

James M Mayer

List of Publications by Year in descending order

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158
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13,245
citations

20797

60
h-index

23514

111
g-index

176
all docs

176
docs citations

176
times ranked

9862
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermochemistry of Proton-Coupled Electron Transfer Reagents and its Implications. <i>Chemical Reviews</i> , 2010, 110, 6961-7001.	23.0	1,373
2	PROTON-COUPLED ELECTRON TRANSFER: A Reaction Chemist's View. <i>Annual Review of Physical Chemistry</i> , 2004, 55, 363-390.	4.8	738
3	Understanding Hydrogen Atom Transfer: From Bond Strengths to Marcus Theory. <i>Accounts of Chemical Research</i> , 2011, 44, 36-46.	7.6	696
4	Hydrogen Atom Abstraction by Metal ^{IV} Oxo Complexes: Understanding the Analogy with Organic Radical Reactions. <i>Accounts of Chemical Research</i> , 1998, 31, 441-450.	7.6	514
5	Oxygen Reduction by Homogeneous Molecular Catalysts and Electrocatalysts. <i>Chemical Reviews</i> , 2018, 118, 2340-2391.	23.0	483
6	Titanium and Zinc Oxide Nanoparticles Are Proton-Coupled Electron Transfer Agents. <i>Science</i> , 2012, 336, 1298-1301.	6.0	339
7	Proton-Coupled Electron Transfer versus Hydrogen Atom Transfer in Benzyl/Toluene, Methoxyl/Methanol, and Phenoxy/Phenol Self-Exchange Reactions. <i>Journal of the American Chemical Society</i> , 2002, 124, 11142-11147.	6.6	330
8	Concerted Proton ⁺ Electron Transfer in the Oxidation of Hydrogen-Bonded Phenols. <i>Journal of the American Chemical Society</i> , 2006, 128, 6075-6088.	6.6	238
9	Electrocatalytic Oxygen Reduction by Iron Tetra-arylporphyrins Bearing Pendant Proton Relays. <i>Journal of the American Chemical Society</i> , 2012, 134, 5444-5447.	6.6	215
10	A Continuum of Proton-Coupled Electron Transfer Reactivity. <i>Accounts of Chemical Research</i> , 2018, 51, 2391-2399.	7.6	196
11	Standard Reduction Potentials for Oxygen and Carbon Dioxide Couples in Acetonitrile and <i>N,N</i> -Dimethylformamide. <i>Inorganic Chemistry</i> , 2015, 54, 11883-11888.	1.9	189
12	Thermodynamics and kinetics of proton-coupled electron transfer: stepwise vs. concerted pathways. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2004, 1655, 51-58.	0.5	186
13	Hydrogen Atom Abstraction by Permanganate: Oxidations of Arylalkanes in Organic Solvents. <i>Inorganic Chemistry</i> , 1997, 36, 2069-2078.	1.9	184
14	Oxidation of C-H Bonds by [(bpy) ₂ (py)RuIVO] ₂ +Occurs by Hydrogen Atom Abstraction. <i>Journal of the American Chemical Society</i> , 2003, 125, 10351-10361.	6.6	183
15	Why Are There No Terminal Oxo Complexes of the Late Transition Metals? or The Importance of Metal ^{IV} Ligand π Antibonding Interactions. <i>Comments in Inorganic Chemistry</i> , 1988, 8, 125-135.	3.0	180
16	Application of the Marcus Cross Relation to Hydrogen Atom Transfer Reactions. <i>Science</i> , 2001, 294, 2524-2526.	6.0	176
17	One-Electron Oxidation of a Hydrogen-Bonded Phenol Occurs by Concerted Proton-Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2004, 126, 12718-12719.	6.6	162
18	Homogenous Electrocatalytic Oxygen Reduction Rates Correlate with Reaction Overpotential in Acidic Organic Solutions. <i>ACS Central Science</i> , 2016, 2, 850-856.	5.3	150

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19	Free Energies of Proton-Coupled Electron Transfer Reagents and Their Applications. <i>Chemical Reviews</i> , 2022, 122, 1-49.	23.0	146
20	Intrinsic Barriers for Electron and Hydrogen Atom Transfer Reactions of Biomimetic Iron Complexes. <i>Journal of the American Chemical Society</i> , 2000, 122, 5486-5498.	6.6	136
21	The first crystal structure of a monomeric phenoxyl radical: 2,4,6-tri-tert-butylphenoxyl radical. <i>Chemical Communications</i> , 2008, , 256-258.	2.2	135
22	Large Ground-State Entropy Changes for Hydrogen Atom Transfer Reactions of Iron Complexes. <i>Journal of the American Chemical Society</i> , 2007, 129, 5153-5166.	6.6	134
23	Do spin state and spin density affect hydrogen atom transfer reactivity?. <i>Chemical Science</i> , 2014, 5, 21-31.	3.7	134
24	Probing concerted proton-electron transfer in phenol-imidazoles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 8185-8190.	3.3	120
25	Hydrocarbon Oxidation by Bis- μ -oxo Manganese Dimers: Electron Transfer, Hydride Transfer, and Hydrogen Atom Transfer Mechanisms. <i>Journal of the American Chemical Society</i> , 2002, 124, 10112-10123.	6.6	118
26	Controlling Carrier Densities in Photochemically Reduced Colloidal ZnO Nanocrystals: Size Dependence and Role of the Hole Quencher. <i>Journal of the American Chemical Society</i> , 2013, 135, 16569-16577.	6.6	117
27	Medium Effects Are as Important as Catalyst Design for Selectivity in Electrocatalytic Oxygen Reduction by Iron Porphyrin Complexes. <i>Journal of the American Chemical Society</i> , 2015, 137, 4296-4299.	6.6	117
28	Cu K-Edge XAS Study of the $[\text{Cu}_2(\mu\text{-O})_2]$ Core: Direct Experimental Evidence for the Presence of Cu(III). <i>Journal of the American Chemical Society</i> , 1997, 119, 8578-8579.	6.6	116
29	Evaluating the Thermodynamics of Electrocatalytic N_2 Reduction in Acetonitrile. <i>ACS Energy Letters</i> , 2016, 1, 698-704.	8.8	115
30	Predicting organic hydrogen atom transfer rate constants using the Marcus cross relation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 5282-5287.	3.3	109
31	Distant protonated pyridine groups in water-soluble iron porphyrin electrocatalysts promote selective oxygen reduction to water. <i>Chemical Communications</i> , 2012, 48, 11100.	2.2	104
32	Concerted proton-electron transfer reactions in the Marcus inverted region. <i>Science</i> , 2019, 364, 471-475.	6.0	104
33	A Flexible Photoactive Titanium Metal-Organic Framework Based on a $[\text{Ti}^{\text{IV}}_3(\mu_3\text{-O})_3(\mu_2\text{-O})_2(\text{COO})_6]$ Cluster. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13912-13917.	7.2	103
34	Molecular Cobalt Catalysts for O_2 Reduction: Low-Overpotential Production of H_2O_2 and Comparison with Iron-Based Catalysts. <i>Journal of the American Chemical Society</i> , 2017, 139, 16458-16461.	6.6	101
35	Concerted Proton-Electron Transfer in Pyridylphenols: The Importance of the Hydrogen Bond. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 738-740.	7.2	99
36	Mechanism of Catalytic O_2 Reduction by Iron Tetraphenylporphyrin. <i>Journal of the American Chemical Society</i> , 2019, 141, 8315-8326.	6.6	99

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37	Direct Comparison of Electrochemical and Spectrochemical Kinetics for Catalytic Oxygen Reduction. <i>Journal of the American Chemical Society</i> , 2014, 136, 12544-12547.	6.6	98
38	Using combinations of oxidants and bases as PCET reactants: thermochemical and practical considerations. <i>Energy and Environmental Science</i> , 2012, 5, 7771.	15.6	97
39	New Layered Iron-Lanthanum-Oxide-Sulfide and -Selenide Phases: Fe ₂ La ₂ O ₃ E ₂ (E = S, Se). <i>Angewandte Chemie International Edition in English</i> , 1992, 31, 1645-1647.	4.4	91
40	Identifying and Breaking Scaling Relations in Molecular Catalysis of Electrochemical Reactions. <i>Journal of the American Chemical Society</i> , 2017, 139, 11000-11003.	6.6	89
41	Moving Protons and Electrons in Biomimetic Systems. <i>Biochemistry</i> , 2015, 54, 1863-1878.	1.2	88
42	Simple Marcus-Theory-Type Model for Hydrogen-Atom Transfer/Proton-Coupled Electron Transfer. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 1481-1489.	2.1	87
43	Kinetic Effects of Increased Proton Transfer Distance on Proton-Coupled Oxidations of Phenol-Amines. <i>Journal of the American Chemical Society</i> , 2011, 133, 17341-17352.	6.6	83
44	Trends in Ground-State Entropies for Transition Metal Based Hydrogen Atom Transfer Reactions. <i>Journal of the American Chemical Society</i> , 2009, 131, 4335-4345.	6.6	82
45	Multiple-Site Concerted Proton-Electron Transfer Reactions of Hydrogen-Bonded Phenols Are Nonadiabatic and Well Described by Semiclassical Marcus Theory. <i>Journal of the American Chemical Society</i> , 2012, 134, 16635-16645.	6.6	82
46	Determining Proton-Coupled Standard Potentials and X-H Bond Dissociation Free Energies in Nonaqueous Solvents Using Open-Circuit Potential Measurements. <i>Journal of the American Chemical Society</i> , 2020, 142, 10681-10691.	6.6	82
47	Nitroxyl Radical Plus Hydroxylamine Pseudo Self-Exchange Reactions: Tunneling in Hydrogen Atom Transfer. <i>Journal of the American Chemical Society</i> , 2009, 131, 11985-11997.	6.6	81
48	SmI ₂ (H ₂ O) ₂ Reduction of Electron Rich Enamines by Proton-Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2017, 139, 10687-10692.	6.6	80
49	Oxidations of NADH Analogues by cis-[RuIV(bpy) ₂ (py)(O)] ²⁺ Occur by Hydrogen-Atom Transfer Rather than by Hydride Transfer. <i>Inorganic Chemistry</i> , 2005, 44, 2150-2158.	1.9	78
50	Synthesis and Characterization of Ruthenium Bis(η ² -diketonato) Pyridine-Imidazole Complexes for Hydrogen Atom Transfer. <i>Inorganic Chemistry</i> , 2007, 46, 11190-11201.	1.9	78
51	Concerted Proton-Electron Transfer in a Ruthenium Terpyridyl-Benzoate System with a Large Separation between the Redox and Basic Sites. <i>Journal of the American Chemical Society</i> , 2009, 131, 9874-9875.	6.6	75
52	Potential Economic Feasibility of Direct Electrochemical Nitrogen Reduction as a Route to Ammonia. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 8938-8948.	3.2	75
53	Cumene Oxidation by cis-[RuIV(bpy) ₂ (py)(O)] ²⁺ , Revisited. <i>Inorganic Chemistry</i> , 2004, 43, 1587-1592.	1.9	71
54	Chalcogen Atom Transfer to a Metal Nitrido. The First Transition Metal Selenonitrosyl Complex. <i>Journal of the American Chemical Society</i> , 1998, 120, 6607-6608.	6.6	70

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55	Models for Proton-coupled Electron Transfer in Photosystem II. <i>Photosynthesis Research</i> , 2006, 87, 3-20.	1.6	68
56	Slow Hydrogen Atom Transfer Reactions of Oxo- and Hydroxo-Vanadium Compounds: The Importance of Intrinsic Barriers. <i>Journal of the American Chemical Society</i> , 2009, 131, 4729-4743.	6.6	68
57	Surprisingly Long-Lived Ascorbyl Radicals in Acetonitrile: Concerted Proton-Electron Transfer Reactions and Thermochemistry. <i>Journal of the American Chemical Society</i> , 2008, 130, 7546-7547.	6.6	66
58	Highly Active NiO Photocathodes for H ₂ O ₂ Production Enabled via Outer-Sphere Electron Transfer. <i>Journal of the American Chemical Society</i> , 2018, 140, 4079-4084.	6.6	66
59	Separating Proton and Electron Transfer Effects in Three-Component Concerted Proton-Coupled Electron Transfer Reactions. <i>Journal of the American Chemical Society</i> , 2017, 139, 10312-10319.	6.6	65
60	Developing Scaling Relationships for Molecular Electrocatalysis through Studies of Fe-Porphyrin-Catalyzed O ₂ Reduction. <i>Accounts of Chemical Research</i> , 2020, 53, 1056-1065.	7.6	65
61	Proton-Coupled Electron Transfer of Ruthenium(III)-Pterin Complexes: A Mechanistic Insight. <i>Journal of the American Chemical Society</i> , 2009, 131, 11615-11624.	6.6	64
62	Low Capping Group Surface Density on Zinc Oxide Nanocrystals. <i>ACS Nano</i> , 2014, 8, 9463-9470.	7.3	64
63	Oriented Electrostatic Effects on O ₂ and CO ₂ Reduction by a Polycationic Iron Porphyrin. <i>Journal of the American Chemical Society</i> , 2021, 143, 11423-11434.	6.6	64
64	Effect of Protons on the Redox Chemistry of Colloidal Zinc Oxide Nanocrystals. <i>Journal of the American Chemical Society</i> , 2013, 135, 8492-8495.	6.6	62
65	Dinitrogen Reduction to Ammonium at Rhenium Utilizing Light and Proton-Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2019, 141, 20198-20208.	6.6	62
66	Hydrogen Atom Transfer Reactions of a Ruthenium Imidazole Complex: Hydrogen Tunneling and the Applicability of the Marcus Cross Relation. <i>Journal of the American Chemical Society</i> , 2008, 130, 14745-14754.	6.6	60
67	Reactivity of the copper(III)-hydroxide unit with phenols. <i>Chemical Science</i> , 2017, 8, 1075-1085.	3.7	60
68	A new strategy to efficiently cleave and form C-H bonds using proton-coupled electron transfer. <i>Science Advances</i> , 2018, 4, eaat5776.	4.7	58
69	Photocharging ZnO Nanocrystals: Picosecond Hole Capture, Electron Accumulation, and Auger Recombination. <i>Journal of Physical Chemistry C</i> , 2012, 116, 20633-20642.	1.5	57
70	Nitric Oxide Abstracts a Nitrogen Atom from an Osmium Nitrido Complex To Give Nitrous Oxide. <i>Journal of the American Chemical Society</i> , 2000, 122, 12391-12392.	6.6	54
71	Facile Concerted Proton-Electron Transfers in a Ruthenium Terpyridine-4-Carboxylate Complex with a Long Distance Between the Redox and Basic Sites. <i>Journal of the American Chemical Society</i> , 2008, 130, 7210-7211.	6.6	53
72	Acceleration of CO ₂ insertion into metal hydrides: ligand, Lewis acid, and solvent effects on reaction kinetics. <i>Chemical Science</i> , 2018, 9, 6629-6638.	3.7	53

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73	Slow Hydrogen Atom Self-Exchange between Os(IV) Anilide and Os(III) Aniline Complexes: Relationships with Electron and Proton Transfer Self-Exchange. <i>Journal of the American Chemical Society</i> , 2003, 125, 12217-12229.	6.6	52
74	Highly Diastereoselective Functionalization of Piperidines by Photoredox-Catalyzed α -Amino C-H Arylation and Epimerization. <i>Journal of the American Chemical Society</i> , 2020, 142, 8194-8202.	6.6	52
75	Electron Transfer Between Colloidal ZnO Nanocrystals. <i>Journal of the American Chemical Society</i> , 2011, 133, 4228-4231.	6.6	51
76	Proton-Coupled Electron Transfer Reactions at a Heme-Propionate in an Iron-Protoporphyrin-IX Model Compound. <i>Journal of the American Chemical Society</i> , 2011, 133, 8544-8551.	6.6	48
77	Proton-Controlled Reduction of ZnO Nanocrystals: Effects of Molecular Reductants, Cations, and Thermodynamic Limitations. <i>Journal of the American Chemical Society</i> , 2016, 138, 1377-1385.	6.6	47
78	Transition State Asymmetry in C-H Bond Cleavage by Proton-Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2019, 141, 10777-10787.	6.6	47
79	Combining scaling relationships overcomes rate versus overpotential trade-offs in O_2 molecular electrocatalysis. <i>Science Advances</i> , 2020, 6, eaaz3318.	4.7	46
80	Fast Proton-Coupled Electron Transfer Observed for a High-Fidelity Structural and Functional [2Fe μ -2S] Rieske Model. <i>Journal of the American Chemical Society</i> , 2014, 136, 3946-3954.	6.6	45
81	Hydrogen Atom Transfer Reactions of Iron μ -Porphyrin μ -Imidazole Complexes as Models for Histidine-Ligated Heme Reactivity. <i>Journal of the American Chemical Society</i> , 2008, 130, 2774-2776.	6.6	44
82	Reactivity of Hydrogen on and in Nanostructured Molybdenum Nitride: Crotonaldehyde Hydrogenation. <i>ACS Catalysis</i> , 2016, 6, 5797-5806.	5.5	44
83	Long-Range Proton-Coupled Electron-Transfer Reactions of Bis(imidazole) Iron Tetraphenylporphyrins Linked to Benzoates. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 519-523.	2.1	43
84	Bulk-to-Surface Proton-Coupled Electron Transfer Reactivity of the Metal-Organic Framework MIL-125. <i>Journal of the American Chemical Society</i> , 2018, 140, 16184-16189.	6.6	41
85	Hydrogen on Cobalt Phosphide. <i>Journal of the American Chemical Society</i> , 2019, 141, 15390-15402.	6.6	41
86	Selectivity-Determining Steps in O_2 Reduction Catalyzed by Iron(tetramesitylporphyrin). <i>Journal of the American Chemical Society</i> , 2020, 142, 4108-4113.	6.6	41
87	Electrochemically Determined O-H Bond Dissociation Free Energies of NiO Electrodes Predict Proton-Coupled Electron Transfer Reactivity. <i>Journal of the American Chemical Society</i> , 2019, 141, 14971-14975.	6.6	40
88	Interfacial Acid-Base Equilibria and Electric Fields Concurrently Probed by <i>In Situ</i> Surface-Enhanced Infrared Spectroscopy. <i>Journal of the American Chemical Society</i> , 2021, 143, 10778-10792.	6.6	40
89	Oxidation of Toluene by [(phen) $_2$ Mn(μ -O) $_2$ Mn(phen) $_2$] $^{4+}$ via Initial Hydride Abstraction. <i>Journal of the American Chemical Society</i> , 1999, 121, 11894-11895.	6.6	39
90	Bimodal Evans-Polanyi Relationships in Hydrogen Atom Transfer from C(sp 3)-H Bonds to the Cumyloxy Radical. A Combined Time-Resolved Kinetic and Computational Study. <i>Journal of the American Chemical Society</i> , 2021, 143, 11759-11776.	6.6	39

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91	Effect of Basic Site Substituents on Concerted Proton–Electron Transfer in Hydrogen-Bonded Pyridyl–Phenols. <i>Journal of Physical Chemistry A</i> , 2012, 116, 12249-12259.	1.1	38
92	Bridge Sites of Au Surfaces Are Active for Electrocatalytic CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2022, 144, 8641-8648.	6.6	38
93	The Importance of Precursor and Successor Complex Formation in a Bimolecular Proton–Electron Transfer Reaction. <i>Inorganic Chemistry</i> , 2010, 49, 3685-3687.	1.9	35
94	Spin-forbidden hydrogen atom transfer reactions in a cobalt bisimidazole system. <i>Chemical Science</i> , 2012, 3, 230-243.	3.7	35
95	Probing Quantum and Dynamic Effects in Concerted Proton–Electron Transfer Reactions of Phenol–Base Compounds. <i>Journal of Physical Chemistry B</i> , 2012, 116, 571-584.	1.2	34
96	On the Mechanism of C–H Bond Activation in the Photochemical Arylation of Rhenium(V) Oxo Iodide Complexes. <i>Organometallics</i> , 1998, 17, 3364-3374.	1.1	30
97	Slow Equilibration between Spectroscopically Distinct Trap States in Reduced TiO ₂ Nanoparticles. <i>Journal of the American Chemical Society</i> , 2017, 139, 2868-2871.	6.6	30
98	Model of the MitoNEET [2Fe–2S] Cluster Shows Proton Coupled Electron Transfer. <i>Journal of the American Chemical Society</i> , 2017, 139, 701-707.	6.6	30
99	(Hydro)peroxide ligands on colloidal cerium oxide nanoparticles. <i>Chemical Communications</i> , 2016, 52, 10281-10284.	2.2	29
100	Tp* Rhenium(V) Oxo–Halide, –Hydride, –Alkyl, –Phenyl, and –Alkoxide Complexes: Syntheses and Oxidations. <i>Organometallics</i> , 2000, 19, 2781-2790.	1.1	28
101	Theoretical Insights into Proton-Coupled Electron Transfer from a Photoreduced ZnO Nanocrystal to an Organic Radical. <i>Nano Letters</i> , 2017, 17, 5762-5767.	4.5	27
102	Thermodynamic Influences on C–H Bond Oxidation. , 2000, , 1-43.		26
103	Stereodynamic Quinone–Hydroquinone Molecules That Enantiomerize at sp ³ -Carbon via Redox-Interconversion. <i>Journal of the American Chemical Society</i> , 2017, 139, 15239-15244.	6.6	26
104	Nanoparticle O–H Bond Dissociation Free Energies from Equilibrium Measurements of Cerium Oxide Colloids. <i>Journal of the American Chemical Society</i> , 2021, 143, 2896-2907.	6.6	25
105	Reaction Dynamics of Proton-Coupled Electron Transfer from Reduced ZnO Nanocrystals. <i>ACS Nano</i> , 2015, 9, 10258-10267.	7.3	24
106	Activationless Multiple-Site Concerted Proton–Electron Tunneling. <i>Journal of the American Chemical Society</i> , 2018, 140, 7449-7452.	6.6	24
107	Activation of an Anilido Ligand for Nucleophilic Aromatic Substitution by an Oxidizing Os(IV) Center. <i>Journal of the American Chemical Society</i> , 2001, 123, 5594-5595.	6.6	23
108	Radical reactivity of the Fe(ⁱⁱⁱ)(ⁱⁱ) tetramesitylporphyrin couple: hydrogen atom transfer, oxyl radical dissociation, and catalytic disproportionation of a hydroxylamine. <i>Chemical Science</i> , 2014, 5, 372-380.	3.7	23

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109	Hydroxide-, Amide-, and Sulfhydrylrhenium(I) Tris(alkyne) Complexes. Rearrangements to Rhenium(III) Bis(alkyne) Oxo and Nitrido Compounds. <i>Organometallics</i> , 1997, 16, 5342-5353.	1.1	22
110	Synthesis and Reactions of Rhenium(V) Oxo-Hydride Complexes. <i>Organometallics</i> , 1998, 17, 2939-2941.	1.1	22
111	Synthesis and Reactivity of Aryl- and Alkyl-Rhenium(V) Imido-Triflate Compounds: An Unusual Mechanism for Triflate Substitution. <i>Organometallics</i> , 1999, 18, 3715-3727.	1.1	22
112	Cation Effects on the Reduction of Colloidal ZnO Nanocrystals. <i>Journal of the American Chemical Society</i> , 2018, 140, 8924-8933.	6.6	22
113	Bond-Stretch Isomers: Fact or Artifact?. <i>Angewandte Chemie International Edition in English</i> , 1992, 31, 286-287.	4.4	21
114	Reactivity of Low-Valent Iridium, Rhodium, and Platinum Complexes with Di- and Tetrasubstituted Hydrazines. <i>Organometallics</i> , 2008, 27, 2238-2245.	1.1	21
115	Synthesis, Radical Reactivity, and Thermochemistry of Monomeric Cu(II) Alkoxide Complexes Relevant to Cu/Radical Alcohol Oxidation Catalysis. <i>Inorganic Chemistry</i> , 2016, 55, 5467-5475.	1.9	20
116	Sodium-coupled electron transfer reactivity of metal-organic frameworks containing titanium clusters: the importance of cations in redox chemistry. <i>Chemical Science</i> , 2019, 10, 1322-1331.	3.7	20
117	Manifesto on the Thermochemistry of Nanoscale Redox Reactions for Energy Conversion. <i>ACS Energy Letters</i> , 2019, 4, 866-872.	8.8	20
118	Intramolecular Electrostatic Effects on O ₂ , CO ₂ , and Acetate Binding to a Cationic Iron Porphyrin. <i>Inorganic Chemistry</i> , 2020, 59, 17402-17414.	1.9	20
119	Two-Electron-Two-Proton Transfer from Colloidal ZnO and TiO ₂ Nanoparticles to Molecular Substrates. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7687-7691.	2.1	20
120	Chemical Oxidation of a Coordinated PNP-Pincer Ligand Forms Unexpected Re-Nitroxide Complexes with Reversal of Nitride Reactivity. <i>Inorganic Chemistry</i> , 2019, 58, 10791-10801.	1.9	19
121	Redox Reactivity of Colloidal Nanoceria and Use of Optical Spectra as an In Situ Monitor of Ce Oxidation States. <i>Inorganic Chemistry</i> , 2018, 57, 14401-14408.	1.9	18
122	Low Reorganization Energy for Electron Self-Exchange by a Formally Copper(III,II) Redox Couple. <i>Inorganic Chemistry</i> , 2019, 58, 14151-14158.	1.9	18
123	Multiple selectivity-determining mechanisms of H ₂ O ₂ formation in iron porphyrin-catalysed oxygen reduction. <i>Chemical Communications</i> , 2021, 57, 1202-1205.	2.2	18
124	Protonation and Proton-Coupled Electron Transfer at S-Ligated [4Fe-4S] Clusters. <i>Chemistry - A European Journal</i> , 2015, 21, 9256-9260.	1.7	17
125	Synthesis and Reactivity of Tripodal Complexes Containing Pendant Bases. <i>Inorganic Chemistry</i> , 2014, 53, 9242-9253.	1.9	16
126	Proton-Coupled Defects Impact H Bond Dissociation Free Energies on Metal Oxide Surfaces. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 9761-9767.	2.1	16

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127	Slow Tautomerization in a Rhenium-Oxo-Hydroxide Complex. <i>Angewandte Chemie International Edition in English</i> , 1988, 27, 1527-1529.	4.4	15
128	All Four Atropisomers of Iron Tetra(<i>o</i> - <i>N</i> , <i>N</i> -trimethylanilinium)porphyrin in Both the Ferric and Ferrous States. <i>Inorganic Chemistry</i> , 2021, 60, 5240-5251.	1.9	14
129	General Light-Mediated, Highly Diastereoselective Piperidine Epimerization: From Most Accessible to Most Stable Stereoisomer. <i>Journal of the American Chemical Society</i> , 2021, 143, 126-131.	6.6	14
130	Effect of Nucleophilicity on the Kinetics of CO ₂ Insertion into Pincer-Supported Nickel Complexes. <i>Organometallics</i> , 2018, 37, 3649-3653.	1.1	13
131	Revealing the Relative Electronic Landscape of Colloidal ZnO and TiO ₂ Nanoparticles via Equilibration Studies. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10262-10271.	1.5	13
132	Electronic Structure of a Cu ^{II} -Alkoxide Complex Modeling Intermediates in Copper-Catalyzed Alcohol Oxidations. <i>Journal of the American Chemical Society</i> , 2016, 138, 4132-4145.	6.6	12
133	Outer-Sphere H ⁺ /2H ⁺ Transfer Reactions of Ruthenium(II)-Amine and Ruthenium(IV)-Amido Complexes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3675-3678.	7.2	12
134	Base-Directed Photoredox Activation of C-H Bonds by PCET. <i>Journal of Organic Chemistry</i> , 2020, 85, 7175-7180.	1.7	12
135	Cooperation of cerium oxide nanoparticles and soluble molecular catalysts for alcohol oxidation. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 1386-1393.	3.0	12
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