Daniel G Nocera

List of Publications by Year
in descending order

264 papers	50,375 citations	3149 92 h-index	1413 221 g-index
271 all docs	271 docs citations	271 times ranked	37079 citing authors

#	Article	IF	Citations
1	Powering the planet: Chemical challenges in solar energy utilization. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15729-15735.	3.3	7,148
2	In Situ Formation of an Oxygen-Evolving Catalyst in Neutral Water Containing Phosphate and Co ²⁺. Science, 2008, 321, 1072-1075.	6.0	3,855
3	Solar Energy Supply and Storage for the Legacy and Nonlegacy Worlds. Chemical Reviews, 2010, 110, 6474-6502.	23.0	2,676
4	Wireless Solar Water Splitting Using Silicon-Based Semiconductors and Earth-Abundant Catalysts. Science, 2011, 334, 645-648.	6.0	1,559
5	The Artificial Leaf. Accounts of Chemical Research, 2012, 45, 767-776.	7.6	1,531
6	Comparing Photosynthetic and Photovoltaic Efficiencies and Recognizing the Potential for Improvement. Science, 2011, 332, 805-809.	6.0	1,369
7	Hydrogen Production by Molecular Photocatalysis. Chemical Reviews, 2007, 107, 4022-4047.	23.0	1,325
8	Mechanistic Studies of the Oxygen Evolution Reaction by a Cobalt-Phosphate Catalyst at Neutral pH. Journal of the American Chemical Society, 2010, 132, 16501-16509.	6.6	1,074
9	Fractionalized excitations in the spin-liquid state of a kagome-lattice antiferromagnet. Nature, 2012, 492, 406-410.	13.7	873
10	PROTON-COUPLED ELECTRON TRANSFER. Annual Review of Physical Chemistry, 1998, 49, 337-369.	4.8	797
11	Radical Initiation in the Class I Ribonucleotide Reductase:â€‰ Long-Range Proton-Coupled Electron Transfer?. Chemical Reviews, 2003, 103, 2167-2202.	23.0	770
12	Water splittingâ€“biosynthetic system with CO ₂ reduction efficiencies exceeding photosynthesis. Science, 2016, 352, 1210-1213.	6.0	760
13	Nickel-borate oxygen-evolving catalyst that functions under benign conditions. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10337-10341.	3.3	709
14	Cobaltâ€“phosphate oxygen-evolving compound. Chemical Society Reviews, 2009, 38, 109-114.	18.7	683
15	Structure and Valency of a Cobaltâˆ’Phosphate Water Oxidation Catalyst Determined by in Situ X-ray Spectroscopy. Journal of the American Chemical Society, 2010, 132, 13692-13701.	6.6	649
16	A Structurally PerfectS=1/2KagomÃ© Antiferromagnet. Journal of the American Chemical Society, 2005, 127, 13462-13463.	6.6	622
17	Structureâ€“Activity Correlations in a Nickelâ€“Borate Oxygen Evolution Catalyst. Journal of the American Chemical Society, 2012, 134, 6801-6809.	6.6	612
18	Electrolyte-Dependent Electrosynthesis and Activity of Cobalt-Based Water Oxidation Catalysts. Journal of the American Chemical Society, 2009, 131, 2615-2620.	6.6	590

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19	A Self-Healing Oxygen-Evolving Catalyst. Journal of the American Chemical Society, 2009, 131, 3838-3839.	6.6	521
20	Quantum spin liquids. Science, 2020, 367, .	6.0	513
21	EPR Evidence for Co(IV) Species Produced During Water Oxidation at Neutral pH. Journal of the American Chemical Society, 2010, 132, 6882-6883.	6.6	488
22	Electocatalytic Water Oxidation by Cobalt(III) Hangman Î²-Octafluoro Corroles. Journal of the American Chemical Society, 2011, 133, 9178-9180.	6.6	488
23	Influence of iron doping on tetravalent nickel content in catalytic oxygen evolving films. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1486-1491.	3.3	488
24	A Functionally Stable Manganese Oxide Oxygen Evolution Catalyst in Acid. Journal of the American Chemical Society, 2014, 136, 6002-6010.	6.6	474
25	Mechanistic Studies of the Oxygen Evolution Reaction Mediated by a Nickelâ€"Borate Thin Film Electrocatalyst. Journal of the American Chemical Society, 2013, 135, 3662-3674.	6.6	430
26	Proton-Coupled Electron Transfer in Biology: Results from Synergistic Studies in Natural and Model Systems. Annual Review of Biochemistry, 2009, 78, 673-699.	5.0	404
27	Highly active cobalt phosphate and borate based oxygen evolving catalysts operating in neutral and natural waters. Energy and Environmental Science, 2011, 4, 499-504.	15.6	402
28	Electronic Design Criteria for Oâˆ'O Bond Formation via Metalâˆ'Oxo Complexes. Inorganic Chemistry, 2008, 47, 1849-1861.	1.9	390
29	Quantum-dot optical temperature probes. Applied Physics Letters, 2003, 83, 3555-3557.	1.5	369
30	Chemistry of Personalized Solar Energy. Inorganic Chemistry, 2009, 48, 10001-10017.	1.9	368
31	Efficient solar-to-fuels production from a hybrid microbialâ€"water-splitting catalyst system. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2337-2342.	3.3	366
32	Nature of Activated Manganese Oxide for Oxygen Evolution. Journal of the American Chemical Society, 2015, 137, 14887-14904.	6.6	359
33	Role of Proton-Coupled Electron Transfer in Oâ€"O Bond Activation. Accounts of Chemical Research, 2007, 40, 543-553.	7.6	353
34	Solar Fuels and Solar Chemicals Industry. Accounts of Chemical Research, 2017, 50, 616-619.	7.6	333
35	Hydrogen Produced from Hydrohalic Acid Solutions by a Two-Electron Mixed-Valence Photocatalyst. Science, 2001, 293, 1639-1641.	6.0	309
36	Photocatalytic hydrogen production. Chemical Communications, 2011, 47, 9268.	2.2	300

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37	Topological Magnon Bands in a Kagome Lattice Ferromagnet. Physical Review Letters, 2015, 115, 147201.	2.9	289
38	The Nature of Lithium Battery Materials under Oxygen Evolution Reaction Conditions. Journal of the American Chemical Society, 2012, 134, 16959-16962.	6.6	287
39	Artificial photosynthesis as a frontier technology for energy sustainability. Energy and Environmental Science, 2013, 6, 1074.	15.6	284
40	Energy and environment policy case for a global project on artificial photosynthesis. Energy and Environmental Science, 2013, 6, 695.	15.6	264
41	Proton-coupled electron transfer: the mechanistic underpinning for radical transport and catalysis in biology. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 1351-1364.	1.8	262
42	Ten-percent solar-to-fuel conversion with nonprecious materials. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14057-14061.	3.3	262
43	Templated assembly of photoswitches significantly increases the energy-storage capacity of solar thermal fuels. Nature Chemistry, 2014, 6, 441-447.	6.6	261
44	Hydrogen Generation by Hangman Metalloporphyrins. Journal of the American Chemical Society, 2011, 133, 8775-8777.	6.6	255
45	Light-driven fine chemical production in yeast biohybrids. Science, 2018, 362, 813-816.	6.0	251
46	Photoinduced electron transfer mediated by a hydrogen-bonded interface. Journal of the American Chemical Society, 1992, 114, 4013-4015.	6.6	243
47	Spin chirality on a two-dimensional frustrated lattice. Nature Materials, 2005, 4, 323-328.	13.3	243
48	Oxygen reduction reactivity of cobalt(ii) hangman porphyrins. Chemical Science, 2010, 1, 411.	3.7	225
49	Reversible, Long-Range Radical Transfer in E. coli Class Ia Ribonucleotide Reductase. Accounts of Chemical Research, 2013, 46, 2524-2535.	7.6	223
50	Artificial Photosynthesis at Efficiencies Greatly Exceeding That of Natural Photosynthesis. Accounts of Chemical Research, 2019, 52, 3143-3148.	7.6	222
51	Nucleation, Growth, and Repair of a Cobalt-Based Oxygen Evolving Catalyst. Journal of the American Chemical Society, 2012, 134, 6326-6336.	6.6	216
52	Alternating layer addition approach to CdSe/CdS core/shell quantum dots with near-unity quantum yield and high on-time fractions. Chemical Science, 2012, 3, 2028.	3.7	207
53	Hangman Corroles: Efficient Synthesis and Oxygen Reaction Chemistry. Journal of the American Chemical Society, 2011, 133, 131-140.	6.6	197
54	Light-induced water oxidation at silicon electrodes functionalized with a cobalt oxygen-evolving catalyst. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10056-10061.	3.3	195

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55	Proton-Coupled Electron Transfer of Tyrosine Oxidation:â€‰ Buffer Dependence and Parallel Mechanisms. Journal of the American Chemical Society, 2007, 129, 15462-15464.	6.6	193
56	Probing Edge Site Reactivity of Oxidic Cobalt Water Oxidation Catalysts. Journal of the American Chemical Society, 2016, 138, 4229-4236.	6.6	178
57	Electrochemical trapping of metastable Mn ³⁺ ions for activation of MnO ₂ oxygen evolution catalysts. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E5261-E5268.	3.3	173
58	Design of template-stabilized active and earth-abundant oxygen evolution catalysts in acid. Chemical Science, 2017, 8, 4779-4794.	3.7	172
59	Ambient nitrogen reduction cycle using a hybrid inorganicâ€"biological system. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6450-6455.	3.3	167
60	Site Specific X-ray Anomalous Dispersion of the Geometrically Frustrated KagomÃ© Magnet, Herbertsmithite, ZnCu₃(OH)₆Cl₂. Journal of the American Chemical Society, 2010, 132, 16185-16190.	6.6	166
61	Role of pendant proton relays and proton-coupled electron transfer on the hydrogen evolution reaction by nickel hangman porphyrins. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15001-15006.	3.3	159
62	Electrochemical polymerization of pyrene derivatives on functionalized carbon nanotubes for pseudocapacitive electrodes. Nature Communications, 2015, 6, 7040.	5.8	159
63	Proton-Coupled Oâˆ'O Activation on a Redox Platform Bearing a Hydrogen-Bonding Scaffold. Journal of the American Chemical Society, 2003, 125, 1866-1876.	6.6	158
64	Electronic Structure Description of a [Co(III)₃Co(IV)O₄] Cluster: A Model for the Paramagnetic Intermediate in Cobalt-Catalyzed Water Oxidation. Journal of the American Chemical Society, 2011, 133, 15444-15452.	6.6	155
65	Blue semiconductor nanocrystal laser. Applied Physics Letters, 2005, 86, 073102.	1.5	154
66	Water Oxidation Catalysis by Co(II) Impurities in Co(III)₄O₄ Cubanes. Journal of the American Chemical Society, 2014, 136, 17681-17688.	6.6	152
67	Proton-coupled electron transfer kinetics for the hydrogen evolution reaction of hangman porphyrins. Energy and Environmental Science, 2012, 5, 7737.	15.6	151
68	Intermediate-Range Structure of Self-Assembled Cobalt-Based Oxygen-Evolving Catalyst. Journal of the American Chemical Society, 2013, 135, 6403-6406.	6.6	151
69	Protonâ€"Electron Transport and Transfer in Electrocatalytic Films. Application to a Cobalt-Based O2-Evolution Catalyst. Journal of the American Chemical Society, 2013, 135, 10492-10502.	6.6	151
70	Photoinduced Electron Transfer within a Donor-Acceptor Pair Juxtaposed by a Salt Bridge. Journal of the American Chemical Society, 1995, 117, 8051-8052.	6.6	148
71	Electrocatalytic four-electron reduction of oxygen to water by a highly flexible cofacial cobalt bisporphyrin. Chemical Communications, 2000, , 1355-1356.	2.2	148
72	Photocatalytic Oxidation of Hydrocarbons by a Bis-iron(III)-Î¼-oxo Pacman Porphyrin Using O2and Visible Light. Journal of the American Chemical Society, 2006, 128, 6546-6547.	6.6	139

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73	Nickel phlorin intermediate formed by proton-coupled electron transfer in hydrogen evolution mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 485-492.	3.3	133
74	â€œHangmanâ€•Porphyrins for the Assembly of a Model Heme Water Channel. Journal of the American Chemical Society, 2001, 123, 1513-1514.	6.6	129
75	Bidirectional and Unidirectional PCET in a Molecular Model of a Cobalt-Based Oxygen-Evolving Catalyst. Journal of the American Chemical Society, 2011, 133, 5174-5177.	6.6	127
76	Spin Frustration in 2D KagomÃ© Lattices: A Problem for Inorganic Synthetic Chemistry. Chemistry - A European Journal, 2004, 10, 3850-3859.	1.7	126
77	Mono-, Di-, Tri-, and Tetra-Substituted Fluorotyrosines:Â New Probes for Enzymes That Use Tyrosyl Radicals in Catalysisâ€. Journal of the American Chemical Society, 2006, 128, 1569-1579.	6.6	126
78	Trap-Free Halogen Photoelimination from Mononuclear Ni(III) Complexes. Journal of the American Chemical Society, 2015, 137, 6472-6475.	6.6	125
79	Ribonucleotide Reductases: Structure, Chemistry, and Metabolism Suggest New Therapeutic Targets. Annual Review of Biochemistry, 2020, 89, 45-75.	5.0	120
80	Elucidation of a Redox-Mediated Reaction Cycle for Nickel-Catalyzed Cross Coupling. Journal of the American Chemical Society, 2019, 141, 89-93.	6.6	119
81	pH Rate Profiles of FnY356â˘’R2s (n= 2, 3, 4) inEscherichiacoliRibonucleotide Reductase:Â Evidence that Y356Is a Redox-Active Amino Acid along the Radical Propagation Pathway. Journal of the American Chemical Society, 2006, 128, 1562-1568.	6.6	114
82	Halogen Photoreductive Elimination from Gold(III) Centers. Journal of the American Chemical Society, 2009, 131, 7411-7420.	6.6	109
83	Personalized Energy: The Home as a Solar Power Station and Solar Gas Station. ChemSusChem, 2009, 2, 387-390.	3.6	108
84	Carbon Dioxide Reduction by Iron Hangman Porphyrins. Organometallics, 2019, 38, 1219-1223.	1.1	108
85	Xanthene-Bridged Cofacial Bisporphyrins. Inorganic Chemistry, 2000, 39, 959-966.	1.9	107
86	Photo-assisted water oxidation with cobalt-based catalyst formed from thin-film cobalt metal on silicon photoanodes. Energy and Environmental Science, 2011, 4, 2058.	15.6	106
87	Micelle-Encapsulated Quantum Dot-Porphyrin Assemblies as <i>in Vivo</i> Two-Photon Oxygen Sensors. Journal of the American Chemical Society, 2015, 137, 9832-9842.	6.6	104
88	Oxygen and hydrogen photocatalysis by two-electron mixed-valence coordination compounds. Coordination Chemistry Reviews, 2005, 249, 1316-1326.	9.5	103
89	The Whole Story of the Two-Electron Bond, with the Î´ Bond as a Paradigm. Accounts of Chemical Research, 2000, 33, 483-490.	7.6	102
90	Interplay of Homogeneous Reactions, Mass Transport, and Kinetics in Determining Selectivity of the Reduction of CO₂ on Gold Electrodes. ACS Central Science, 2019, 5, 1097-1105.	5.3	97

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91	Catalytic Oâ"O Activation Chemistry Mediated by Iron Hangman Porphyrins with a Wide Range of Proton-Donating Abilities. Organic Letters, 2003, 5, 2421-2424.	2.4	95
92	Self-healing catalysis in water. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13380-13384.	3.3	95
93	X-ray Spectroscopic Characterization of Co(IV) and Metalâ€"Metal Interactions in Co₄O₄: Electronic Structure Contributions to the Formation of High-Valent States Relevant to the Oxygen Evolution Reaction. Journal of the American Chemical Society, 2016, 138, 11017-11030.	6.6	94
94	In situ characterization of cofacial Co(IV) centers in Co ₄ O ₄ cubane: Modeling the high-valent active site in oxygen-evolving catalysts. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3855-3860.	3.3	93
95	Proton-Directed Redox Control of Oâ"O Bond Activation by Heme Hydroperoxidase Models. Journal of the American Chemical Society, 2007, 129, 5069-5075.	6.6	91
96	Oxygen Reduction Reaction Promoted by Manganese Porphyrins. ACS Catalysis, 2018, 8, 8671-8679.	5.5	91
97	Theoretical Analysis of Cobalt Hangman Porphyrins: Ligand Dearomatization and Mechanistic Implications for Hydrogen Evolution. ACS Catalysis, 2014, 4, 4516-4526.	5.5	90
98	Reversible Reduction of Oxygen to Peroxide Facilitated by Molecular Recognition. Science, 2012, 335, 450-453.	6.0	87
99	Oxygen Reduction Catalysis at a Dicobalt Center: The Relationship of Faradaic Efficiency to Overpotential. Journal of the American Chemical Society, 2016, 138, 2925-2928.	6.6	84
100	General Paradigm in Photoredox Nickelâ€Catalyzed Crossâ€Coupling Allows for Lightâ€Free Access to Reactivity. Angewandte Chemie - International Edition, 2020, 59, 9527-9533.	7.2	84
101	Electrocatalytic H₂ Evolution by Proton-Gated Hangman Iron Porphyrins. Organometallics, 2014, 33, 4994-5001.	1.1	82
102	Spectroscopic Determination of Proton Position in the Proton-Coupled Electron Transfer Pathways of Donorâ"Acceptor Supramolecule Assemblies. Journal of the American Chemical Society, 2006, 128, 10474-10483.	6.6	81
103	Generation of the R2 Subunit of Ribonucleotide Reductase by Intein Chemistry:Â Insertion of 3-Nitrotyrosine at Residue 356 as a Probe of the Radical Initiation Processâ€. Biochemistry, 2003, 42, 14541-14552.	1.2	79
104	A ligand field chemistry of oxygen generation by the oxygen-evolving complex and synthetic active sites. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1293-1303.	1.8	79
105	Two-Photon Oxygen Sensing with Quantum Dot-Porphyrin Conjugates. Inorganic Chemistry, 2013, 52, 10394-10406.	1.9	76
106	Electronic Structure of Copper Corroles. Angewandte Chemie - International Edition, 2016, 55, 2176-2180.	7.2	76
107	Synthesis and characterization of single crystals of the spin-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mfrac><mml:mrow><mml:mn>1</mml:mn></mml:mrow><mml:mrow><mml:mn>2</mml:mn></m antiferromagnets Zn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>Cu<mml:math	1.1	75
108	Aerobic Catalytic Photooxidation of Olefins by an Electron-Deficient Pacman Bisiron(III) Î¼-Oxo Porphyrin. Journal of Organic Chemistry, 2005, 70, 1885-1888.	1.7	73

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109	Nucleation and Growth Mechanisms of an Electrodeposited Manganese Oxide Oxygen Evolution Catalyst. Journal of Physical Chemistry C, 2014, 118, 17142-17152.	1.5	73
110	Halogen Photoelimination from Monomeric Nickel(III) Complexes Enabled by the Secondary Coordination Sphere. Organometallics, 2015, 34, 4766-4774.	1.1	73
111	Proton-Coupled Electron Transfer: The Engine of Energy Conversion and Storage. Journal of the American Chemical Society, 2022, 144, 1069-1081.	6.6	72
112	Catalase and Epoxidation Activity of Manganese Salen Complexes Bearing Two Xanthene Scaffolds. Journal of the American Chemical Society, 2007, 129, 8192-8198.	6.6	66
113	Chlorine Photoelimination from a Diplatinum Core: Circumventing the Back Reaction. Journal of the American Chemical Society, 2009, 131, 28-29.	6.6	66
114	Excited-State Dynamics of Cofacial Pacman Porphyrins. Journal of Physical Chemistry A, 2002, 106, 11700-11708.	1.1	65
115	Room temperature stable CO _{<i>x</i>} -free H ₂ production from methanol with magnesium oxide nanophotocatalysts. Science Advances, 2016, 2, e1501425.	4.7	62
116	Taming the Chlorine Radical: Enforcing Steric Control over Chlorine-Radical-Mediated Câ€“H Activation. Journal of the American Chemical Society, 2022, 144, 1464-1472.	6.6	62
117	From Molecules to the Crystalline Solid: Secondary Hydrogen-Bonding Interactions of Salt Bridges and Their Role in Magnetic Exchange. Chemistry - A European Journal, 1999, 5, 1474-1480.	1.7	61
118	General Strategy for Improving the Quantum Efficiency of Photoredox Hydroamidation Catalysis. Journal of the American Chemical Society, 2018, 140, 14926-14937.	6.6	61
119	Photoredox Nickel-Catalyzed Câ€“S Cross-Coupling: Mechanism, Kinetics, and Generalization. Journal of the American Chemical Society, 2021, 143, 2005-2015.	6.6	61
120	2,3-Difluorotyrosine at Position 356 of Ribonucleotide Reductase R2:â€‰ A Probe of Long-Range Proton-Coupled Electron Transfer. Journal of the American Chemical Society, 2003, 125, 10506-10507.	6.6	60
121	A nanocrystal-based ratiometric pH sensor for natural pH ranges. Chemical Science, 2012, 3, 2980.	3.7	60
122	Valorization of CO2 through lithoautotrophic production of sustainable chemicals in Cupriavidus necator. Metabolic Engineering, 2020, 62, 207-220.	3.6	60
123	On the future of global energy. Daedalus, 2006, 135, 112-115.	0.9	59
124	Direct formation of a water oxidation catalyst from thin-film cobalt. Energy and Environmental Science, 2010, 3, 1726.	15.6	59
125	Interfaces between water splitting catalysts and buried silicon junctions. Energy and Environmental Science, 2013, 6, 532-538.	15.6	58
126	Proton-coupled electron transfer chemistry of hangman macrocycles: Hydrogen and oxygen evolution reactions. Journal of Porphyrins and Phthalocyanines, 2015, 19, 1-8.	0.4	58

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127	Practical challenges in the development of photoelectrochemical solar fuels production. Sustainable Energy and Fuels, 2020, 4, 985-995.	2.5	58
128	Hydrogen Evolution Catalysis by a Sparsely Substituted Cobalt Chlorin. ACS Catalysis, 2017, 7, 3597-3606.	5.5	56
129	Porphyrin Architectures Bearing Functionalized Xanthene Spacers. Journal of Organic Chemistry, 2002, 67, 1403-1406.	1.7	54
130	Transient Absorption Studies of the Pacman Effect in Spring-Loaded Diiron(III) Î¼-Oxo Bisporphyrins. Inorganic Chemistry, 2003, 42, 8270-8277.	1.9	54
131	Exciton-exciton annihilation in organic polariton microcavities. Physical Review B, 2010, 82, .	1.1	54
132	Photo-ribonucleotide reductase Î²2 by selective cysteine labeling with a radical phototrigger. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 39-43.	3.3	53
133	How Radical Are â€œRadicalâ€• Photocatalysts? A Closed-Shell Meisenheimer Complex Is Identified as a Super-Reducing Photoreagent. Journal of the American Chemical Society, 2021, 143, 14352-14359.	6.6	53
134	Xanthene-Modified and Hangman Iron Corroles. Inorganic Chemistry, 2011, 50, 1368-1377.	1.9	52
135	Dzyaloshinskii-Moriya interaction and spin reorientation transition in the frustrated kagome lattice antiferromagnet. Physical Review B, 2011, 83, .	1.1	50
136	Electrochemical Deposition of Conformal and Functional Layers on High Aspect Ratio Silicon Micro/Nanowires. Nano Letters, 2017, 17, 4502-4507.	4.5	50
137	Activation of Electronâ€Deficient Quinones through Hydrogenâ€Bondâ€Donorâ€Coupled Electron Transfer. Angewandte Chemie - International Edition, 2016, 55, 539-544.	7.2	49
138	Efficient Synthesis of Hangman Porphyrins. Organic Letters, 2010, 12, 1036-1039.	2.4	48
139	Tertiary Amine-Assisted Electroreduction of Carbon Dioxide to Formate Catalyzed by Iron Tetraphenylporphyrin. ACS Energy Letters, 2020, 5, 72-78.	8.8	48
140	Long-Lived Triplet Excited State in a Heterogeneous Modified Carbon Nitride Photocatalyst. Journal of the American Chemical Society, 2021, 143, 4646-4652.	6.6	48
141	Photophysical Properties of Î²-Substituted Free-Base Corroles. Inorganic Chemistry, 2015, 54, 2713-2725.	1.9	47
142	Solar-driven tandem photoredox nickel-catalysed cross-coupling using modified carbon nitride. Chemical Science, 2020, 11, 7456-7461.	3.7	47
143	Catalytic Oxygen Evolution by Cobalt Oxido Thin Films. Topics in Current Chemistry, 2015, 371, 173-213.	4.0	46
144	Slow Magnetic Relaxation in Intermediate Spin <i>S</i> = 3/2 Mononuclear Fe(III) Complexes. Journal of the American Chemical Society, 2017, 139, 16474-16477.	6.6	46

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145	Self-healing oxygen evolution catalysts. Nature Communications, 2022, 13, 1243.	5.8	46
146	Stereochemical control of H2O2 dismutation by Hangman porphyrins. Chemical Communications, 2007, , 2642.	2.2	44
147	Photoactive Peptides for Light-Initiated Tyrosyl Radical Generation and Transport into Ribonucleotide Reductase. Journal of the American Chemical Society, 2007, 129, 8500-8509.	6.6	44
148	Generation of a stable, aminotyrosyl radical-induced Î±2Î²2 complex of <i>Escherichia coli</i> class Ia ribonucleotide reductase. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3835-3840.	3.3	44
149	Continuous electrochemical water splitting from natural water sources via forward osmosis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	44
150	Gold Corroles as Near-IR Phosphors for Oxygen Sensing. Inorganic Chemistry, 2017, 56, 10991-10997.	1.9	43
151	Double Hangman Iron Porphyrin and the Effect of Electrostatic Nonbonding Interactions on Carbon Dioxide Reduction. Journal of Physical Chemistry Letters, 2020, 11, 1890-1895.	2.1	42
152	Template-stabilized oxidic nickel oxygen evolution catalysts. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16187-16192.	3.3	41
153	Deciphering Radical Transport in the Large Subunit of Class I Ribonucleotide Reductase. Journal of the American Chemical Society, 2012, 134, 1172-1180.	6.6	40
154	Protonâ€“Electron Conductivity in Thin Films of a Cobaltâ€“Oxygen Evolving Catalyst. ACS Applied Energy Materials, 2019, 2, 3-12.	2.5	39
155	Detection of high-valent iron species in alloyed oxidic cobaltates for catalysing the oxygen evolution reaction. Nature Communications, 2021, 12, 4218.	5.8	38
156	Can We Progress from Solipsistic Science to Frugal Innovation?. Daedalus, 2012, 141, 45-52.	0.9	37
157	Photocatalytic Hydromethylation and Hydroalkylation of Olefins Enabled by Titanium Dioxide Mediated Decarboxylation. Journal of the American Chemical Society, 2020, 142, 17913-17918.	6.6	37
158	Pseudotetrahedral d0, d1, and d2Metalâˆ’Oxo Cores within a Tris(alkoxide) Platform. Inorganic Chemistry, 2010, 49, 10759-10761.	1.9	36
159	â€œFast foodâ€•energy. Energy and Environmental Science, 2010, 3, 993.	15.6	36
160	Mechanism of Cobalt Self-Exchange Electron Transfer. Journal of the American Chemical Society, 2013, 135, 15053-15061.	6.6	36
161	Conformationally Dynamic Radical Transfer within Ribonucleotide Reductase. Journal of the American Chemical Society, 2017, 139, 16657-16665.	6.6	36
162	Biological-inorganic hybrid systems as a generalized platform for chemical production. Current Opinion in Chemical Biology, 2017, 41, 107-113.	2.8	36

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163	Hangman Salen Platforms Containing Two Xanthene Scaffolds. Journal of Organic Chemistry, 2006, 71, 8706-8714.	1.7	35
164	Halogen photoelimination from dirhodium phosphazane complexes via chloride-bridged intermediates. Chemical Science, 2013, 4, 2880.	3.7	35
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