

Steven M Bischof

List of Publications by Year in descending order

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28
papers

1,404
citations

567281

15
h-index

501196

28
g-index

33
all docs

33
docs citations

33
times ranked

1729
citing authors

#	ARTICLE	IF	CITATIONS
1	Homogeneous Functionalization of Methane. <i>Chemical Reviews</i> , 2017, 117, 8521-8573.	47.7	344
2	Designing Catalysts for Functionalization of Unactivated C-H Bonds Based on the CH Activation Reaction. <i>Accounts of Chemical Research</i> , 2012, 45, 885-898.	15.6	301
3	Main-Group Compounds Selectively Oxidize Mixtures of Methane, Ethane, and Propane to Alcohol Esters. <i>Science</i> , 2014, 343, 1232-1237.	12.6	139
4	Using Reduced Catalysts for Oxidation Reactions: Mechanistic Studies of the Periana-Catalytic System for CH ₄ Oxidation. <i>Journal of the American Chemical Society</i> , 2013, 135, 14644-14658.	13.7	82
5	Computational Transition-State Design Provides Experimentally Verified Cr(P,N) Catalysts for Control of Ethylene Trimerization and Tetramerization. <i>ACS Catalysis</i> , 2018, 8, 1138-1142.	11.2	64
6	Transition State Energy Decomposition Study of Acetate-Assisted and Internal Electrophilic Substitution C-H Bond Activation by (acac-O) ₂ Ir(X) Complexes (X =) <i>J. Am. Chem. Soc.</i> 137 (CH ₄)	10.0	57
7	Benzene C-H Bond Activation in Carboxylic Acids Catalyzed by O-Donor Iridium(III) Complexes: An Experimental and Density Functional Study. <i>Organometallics</i> , 2010, 29, 742-756.	2.3	52
8	Quantum-mechanical transition-state model combined with machine learning provides catalyst design features for selective Cr olefin oligomerization. <i>Chemical Science</i> , 2020, 11, 9665-9674.	7.4	51
9	A Mechanistic Change Results in 100 Times Faster CH Functionalization for Ethane versus Methane by a Homogeneous Pt Catalyst. <i>Journal of the American Chemical Society</i> , 2014, 136, 10085-10094.	13.7	41
10	Mechanism of efficient anti-Markovnikov olefin hydroarylation catalyzed by homogeneous Ir(III) complexes. <i>Green Chemistry</i> , 2011, 13, 69-81.	9.0	39
11	Alkene Isomerization-Hydroboration Catalyzed by First-Row Transition-Metal (Mn, Fe, Co, and Ni) N-Phosphinoamidinate Complexes: Origin of Reactivity and Selectivity. <i>ACS Catalysis</i> , 2018, 8, 9907-9925.	11.2	38
12	Functionalization of Rhenium Aryl Bonds by O-Atom Transfer. <i>Organometallics</i> , 2011, 30, 2079-2082.	2.3	35
13	Why Less Coordination Provides Higher Reactivity Chromium Phosphinoamidinate Ethylene Trimerization Catalysts. <i>ACS Catalysis</i> , 2020, 10, 9674-9683.	11.2	21
14	The Hydroxide-Promoted Catalytic Hydrodefluorination of Fluorocarbons by Ruthenium in Aqueous Media. <i>Advanced Synthesis and Catalysis</i> , 2013, 355, 632-636.	4.3	19
15	Oxy-Functionalization of Nucleophilic Rhenium(I) Metal Carbon Bonds Catalyzed by Selenium(IV). <i>Journal of the American Chemical Society</i> , 2009, 131, 2466-2468.	13.7	17
16	Dehydrogenative B-H/C(sp ³)-H Benzylic Borylation within the Coordination Sphere of Platinum(II). <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6312-6316.	13.8	16
17	Synthesis, characterization, and C-H activation reactions of novel organometallic O-donor ligated Rh(III) complexes. <i>Journal of Organometallic Chemistry</i> , 2011, 696, 551-558.	1.8	13
18	Synthesis and Reactivity of a Neutral, Three-Coordinate Platinum(II) Complex Featuring Terminal Amido Ligation. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14498-14502.	13.8	10

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19	The para-substituent effect and pH-dependence of the organometallic Baeyer-Villiger oxidation of rhenium-carbon bonds. Dalton Transactions, 2012, 41, 3758.	3.3	9
20	Base accelerated generation of N ₂ and NH ₃ from an osmium nitride. Journal of Molecular Catalysis A, 2014, 382, 1-7.	4.8	8
21	Challenge of Using Practical DFT to Model Fe Pendant Donor Diimine Catalyzed Ethylene Oligomerization. Journal of Physical Chemistry C, 2019, 123, 3727-3739.	3.1	8
22	Designing Molecular Catalysts for Selective CH Functionalization. Topics in Organometallic Chemistry, 2012, , 195-231.	0.7	6
23	Making Water the Exciting Way: A Classroom Demonstration of Catalysis. Journal of Chemical Education, 2014, 91, 550-553.	2.3	6
24	Dehydrogenative β -H/C(sp ³) α -H Benzylic Borylation within the Coordination Sphere of Platinum(II). Angewandte Chemie, 2017, 129, 6409-6413.	2.0	5
25	Computational Evaluation and Design of Polyethylene Zirconocene Catalysts with Noncovalent Dispersion Interactions. Organometallics, 2022, 41, 581-593.	2.3	4
26	Iridium(III) catalyzed trifluoroacetoxylation of aromatic hydrocarbons. RSC Advances, 2014, 4, 35639-35648.	3.6	3
27	Computational assessment and understanding of C ₆ product selectivity for chromium phosphinoamidine catalyzed ethylene trimerization. Journal of Organometallic Chemistry, 2022, 961, 122251.	1.8	2
28	Density functional theory and CCSD(T) evaluation of ionization potentials, redox potentials, and bond energies related to zirconocene polymerization catalysts. Journal of Computational Chemistry, 0, , .	3.3	0