acta - Bioenergetics*, **1983**, 723, 366-371	4.6	131

220	Electroreduction of CO Catalyzed by a Heterogenized Zn-Porphyrin Complex with a Redox-Innocent Metal Center. *ACS Central Science*, **2017**, 3, 847-852	16.8	130
219	QM/MM Models of the O2-Evolving Complex of Photosystem II. *Journal of Chemical Theory and Computation*, **2006**, 2, 1119-34	6.4	126
218	Dimer-of-dimers model for the oxygen-evolving complex of photosystem II. Synthesis and properties of [MnIV4O5(terpy)4(H2O)2](ClO4)6. *Journal of the American Chemical Society*, **2004**, 126, 7345-9	16.4	123
217	Energy Conversion in Photosynthesis: A Paradigm for Solar Fuel Production. *Annual Review of Condensed Matter Physics*, **2011**, 2, 303-327	19.7	117
216	An Iridium(IV) Species, [Cp*Ir(NHC)Cl]+, Related to a Water-Oxidation Catalyst. *Organometallics*, **2011**, 30, 965-973	3.8	116
215	Photosynthetic water oxidation: insights from manganese model chemistry. *Accounts of Chemical Research*, **2015**, 48, 567-74	24.3	115
214	Structural-functional role of chloride in photosystem II. *Biochemistry*, **2011**, 50, 6312-5	3.2	114
213	Progress Toward a Molecular Mechanism of Water Oxidation in Photosystem II. *Annual Review of Physical Chemistry*, **2017**, 68, 101-116	15.7	111
212	Hematite-Based Solar Water Splitting in Acidic Solutions: Functionalization by Mono- and Multilayers of Iridium Oxygen-Evolution Catalysts. *Angewandte Chemie - International Edition*, **2015**, 54, 11428-32	16.4	111
211	Characterization of carotenoid and chlorophyll photooxidation in photosystem II. *Biochemistry*, **2001**, 40, 193-203	3.2	111
210	Electrocatalytic Water Oxidation by a Copper(II) Complex of an Oxidation-Resistant Ligand. *ACS Catalysis*, **2017**, 7, 3384-3387	13.1	109
209	Ultrafast photodriven intramolecular electron transfer from an iridium-based water-oxidation catalyst to perylene diimide derivatives. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 15651-6	11.5	108
208	Comparison of heterogenized molecular and heterogeneous oxide catalysts for photoelectrochemical water oxidation. *Energy and Environmental Science*, **2016**, 9, 1794-1802	35.4	104
207	A model of the oxygen-evolving center of photosystem II predicted by structural refinement based on EXAFS simulations. *Journal of the American Chemical Society*, **2008**, 130, 6728-30	16.4	103
206	Mechanistic Study of an Improved Ni Precatalyst for Suzuki-Miyaura Reactions of Aryl Sulfamates: Understanding the Role of Ni(I) Species. *Journal of the American Chemical Society*, **2017**, 139, 922-936	16.4	102
205	Plasmonic Enhancement of Dye-Sensitized Solar Cells Using Core–Shell–Shell Nanostructures. *Journal of Physical Chemistry C*, **2013**, 117, 927-934	3.8	102
204	Heme biomolecule as redox mediator and oxygen shuttle for efficient charging of lithium-oxygen batteries. *Nature Communications*, **2016**, 7, 12925	17.4	98
203	Electrochemical activation of Cp* iridium complexes for electrode-driven water-oxidation catalysis. *Journal of the American Chemical Society*, **2014**, 136, 13826-34	16.4	98

202	Manganese and calcium requirements for reconstitution of oxygen-evolution activity in manganese-depleted photosystem II membranes. *Biochemistry*, **1989**, 28, 8181-90	3.2	98
201	Active and resting states of the O2-evolving complex of photosystem II. *Biochemistry*, **1985**, 24, 3035-43	3.2	96
200	Magnetic properties of manganese in the photosynthetic oxygen-evolving complex. *Journal of the American Chemical Society*, **1985**, 107, 2643-2648	16.4	95
199	Binding of amines to the O2-evolving center of photosystem II. *Biochemistry*, **1986**, 25, 6479-86	3.2	95
198	Water-stable, hydroxamate anchors for functionalization of TiO2 surfaces with ultrafast interfacial electron transfer. *Energy and Environmental Science*, **2010**, 3, 917	35.4	94
197	Analysis of Dipolar and Exchange Interactions between Manganese and Tyrosine Z in the S2YZ□ State of Acetate-Inhibited Photosystem II via EPR Spectral Simulations at X- and Q-Bands. *Journal of Physical Chemistry B*, **1998**, 102, 8327-8335	3.4	87
196	Proton-coupled electron transfer in manganese complex [(bpy)2Mn(O)2Mn(bpy)2]3+. *Journal of the American Chemical Society*, **1989**, 111, 9249-9250	16.4	86
195	S0-State model of the oxygen-evolving complex of photosystem II. *Biochemistry*, **2013**, 52, 7703-6	3.2	84
194	Sodium periodate as a primary oxidant for water-oxidation catalysts. *Inorganic Chemistry*, **2012**, 51, 6147-52	5.1	83
193	A tridentate Ni pincer for aqueous electrocatalytic hydrogen production. *New Journal of Chemistry*, **2012**, 36, 1149	3.6	83
192	Modular Assembly of High-Potential Zinc Porphyrin Photosensitizers Attached to TiO2 with a Series of Anchoring Groups. *Journal of Physical Chemistry C*, **2013**, 117, 14526-14533	3.8	82
191	Oxygen-evolving complex of Photosystem II: an analysis of second-shell residues and hydrogen-bonding networks. *Current Opinion in Chemical Biology*, **2015**, 25, 152-8	9.7	82
190	Hydroxamate anchors for water-stable attachment to TiO2 nanoparticles. *Energy and Environmental Science*, **2009**, 2, 1173	35.4	82
189	Quantum mechanics/molecular mechanics structural models of the oxygen-evolving complex of photosystem II. *Current Opinion in Structural Biology*, **2007**, 17, 173-80	8.1	81
188	Ultrathin dendrimer-graphene oxide composite film for stable cycling lithium-sulfur batteries. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 3578-3583	11.5	78
187	Ultrafast Photooxidation of Mn(II)□terpyridine Complexes Covalently Attached to TiO2 Nanoparticles. *Journal of Physical Chemistry C*, **2007**, 111, 11982-11990	3.8	77
186	Reactions of hydroxylamine with the electron-donor side of photosystem II. *Biochemistry*, **1987**, 26, 8285-95	3.2	77
185	Mutation of lysine 317 in the D2 subunit of photosystem II alters chloride binding and proton transport. *Biochemistry*, **2013**, 52, 4758-73	3.2	76

184	Electron-transfer events leading to reconstitution of oxygen-evolution activity in manganese-depleted photosystem II membranes. *Biochemistry*, **1990**, 29, 1385-92	3.2	76
183	Identification of histidine 118 in the D1 polypeptide of photosystem II as the axial ligand to chlorophyll Z. *Biochemistry*, **1998**, 37, 10040-6	3.2	75
182	Oxomanganese complexes for natural and artificial photosynthesis. *Current Opinion in Chemical Biology*, **2012**, 16, 11-8	9.7	73
181	Bioinorganic Chemistry of Manganese Related to Photosynthetic Oxygen Evolution. *Progress in Inorganic Chemistry*,99-142		73
180	An anionic N-donor ligand promotes manganese-catalyzed water oxidation. *Inorganic Chemistry*, **2013**, 52, 7615-22	5.1	71
179	Deposition of an oxomanganese water oxidation catalyst on TiO2 nanoparticles: computational modeling, assembly and characterization. *Energy and Environmental Science*, **2009**, 2, 230	35.4	71
178	Comparison of dppf-Supported Nickel Precatalysts for the Suzuki-Miyaura Reaction: The Observation and Activity of Nickel(I). *Angewandte Chemie - International Edition*, **2015**, 54, 13352-6	16.4	70
177	High-frequency EPR study of a new mononuclear manganese(III) complex:. [(terpy)Mn(N3)3] (terpy = 2,2′:6′,2″-terpyridine). *Inorganic Chemistry*, **2001**, 40, 1698-703	5.1	67
176	Analysis of the radiation-damage-free X-ray structure of photosystem II in light of EXAFS and QM/MM data. *Biochemistry*, **2015**, 54, 1713-6	3.2	65
175	Interfacial electron transfer into functionalized crystalline polyoxotitanate nanoclusters. *Journal of the American Chemical Society*, **2012**, 134, 8911-7	16.4	65
174	Reversible binding of nitric oxide to tyrosyl radicals in photosystem II. Nitric oxide quenches formation of the S3 EPR signal species in acetate-inhibited photosystem II. *Biochemistry*, **1996**, 35, 15080-7	3.2	65
173	QM/MM computational studies of substrate water binding to the oxygen-evolving centre of photosystem II. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2008**, 363, 1149-56; discussion 1156	5.8	64
172	Q-band EPR of the S2 state of photosystem II confirms an S = 5/2 origin of the X-band g = 4.1 signal. *Biophysical Journal*, **2004**, 87, 2885-96	2.9	64
171	A Pyridine Alkoxide Chelate Ligand That Promotes Both Unusually High Oxidation States and Water-Oxidation Catalysis. *Accounts of Chemical Research*, **2017**, 50, 952-959	24.3	63
170	Fluorescence quenching by chlorophyll cations in photosystem II. *Biochemistry*, **1997**, 36, 11351-9	3.2	63
169	Heterogenized Iridium Water-Oxidation Catalyst from a Silatrane Precursor. *ACS Catalysis*, **2016**, 6, 5371-5377	10.6	63
168	Experimental Support for a Single Electron-Transfer Oxidation Mechanism in Firefly Bioluminescence. *Journal of the American Chemical Society*, **2015**, 137, 7592-5	16.4	61
167	Bioinspired High-Potential Porphyrin Photoanodes. *Journal of Physical Chemistry C*, **2012**, 116, 4892-4902	3.8	61

166	NH3 Binding to the S2 State of the O2-Evolving Complex of Photosystem II: Analogue to H2O Binding during the S2 -jS3 Transition. *Biochemistry*, **2015**, 54, 5783-6	3.2	60
165	Photoelectrochemical hole injection revealed in polyoxotitanate nanocrystals functionalized with organic adsorbates. *Journal of the American Chemical Society*, **2014**, 136, 16420-9	16.4	59
164	Oxygen-evolving complex of photosystem II: correlating structure with spectroscopy. *Physical Chemistry Chemical Physics*, **2014**, 16, 11812-21	3.6	59
163	Chloride regulation of enzyme turnover: application to the role of chloride in photosystem II. *Biochemistry*, **2011**, 50, 2725-34	3.2	59
162	Computational insights into the O2-evolving complex of photosystem II. *Photosynthesis Research*, **2008**, 97, 91-114	3.7	58
161	Isolation and characterization of spinach photosystem II membrane-associated catalase and polyphenol oxidase. *Biochemistry*, **1996**, 35, 16255-63	3.2	58
160	Nickel(I) monomers and dimers with cyclopentadienyl and indenyl ligands. *Chemistry - A European Journal*, **2014**, 20, 5327-37	4.8	57
159	Competitive binding of acetate and chloride in photosystem II. *Biochemistry*, **1999**, 38, 6604-13	3.2	57
158	Photosynthetic water oxidation: binding and activation of substrate waters for O-O bond formation. *Faraday Discussions*, **2015**, 185, 37-50	3.6	56
157	End-On Bound Iridium Dinuclear Heterogeneous Catalysts on WO for Solar Water Oxidation. *ACS Central Science*, **2018**, 4, 1166-1172	16.8	54
156	Solution Structures of Highly Active Molecular Ir Water-Oxidation Catalysts from Density Functional Theory Combined with High-Energy X-ray Scattering and EXAFS Spectroscopy. *Journal of the American Chemical Society*, **2016**, 138, 5511-4	16.4	54
155	Cp* Iridium Precatalysts for Selective C–H Oxidation with Sodium Periodate As the Terminal Oxidant. *Organometallics*, **2013**, 32, 957-965	3.8	53
154	Development of an Improved System for the Carboxylation of Aryl Halides through Mechanistic Studies. *ACS Catalysis*, **2019**, 9, 3228-3241	13.1	52
153	Formation and decay of the S3 EPR signal species in acetate-inhibited photosystem II. *Biochemistry*, **1996**, 35, 1946-53	3.2	52
152	Rutile TiO2 as an Anode Material for Water-Splitting Dye-Sensitized Photoelectrochemical Cells. *ACS Energy Letters*, **2016**, 1, 603-606	20.1	51
151	S3 State of the O2-Evolving Complex of Photosystem II: Insights from QM/MM, EXAFS, and Femtosecond X-ray Diffraction. *Biochemistry*, **2016**, 55, 981-4	3.2	51
150	Electron Injection Dynamics from Photoexcited Porphyrin Dyes into SnO2 and TiO2 Nanoparticles. *Journal of Physical Chemistry C*, **2013**, 117, 21662-21670	3.8	51
149	Highly Active NiO Photocathodes for HO Production Enabled via Outer-Sphere Electron Transfer. *Journal of the American Chemical Society*, **2018**, 140, 4079-4084	16.4	50

148	Orientation of the tetranuclear manganese cluster and tyrosine Z in the O(2)-evolving complex of photosystem II: An EPR study of the S(2)Y(Z)(*) state in oriented acetate-inhibited photosystem II membranes. *Biochemistry*, **1999**, 38, 12758-67	3.2	50
147	A [3Fe-4S] cluster is required for tRNA thiolation in archaea and eukaryotes. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 12703-12708	11.5	48
146	Proton-Coupled Electron Transfer Involving Tyrosine Z in Photosystem II. *Journal of Physical Chemistry B*, **2002**, 106, 8189-8196	3.4	47
145	Silatranes for binding inorganic complexes to metal oxide surfaces. *Dalton Transactions*, **2015**, 44, 20312-53	4.5	46
144	High-Field EPR Study of Carotenoid and Chlorophyll Cation Radicals in Photosystem II. *Journal of Physical Chemistry B*, **2000**, 104, 10445-10448	3.4	45
143	Synthesis and Reactivity of Paramagnetic Nickel Polypyridyl Complexes Relevant to C(sp)-C(sp)Coupling Reactions. *Angewandte Chemie - International Edition*, **2019**, 58, 6094-6098	16.4	44
142	Crystallographic Data Support the Carousel Mechanism of Water Supply to the Oxygen-Evolving Complex of Photosystem II. *ACS Energy Letters*, **2017**, 2, 2299-2306	20.1	43
141	Nickel(I) Aryl Species: Synthesis, Properties, and Catalytic Activity. *ACS Catalysis*, **2018**, 8, 2526-2533	13.1	42
140	Stable Iridium(IV) Complexes of an Oxidation-Resistant Pyridine-Alkoxide Ligand: Highly Divergent Redox Properties Depending on the Isomeric Form Adopted. *Journal of the American Chemical Society*, **2015**, 137, 7243-50	16.4	41
139	Probing the Viability of Oxo-Coupling Pathways in Iridium-Catalyzed Oxygen Evolution. *Organometallics*, **2013**, 32, 5384-5390	3.8	40
138	Structural changes in the oxygen-evolving complex of photosystem II induced by the S1 to S2 transition: A combined XRD and QM/MM study. *Biochemistry*, **2014**, 53, 6860-2	3.2	39
137	Proton-Coupled Electron Transfer During the S-State Transitions of the Oxygen-Evolving Complex of Photosystem II. *Journal of Physical Chemistry B*, **2015**, 119, 7366-77	3.4	39
136	EPR spectroscopic characterization of neuronal NO synthase. *Biochemistry*, **1996**, 35, 2804-10	3.2	39
135	Calcium binding studies of photosystem II using a calcium-selective electrode. *Biochemistry*, **1998**, 37, 1532-9	3.2	37
134	Photodriven Oxidation of Surface-Bound Iridium-Based Molecular Water-Oxidation Catalysts on Perylene-3,4-dicarboximide-Sensitized TiO2 Electrodes Protected by an Al2O3 Layer. *Journal of Physical Chemistry C*, **2017**, 121, 3752-3764	3.8	35
133	Interfacial electron transfer in photoanodes based on phosphorus(V) porphyrin sensitizers co-deposited on SnO2 with the Ir(III)Cp* water oxidation precatalyst. *Journal of Materials Chemistry A*, **2015**, 3, 3868-3879	13	35
132	Mechanism of Manganese-Catalyzed Oxygen Evolution from Experimental and Theoretical Analyses of 18O Kinetic Isotope Effects. *ACS Catalysis*, **2015**, 5, 7104-7113	13.1	35
131	Ferrocene-Promoted Long-Cycle Lithium-Sulfur Batteries. *Angewandte Chemie - International Edition*, **2016**, 55, 14818-14822	16.4	34

130	Redox Activity of Oxo-Bridged Iridium Dimers in an N,O-Donor Environment: Characterization of Remarkably Stable Ir(IV,V) Complexes. *Journal of the American Chemical Society*, **2017**, 139, 9672-9683	16.4	34
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128	Facet-Dependent Kinetics and Energetics of Hematite for Solar Water Oxidation Reactions. *ACS Applied Materials & Interfaces*, **2019**, 11, 5616-5622	9.5	32
127	Electrostatic effects on proton coupled electron transfer in oxomanganese complexes inspired by the oxygen-evolving complex of photosystem II. *Journal of Physical Chemistry B*, **2013**, 117, 6217-26	3.4	32
126	Studies of the manganese site of photosystem II by electron spin resonance spectroscopy. *Journal of the Chemical Society Faraday Transactions I*, **1987**, 83, 3635		32
125	Energetics of the S State Spin Isomers of the Oxygen-Evolving Complex of Photosystem II. *Journal of Physical Chemistry B*, **2017**, 121, 1020-1025	3.4	31
124	High Oxidation State Iridium Mono-□xo Dimers Related to Water Oxidation Catalysis. *Journal of the American Chemical Society*, **2016**, 138, 15917-15926	16.4	31
123	Selective CO Production by Photoelectrochemical Methane Oxidation on TiO. *ACS Central Science*, **2018**, 4, 631-637	16.8	30
122	Water-Nucleophilic Attack Mechanism for the CuII(pyalk)2 Water-Oxidation Catalyst. *ACS Catalysis*, **2018**, 8, 7952-7960	13.1	30
121	Computational Design of Intrinsic Molecular Rectifiers Based on Asymmetric Functionalization of N-Phenylbenzamide. *Journal of Chemical Theory and Computation*, **2015**, 11, 5888-96	6.4	29
120	Antimony Complexes for Electrocatalysis: Activity of a Main-Group Element in Proton Reduction. *Angewandte Chemie - International Edition*, **2017**, 56, 9111-9115	16.4	28
119	Strongly Coupled Phenazine-Porphyrin Dyads: Light-Harvesting Molecular Assemblies with Broad Absorption Coverage. *ACS Applied Materials & Interfaces*, **2019**, 11, 8000-8008	9.5	28
118	Controlling the rectification properties of molecular junctions through molecule-electrode coupling. *Nanoscale*, **2016**, 8, 16357-16362	7.7	28
117	Computational insights on crystal structures of the oxygen-evolving complex of photosystem II with either Ca(2+) or Ca(2+) substituted by Sr(2+). *Biochemistry*, **2015**, 54, 820-5	3.2	28
116	A full set of iridium(iv) pyridine-alkoxide stereoisomers: highly geometry-dependent redox properties. *Chemical Science*, **2017**, 8, 1642-1652	9.4	27
115	Factors that determine the unusually low reduction potential of cytochrome c550 in cyanobacterial photosystem II. *Journal of Biological Inorganic Chemistry*, **2001**, 6, 708-16	3.7	27
114	Formation of the S2 state and structure of the Mn complex in photosystem II lacking the extrinsic 33 kilodalton polypeptide. *Photosynthesis Research*, **1987**, 12, 205-18	3.7	27
113	Endothelial Cell Autonomous Role of Akt1: Regulation of Vascular Tone and Ischemia-Induced Arteriogenesis. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2018**, 38, 870-879	9.4	26

112	New Ir Bis-Carbonyl Precursor for Water Oxidation Catalysis. *Inorganic Chemistry*, **2016**, 55, 2427-35	5.1	26
111	Direct Interfacial Electron Transfer from High-Potential Porphyrins into Semiconductor Surfaces: A Comparison of Linkers and Anchoring Groups. *Journal of Physical Chemistry C*, **2018**, 122, 13529-13539	3.8	25
110	Optimization of Photoanodes for Photocatalytic Water Oxidation by Combining a Heterogenized Iridium Water-Oxidation Catalyst with a High-Potential Porphyrin Photosensitizer. *ChemSusChem*, **2017**, 10, 4526-4534	8.3	25
109	Organosilatrane building blocks. *Tetrahedron Letters*, **2014**, 55, 1062-1064	2	24
108	Towards multielectron photocatalysis: a porphyrin array for lateral hole transfer and capture on a metal oxide surface. *Physical Chemistry Chemical Physics*, **2015**, 17, 12728-34	3.6	24
107	A Stable Coordination Complex of Rh(IV) in an N,O-Donor Environment. *Journal of the American Chemical Society*, **2015**, 137, 15692-5	16.4	24
106	Nanotechnology for catalysis and solar energy conversion. *Nanotechnology*, **2021**, 32, 042003	3.4	24
105	Probing the effect of mutations of asparagine 181 in the D1 subunit of photosystem II. *Biochemistry* , **2015**, 54, 1663-72	3.2	23
104	Mapping RNA-protein interactions in ribonuclease P from Escherichia coli using electron paramagnetic resonance spectroscopy. *Biochemistry*, **1999**, 38, 1705-14	3.2	23
103	Metal-Organic Framework Photoconductivity via Time-Resolved Terahertz Spectroscopy. *Journal of the American Chemical Society*, **2019**, 141, 9793-9797	16.4	22
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100	Cryo-EM Structure of Monomeric Photosystem II from Synechocystis sp. PCC 6803 Lacking the Water-Oxidation Complex. *Joule*, **2020**, 4, 2131-2148	27.8	22
99	Molecular titanium-hydroxamate complexes as models for TiO2 surface binding. *Chemical Communications*, **2016**, 52, 2972-5	5.8	21
98	Silatrane Anchors for Metal Oxide Surfaces: Optimization for Potential Photocatalytic and Electrocatalytic Applications. *ACS Applied Materials & Interfaces*, **2019**, 11, 5602-5609	9.5	21
97	The tetranuclear manganese cluster in photosystem II: location and magnetic properties of the S2 state as determined by saturation-recovery EPR spectroscopy. *Biochemistry*, **1997**, 36, 9735-46	3.2	21
96	High-Potential Porphyrins Supported on SnO2 and TiO2 Surfaces for Photoelectrochemical Applications. *Journal of Physical Chemistry C*, **2016**, 120, 28971-28982	3.8	21
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