Robert H Morris

List of Publications by Year
in descending order

264 papers	19,296 citations	10986 71 h-index	12597 132 g-index
302 all docs	302 docs citations	302 times ranked	10070 citing authors

#	Article	IF	Citations
1	Frontiers, Opportunities, and Challenges in Biochemical and Chemical Catalysis of CO₂ Fixation. Chemical Reviews, 2013, 113, 6621-6658.	47.7	1,786
2	Mechanisms of the H2-hydrogenation and transfer hydrogenation of polar bonds catalyzed by ruthenium hydride complexes. Coordination Chemistry Reviews, 2004, 248, 2201-2237.	18.8	1,197
3	Asymmetric hydrogenation, transfer hydrogenation and hydrosilylation of ketones catalyzed by iron complexes. Chemical Society Reviews, 2009, 38, 2282.	38.1	700
4	Reactions of transition metal dihydrogen complexes. Coordination Chemistry Reviews, 1992, 121, 155-284.	18.8	693
5	Mechanism of the Hydrogenation of Ketones Catalyzed bytrans-Dihydrido(diamine)ruthenium(II) Complexesâ€. Journal of the American Chemical Society, 2002, 124, 15104-15118.	13.7	495
6	Amine(imine)diphosphine Iron Catalysts for Asymmetric Transfer Hydrogenation of Ketones and Imines. Science, 2013, 342, 1080-1083.	12.6	454
7	Exploiting Metalâ€“Ligand Bifunctional Reactions in the Design of Iron Asymmetric Hydrogenation Catalysts. Accounts of Chemical Research, 2015, 48, 1494-1502.	15.6	376
8	Highly Efficient Catalyst Systems Using Iron Complexes with a Tetradentate PNNP Ligand for the Asymmetric Hydrogenation of Polar Bonds. Angewandte Chemie - International Edition, 2008, 47, 940-943.	13.8	324
9	Getting Down to Earth: The Renaissance of Catalysis with Abundant Metals. Accounts of Chemical Research, 2015, 48, 2495-2495.	15.6	311
10	Using natureâ€™s blueprint to expand catalysis with Earth-abundant metals. Science, 2020, 369, .	12.6	306
11	Fundamentals and applications of photocatalytic CO2 methanation. Nature Communications, 2019, 10, 3169.	12.8	304
12	Catalytic Cycle for the Asymmetric Hydrogenation of Prochiral Ketones to Chiral Alcohols:Â Direct Hydride and Proton Transfer from Chiral Catalyststrans-Ru(H)2(diphosphine)(diamine) to Ketones and Direct Addition of Dihydrogen to the Resulting Hydridoamido Complexes. Journal of the American Chemical Society, 2001, 123, 7473-7474.	13.7	284
13	Iron(II) Complexes Containing Unsymmetrical Pâ€“Nâ€“Pâ€² Pincer Ligands for the Catalytic Asymmetric Hydrogenation of Ketones and Imines. Journal of the American Chemical Society, 2014, 136, 1367-1380.	13.7	278
14	Efficient Asymmetric Transfer Hydrogenation of Ketones Catalyzed by an Iron Complex Containing a Pâ^'Nâ^'Nâ^'P Tetradentate Ligand Formed by Template Synthesis. Journal of the American Chemical Society, 2009, 131, 1394-1395.	13.7	263
15	Switching On and Off a New Intramolecular Hydrogen-Hydrogen Interaction and the Heterolytic Splitting of Dihydrogen. Crystal and Molecular Structure of [Ir{H(.eta.1-SC5H4NH)}2(PCy3)2]BF4.cntdot.2.7CH2Cl2. Journal of the American Chemical Society, 1994, 116, 8356-8357.	13.7	259
16	An Acidity Scale for Phosphorus-Containing Compounds Including Metal Hydrides and Dihydrogen Complexes in THF:Â Toward the Unification of Acidity Scales. Journal of the American Chemical Society, 2000, 122, 9155-9171.	13.7	245
17	Dihydrogen with Frequency of Motion Near the1H Larmor Frequency. Solid-State Structures and Solution NMR Spectroscopy of Osmium Complexestrans-[Os(HÂ·Â·H)X(PPh2CH2CH2PPh2)2]+(X = Cl, Br). Journal of the American Chemical Society, 1996, 118, 5396-5407.	13.7	231
18	Iron Nanoparticles Catalyzing the Asymmetric Transfer Hydrogenation of Ketones. Journal of the American Chemical Society, 2012, 134, 5893-5899.	13.7	219

#	Article	IF	Citations
19	Hydrogenation versus Transfer Hydrogenation of Ketones: Two Established Ruthenium Systems Catalyze Both. Chemistry - A European Journal, 2003, 9, 4954-4967.	3.3	206
20	RuHCl(diphosphine)(diamine):â€‰ Catalyst Precursors for the Stereoselective Hydrogenation of Ketones and Imines1. Organometallics, 2001, 20, 1047-1049.	2.3	197
21	BrÃ¸nstedâ€“Lowry Acid Strength of Metal Hydride and Dihydrogen Complexes. Chemical Reviews, 2016, 116, 8588-8654.	47.7	194
22	Catalytic Homogeneous Asymmetric Hydrogenation: Successes and Opportunities. Organometallics, 2019, 38, 47-65.	2.3	184
23	Preparation and spectroscopic properties of the .eta.2-dihydrogen complexes iron group triad. Journal of the American Chemical Society, 1991, 113, 4876-4887.	13.7	177
24	The Mechanism of Efficient Asymmetric Transfer Hydrogenation of Acetophenone Using an Iron(II) Complex Containing an (S,S)-Ph₂PCH₂CHâ•NCHPhCHPhNâ•CHCH₂PPh₂ Ligand: Partial Ligand Reduction Is the Key. Journal of the American Chemical Society, 2012, 134, 12266-12280.	13.7	174
25	A Succession of Isomers of Ruthenium Dihydride Complexes. Which One Is the Ketone Hydrogenation Catalyst?. Journal of the American Chemical Society, 2005, 127, 1870-1882.	13.7	169
26	Iron(II) Complexes for the Efficient Catalytic Asymmetric Transfer Hydrogenation of Ketones. Chemistry - A European Journal, 2009, 15, 5605-5610.	3.3	169
27	Low-Valent Eneâ€“Amido Iron Complexes for the Asymmetric Transfer Hydrogenation of Acetophenone without Base. Journal of the American Chemical Society, 2011, 133, 9662-9665.	13.7	159
28	Effect of the Ligand and Metal on the pKa Values of the Dihydrogen Ligand in the Series of Complexes [M(H2)H(L)2]+, M = Fe, Ru, Os, Containing Isosteric Ditertiaryphosphine Ligands, L. Journal of the American Chemical Society, 1994, 116, 3375-3388.	13.7	153
29	Influence of Chloride versus Hydride on H-H Bonding and Acidity of the Trans Dihydrogen Ligand in the Complexes trans-[Ru(H2)X(PR2CH2CH2PR2)2]+, X = Cl, H, R = Ph, Et. Crystal Structure Determinations of [RuCl(dppe)2]PF6 and trans-[Ru(H2)Cl(dppe)2]PF6. Inorganic Chemistry, 1994, 33, 6278-6288.	4.0	144
30	Dihydrogen, dihydride and in between: NMR and structural properties of iron group complexes. Coordination Chemistry Reviews, 2008, 252, 2381-2394.	18.8	142
31	Two molecular hydrogen complexes: trans-[M(.eta.2-H2)(H)(PPh2CH2CH2PPh2)2]BF4 (M = Fe, Ru). The crystal structure determination of the iron complex. Journal of the American Chemical Society, 1985, 107, 5581-5582.	13.7	137
32	Ruthenium Dihydride RuH2(PPh3)2((R,R)-cyclohexyldiamine) and Ruthenium Monohydride RuHCl(PPh3)2((R,R)-cyclohexyldiamine):Â Active Catalyst and Catalyst Precursor for the Hydrogenation of Ketones and Imines. Organometallics, 2000, 19, 2655-2657.	2.3	136
33	.eta.2-Dihydrogen on the brink of homolytic cleavage: trans-[Os(H.cntdot..cntdot..cntdot.H)H(PEt2CH2CH2PEt2)2]+ has spectroscopic and chemical properties between those of the isoelectronic complexes trans-[OsH(PPh2CH2CH2PPh2)2(.eta.2-H2)]+ and ReH3(PPh2CH2CH2PPh2)2. Journal of the American Chemical Society, 1991, 113, 3027-3039.	13.7	134
34	Synthesis and Characterization of Iron(II) Complexes with Tetradentate Diiminodiphosphine or Diaminodiphosphine Ligands as Precatalysts for the Hydrogenation of Acetophenone. Inorganic Chemistry, 2009, 48, 735-743.	4.0	129
35	Estimation of the hydrogen-hydrogen distances of .eta.2-dihydrogen ligands in the complexes trans-[M(.eta.2-H2)(H)(PR2CH2CH2PR2)2]+ [M = iron, ruthenium, R = Ph, M = osmium, R = Et] by solution NMR methods. Journal of the American Chemical Society, 1988, 110, 7031-7036.	13.7	125
36	The hydrogenation of molecules with polar bonds catalyzed by a ruthenium(ii) complex bearing a chelating N-heterocyclic carbene with a primary amine donor. Chemical Communications, 2010, 46, 8240.	4.1	121

#	Article	IF	Citations
37	Coordinatively Unsaturated Hydridoruthenium(II) Complexes of N-Heterocyclic Carbenes. Organometallics, 2004, 23, 86-94.	2.3	120
38	Hydrogenation of Benzonitrile to Benzylamine Catalyzed by Ruthenium Hydride Complexes with Pâ^'NHâ^'NHâ^'P Tetradentate Ligands:â€‰ Evidence for a Hydridicâ^'Protonic Outer Sphere Mechanism. Organometallics, 2007, 26, 5940-5949.	2.3	120
39	Wide range of pKa values of coordinated dihydrogen. Synthesis and properties of some .eta.2-dihydrogen and dihydride complexes of ruthenium. Journal of the American Chemical Society, 1991, 113, 875-883.	13.7	116
40	Asymmetric Transfer Hydrogenation of Ketimines Using Well-Defined Iron(II)-Based Precatalysts Containing a PNNP Ligand. Organic Letters, 2012, 14, 4638-4641.	4.6	116
41	Stereoelectronic Factors in Iron Catalysis: Synthesis and Characterization of Aryl-Substituted Iron(II) Carbonyl Pâ€“Nâ€“Nâ€“P Complexes and Their Use in the Asymmetric Transfer Hydrogenation of Ketones. Organometallics, 2011, 30, 4418-4431.	2.3	115
42	Single Crystal Neutron Diffraction Study of the Complex [Ru(H.cntdot..cntdot..cntdot.H)(C5Me5)(dppm)]BF4 which Contains an Elongated Dihydrogen Ligand. Journal of the American Chemical Society, 1994, 116, 7677-7681.	13.7	112
43	Single-crystal x-ray and neutron diffraction studies of an .eta.2-dihydrogen transition-metal complex: trans-[Fe(.eta.2-H2)(H)(PPh2CH2CH2PPh2)2]BPh4. Journal of the American Chemical Society, 1989, 111, 8823-8827.	13.7	108
44	Kinetic Hydrogen/Deuterium Effects in the Direct Hydrogenation of Ketones Catalyzed by a Well-Defined Ruthenium Diphosphine Diamine Complex. Journal of the American Chemical Society, 2009, 131, 11263-11269.	13.7	106
45	1995 Alcan Award Lecture New intermediates in the homolytic and heterolytic splitting of dihydrogen. Canadian Journal of Chemistry, 1996, 74, 1907-1915.	1.1	105
46	Estimating the Acidity of Transition Metal Hydride and Dihydrogen Complexes by Adding Ligand Acidity Constants. Journal of the American Chemical Society, 2014, 136, 1948-1959.	13.7	105
47	Synthesis and the kinetic and thermodynamic acidity of .eta.2-dihydrogen and dihydride complexes of the type [Ru(C5Me5)H2L2]+. X-ray crystal structure determination of the complex [Ru(C5Me5)(.eta.2-H2)(PPh2CH2PPh2)]BF4. Organometallics, 1992, 11, 161-171.	2.3	101
48	Synthesis of Ruthenium Hydride Complexes Containing beta-Aminophosphine Ligands Derived from Amino Acids and their use in the H2-Hydrogenation of Ketones and Imines. Advanced Synthesis and Catalysis, 2005, 347, 571-579.	4.3	98
49	Enantioselective Tandem Michael Addition/H2-Hydrogenation Catalyzed by Ruthenium Hydride Borohydride Complexes Containing Î²-aminophosphine Ligands1. Journal of the American Chemical Society, 2005, 127, 516-517.	13.7	98
50	Transmetalation of a Primary Amino-Functionalized N-Heterocyclic Carbene Ligand from an Axially Chiral Square-Planar Nickel(II) Complex to a Ruthenium(II) Precatalyst for the Transfer Hydrogenation of Ketones. Organometallics, 2009, 28, 6755-6761.	2.3	97
51	Effect of the Structure of the Diamine Backbone of Pâ^'Nâ^'Nâ^'P ligands in Iron(II) Complexes on Catalytic Activity in the Transfer Hydrogenation of Acetophenone. Inorganic Chemistry, 2010, 49, 11039-11044.	4.0	95
52	Rational development of iron catalysts for asymmetric transfer hydrogenation. Dalton Transactions, 2014, 43, 7650.	3.3	94
53	Iron Catalysts Containing Amine(imine)diphosphine P-NH-N-P Ligands Catalyze both the Asymmetric Hydrogenation and Asymmetric Transfer Hydrogenation of Ketones. Organometallics, 2014, 33, 5791-5801.	2.3	94
54	Applications of Ruthenium Hydride Borohydride Complexes Containing Phosphinite and Diamine Ligands to Asymmetric Catalytic Reactions. Organic Letters, 2005, 7, 1757-1759.	4.6	92

#	Article	IF	Citations
55	A new type of intramolecular H â‹¯ H â‹¯ H interaction involving Nâ€“H â‹¯ H(Ir)â‹¯ Hâ€“N atoms. Crystal and molecular structure of [IrH(Î·1-SC5H4NH)2(Î·2-SC5H4N)(PCy3)]BF4Â·0.72CH2Cl2. Journal of the Chemical Society Chemical Communications, 1994, , 2201-2202.	2.0	90
56	Ester Hydrogenation Catalyzed by a Ruthenium(II) Complex Bearing an N-Heterocyclic Carbene Tethered with an â€œNH‹sub›2‹/sub›â€•Group and a DFT Study of the Proposed Bifunctional Mechanism. ACS Catalysis, 2013, 3, 32-40.	11.2	89
57	Ligand additivity effects and periodic trends in the stability and acidity of octahedral .eta.2-dihydrogen complexes of d6 transition metal ions. Inorganic Chemistry, 1992, 31, 1471-1478.	4.0	86
58	Dihydridoamine and Hydridoamido Complexes of Ruthenium(II) with a Tetradentate Pâ^'Nâ^'Nâ^'P Donor Ligand. Organometallics, 2004, 23, 6239-6247.	2.3	86
59	A Mechanism Displaying Autocatalysis:â€‰ The Hydrogenation of Acetophenone Catalyzed by RuH(S-binap)(app) Where app Is the Amido Ligand Derived from 2-Amino-2-(2-pyridyl)propane. Organometallics, 2007, 26, 5987-5999.	2.3	86
60	Iron Complexes for the Catalytic Transfer Hydrogenation of Acetophenone: Steric and Electronic Effects Imposed by Alkyl Substituents at Phosphorus. Inorganic Chemistry, 2010, 49, 10057-10066.	4.0	86
61	Synthesis and Characterization of RuH2(H2)2(PiPr3)2 and Related Chemistry. Evidence for a Bis(dihydrogen) Structure. Organometallics, 2000, 19, 1652-1660.	2.3	83
62	Ketone Asymmetric Hydrogenation Catalyzed by P-NH-Pâ€² Pincer Iron Catalysts: An Experimental and Computational Study. ACS Catalysis, 2017, 7, 316-326.	11.2	83
63	Factors Favoring Efficient Bifunctional Catalysis. Study of a Ruthenium(II) Hydrogenation Catalyst Containing an N-Heterocyclic Carbene with a Primary Amine Donor. Organometallics, 2012, 31, 2137-2151.	2.3	82
64	Asymmetric Hydrogenation of Ketones Catalyzed by Ruthenium Hydride Complexes of a Beta-aminophosphine Ligand Derived from Norephedrine. Organometallics, 2004, 23, 5524-5529.	2.3	80
65	Unsymmetrical Iron Pâ€NHâ€Pâ€² Catalysts for the Asymmetric Pressure Hydrogenation of Aryl Ketones. Chemistry - A European Journal, 2017, 23, 7212-7216.	3.3	80
66	Mechanistic Investigation of the Hydrogenation of Ketones Catalyzed by a Ruthenium(II) Complex Featuring an N-Heterocyclic Carbene with a Tethered Primary Amine Donor: Evidence for an Inner Sphere Mechanism. Organometallics, 2011, 30, 1236-1252.	2.3	79
67	Inner-Sphere Activation, Outer-Sphere Catalysis: Theoretical Study on the Mechanism of Transfer Hydrogenation of Ketones Using Iron(II) PNNP Eneamido Complexes. Organometallics, 2012, 31, 7375-7385.	2.3	79
68	Asymmetric Transfer Hydrogenation of Ketones with Well-Defined Manganese(I) PNN and PNNP Complexes. Organometallics, 2018, 37, 4608-4618.	2.3	79
69	Monomeric and dimeric ruthenium(II) .eta.2-dihydrogen complexes with tricyclohexylphosphine co-ligands. Inorganic Chemistry, 1988, 27, 598-599.	4.0	78
70	Synthesis, Structure, and Properties of the Stable and Highly Acidic Dihydrogen Complextrans-[Os(Î·2-H2)(CH3CN)(dppe)2](BF4)2. Perspectives on the Influence of thetransLigand on the Chemistry of the Dihydrogen Ligand. Organometallics, 1996, 15, 2270-2278.	2.3	76
71	Dihydrogen Thiolate vs Hydride Thiol:Â Reactivity of the Series of Complexes MH(CO)(L)(PPh3)2(M = Ru,) Tj ETQq1 1 0.784314 rgBT /O [Os(CO)(Î¼2-Spy)(SpyH)(PPh3)]2[BF4]2. Organometallics, 1996, 15, 4423-4436.	2.3	74
72	Dihydrogen vs. dihydride. Correlations between electrochemical or UV PES data and force constants for carbonyl or dinitrogen ligands in octahedral, d6 complexes and their use in explaining the behavior of the dihydrogen ligand. Inorganic Chemistry, 1987, 26, 2674-2683.	4.0	71

#	Article	IF	Citations
73	Iridium(III) Complex Containing a Unique Bifurcated Hydrogen Bond Interaction Involving Irâ^'HÂ·Â·Â·H(N)Â·Â·Â·Fâ^'B atoms. Crystal and Molecular Structure of [IrH(Î·1-SC5H4NH)(Î·2-SC5H4N)(PPh3)2](BF4)Â·0.5C6H6. Inorganic Chemistry, 1996, 35, 3001-3006.	4.0	71
74	Bifunctional Mechanism with Unconventional Intermediates for the Hydrogenation of Ketones Catalyzed by an Iridium(III) Complex Containing an N-Heterocyclic Carbene with a Primary Amine Donor. Organometallics, 2012, 31, 2152-2165.	2.3	70
75	Sulfur-bonded sulfoxide complexes of rhodium(III) and rhodium(I). Canadian Journal of Chemistry, 1980, 58, 399-408.	1.1	67
76	Details of the Mechanism of the Asymmetric Transfer Hydrogenation of Acetophenone Using the Amine(imine)diphosphine Iron Precatalyst: The Base Effect and The Enantiodetermining Step. ACS Catalysis, 2016, 6, 301-314.	11.2	66
77	Distinguishing homogeneous from nanoparticle asymmetric iron catalysis. Catalysis Science and Technology, 2014, 4, 3426-3438.	4.1	65
78	NMR properties of the complexes trans-[M(.eta.2-H2)(H)(PEt2CH2CH2PEt2)2]+ (M = Fe, Ru, Os). Intramolecular exchange of atoms between .eta.2-dihydrogen and hydride ligands. Journal of the American Chemical Society, 1987, 109, 3780-3782.	13.7	63
79	Synthesis of Iron P-N-Pâ€² and P-NH-Pâ€² Asymmetric Hydrogenation Catalysts. Organometallics, 2014, 33, 6452-6465.	2.3	62
80	Iron(II) Complexes Containing Chiral Unsymmetrical PNPâ€² Pincer Ligands: Synthesis and Application in Asymmetric Hydrogenations. Organometallics, 2016, 35, 3781-3787.	2.3	62
81	Use of the new ligand P(CH2CH2PCy2)3 in the synthesis of dihydrogen complexes of iron(II) and ruthenium(II). Organometallics, 1993, 12, 906-916.	2.3	61
82	Synthesis and use of an asymmetric transfer hydrogenation catalyst based on iron(II) for the synthesis of enantioenriched alcohols and amines. Nature Protocols, 2015, 10, 241-257.	12.0	61
83	From cis-dichloride complexes to dihydride complexes of the iron group metals via two successive .eta.2-dihydrogen intermediates. Inorganic Chemistry, 1989, 28, 4437-4438.	4.0	58
84	Effect of chelating ring size in catalytic ketone hydrogenation: facile synthesis of ruthenium(ii) precatalysts containing an N-heterocyclic carbene with a primary amine donor for ketone hydrogenation and a DFT study of mechanisms. Dalton Transactions, 2012, 41, 8797.	3.3	58
85	Evidence for Iron Nanoparticles Catalyzing the Rapid Dehydrogenation of Ammonia-Borane. ACS Catalysis, 2013, 3, 1092-1102.	11.2	57
86	Bonding interactions between three adjacent hydrogen ligands. Preparation and spectroscopic properties of the tantalum and niobium complexes [Ta(H)3(C5H5â€"nRn)2](R = SiMe3, n= 1 or 2) and [Nb(H3)(C5H5â€"nRn)2](n= 1, R = Me or SiMe3; n= 2, R = SiMe3). Journal of the Chemical Society Chemical Communications, 1988, .	2.0	56
87	New Polyhydride Anions and Proton-Hydride Hydrogen Bonding in Their Ion Pairs. X-ray Crystal Structure Determinations of Q[mer-Os(H)3(CO)(PiPr3)2], Q = [K(18-crown-6)] and Q = [K(1-aza-18-crown-6)]. Journal of the American Chemical Society, 1998, 120, 13138-13147.	13.7	56
88	Synthesis of the acidic dihydrogen complexes trans-[M(H2)(CN)L2]+ and trans-[M(H2)(CNH)L2]2+ where Mâ€…=â€…Fe, Ru, Os and Lâ€…=â€…dppm, dppe, dppp, depe, and dihydrogen substitution by the trifluoromethanesulfonate anion to give trans-[Ru(OTfâ€Š)(CN)L2] or trans-[Ru(OTfâ€Š)(CNH)L2]OTfâ€Šâ€. Journal of the Chemical Society Dalton Transactions, 1999, , 4475-4486.	1.1	55
89	Template Syntheses of Iron(II) Complexes Containing Chiral Pâ^'Nâ^'Nâ^'P and Pâ^'Nâ^'N Ligands. Inorganic Chemistry, 2008, 47, 6587-6589.	4.0	54
90	Acidic Dicationic Iron(II) Dihydrogen Complexes and Compounds Related by H2Substitution. Inorganic Chemistry, 1999, 38, 6060-6068.	4.0	52

#	Article	IF	Citations
91	Protonation and H2 Heterolysis Reactions of Electrophilic (Î·5-C5R5)Ru(dfepe)(X) (R = H, Me; X = H, OTf) Complexes. Organometallics, 1998, 17, 5467-5476.	2.3	50
92	Reactions of elemental sulfur with tetrakis(triphenylphosphine)platinum(0). Formation of a complex containing very nucleophilic bridging sulfido ligands. Canadian Journal of Chemistry, 1983, 61, 2490-2492.	1.1	49
93	Synthesis and Structure of the Chiral Dihydrogen Complextrans-[Ru(Î·2-H2)H(R,Râ€˜-Me-DuPHOS)2]PF6and the Dinitrogen Complextrans-[Ru(N2)H(R,Râ€˜-Me-DuPHOS)2]PF6(R,Râ€˜-Me-DuPHOS =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	2.3	49
94	Chemistry of Ruthenium(II) Monohydride and Dihydride Complexes Containing Pyridyl Donor Ligands Including Catalytic Ketone H2-Hydrogenation1. Inorganic Chemistry, 2005, 44, 2483-2492.	4.0	49
95	A modular design of ruthenium catalysts with diamine and BINOL-derived phosphinite ligands that are enantiomerically-matched for the effective asymmetric transfer hydrogenation of simple ketones. Chemical Communications, 2005, , 3050.	4.1	48
96	Stereochemical control of the exchange of hydrogen atoms between hydride and dihydrogen ligands in the complexes [M(.eta.2-H2)(H)(meso- or rac-tetraphos-1)]+, M = Fe, Os. Journal of the American Chemical Society, 1988, 110, 4056-4057.	13.7	47
97	Hydrogen/deuterium exchange reactions of an iridium dithiol complex. Inorganic Chemistry, 1993, 32, 2236-2237.	4.0	47
98	Reactions of an Amido Hydrido Complex of Osmium, OsH(NHCMe2CMe2NH2)(PPh3)2:Â HX Addition, HX Transfer, and Ketone H2Hydrogenation. Organometallics, 2005, 24, 479-481.	2.3	47
99	Symmetry Aspects of H₂ Splitting by Five-Coordinate d⁶ Ruthenium Amides, and Calculations on Acetophenone Hydrogenation, Ruthenium Alkoxide Formation, and Subsequent Hydrogenolysis in a Model trans-Ru(H)₂(diamine)(diphosphine) System. Inorganic Chemistry, 2012, 51, 10808-10818.	4.0	47
100	Probing the Effect of the Ligand X on the Properties and Catalytic Activity of the Complexes RuHX(diamine)(PPh3)2 (X = OPh, 4-SC6H4OCH3, OPPh2, OP(OEt)2, CCPh, NCCHCN, CH(COOMe)2; diamine =) Tj ETQq0 0 0 rgBT /Ove	2.3	46
101	Spectroscopic and DFT Study of Ferraaziridine Complexes Formed in the Transfer Hydrogenation of Acetophenone Catalyzed Using trans-[Fe(CO)(NCMe)(PPh₂C₆H₄CHâ•NCH₂â€˜)₂]⁺. Organometallics, 2012, 31, 3056-3064.	2.3	46
102	Preparation of Rhenium(I) and Rhenium(II) Amine Dinitrogen Complexes and the Characterization of an Elongated Dihydrogen Species. Inorganic Chemistry, 1997, 36, 3553-3558.	4.0	44
103	Coherent D2 rotational tunneling and incoherent D2 dynamics in a solid non-classical RuD2 complex studied by 2H solid state NMR spectroscopy. Physical Chemistry Chemical Physics, 1999, 1, 4033-4041.	2.8	44
104	Effect of a Libration or Hopping Motion of theÎ·2-Dihydrogen Ligand on Longitudinal NuclearMagnetic Resonance Relaxation. Magnetic Resonance in Chemistry, 1997, 35, 243-250.	1.9	43
105	Competition between NHÂ·Â·Â·HIr Intramolecular Protonâ€˜Hydride Interactions and NHÂ·Â·Â·FBF3-or NHÂ·Â·Â·O Intermolecular Hydrogen Bonds Involving [IrH(2-thiazolidinethione)4(PCy3)](BF4)2and Related Complexes. Inorganic Chemistry, 1996, 35, 1549-1555.	4.0	42
106	Solvent transfer hydrogenation of Î±Î²-unsaturated aldehydes to the unsaturated alcohols catalysed by hydridoiridium sulphoxide complexes. Journal of the Chemical Society Chemical Communications, 1978, , 929-930.	2.0	41
107	Organizing Chain Structures by Use of Protonâ€˜Hydride Bonding. The Single-Crystal X-ray Diffraction Structures of [K(Q)][Os(H)5(PiPr3)2] and [K(Q)][Ir(H)4(PiPr3)2], Q = 18-Crown-6 and 1,10-Diaza-18-crown-6. Journal of the American Chemical Society, 1998, 120, 11826-11827.	13.7	41
108	Protonation Reactions oftrans-M(H)(SPh)(dppe)2(M = Ru, Os) To Give Thiol and Dihydrogen Complexes. X-ray Crystal Structure Determination oftrans-Ru(H)(SPh)(dppe)2andtrans-[Os(H)(O2)(dppe)2](O3SCF3). Inorganic Chemistry, 1998, 37, 1555-1562.	4.0	41

#	Article	IF	Citations
109	Intermolecular Protonâ^'Hydride Bonding in Ion Pairs:â€‰ Synthesis and Structural Properties of [K(Q)][MH5(PiPr3)2] (M = Os, Ru; Q = 18-crown-6, 1-aza-18-crown-6, 1,10-diaza-18-crown-6). Organometallics, 2000, 19, 834-843.	2.3	41
110	Template Synthesis of Iron(II) Complexes Containing Tridentate Pâ^'Nâ^'S, Pâ^'Nâ^'P, Pâ^'Nâ^'N, and Tetradentate Pâ^'Nâ^'Nâ^'P Ligands. Inorganic Chemistry, 2010, 49, 1094-1102.	4.0	39
111	A dihydrogen complex, [Os(Î·2-H2)(CO)(quS)(PPh3)2]+, in equilibrium with its coordinated thiol tautomer (quS = quinoline-8-thiolate). Journal of the Chemical Society Chemical Communications, 1995, , 625-626.	2.0	38
112	Palladium(II) and Platinum(II) Complexes Featuring a Nitrile-Functionalized N-Heterocyclic Carbene Ligand. Organometallics, 2010, 29, 570-581.	2.3	38
113	Cationic rhodium(I) sulfoxide complexes. Synthesis and spectroscopic properties. Canadian Journal of Chemistry, 1977, 55, 2353-2359.	1.1	37
114	Photochemical synthesis and reactions of FeH(C6H4PPhCH2CH2PPh2)(PPh2PCH2CH2PPh2). Inorganic Chemistry, 1983, 22, 6-9.	4.0	35
115	2H MAS NMR of strongly dipolar coupled deuterium pairs in transition metal dihydrides: extracting dipolar coupling and quadrupolar tensor orientations from the lineshape of spinning sidebands. Physical Chemistry Chemical Physics, 2000, 2, 935-941.	2.8	35
116	Large Effects of Ion Pairing and Protonicâ^'Hydridic Bonding on the Stereochemistry and Basicity of Crown-, Azacrown-, and Cryptand-222-potassium Salts of Anionic Tetrahydride Complexes of Iridium(III). Inorganic Chemistry, 2002, 41, 2995-3007.	4.0	35
117	Cyclometalated Tridentate C-N-N Ligands with an Amine or Amido Donor in Platinum(II) and Palladium(II) Complexes and a Novel Potassium Alkoxide Aggregate. Organometallics, 2004, 23, 4406-4413.	2.3	35
118	Primary Amine Functionalized N-Heterocyclic Carbene Complexes of Iridium: Synthesis, Structure, and Catalysis. Organometallics, 2013, 32, 3808-3818.	2.3	35
119	An Unsymmetrical Iron Catalyst for the Asymmetric Transfer HydrogenationÂ-of Ketones. Synthesis, 2015, 47, 1775-1779.	2.3	35
120	Mechanisms of the H₂- and transfer hydrogenation of polar bonds catalyzed by iron group hydrides. Dalton Transactions, 2018, 47, 10809-10826.	3.3	35
121	Enantioselective Hydrogenation of Activated Aryl Imines Catalyzed by an Iron(II) P-NH-Pâ€² Complex. Journal of Organic Chemistry, 2019, 84, 12040-12049.	3.2	35
122	Spectroscopic and chemical properties of nitrogen-15-enriched molybdenum dinitrogen complexes trans,mer-Mo(N2)2(L)(PMePh2)3. Inorganic Chemistry, 1986, 25, 3926-3932.	4.0	34
123	[Os(.eta.2-H2)(CO)(pyS)(PPh3)2]BF4-a stable but highly acidic dihydrogen complex. Organometallics, 1993, 12, 3808-3809.	2.3	34
124	Single-crystal X-ray and neutron diffraction structure determination and inelastic neutron scattering study of the dihydrogen complex trans-[Ru(H2)(H)(dppe)2][BPh4]. Inorganica Chimica Acta, 1997, 259, 351-357.	2.4	34
125	New dihydrogen complexes: the synthesis and spectroscopic properties of iron(II), ruthenium(II), and osmium(II) complexes containing the meso-tetraphos-1 ligand. Canadian Journal of Chemistry, 1994, 72, 547-560.	1.1	33
126	A sulfur-ligated molybdenum complex that reduces dinitrogen to ammonia. The crystal and molecular structure of the dinitrogen-molybdenum complex trans-Mo(N2)2(PMePh2)2(PPh2CH2CH2SMe). Journal of the American Chemical Society, 1984, 106, 3683-3684.	13.7	32

#	Article	IF	Citations
127	Dicationic iron(II) complexes with dihydrogen trans to Ï€-acid ligands: trans-[Fe(Î·2-H2)(L)(dppe) 2]2+ (Lâ€…=â€…CO or CNH). Is there Feâ€“H2 Ï€-back bonding?. Journal of the Chemical Society Dalton Transactions, 1997, , 1663-1664.	1.1	32
128	An acidic .eta.2-dihydrogen complex protonating coordinated dinitrogen. Inorganic Chemistry, 1991, 30, 593-594.	4.0	31
129	Reactivity of Ruthenium Phosphido Species Generated through the Deprotonation of a Tripodal Phosphine Ligand and Implications for Hydrophosphination. Journal of the American Chemical Society, 2014, 136, 4746-4760.	13.7	31
130	From imine to amine: an unexpected left turn. Cis-Î² iron(<scp>ii</scp>) PNNPâ€² precatalysts for the asymmetric transfer hydrogenation of acetophenone. Chemical Science, 2017, 8, 6531-6541.	7.4	31
131	Synthesis and properties of iron-group hydrido-cyano complexes trans-[MH(CN)(L)2], Mâ€…=â€…Fe, Ru or Os, Lâ€…=â€…diphosphine, and their hydrogen, trifluoroboron and triphenylboron isocyanide derivatives of the type trans-[MH(CNH)(L)2]O3SCF3, trans-[MH(CNBX3)(L)2], Xâ€…=â€…F or Ph, and trans-[M(H2)(CNBF3)(dppp)2]BF4 [dpppâ€…=â€…Ph2P(CH2)3PPh2]. Dalton Transactions RSC, 2000, , 3591-3602.	2.3	30
132	An Acidity Scale of Tetrafluoroborate Salts of Phosphonium and Iron Hydride Compounds in [D2]Dichloromethane. Chemistry - A European Journal, 2007, 13, 3796-3803.	3.3	30
133	Iron Group Hydrides in Noyori Bifunctional Catalysis. Chemical Record, 2016, 16, 2644-2658.	5.8	29
134	The Role of Protons and Hydrides in the Catalytic Hydrogenolysis of Guaiacol at the Ruthenium Nanoparticleâ€“Water Interface. ACS Catalysis, 2020, 10, 12310-12332.	11.2	29
135	Formation of a trimethyldihydroperimidinium cation from proton sponge [1,8-bis(dimethylamino)naphthalene] during base-promoted reactions of rhodium and ruthenium complexes. Journal of the Chemical Society Chemical Communications, 1987, , 894.	2.0	28
136	Dynamics of molecular hydrogen in the complex trans-[bis[bis(diphenylphosphino)ethane]](.eta.2-dihydrogen)hydridoiron(1+) tetrafluoroborate(1-) in the solid state as revealed by neutron-scattering experiments. Inorganic Chemistry, 1990, 29, 747-750.	4.0	28
137	Comparing the acidity of hydride and .eta.2-dihydrogen complexes of transition metals. Inorganic Chemistry, 1990, 29, 581-582.	4.0	28
138	.pi.-Bonding of the Dihydrogen Ligand Probed by Moessbauer Spectroscopy. Inorganic Chemistry, 1994, 33, 1725-1726.	4.0	28
139	Turning dihydrogen gas into a strong acid. Formation and reactions of the very acidic ruthenium dihydrogen complexes trans-[Ru(H2)(CNH){PPh2(CH2)nPPh2}2][O3SCF3]2 (nâ€…=â€…2 or 3). Journal of the Chemical Society Dalton Transactions, 1998, , 2111-2114.	1.1	27
140	Synthesis, Characterization, and Activity of Yttrium(III) Nitrate Complexes Bearing Tripodal Phosphine Oxide and Mixed Phosphineâ€“Phosphine Oxide Ligands. Inorganic Chemistry, 2012, 51, 9322-9332.	4.0	27
141	Protonated dimethyl sulphoxide, [Me2SO ? H ? OSMe2]+; a novel hydrogen-bridged structure: X-ray crystal structure of trans-[H(Me2SO)2][RhCl4(Me2SO)2]. Journal of the Chemical Society Chemical Communications, 1980, , 31.	2.0	26
142	2H NMR Theory of Transition Metal Dihydrides:Â Coherent and Incoherent Quantum Dynamics. Journal of Physical Chemistry A, 1997, 101, 4679-4689.	2.5	26
143	Solution and crystal structure of the dihydrogen complex [Ru(H2)(H)(PMe2Ph)4]PF6, an active alkyne hydrogenation catalyst. Inorganica Chimica Acta, 1998, 270, 238-246.	2.4	26
144	Half-Sandwich Ruthenium Catalyst Bearing an Enantiopure Primary Amine Tethered to an N-Heterocyclic Carbene for Ketone Hydrogenation. ACS Catalysis, 2017, 7, 6827-6842.	11.2	26

#	Article	IF	Citations
145	Conversion of .eta.6-arylphosphine to .eta.6-benzene complexes of molybdenum by use of strong acids to cleave the phosphorus-carbon bonds. The crystal and molecular structure of [Mo(H)(.eta.6-C6H6)(PPh2CH2CH2PPh2)(PPh2F)]BF4. Organometallics, 1989, 8, 2099-2106.	2.3	25
146	NMR Studies of the Complexes trans-[M(Î·2-H2)(H)(Ph2PCH2CH2PEt2)2]X (M=Fe, X = BPh4; M = Os, X = BF4): Evidence for Unexpected Shortening of the H-H Bond. Inorganic Chemistry, 1988, 27, 1124-1125.	4.0	24
147	Ruthenium hydrogenation catalysts with Pâ€“Nâ€“Nâ€“P ligands derived from 1,3-diaminopropane and the formation of a Î²-diiminate complex by a base-induced isomerization. Inorganica Chimica Acta, 2008, 361, 3149-3158.	2.4	24
148	Transition Metal Complexes of an (S,S)-1,2-Diphenylethylamine-Functionalized N-Heterocyclic Carbene: A New Member of the Asymmetric NHC Ligand Family. Organometallics, 2016, 35, 1604-1612.	2.3	24
149	Asymmetric Transfer Hydrogenation of Ketones Using New Iron(II) (Pâ€NHâ€Nâ€Pâ€²) Catalysts: Changing the Steric and Electronic Properties at Phosphorus Pâ€². Israel Journal of Chemistry, 2017, 57, 1204-1215.	2.3	24
150	Estimating the Wavenumber of Terminal Metal-Hydride Stretching Vibrations of Octahedral d⁶ Transition Metal Complexes. Inorganic Chemistry, 2018, 57, 13809-13821.	4.0	24
151	Vibrational analysis of oxygen-bonded sulfoxide complexes. Spectrochimica Acta Part A: Molecular Spectroscopy, 1978, 34, 577-582.	0.1	23
152	Weak interactions observed in ruthenium and iridium complexes containing hydride, amine, and bulky phospyhine ligands. Canadian Journal of Chemistry, 1997, 75, 475-482.	1.1	23
153	Aqueous biphasic iron-catalyzed asymmetric transfer hydrogenation of aromatic ketones. RSC Advances, 2016, 6, 88580-88587.	3.6	23
154	Enantioselective direct, base-free hydrogenation of ketones by a manganese amido complex of a homochiral, unsymmetrical Pâ€“Nâ€“Pâ€² ligand. Catalysis Science and Technology, 2021, 11, 3153-3163.	4.1	23
155			

#	Article	IF	Citations
163	Hydride complexes of molybdenum and tungsten in a sulphur environment. Polyhedron, 1989, 8, 1701-1704.	2.2	20
164	An acidity scale of phosphonium tetraphenylborate salts and ruthenium dihydrogen complexes in dichloromethane. Canadian Journal of Chemistry, 2006, 84, 164-175.	1.1	20
165	Synthesis and Characterization of Nitrile-Functionalized N-Heterocyclic Carbenes and Their Complexes of Silver(I) and Rhodium(I). Organometallics, 2009, 28, 853-862.	2.3	20
166	Formation of Î·6-pyridine complexes of molybdenum (0) by a Ïƒ to Ï€ rearrangement in Mo(N2)2(NC5H4-4-R)(PMePh2)3, Rî€†H, Me. Journal of the Chemical Society Chemical Communications, 1983, .	2.0	19
167	Synthesis and substitution reactions of Mo(.eta.6-PhPMePh)(PMePh2)3. The crystal and molecular structure of Mo(.eta.6-PhPMePh)(CNCMe3)(PMePh2)2. Organometallics, 1984, 3, 247-255.	2.3	19
168	Reactions of the hydridethiolate complexes [MH(SC6H2R3-2,4,6)3(PMe2Ph)2](M = Mo or W, R = Me or) Tj ETQq0 0 0 rgBT /Overlock 10 Chemical Society Dalton Transactions, 1991, , 2519.	1.1	19
169	Synthesis and Structure of Fe(TIM)(CNBPh3)2:Â TIM = 2,3,9,10-tetramethyl-1,4,8,11-tetraazacyclotetradeca-1,3,8,10-tetraene. Conversion of BPh4-into CNBPh3-. Inorganic Chemistry, 1996, 35, 4523-4525.	4.0	19
170	Probing the motion of the Î·²-dideuterium ligand by solution and solid-state ²H NMR spectroscopy. Canadian Journal of Chemistry, 1999, 77, 1899-1910.	1.1	19
171	Ancillary ligand control of reactivity. Protonation at hydride vs. cyanide in trans-[FeH(CN)(R2PCH2CH2PR2)2](R = Et, Ph, p-tolyl) and X-ray crystal structure determination of trans-[FeH(CNH)(R2PCH2CH2PR2)2]BF4(R =p-tolyl). Chemical Communications, 1996, , 1665.	4.1	18
172	[{ReH2(PMePh2)2}2(Î¼-H)3]-:â€‰ The First Member of a New Class of Anionic Polyhydride Dimers [Re2H7L4]-. Inorganic Chemistry, 2001, 40, 2480-2481.	4.0	18
173	Ketone H2-hydrogenation catalysts: Ruthenium complexes with the headphone-like ligand bis(phosphaadamantyl)propane. Inorganica Chimica Acta, 2006, 359, 2864-2869.	2.4	18
174	Properties of the Polyhydride Anions [WH5(PMe2Ph)3]-and [ReH4(PMePh2)3]-and Periodic Trends in the Acidity of Polyhydride Complexes. Inorganic Chemistry, 2007, 46, 4392-4401.	4.0	18
175	Exploring the decomposition pathways of iron asymmetric transfer hydrogenation catalysts. Dalton Transactions, 2015, 44, 12119-12127.	3.3	18
176	Cleavage of an aryl carbonâ€“sulphur bond in hydrideâ€“thiolate complexes of molybdenum(IV); X-ray crystal structure of [{Mo(SC6H2Pri3-2,4,6)(OMe)(PMePh2)}2(Âµ-S)2]. Journal of the Chemical Society Chemical Communications, 1990, , 1757-1759.	2.0	17
177	Monohydride complexes of molybdenum(IV) and tungsten(IV) containing bulky thiolate ligands: X-ray crystal structures of [MH(SC6H2Pr I 3-2,4,6)3(PMe2Ph)2], M = Mo or W. Journal of the Chemical Society Dalton Transactions, 1991, , 1813.	1.1	17
178	Neutral Four-Coordinate (Thiolato)- and (Selenolato)iron(II) Complexes:Â Synthesis and Characterization of Fe(E-2,6-i-Pr2C6H3)2(1-MeIm)2(E = S, Se; 1-MeIm = 1-Methylimidazole). Potential Models for a Biological, Mononuclear N2S2Binding Site for Iron?. Inorganic Chemistry, 1996, 35, 2747-2751.	4.0	17
179	Intra- and inter-ion-pair protonic-hydridic bonding in polyhydridobis(phosphine)rhenates. Canadian Journal of Chemistry, 2001, 79, 964-976.	1.1	17
180	Non-Contact Universal Sample Presentation for Room Temperature Macromolecular Crystallography Using Acoustic Levitation. Scientific Reports, 2019, 9, 12431.	3.3	17

#	Article	IF	Citations
181	Use of .eta.6-arylphosphine complexes of molybdenum(0) for the synthesis of complexes containing molybdenum-molybdenum and molybdenum-tungsten quadruple bonds. Journal of the American Chemical Society, 1984, 106, 7978-7979.	13.7	16
182	Reversible binding of dinitrogen and dihydrogen by (.eta.6-phenylmethylphenylphosphine)tris(methyldiphenylphosphine)molybdenum (Mo(.eta.6-PhPMePh)(PMePh2)3): use of [9-BBN]2 as a phosphine sponge reagent. Inorganic Chemistry, 1984, 23, 1489-1491.	4.0	16
183	Complexes containing unbridged homonuclear or heteronuclear quadruple bonds. Crystal and molecular structures of MoWCl4(PMePh2)4, MoWCl4(PMe3)4, and Cl2(PMe3)2MoWCl2(PMePh2)2. Inorganic Chemistry, 1987, 26, 2422-2429.	4.0	16
184	Structure of dimethyl(phenyl)phosphonium tris(1,2-benzenedithiolato)tungsten(V). Acta Crystallographica Section C: Crystal Structure Communications, 1993, 49, 1591-1594.	0.4	16
185	Neutral Four-Coordinate (Selenolato)iron(II) Complexes: Syntheses and Structures of Fe(Se-2,6-i-Pr2C6H3)2(PMe2Ph)2 and Fe(Se-2,6-i-Pr2C6H3)2(Et2PCH2CH2PEt2). Inorganic Chemistry, 1994, 33, 5647-5653.	4.0	16
186	Non-classical Hydrogen Bonding along the Pathway to the Heterolytic Splitting of Dihydrogen. , 2001, , 1-38.		16
187	A DFT investigation into the origin of regioselectivity in palladium-catalyzed allylic amination. Canadian Journal of Chemistry, 2009, 87, 54-62.	1.1	16
188	Complexes [Mo(N2)(PPh3)2]2 and [Mo(CNR)(PPh3)2]2 (R = n-butyl and tert-butyl) containing bridging .eta.1,.eta.6-triphenylphosphine ligands. The molecular structure of [Mo(.mu.-.eta.1,.eta.6-PPh3)(PPh3)(CN(CH2)3Me)]2. Organometallics, 1984, 3, 1009-1014.	2.3	15
189	Synthesis of New Late Transition Metal P,P-, P,N-, and P,O- Complexes Using Phosphonium Dimers as Convenient Ligand Precursors. Inorganic Chemistry, 2013, 52, 5448-5456.	4.0	15
190	Structural properties of trans hydridoâ€“hydroxo M(H)(OH)(NH2CMe2CMe2NH2)(PPh3)2 (M = Ru, Os) complexes and their proton exchange behaviour with water in solution. Dalton Transactions, 2013, 42, 10214.	3.3	14
191	Five-co-ordinate complexes [MoH(SC6H2R3-2,4,6)3(PRâ€²Ph2)] (R = Me or Pri, Râ€²= Me or Et) and their reactions with nitrogen donors. Crystal structures of [MoH(SC6H2Pri3-2,4,6)3(C5H5N)(PMe2Ph)], [MoH(NC5H4S-2)2(SC6H2Pri3-2,4,6)(PEtPh2)] and [PPh4][MoO(SC6H2Pri3-2,4,6)4]. Journal of the Chemical Society Dalton Transactions, 1995, , 5-15.	1.1	13
192	The effect of ancillary ligands on intramolecular protonî—hydride (NHâ‹¯HIr) bonding in complexes of iridium(III). Journal of Organometallic Chemistry, 2000, 609, 110-122.	1.8	13
193	PNNâ€² & P₂NNâ€² ligands via reductive amination with phosphine aldehydes: synthesis and base-metal coordination chemistry. Dalton Transactions, 2019, 48, 2150-2159.	3.3	12
194	Photoinduced elimination of hydrogen from [Pt2H3(dppm)2]PF6 and [Pt2H2Cl(dppm)2]PF6. Journal of the American Chemical Society, 1981, 103, 7337-7339.	13.7	11
195	Formation of an Î·1-ylidic enamine complex of rhodium(III) during use of triethylamine for a base-promoted reaction. Journal of Organometallic Chemistry, 1986, 309, C59-C62.	1.8	11
196	High yield synthesis of arylphosphine molybdenum complex Mo(.eta.6-PhPMe2)(PMe2Ph)3 and its dimerization to form {Mo(.mu.-.eta.1,.eta.6-PMe2Ph)(PMe2Ph)2}2, a complex characterized by x-ray crystallography. Organometallics, 1989, 8, 1282-1287.	2.3	11
197	Monohydride complexes of W (IV) containing bulky selenolate ligands: X-ray crystal structure determination of [WH(SeC6H3Pri2-2,6)3(PMe2Ph)2]. Inorganica Chimica Acta, 1997, 259, 125-135.	2.4	11
198	Novel hydrido-ruthenium(ii) complexes with histidine derivatives and their application in the hydrogenation of ketones. Dalton Transactions, 2007, , 2536.	3.3	11

#	Article	IF	Citations
199	A sulfur mimic of 1,1-bis(diphenylphosphino)methane: a new ligand opens up. Chemical Communications, 2014, 50, 4707-4710.	4.1	11
200	Density Functional Theory Calculations Support the Additive Nature of Ligand Contributions to the pK_a of Iron Hydride Phosphine Carbonyl Complexes. Inorganic Chemistry, 2016, 55, 9596-9601.	4.0	11
201	DFT methods applied to answer the question: how accurate is the ligand acidity constant method for estimating the pK_a of transition metal hydride complexes MHXL₄ when X is varied?. Dalton Transactions, 2018, 47, 2739-2747.	3.3	11
202	Synthesis of molybdenum-rhodium bimetallic complexes using, as ligands, electron-rich molybdenum(0) complexes containing an Î·6-methyldiphenylphosphine ligand. Journal of Organometallic Chemistry, 1983, 255, 221-230.	1.8	10
203	Molybdenum complexes containing hydride and sulphur donor ligands. Synthesis and properties of Mo(H)2(S2C6H3R)(PMePh2)3, R = H, Me. Journal of the Chemical Society Chemical Communications, 1987, , 1865.	2.0	10
204	Synthesis and substitution chemistry of some bis(dithiolate) complexes of molybdenum, Mo(S2C6H3R)2(PMePh2)2, Râ€,=â€,H, Me. Canadian Journal of Chemistry, 1990, 68, 558-564.	1.1	10
205	Alcohol-assisted base-free hydrogenation of acetophenone catalyzed by OsH(NHCMe₂CMe₂NH₂)(PPh₃)₂. Canadian Journal of Chemistry, 2014, 92, 731-738.	1.1	10
206	Metal Hydride Vibrations: The Trans Effect of the Hydride. Inorganic Chemistry, 2019, 58, 12467-12479.	4.0	10
207	Systematic Trends in the Electrochemical Properties of Transition Metal Hydride Complexes Discovered by Using the Ligand Acidity Constant Equation. Journal of the American Chemical Society, 2020, 142, 17607-17629.	13.7	10
208	Dinitrogen versus Î·6-arene coordination in methyldiphenylphosphine complexes of molybdenum(0). Journal of Organometallic Chemistry, 1982, 238, C24-C26.	1.8	9
209	The synthesis and properties of complexes containing heteronuclear quadruple bonds. Polyhedron, 1987, 6, 793-801.	2.2	8
210	Cleavage of an aryl carbonâ€“sulfur bond in hydrideâ€“thiolate complexes of molybdenum and tungsten. Crystal structures of [{Mo(SC6H2Pri3-2,4,6)(OMe)(PMePh2)}2(Âµ-S)2] and [{Mo(SC6H2Pri3-2,4,6)(OEt)(PEtPh2)}2(Âµ-S)2]. Journal of the Chemical Society Dalton Transactions, 1995, , 2583-2589.	1.1	8
211	Mechanistic insight into organic and industrial transformations: general discussion. Faraday Discussions, 2019, 220, 282-316.	3.2	8
212	Ligand acidity constants as calculated by density functional theory for PF3 and N-Heterocyclic carbene ligands in hydride complexes of Iron(II). Journal of Organometallic Chemistry, 2019, 880, 15-21.	1.8	8
213	Phosphine-free ruthenium NCN-ligand complexes and their use in catalytic CO₂ hydrogenation. Dalton Transactions, 2019, 48, 16569-16577.	3.3	7
214	Radiation chemistry of acetylene at high intensity: the initial product distributions. Canadian Journal of Chemistry, 1977, 55, 3288-3293.	1.1	6
215	Elucidation of the structures of the hydridothiolato complexes WH(SC6H2Pri3-2,4,6)3(L)(PMe2Ph), Lâ€,=â€,PMe2Ph or pyridine, by NMR and X-ray techniques. Canadian Journal of Chemistry, 1995, 73, 1092-1101.	1.1	6
216	Use of an Iodide-Modified Merrifield Resin in the Synthesis of Ruthenium Hydride Complexes. The Structure of RuHI((R)-binap)(PPh₃). Organometallics, 2008, 27, 503-508.	2.3	6

#	Article	IF	Citations
217	From amine to ruthenaziridine to azaallyl: unusual transformation of di-(2-pyridylmethyl)amine on ruthenium. Dalton Transactions, 2011, 40, 10603.	3.3	6
218	Six coordinate capped trigonal bipyramidal complexes. Coordination Chemistry Reviews, 2017, 350, 105-116.	18.8	6
219	Methane activation by a single copper center in particulate methane monooxygenase: A computational study. Inorganica Chimica Acta, 2020, 503, 119441.	2.4	6
220	Osmium(II)-Induced Rearrangement of Allenols for Metallafuran Complexes. Organometallics, 2022, 41, 1931-1941.	2.3	6
221	The influence of the steric properties of the ligands PR2Ph and L on the formation and properties of the complexes Mo(Î·6-PhPR2)(L)(PPh2CH2CH2PPh2), R = Et, L = PPhEt2 and R = Ph, L = PPh3, PRâ€²3, CO, CNR, N2, H2. Journal of Organometallic Chemistry, 1985, 284, 243-255.	1.8	5
222	The photoelectron spectrum of MoWCl4(PMe3)4: the position of the valence Ïƒ-ionization in quadruply bonded compounds. Journal of the Chemical Society Chemical Communications, 1986, , 898-899.	2.0	5
223	The effect of deuteration on the stabilities of cis-polyacetylene and polystyrene. Polymer, 1994, 35, 1952-1956.	3.8	5
224	Pentahydridobis(Tricyclohexylphosphine)-Iridium(V) and Trihydridotris(Triphenylphos-phine)Iridium(III). Inorganic Syntheses, 2007, , 303-308.	0.3	5
225	Flexible Syntheses of Tripodal Phosphine Ligands 1,1,2-Tris(diarylphosphino)ethane and Their Ruthenium Î·⁵-C₅Me₅ Complexes. Organometallics, 2012, 31, 6589-6594.	2.3	5
226	Template Effect and Ligand Substitution Methods for the Synthesis of Iron Catalysts: A Two-Part Experiment for Inorganic Chemistry. Journal of Chemical Education, 2015, 92, 378-381.	2.3	5
227	Insights into metalâ€“ligand hydrogen transfer: a square-planar ruthenate complex supported by a tetradentate aminoâ€“amido-diolefin ligand. Chemical Communications, 2016, 52, 6138-6141.	4.1	5
228	Monoclinic and triclinic forms of [1,2-bis(diphenylphosphino)propane](Î·6-methyldiphenylphosphine)(methyldiphenylphosphine)molybdenum(0) benzene solvate. Acta Crystallographica Section C: Crystal Structure Communications, 1988, 44, 23-27.	0.4	4
229	RuH2[P(C6H5)2(p-C6H4CH3)]3: An unexpectedly stable and unreactive 16-electron ruthenium dihydride. Polyhedron, 1988, 7, 2031-2033.	2.2	4
230	Structure of trans-[OsH(Î·2-H2)(PPh2CH2CH2PPh2)2][BF4]. Acta Crystallographica Section C: Crystal Structure Communications, 1992, 48, 28-31.	0.4	4
231	Oxidative Kinetic Resolution of Aromatic Alcohols Using Iron Nanoparticles. Topics in Catalysis, 2013, 56, 1199-1207.	2.8	4
232	Ligand-based molecular recognition and dioxygen splitting: an endo epoxide ending. Dalton Transactions, 2014, 43, 4137-4145.	3.3	4
233	Physical insights into mechanistic processes in organometallic chemistry: an introduction. Faraday Discussions, 2019, 220, 10-27.	3.2	4
234	The Chemistry of the Dihydrogen Ligand in Transition Metal Compounds with Sulphur-Donor Ligands. , 1998, , 57-87.		4

#	Article	IF	Citations
235	Use of electron-rich Î·6-arylphosphine complexes of molybdenum(0) as ligands in group 6 metal carbonyl complexes. Journal of Organometallic Chemistry, 1988, 347, 349-364.	1.8	3
236	Computational and theoretical approaches for mechanistic understanding: general discussion. Faraday Discussions, 2019, 220, 464-488.	3.2	3
237	A One-Step Preparation of Tetradentate Ligands with Nitrogen and Phosphorus Donors by Reductive Amination and Representative Iron Complexes. Inorganic Chemistry, 2020, 59, 11041-11053.	4.0	3
238	Electrochemistry of transition metal hydride diphosphine complexes trans-MH(X)(PP)2 and trans-[MH(L)(PP)2]+, MÂ=ÂFe, Ru, Os; PPÂ=Âchelating phosphine ligand. Inorganica Chimica Acta, 2021, 516, 120124.	2.4	3
239	Mechanistic Similarities and Differences for Hydrogenation of Aromatic Heterocycles and Aliphatic Carbonyls on Sulfided Ru Nanoparticles. ACS Catalysis, 2021, 11, 12585-12608.	11.2	3
240	Bromidocarbonyl{(1S,2S)-N-[2-(dicyclohexylphosphanyl)ethylidenyl]-Nâ€²-[2-(diphenylphosphanyl)ethyl]-1,2 tetraphenylborate. IUCrData, 2017, 2, .	0.3	3
241	trans-Bis(dinitrogen)tetrakis(methyldiphenylphosphine)molybdenum(0) benzene solvate, [Mo(N2)2{P(CH3)(C6H5)2}4].1.5(C6H6). Acta Crystallographica Section C: Crystal Structure Communications, 1985, 41, 1017-1019.	0.4	2
242	Molybdenum complexes containing hydride and sulphur donor ligands.. Journal of Inorganic Biochemistry, 1991, 43, 583.	3.5	2
243	Bis[1,2-bis(diphenylphosphino)ethane-P,P']chloroosmium(II) Hexafluorophosphate Dichloromethane Solvate. Acta Crystallographica Section C: Crystal Structure Communications, 1996, 52, 2193-2196.	0.4	2
244	{N,Nâ€²-Bis[2-(diphenylphosphanyl)ethan-1-ylidene]ethylenediamine}bromido(p-toluenesulfonylmethyl) Tj ETQq0 2014, 70, m144-m144.	0.2	2
245	A capped trigonal pyramidal molybdenum hydrido complex and an unusually mild sulfurâ€“carbon bond cleavage reaction. Chemical Communications, 2017, 53, 11032-11035.	4.1	2
246	Bis[1,2-bis(diethylphosphino)ethane](Î·2-dihydrogen)hydridoosmium(II) tetraphenylborate. Acta Crystallographica Section C: Crystal Structure Communications, 1989, 45, 1137-1139.	0.4	1
247	Crystal structure of trans-dibromo-bis(bis(diphenylphosphino)ethane)-osmium(II), OsBr₂(((C₆H₅)₂P)₂C₂H₄₂). Zeitschrift Fur Kristallographie - Crystalline Materials, 1995, 210, 973-974.	0.8	1
248	(Î·5-Pentamethylcyclopentadienyl)(Î·6-toluene)ruthenium(II) hexafluoridophosphate. Acta Crystallographica Section E: Structure Reports Online, 2010, 66, m1264-m1264.	0.2	1
249	A magnetic resonance disruption (MaRDi) technique for the detection of surface immobilised magnetic nanoparticles. Analytical Methods, 2017, 9, 1681-1683.	2.7	1
250	An acoustic on-chip goniometer for room temperature macromolecular crystallography. Lab on A Chip, 2017, 17, 4225-4230.	6.0	1
251	The effect of the counteranion on the loss of hydrogen from cationic ruthenium dihydrogen complexes in the solid state. Polyhedron, 2018, 156, 342-349.	2.2	1
252	Group VII and VIII Hydrogenation Catalysts. , 2021, , 657-714.		1

#	Article	IF	Citations
253	Tridentate NPN Ligands with a Central Secondary Phosphine Oxide Donor and their Corresponding Metal Complexes. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 1436-1441.	1.2	1
254	Trans Element-Hydrogen Bonds: A Distinctive Difference Between Transition Metals and Main Group Elements. Inorganic Chemistry, 2021, 60, 13920-13928.	4.0	1
255	Crystal structure of bis[(R,R)-1,2-(binaphthylphosphonito)ethane]dichloridoiron(II) dichloromethane disolvate. Acta Crystallographica Section E: Crystallographic Communications, 2020, 76, 1525-1527.	0.5	1
256	Intra- and inter-ion-pair protonic-hydridic bonding in polyhydridobis(phosphine)rhenates. Canadian Journal of Chemistry, 2001, 79, 964-976.	1.1	1
257	Additions and Corrections - Ï€-Bonding of the Dihydrogen Ligand Probed by Mossbauer Spectroscopy.. Inorganic Chemistry, 1994, 33, 5366-5366.	4.0	0
258	Asymmetric Hydrogenation of Ketones Catalyzed by Ruthenium Hydride Complexes of a ?-Aminophosphine Ligand Derived from Norephedrine.. ChemInform, 2005, 36, no.	0.0	0
259	Applications of Ruthenium Hydride Borohydride Complexes Containing Phosphinite and Diamine Ligands to Asymmetric Catalytic Reactions.. ChemInform, 2005, 36, no.	0.0	0
260	A Modular Design of Ruthenium Catalysts with Diamine and BINOL-Derived Phosphinite Ligands that Are Enantiomerically-Matched for the Effective Asymmetric Transfer Hydrogenation of Simple Ketones.. ChemInform, 2005, 36, no.	0.0	0
261	Asymmetric Hydrogenation of Ketones Catalyzed by Ruthenium Hydride Complexes of a Beta-aminophosphine Ligand Derived from Norephedrine. Organometallics, 2005, 24, 3354-3354.	2.3	0
262	Physical methods for mechanistic understanding: general discussion. Faraday Discussions, 2019, 220, 144-178.	3.2	0
263	Focusing on transition metal hydride complexes. Canadian Journal of Chemistry, 2021, 99, v-vii.	1.1	0
264	Electronic insights into aminoquinoline-based PN^HN ligands: protonation state dictates geometry while coordination environment dictates Nâ€“H acidity and bond strength. Dalton Transactions, 0, , .	3.3	0