

Richard H Heyn

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Alkoxy and aryloxy derivatives of (pentamethylcyclopentadienyl)ruthenium. X-ray crystal structures of [(η -5-C ₅ Me ₅)Ru(μ -OMe)] ₂ , [(η -5-C ₅ Me ₅)(CO)Ru(μ -OEt)] ₂ , and (η -5-C ₅ Me ₅)Ru(η -5-2,6-tBu ₂ C ₆ H ₃ O) and molecular orbital analysis of [(η -5-C ₅ H ₅)Ru(μ -OMe)] ₂ . Journal of the American Chemical Society, 1989, 111, 4712-4718.	13.7	122
2	Platinum-mediated reactions of hydrosilanes. Isolation of a complex with bridging disilene and silylene ligands. Journal of the American Chemical Society, 1992, 114, 1917-1919.	13.7	115
3	σ -Bond metathesis reactions for d ⁰ metal-silicon bonds that produce zirconocene and hafnocene hydrosilyl complexes. Journal of the American Chemical Society, 1992, 114, 5698-5707.	13.7	110
4	Preparation and reactivity of 16-electron η^5 -half-sandwich TM ruthenium complexes; X-ray crystal structure of (η -5-C ₅ Me ₅)Ru(PPr ₃)Cl. Journal of the Chemical Society Chemical Communications, 1988, , 278-280.	2.0	106
5	Silyl and diphenylsilylene derivatives of (η -5-C ₅ Me ₅)(PMe ₃) ₂ Ru. Evidence for the base-free silylene complex [(η -5-C ₅ Me ₅)(PMe ₃) ₂ Ru:SiPh ₂] ⁺ . Journal of the American Chemical Society, 1990, 112, 2673-2681.	13.7	96
6	Synthesis and reactions of silyl and germyl derivatives of scandocene. Structure of Cp ₂ Sc[Si(SiMe ₃) ₃](THF). Organometallics, 1993, 12, 2584-2590.	2.3	90
7	Preparation, isolation, and characterization of transition-metal η -2-silene complexes. X-ray crystal structure of (η -5-C ₅ Me ₅)[P(iso-Pr) ₃]Ru(H)(η -2-CH ₂ SiPh ₂). Journal of the American Chemical Society, 1988, 110, 7558-7560.	13.7	73
8	Synthesis and study of the ruthenium-silene complexes (η -5-C ₅ Me ₅)(PR ₃)RuH(η -2-CH ₂ :SiR' ₂) (R =) Tj ETQq0 Q 0,rgBT /Overlock 10	13.7	64
9	A Gold Exchange: A Mechanistic Study of a Reversible, Formal Ethylene Insertion into a Gold(III) η^2 -Oxygen Bond. Journal of the American Chemical Society, 2014, 136, 10104-10115.	13.7	64
10	Dimesitylsilyl derivatives of zirconium. Organometallics, 1989, 8, 324-330.	2.3	62
11	Reactions of alkynes with coordinatively unsaturated (η -5-C ₅ Me ₅)Ru derivatives. X-ray crystal structures of (η -5-C ₅ Me ₅)Cl ₂ Ru(η -2: η -4- μ -2-C ₄ H ₄)Ru(η -5-C ₅ Me ₅) and (η -5-C ₅ Me ₅) ₃ Ru ₃ (μ -2-Cl) ₂ (μ -3-Cl)(η -2- μ -2-HC.tplbond.CSiMe ₃). Organometallics, 1990, 9, 1106-1112.	2.3	62
12	Generation and Structural Characterization of a Gold(III) Alkene Complex. Angewandte Chemie - International Edition, 2013, 52, 1660-1663.	13.8	58
13	A stable η -2-silene complex of iridium: (η -5-C ₅ Me ₅)(PMe ₃)Ir(η -2-CH ₂ :SiPh ₂). Journal of the American Chemical Society, 1990, 112, 4079-4081.	13.7	57
14	Versatile Methods for Preparation of New Cyclometalated Gold(III) Complexes. Organometallics, 2012, 31, 6567-6571.	2.3	56
15	The crystal structure of KAlD ₄ . Journal of Alloys and Compounds, 2005, 394, 35-38.	5.5	49
16	Microwave methods for the synthesis of gold(III) complexes. Journal of Coordination Chemistry, 2011, 64, 38-47.	2.2	46
17	Is π -donation the only way? Unprecedented unsaturated Ru(II) species devoid of π -donor ligands. Inorganica Chimica Acta, 1997, 259, 5-26.	2.4	42
18	Hydrogen storage properties of η^3 -Mg(BH ₄) ₂ modified by MoO ₃ and TiO ₂ . International Journal of Hydrogen Energy, 2015, 40, 12286-12293.	7.1	42

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19	Carbon dioxide activation by a transition metal-silicon bond. Formation of silanecarboxylate	4.0	41
20	Tris(trimethylsilyl)silyl derivatives of tri-tert-butoxyzirconium and tri-tert-butoxyhafnium. X-ray crystal structure of (Me ₃ CO) ₃ ZrSi(SiMe ₃) ₃ . Inorganic Chemistry, 1989, 28, 1768-1769.	4.0	40
21	Ruthenium(IV) silyl hydride complexes via reaction of silanes with 16-electron [Ru(η -5-C ₅ Me ₅)(PPri ₃)X](X) Tj ETQq1 1 0.784314 rgBT Society Chemical Communications, 1992, , 1201-1203.	2.0	40

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37	(η^2 -Diketiminato)dimethylgold(III): Synthesis, Structure, and Reactivity. <i>Organometallics</i> , 2010, 29, 2248-2253.	2.3	19
38	Dehydrohalogenation for facile generation of unsaturated ruthenium(0). <i>Journal of the American Chemical Society</i> , 1993, 115, 3354-3355.	13.7	18
39	Rock $\hat{\epsilon}$ ™ Roll With Gold: Synthesis, Structure, and Dynamics of a (bipyridine)AuCl ₃ Complex. <i>Organometallics</i> , 2012, 31, 7093-7100.	2.3	18
40	Structural and spectroscopic characterization of potassium fluoroborohydrides. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 11226.	2.8	18
41	A Highly Asymmetric Gold(III) $\hat{\epsilon}$ - ³ Allyl Complex. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 1516-1520.	13.8	18
42	The crystal structure of LiMgAlD ₆ from combined neutron and synchrotron X-ray powder diffraction. <i>Journal of Alloys and Compounds</i> , 2008, 460, 64-68.	5.5	17
43	Synthesis of a Coordinatively Labile Gold(III) Methyl Complex. <i>Organometallics</i> , 2011, 30, 3250-3253.	2.3	17
44	Chemical, Computational, and Structural Studies of Dimeric (Pentamethylcyclopentadienyl)zirconium Thiolate and Alkoxide Complexes. <i>Inorganic Chemistry</i> , 1995, 34, 2804-2812.	4.0	16
45	Destabilization effect of transition metal fluorides on sodium borohydride. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 20483-20491.	2.8	15
46	Small-molecule activation at Au(III): metallacycle construction from ethylene, water, and acetonitrile. <i>Dalton Transactions</i> , 2016, 45, 14719-14724.	3.3	15
47	Synthesis and carbon monoxide insertion reactions of (η^5 -cycloheptadienyl)Fe(CO)(L)Me [L = CO, P(OPh) ₃]. <i>Organometallics</i> , 1986, 5, 818-819.	2.3	13
48	Synthesis and characterization of Al@MOF materials. <i>Materials Chemistry and Physics</i> , 2019, 226, 220-225.	4.0	13
49	Decomposition of lithium magnesium aluminum hydride. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 7602-7611.	7.1	12
50	Influence of nanoconfinement on morphology and dehydrogenation of the Li ¹¹ BD ₄ $\hat{\epsilon}$ Mg(¹¹ BD ₄) ₂ system. <i>Nanotechnology</i> , 2012, 23, 255704.	2.6	12
51	Markovnikov at Gold: Nucleophilic Addition to Alkenes at Au(III). <i>Organometallics</i> , 2018, 37, 1937-1947.	2.3	12
52	Semi-Batch Polymerisations of Ethylene with Metallocene Catalysts in the Presence of Hydrogen, 3. Correlation Between Hydrogen Sensitivity and Molecular Parameters. <i>Macromolecular Chemistry and Physics</i> , 2002, 203, 381-387.	2.2	11
53	Synthesis, structure, and ethene polymerisation catalysis of 1- or 2-silyl substituted bis[indenyl]zirconium(IV) dichlorides. <i>Dalton Transactions</i> , 2004, , 1578-1589.	3.3	11
54	Ping-Pong at Gold: Proton Jump Between Coordinated Phenyl and $\hat{\epsilon}$ - ¹ -Benzene Ligands, A Computational Study. <i>Journal of Physical Chemistry A</i> , 2010, 114, 8135-8141.	2.5	11

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55	Synthetic Explorations Towards Sterically Crowded 1,2,3-Substituted Bis(indenyl)zirconium(IV) Dichlorides. <i>European Journal of Inorganic Chemistry</i> , 2005, 2005, 1759-1769.	2.0	10
56	<i>Organic Carbonates</i> . , 2015, , 97-113.		9
57	New catalysts for carboxylation of propylene glycol to propylene carbonate via high-throughput screening. <i>Faraday Discussions</i> , 2015, 183, 19-30.	3.2	9
58	A general one-pot synthesis for elusive 2-substituted indenenes: does bis[2-(tert-butyl)indenyl]zirconium(IV) dichloride/MAO polymerise ethene?. <i>Dalton Transactions</i> , 2006, , 2098-2105.	3.3	8
59	The first crystal structure with pyrazine-2-carboxylato-3-amide as a ligand. Synthesis and structure of cis - N , cis - O , trans - O -diaquobis(pyrazine-2-carboxylato- 3-amide)nickel dihydrate. <i>Journal of Coordination Chemistry</i> , 2007, 60, 431-437.	2.2	7
60	Synthesis and Characterization of Stable Gold(III) PNP Pincer Complexes. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 3113-3117.	2.0	7
61	A Disruptive Innovation for Upgrading Methane to C3 Commodity Chemicals. <i>Johnson Matthey Technology Review</i> , 2021, 65, 311-329.	1.0	7
62	Zinc Schiff Base Complexes Derived from 2,2'-Diaminobiphenyls: Solution Behavior and Reactivity towards Nitrogen Bases. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 3627-3643.	2.0	6
63	Use of metal-organics based solvents for CO2 capture. <i>Energy Procedia</i> , 2014, 63, 1805-1810.	1.8	4
64	NMR spectroscopic investigations into the mechanism of absorption and desorption of CO 2 by (tris-pyridyl)amine Zn complexes. <i>Journal of CO2 Utilization</i> , 2017, 19, 58-67.	6.8	4
65	A Highly Asymmetric Gold(III) η^3 -Allyl Complex. <i>Angewandte Chemie</i> , 2020, 132, 1532-1536.	2.0	4
66	Structure of trans-(ethanenitrile)(hydrido)bis(tricyclohexylphosphine)platinum tetraphenylborate dichloromethane solvate. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 1991, 47, 313-315.	0.4	3
67	The synthesis and thermal degradation products of the C-H bond activating complex [(diimine)Pt(Me)(OSO ₂ CF ₃)]. <i>Journal of Coordination Chemistry</i> , 2009, 62, 3085-3097.	2.2	3
68	Tris(trimethylstannyl)silyl Complexes of Ruthenium and Platinum. <i>Main Group Chemistry</i> , 1996, 1, 415-424.	0.8	1
69	<i>Creative Chemical Approaches for Carbon Dioxide Removal From Flue GAS</i> . , 2005, , 189-200.		1
70	Kinetics Assessment of the Homogeneously Catalyzed Hydroformylation of Ethylene on an Rh Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 16665-16681.	3.7	1