

David C Powers

List of Publications by Year in descending order

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71
papers

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172457

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110387

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docs citations

95
times ranked

4018
citing authors

#	ARTICLE	IF	CITATIONS
1	Nitrogen Atom Transfer Catalysis by Metallonitrene C-H Insertion: Photocatalytic Amidation of Aldehydes. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	4
2	Nitrogen Atom Transfer Catalysis by Metallonitrene C-H Insertion: Photocatalytic Amidation of Aldehydes. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	29
3	Kinetic Probes of the Origin of Activity in MOF-Based C-H Oxidation Catalysis. <i>ACS Catalysis</i> , 2022, 12, 3858-3867.	11.2	12
4	Diversification of Amidyl Radical Intermediates Derived from C-H Aminopyridylation. <i>Organic Letters</i> , 2022, 24, 2762-2766.	4.6	13
5	Traceless Benzylic C-H Amination via Bifunctional N-Haloaminopyridinium Intermediates. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202200665.	13.8	13
6	N-Aminopyridinium reagents as traceless activating groups in the synthesis of N-Aryl aziridines. <i>Nature Communications</i> , 2022, 13, .	12.8	10
7	Synthesis and Characterization of Nitrogen Subvalence in a Pt Metallonitrene. <i>Trends in Chemistry</i> , 2021, 3, 251-253.	8.5	0
8	In crystallo organometallic chemistry. <i>Chemical Communications</i> , 2021, 57, 4993-5003.	4.1	19
9	Leveraging Exchange Kinetics for the Synthesis of Atomically Precise Porous Catalysts. <i>ChemCatChem</i> , 2021, 13, 2117-2131.	3.7	6
10	Cis-Divacant Octahedral Fe(II) in a Dimensionally Reduced Family of 2-(Pyridin-2-yl)pyrrolide Complexes. <i>Inorganic Chemistry</i> , 2021, 60, 15617-15626.	4.0	1
11	Electronic structure analysis and reactivity of the bimetallic bis-titanocene vinylcarboxylate complex, [(Cp2Ti)2(O2C3TMS2)]. <i>Polyhedron</i> , 2021, 207, 115368.	2.2	4
12	Nitrene Photochemistry of Manganese N-Haloamides**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26647-26655.	13.8	7
13	Nitrene Photochemistry of Manganese N-Haloamides**. <i>Angewandte Chemie</i> , 2021, 133, 26851-26859.	2.0	2
14	Synthesis of atomically precise single-crystalline Ru ₂ -based coordination polymers. <i>Dalton Transactions</i> , 2020, 49, 16077-16081.	3.3	3
15	In Crystallo Snapshots of Rh ₂ -Catalyzed C-H Amination. <i>Journal of the American Chemical Society</i> , 2020, 142, 19862-19867.	13.7	31
16	Exploring Green Chemistry with Aerobic Hypervalent Iodine Catalysis. <i>Journal of Chemical Education</i> , 2020, 97, 3816-3821.	2.3	4
17	Dual Polymerization Pathway for Polyolefin-Polar Block Copolymer Synthesis via MILRad: Mechanism and Scope. <i>Journal of the American Chemical Society</i> , 2020, 142, 21469-21483.	13.7	43
18	C-H Amination Mediated by Cobalt Organoazide Adducts and the Corresponding Cobalt Nitrenoid Intermediates. <i>Journal of the American Chemical Society</i> , 2020, 142, 11232-11243.	13.7	44

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19	Multielectron C-H photoactivation with an Sb(v) oxo corrole. <i>Chemical Communications</i> , 2020, 56, 5247-5250.	4.1	14
20	Electrocatalytic C-N Coupling via Anodically Generated Hypervalent Iodine Intermediates. <i>Journal of the American Chemical Society</i> , 2020, 142, 4990-4995.	13.7	61
21	Atomically Precise Crystalline Materials Based on Kinetically Inert Metal Ions via Reticular Mechanopolymerization. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10878-10883.	13.8	13
22	Crystallography of Reactive Intermediates. <i>Comments on Inorganic Chemistry</i> , 2020, 40, 116-158.	5.2	18
23	Kinetic <i>versus</i> thermodynamic metalation enables synthesis of isostructural homo- and heterometallic trinuclear clusters. <i>Chemical Communications</i> , 2020, 56, 5893-5896.	4.1	2
24	Atomically Precise Crystalline Materials Based on Kinetically Inert Metal Ions via Reticular Mechanopolymerization. <i>Angewandte Chemie</i> , 2020, 132, 10970-10975.	2.0	3
25	The Role of Iodanyl Radicals as Critical Chain Carriers in Aerobic Hypervalent Iodine Chemistry. <i>CheM</i> , 2019, 5, 2388-2404.	11.7	26
26	Templating metastable Pd ₂ carboxylate aggregates. <i>Chemical Science</i> , 2019, 10, 1823-1830.	7.4	15
27	Characterization of a Reactive Rh ₂ Nitrenoid by Crystalline Matrix Isolation. <i>Journal of the American Chemical Society</i> , 2019, 141, 16232-16236.	13.7	46
28	Iodosylbenzene Coordination Chemistry Relevant to Metal-Organic Framework Catalysis. <i>Inorganic Chemistry</i> , 2019, 58, 10543-10553.	4.0	14
29	Metallopolymerization as a Strategy to Translate Ligand-Modulated Chemoselectivity to Porous Catalysts. <i>Organometallics</i> , 2019, 38, 3436-3443.	2.3	9
30	High-Frequency and -Field EPR (HF-EPR) Investigation of a Pseudotetrahedral Cr ^{IV} Siloxide Complex and Computational Studies of Related Cr ^{IV} L ₄ Systems. <i>Inorganic Chemistry</i> , 2019, 58, 4907-4920.	4.0	11
31	Measuring and Modulating Substrate Confinement during Nitrogen-Atom Transfer in a Ru ₂ -Based Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2019, 141, 19203-19207.	13.7	21
32	In Operando Analysis of Diffusion in Porous Metal-Organic Framework Catalysts. <i>Chemistry - A European Journal</i> , 2019, 25, 3465-3476.	3.3	42
33	Hypervalent Iodine Chemistry as a Platform for Aerobic Oxidation Catalysis. <i>Synlett</i> , 2019, 30, 257-262.	1.8	7
34	Probing Substrate Diffusion in Interstitial MOF Chemistry with Kinetic Isotope Effects. <i>Angewandte Chemie</i> , 2018, 130, 3738-3743.	2.0	12
35	Halogen Photoelimination from Sb ^V Dihalide Corroles. <i>Inorganic Chemistry</i> , 2018, 57, 5333-5342.	4.0	28
36	Oxidation Catalysis by an Aerobically Generated Dess-Martin Periodinane Analogue. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7205-7209.	13.8	26

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37	Probing Substrate Diffusion in Interstitial MOF Chemistry with Kinetic Isotope Effects. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3676-3681.	13.8	34
38	Oxidase catalysis via aerobically generated hypervalent iodine intermediates. <i>Nature Chemistry</i> , 2018, 10, 200-204.	13.6	80
39	Observation of a Photogenerated Rh ₂ Nitrenoid Intermediate in C-H Amination. <i>Journal of the American Chemical Society</i> , 2018, 140, 10412-10415.	13.7	30
40	Oxidation Catalysis by an Aerobically Generated Dess-Martin Periodinane Analogue. <i>Angewandte Chemie</i> , 2018, 130, 7323-7327.	2.0	9
41	Direct Characterization of a Reactive Lattice-Confined Ru ₂ Nitride by Photocrystallography. <i>Journal of the American Chemical Society</i> , 2017, 139, 2912-2915.	13.7	47
42	cis-Decalin oxidation as a stereochemical probe of in-MOF versus on-MOF catalysis. <i>Chemical Communications</i> , 2017, 53, 7377-7380.	4.1	28
43	Gold Corroles as Near-IR Phosphors for Oxygen Sensing. <i>Inorganic Chemistry</i> , 2017, 56, 10991-10997.	4.0	43
44	Stereoelectronic Effects in Cl ₂ Elimination from Binuclear Pt(III) Complexes. <i>Inorganic Chemistry</i> , 2016, 55, 11815-11820.	4.0	22
45	Electronic Structure of Copper Corroles. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2176-2180.	13.8	76
46	Trap-Free Halogen Photoelimination from Mononuclear Ni(III) Complexes. <i>Journal of the American Chemical Society</i> , 2015, 137, 6472-6475.	13.7	125
47	Halogen Photoelimination from Monomeric Nickel(III) Complexes Enabled by the Secondary Coordination Sphere. <i>Organometallics</i> , 2015, 34, 4766-4774.	2.3	73
48	Tandem redox mediator/Ni(II) trihalide complex photocycle for hydrogen evolution from HCl. <i>Chemical Science</i> , 2015, 6, 917-922.	7.4	16
49	Theoretical Analysis of Cobalt Hangman Porphyrins: Ligand Dearomatization and Mechanistic Implications for Hydrogen Evolution. <i>ACS Catalysis</i> , 2014, 4, 4516-4526.	11.2	90
50	Water Oxidation Catalysis by Co(II) Impurities in Co(III) ₄ O ₄ Cubanes. <i>Journal of the American Chemical Society</i> , 2014, 136, 17681-17688.	13.7	152
51	Photocrystallographic Observation of Halide-Bridged Intermediates in Halogen Photoeliminations. <i>Journal of the American Chemical Society</i> , 2014, 136, 15346-15355.	13.7	31
52	Halide-Bridged Binuclear HX-Splitting Catalysts. <i>Inorganic Chemistry</i> , 2014, 53, 9122-9128.	4.0	31
53	Two-Electron HCl to H ₂ Photocycle Promoted by Ni(II) Polypyridyl Halide Complexes. <i>Journal of the American Chemical Society</i> , 2013, 135, 18876-18883.	13.7	62
54	A Transition State Analogue for the Oxidation of Binuclear Palladium(II) to Binuclear Palladium(III) Complexes. <i>Organometallics</i> , 2013, 32, 2042-2045.	2.3	35

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55	Halogen photoelimination from dirhodium phosphazane complexes via chloride-bridged intermediates. <i>Chemical Science</i> , 2013, 4, 2880.	7.4	35
56	Connecting Binuclear Pd(III) and Mononuclear Pd(IV) Chemistry by Pd-Pd Bond Cleavage. <i>Journal of the American Chemical Society</i> , 2012, 134, 12002-12009.	13.7	148
57	Bimetallic Redox Synergy in Oxidative Palladium Catalysis. <i>Accounts of Chemical Research</i> , 2012, 45, 840-850.	15.6	309
58	Synthesis and structure of solution-stable one-dimensional palladium wires. <i>Nature Chemistry</i> , 2011, 3, 949-953.	13.6	115
59	A Fluoride-Derived Electrophilic Late-Stage Fluorination Reagent for PET Imaging. <i>Science</i> , 2011, 334, 639-642.	12.6	384
60	Palladium(III) in Synthesis and Catalysis. <i>Topics in Organometallic Chemistry</i> , 2011, 503, 129-156.	0.7	89
61	Bimetallic Reductive Elimination from Dinuclear Pd(III) Complexes. <i>Journal of the American Chemical Society</i> , 2010, 132, 14092-14103.	13.7	237
62	On the Mechanism of Palladium-Catalyzed Aromatic C-H Oxidation. <i>Journal of the American Chemical Society</i> , 2010, 132, 14530-14536.	13.7	189
63	Bimetallic Pd(III) complexes in palladium-catalysed carbon-heteroatom bond formation. <i>Nature Chemistry</i> , 2009, 1, 302-309.	13.6	527
64	Bimetallic Palladium Catalysis: Direct Observation of Pd(III)-Pd(III) Intermediates. <i>Journal of the American Chemical Society</i> , 2009, 131, 17050-17051.	13.7	427
65	Thermal Chemistry of Bicyclo[4.2.0]oct-2-enes. <i>Journal of Organic Chemistry</i> , 2007, 72, 187-194.	3.2	13
66	Thermal isomerizations of cis,anti,cis-tricyclo[6.4.0.0 ^{2,7}]dodec-3-ene to trans- and cis,endo-tricyclo[6.2.2.0 ^{2,7}]dodec-9-ene: diradical conformations and stereochemical outcomes in [1,3] carbon shifts. <i>Tetrahedron</i> , 2007, 63, 6331-6338.	1.9	8
67	Thermal Reactions of 7-d- and 8-d-Bicyclo[4.2.0]oct-2-enes. <i>Journal of the American Chemical Society</i> , 2006, 128, 10020-10021.	13.7	9
68	Thermal Reactions of 8-Methylbicyclo[4.2.0]oct-2-enes: Competitive Diradical-Mediated [1,3] Sigmatropic, Stereomutation, and Fragmentation Processes. <i>Journal of Organic Chemistry</i> , 2005, 70, 8913-8918.	3.2	16
69	Thermal Isomerization of cis,anti,cis-Tricyclo[6.3.0.0 ^{2,7}]undec-3-ene to endo-Tricyclo[5.2.2.0 ^{2,6}]undec-8-ene. <i>Organic Letters</i> , 2005, 7, 5195-5197.	4.6	6
70	Analysis of Natural Buffer Systems and the Impact of Acid Rain. An Environmental Project for First-Year Chemistry Students. <i>Journal of Chemical Education</i> , 2005, 82, 274.	2.3	6
71	Traceless Benzylic C-H Amination via Bifunctional N-Aminopyridinium Intermediates. <i>Angewandte Chemie</i> , 0, , .	2.0	3