D Michael Heinekey

List of Publications by Year in descending order

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71 papers

4,441 citations

36 h-index 102487 66 g-index

75 all docs

75 docs citations

times ranked

75

3251 citing authors

#	Article	IF	CITATIONS
1	Efficient Catalysis of Ammonia Borane Dehydrogenation. Journal of the American Chemical Society, 2006, 128, 12048-12049.	13.7	605
2	Coordination chemistry of dihydrogen. Chemical Reviews, 1993, 93, 913-926.	47.7	581
3	Dihydrogen complexes of ruthenium. 2. Kinetic and thermodynamic considerations affecting product distribution. Journal of the American Chemical Society, 1990, 112, 5166-5175.	13.7	206
4	Elongated dihydrogen complexes: what remains of the H–H Bond?. Chemical Society Reviews, 2004, 33, 175-182.	38.1	178
5	Hydrogenase enzymes: Recent structural studies and active site models. Journal of Organometallic Chemistry, 2009, 694, 2671-2680.	1.8	123
6	Dinuclear Iron Isonitrile Complexes:  Models for the Iron Hydrogenase Active Site. Inorganic Chemistry, 2003, 42, 4288-4292.	4.0	117
7	Synthesis, Characterization, and Reactivity of Dicationic Dihydrogen Complexes of Osmium and Ruthenium. Inorganic Chemistry, 1998, 37, 127-132.	4.0	108
8	CH Bond Activation by Rhodium(I) Hydroxide and Phenoxide Complexes. Angewandte Chemie - International Edition, 2007, 46, 4736-4738.	13.8	108
9	Câr'H Bond Activation by Rhodium(I) Phenoxide and Acetate Complexes: Mechanism of Hâr'D Exchange between Arenes and Water. Organometallics, 2008, 27, 1454-1463.	2.3	108
10	Synthesis and Characterization of Hydrotris(pyrazolyl)borate Dihydrogen/Hydride Complexes of Rhodium and Iridium. Journal of the American Chemical Society, 1997, 119, 11028-11036.	13.7	101
11	Structure and Solution Reactivity of (Triethylsilylium)triethylsilane Cations. Organometallics, 2013, 32, 7478-7481.	2.3	98
12	Stereoselective Decarbonylation of Methanol to Form a Stable Iridium(III)trans-Dihydride Complex. Organometallics, 2006, 25, 3007-3011.	2.3	85
13	Synthesis and Properties of Compressed Dihydride Complexes of Iridium:Â Theoretical and Spectroscopic Investigations. Journal of the American Chemical Society, 2004, 126, 8813-8822.	13.7	79
14	Preparation of a Dihydrogen Complex of Cobalt. Angewandte Chemie - International Edition, 2011, 50, 1873-1876.	13.8	79
15	Synthesis and Characterization of a Dicationic Dihydrogen Complex of Iridium with a Bis-carbene Ligand Set. Organometallics, 2005, 24, 1832-1836.	2.3	69
16	Active-Site Models for Iron Hydrogenases:  Reduction Chemistry of Dinuclear Iron Complexes. Inorganic Chemistry, 2006, 45, 8000-8002.	4.0	69
17	Synthesis and Investigation of [Cp*(PMe3)Rh(H)(H2)]+and Its Partially Deuterated and Tritiated Isotopomers:Â Evidence for a Hydride/Dihydrogen Structure. Journal of the American Chemical Society, 2002, 124, 5100-5108.	13.7	68
18	Synthesis, Characterization, and Reactivity of Dicationic Dihydrogen Complexes of Osmium. Inorganic Chemistry, 1996, 35, 4396-4399.	4.0	66

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19	Dihydride Complexes of the Cobalt and Iron Group Metals:Â An Investigation of Structure and Dynamic Behavior. Journal of the American Chemical Society, 1996, 118, 12134-12140.	13.7	63
20	Quantum mechanical exchange in a transition metal hydride complex: NMR data for [cp(PPh3)lrH3]+ fitted by a two-dimensional model. Journal of Chemical Physics, 1997, 106, 1-10.	3.0	62
21	Alkane Dehydrogenation by C–H Activation at Iridium(III). Organometallics, 2013, 32, 1579-1582.	2.3	61
22	Dihydrogen/Dihydride or Tetrahydride? An Experimental and Computational Investigation of Pincer Iridium Polyhydrides. Inorganic Chemistry, 2010, 49, 1733-1742.	4.0	59
23	Dihydrogen Complexes of Iridium and Rhodium. Inorganic Chemistry, 2012, 51, 4672-4678.	4.0	58
24	The Importance of Steric Factors in Iridium Pincer Complexes. Organometallics, 2015, 34, 753-762.	2.3	54
25	Hydride & Eamp; dihydrogen complexes of earth abundant metals: structure, reactivity, and applications to catalysis. Chemical Communications, 2017, 53, 669-676.	4.1	54
26	Activation of Hydrogen by Palladium(0): Formation of the Mononuclear Dihydride Complex <i>trans</i> â€[Pd(H) ₂ (IPr)(PCy ₃)]. Angewandte Chemie - International Edition, 2009, 48, 5182-5186.	13.8	53
27	Partial Deoxygenation of Glycerol Catalyzed by Iridium Pincer Complexes. ACS Catalysis, 2013, 3, 2391-2396.	11.2	52
28	Synthesis, Structure, and Reactivity of Iridium NHC Pincer Complexes. Organometallics, 2011, 30, 1429-1437.	2.3	51
29	Iridium, Rhodium, and Ruthenium Catalysts for the "Aldehyde–Water Shift―Reaction. ACS Catalysis, 2014, 4, 3034-3038.	11.2	50
30	Oxyfunctionalization with Cp*Ir ^{III} (NHC)(Me)(Cl) with O ₂ : Identification of a Rare Bimetallic Ir ^{IV} $\hat{1}\frac{1}{4}$ -Oxo Intermediate. Journal of the American Chemical Society, 2015, 137, 3574-3584.	13.7	44
31	Synthesis, Structure, and Reactivity of a Nickel Dihydrogen Complex. Chemistry - A European Journal, 2012, 18, 15932-15934.	3.3	42
32	Cationic Dihydrogen Complexes of Rhodium and Cobalt: A Reinvestigation. Journal of the American Chemical Society, 1994, 116, 8388-8389.	13.7	40
33	Protonation of Metalâ^'Metal Bonds in Dinuclear Iridium Complexes:Â Consequences for Structure and Reactivity. Organometallics, 1997, 16, 2530-2538.	2.3	40
34	Rhenium Dihydrogen Complexes with Isonitrile Coligands:Â Novel Displacement of Chloride by Hydrogen. Journal of the American Chemical Society, 1996, 118, 10792-10802.	13.7	39
35	Hydrogen Addition to (pincer)lr ^I (CO) Complexes: The Importance of Steric and Electronic Factors. Organometallics, 2016, 35, 3546-3556.	2.3	38
36	Temperature- and Solvent-Dependent Binding of Dihydrogen in Iridium Pincer Complexes. Journal of the American Chemical Society, 2006, 128, 17114-17119.	13.7	37

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37	Regeneration of an Iridium(III) Complex Active for Alkane Dehydrogenation Using Molecular Oxygen. Organometallics, 2014, 33, 1337-1340.	2.3	37
38	Synthesis of Ethylene Hydridotris(1-pyrazolyl)borate Triphenylphosphine Complexes of Rhodium and Iridium and Their Reactions with Hydrogen. Organometallics, 1997, 16, 467-474.	2.3	36
39	Structure and Dynamics of a Dihydrogen/Hydride Ansa Molybdenocene Complex. Inorganic Chemistry, 2004, 43, 3475-3483.	4.0	36
40	Pincer Complexes as Catalysts for Amine Borane Dehydrogenation. Topics in Organometallic Chemistry, 2013, , 271-287.	0.7	35
41	An Elongated Dihydrogen Complex of Iridium. Journal of the American Chemical Society, 2003, 125, 8428-8429.	13.7	33
42	Synthesis and Reactivity of the Cationic Methylene Complex [Cp2ReCH2]+. Organometallics, 1998, 17, 51-58.	2.3	32
43	C–H Bond Activation by Cationic Iridium(III) NHC Complexes: A Combined Experimental and Computational Study. Organometallics, 2012, 31, 1879-1887.	2.3	29
44	Carbonâ^'Hydrogen Bond Activation in Hydridotris(pyrazolyl)borate Complexes of Iridium. Organometallics, 2000, 19, 1670-1676.	2.3	24
45	Hâ^'H Distances in Elongated Transition Metal Dihydrogen Complexes:  Effects of Temperature and Isotopic Substitution. Journal of the American Chemical Society, 2001, 123, 2085-2086.	13.7	24
46	High Catalytic Efficiency Combined with High Selectivity for the Aldehyde–Water Shift Reaction using (<i>para</i> -cymene)Ruthenium Precatalysts. ACS Catalysis, 2016, 6, 6302-6305.	11.2	24
47	Pincer-Supported Carbonyl Complexes of Cobalt(I). Organometallics, 2017, 36, 3104-3109.	2.3	24
48	Dynamic Processes incisDihydrogen/Hydride Complexes of Ruthenium. Journal of the American Chemical Society, 2000, 122, 6498-6499.	13.7	22
49	Transition metal dihydrogen complexes: isotope effects on reactivity and structure. Journal of Labelled Compounds and Radiopharmaceuticals, 2007, 50, 1063-1071.	1.0	22
50	Synthesis, Characterization, and Reactivity of Arene-Stabilized Rhodium Complexes. Organometallics, 2011, 30, 2105-2116.	2.3	22
51	Kubas Complexes Revisited:  Novel Dihydride Complexes of Tungsten. Journal of the American Chemical Society, 2001, 123, 12728-12729.	13.7	21
52	Detection of an Iridium–Dihydrogen Complex: A Proposed Intermediate in Ionic Hydrogenation. Journal of the American Chemical Society, 2017, 139, 12638-12646.	13.7	21
53	Cationic Dihydrogen/Dihydride Complexes of Osmium:Â Structure and Dynamics. Organometallics, 2007, 26, 2291-2295.	2.3	19
54	Dihydrogen Complexes of the Chromium Group: Synthesis and Characterization of (Arene)M(CO) ₂ (H ₂) Complexes. Organometallics, 2010, 29, 3387-3391.	2.3	19

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55	Structure of a Novel Rhodium Phosphinite Compound: Agostic Interactions as a Model for an Oxidative Addition Intermediate. Organometallics, 2016, 35, 2165-2169.	2.3	19
56	î- ⁶ -Tetramethylfulvene and î½-î- ³ :î- ³ -Benzene Complexes of Iridium. Organometallics, 2012, 31, 8459-8462.	2.3	18
57	Cyclometalation of a Pyrazolyl Arm in Hydridotris(1-pyrazolyl)borate and Tris(1-pyrazolyl)methane Complexes of Iridium. Journal of the American Chemical Society, 1996, 118, 12842-12843.	13.7	15
58	Characterization of a Palladium Dihydrogen Complex. Angewandte Chemie - International Edition, 2015, 54, 5915-5918.	13.8	15
59	The Electronic Structure of [(\hat{i} -5-C5H5)2Co2]: Comment on the Existence of a Complex with an Unsupported Coï£;Co Double Bond. Angewandte Chemie International Edition in English, 1992, 31, 471-473.	4.4	14
60	Dinuclear Iridium Complexes Containing Cp* and Carbonyl Ligands: Synthesis, Structure, and Reactivity. Organometallics, 2009, 28, 3546-3551.	2.3	13
61	Elektronenstruktur von [(Î- ⁵ â€C ₅ H ₅) ₂ Co ₂]: Kommentar zur Existenz eines Komplexes mit einer unverbrÃ⅓ckten Coâ€Coâ€Doppelbindung. Angewandte Chemie, 1992, 104, 464-466.	2.0	11
62	(Hexamethylbenzene)Ru catalysts for the Aldehyde-Water Shift reaction. Green Chemistry, 2021, 23, 1609-1615.	9.0	11
63	Structure and Dynamics of a Compressed Dihydride Complex of Osmium. Organometallics, 2006, 25, 3481-3485.	2.3	9
64	H ₂ addition to (^{Me4} PCP)Ir(CO): studies of the isomerization mechanism. Dalton Transactions, 2018, 47, 16119-16125.	3.3	9
65	Synthesis, Structure, and Reactivity ofansa-Rhenocene Complexes. Organometallics, 1999, 18, 3070-3074.	2.3	7
66	Synthesis and Characterization of Iridium(I) and Iridium(III) Complexes Containing Dialkylbiphenylphosphines. Organometallics, 2013, 32, 4016-4019.	2.3	7
67	Synthesis and structural characterization of sulfur rich iron (II) carbonyl dimers: Facile reversible reaction with carbon monoxide. Journal of Organometallic Chemistry, 2009, 694, 840-844.	1.8	6
68	Synthesis and Structure of Molybdenum and Tungsten Bisphosphine Carbonyl Dimers. Organometallics, 2008, 27, 3901-3906.	2.3	5
69	Preparation and Reactivity of Bimetallic (pincer)Ir Complexes. Organometallics, 2020, 39, 3323-3334.	2.3	5
70	A Convenient One-Pot Synthesis of Di- <i>t</i> -butylphosphinic Chloride. Phosphorus, Sulfur and Silicon and the Related Elements, 2008, 183, 2534-2540.	1.6	3
71	An Improved Synthesis of ^{Me4} PCP and DMPE. Organometallics, 2018, 37, 211-213.	2.3	3