Rory Waterman

List of Publications by Year
in descending order

99 papers	4,029 citations	117571 34 h-index	123376 61 g-index
122 all docs	122 docs citations	122 times ranked	2824 citing authors

#	Article	IF	Citations
1	Effect of Photolysis on Zirconium Amino Phenoxides for the Hydrophosphination of Alkenes: Improving Catalysis. Photochem, 2022, 2, 77-87.	1.3	3
2	Cyclo-Tetrakis(Î¼-diphenylphosphido)-1,5-bis(tri-tert-butylphosphine)-Tetracopper. MolBank, 2022, 2022, M1334.	0.2	3
3	2,6-Bis[bis(1,1-dimethylethyl)phosphinito-Îº*P*]phenyl-Îº*C*]-trans-chlorohydro(phenylphosphine)iridium(III). MolBank, 2022, 2022, M1388.	0.2	0
4	Zirconium Complexes. , 2021, , 162-196.		0
5	Siliconâ€“Nitrogen Bond Formation via Heterodehydrocoupling and Catalytic Nâ€Silylation. Chemistry - A European Journal, 2021, 27, 3251-3261.	1.7	19
6	Buta- and Penta-Dienyl Complexes of the Group 4 Metals. , 2021, , .		0
7	A Commercially Available Ruthenium Compound for Catalytic Hydrophosphination. Israel Journal of Chemistry, 2020, 60, 446-451.	1.0	8
8	Love in the Time of COVID. Journal of Organic Chemistry, 2020, 85, 14273-14275.	1.7	1
9	A bench-stable copper photocatalyst for the rapid hydrophosphination of activated and unactivated alkenes. Chemical Communications, 2020, 56, 14219-14222.	2.2	20
10	Actinide 2-metallabiphenylenes that satisfy HÃ¼ckelâ€™s rule. Nature, 2020, 578, 563-567.	13.7	43
11	Photoactivated siliconâ€“oxygen and siliconâ€“nitrogen heterodehydrocoupling with a commercially available iron compound. Dalton Transactions, 2020, 49, 2972-2978.	1.6	15
12	Structural versatility of the quasi-aromatic MÃ¶bius type zinc(ii)-pseudohalide complexes â€“ experimental and theoretical investigations. RSC Advances, 2019, 9, 23764-23773.	1.7	10
13	Triamidoamine-Supported Zirconium Compounds in Main Group Bond-Formation Catalysis. Accounts of Chemical Research, 2019, 52, 2361-2369.	7.6	14
14	Anodic Oxidation of Ethynylferrocene Derivatives in Homogeneous Solution and Following Anodic Deposition onto Glassy Carbon Electrodes. ChemElectroChem, 2019, 6, 5880-5887.	1.7	2
15	Elementâ€“Hydrogen Bond Activations at Cationic Platinum Centers To Produce Silylene, Germylene, Stannylene, and Stibido Complexes. Organometallics, 2019, 38, 2053-2061.	1.1	9
16	Photocatalytic Hydrophosphination of Alkenes and Alkynes Using Diphenylphosphine and Triamidoamineâ€Supported Zirconium. European Journal of Inorganic Chemistry, 2019, 2019, 1640-1643.	1.0	14
17	Electrochemical and structural characterization of a radical cation formed by one-electron oxidation of a cymantrene complex containing an N-heterocyclic carbene ligand. Polyhedron, 2019, 157, 442-448.	1.0	6
18	Visible-light and thermal driven double hydrophosphination of terminal alkynes using a commercially available iron compound. Chemical Communications, 2018, 54, 2774-2776.	2.2	26

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19	Catalytic Nâ€“Si coupling as a vehicle for silane dehydrocoupling via Î±-silylene elimination. Dalton Transactions, 2018, 47, 2138-2142.	1.6	18
20	Evidence for Ironâ€Catalyzed Î±â€Phosphinidene Elimination with Phenylphosphine. Chemistry - A European Journal, 2018, 24, 2554-2557.	1.7	14
21	Zirconium-catalyzed hydroarsination with primary arsines. Polyhedron, 2018, 156, 31-34.	1.0	10
22	Light-Driven, Zirconium-Catalyzed Hydrophosphination with Primary Phosphines. ACS Catalysis, 2018, 8, 6230-6238.	5.5	30
23	An Inorganic Chemistry Laboratory Course as Research. Journal of Chemical Education, 2018, 95, 1520-1525.	1.1	36
24	Siâ€“N Heterodehydrocoupling with a Lanthanide Compound. Organometallics, 2018, 37, 4395-4401.	1.1	18
25	Visible Light Photocatalysis Using a Commercially Available Iron Compound. Organometallics, 2017, 36, 3891-3895.	1.1	24
26	Synthesis and characterization of a new and electronically unusual uranium metallacyclocumulene, (C5Me5)2U(Î·4-1,2,3,4-PhC4Ph). Journal of Organometallic Chemistry, 2017, 829, 79-84.	0.8	27
27	Throwing Away the Cookbook: Implementing Course-Based Undergraduate Research Experiences (CUREs) in Chemistry. ACS Symposium Series, 2017, , 33-63.	0.5	37
28	The Cottrell Scholars Collaborative New Faculty Workshop: Early Lessons for Change in Teaching. ACS Symposium Series, 2017, , 23-34.	0.5	0
29	Zirconium-Catalyzed Alkene Hydrophosphination and Dehydrocoupling with an Air-Stable, Fluorescent Primary Phosphine. Inorganics, 2016, 4, 26.	1.2	6
30	Exciton Delocalization in H₂OBPc_{1â€“x}MOBPc_x (M =) Tj ETQq0 0 0 rgBT /Overlock 11966-11976.	1.5	4
31	Metalâ€Ligand Cooperativity in a Methandiideâ€Derived Iridium Carbene Complex. Chemistry - A European Journal, 2016, 22, 3846-3855.	1.7	22
32	Selectivity effects in zirconium-catalyzed heterodehydrocoupling reactions of phosphines. Phosphorus, Sulfur and Silicon and the Related Elements, 2016, 191, 668-670.	0.8	3
33	Synthesis, X-ray characterization, DFT calculations and Hirshfeld surface analysis of Zn(<scp>ii</scp>) and Cd(<scp>ii</scp>) complexes based on isonicotinoylhydrazone ligand. CrystEngComm, 2016, 18, 4587-4596.	1.3	27
34	A â€œBottle-ableâ€•Phosphinidene. CheM, 2016, 1, 27-29.	5.8	8
35	Zirconium-Catalyzed Intermolecular Double Hydrophosphination of Alkynes with a Primary Phosphine. ACS Catalysis, 2016, 6, 6413-6416.	5.5	36
36	Triamidoamine-supported zirconium: hydrogen activation, Lewis acidity, and rac-lactide polymerization. RSC Advances, 2016, 6, 70581-70585.	1.7	6

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37	Challenges in Catalytic Hydrophosphination. Chemistry - A European Journal, 2016, 22, 12598-12605.	1.7	126
38	Phosphorus chemistry: discoveries and advances. Dalton Transactions, 2016, 45, 1801-1803.	1.6	3
39	Zirconium-catalyzed intermolecular hydrophosphination using a chiral, air-stable primary phosphine. Dalton Transactions, 2016, 45, 1863-1867.	1.6	25
40	Tuning the Oxidation State, Nuclearity, and Chemistry of Uranium Hydrides with Phenylsilane and Temperature: The Case of the Classic Uranium(III) Hydride Complex [(C₅Me₅)₂U(Î¼-H)]₂. Organometallics, 2016, 35, 617-620.	1.1	44
41	Tin-catalyzed hydrophosphination of alkenes. Dalton Transactions, 2016, 45, 6204-6209.	1.6	23
42	Spin Exchange Interaction in Substituted Copper Phthalocyanine Crystalline Thin Films. Scientific Reports, 2015, 5, 16536.	1.6	6
43	Organic analogues of diluted magnetic semiconductors: bridging quantum chemistry to condensed matter physics. , 2015, , .		1
44	Zirconium-Catalyzed Amine Borane Dehydrocoupling and Transfer Hydrogenation. Organometallics, 2015, 34, 4693-4699.	1.1	46
45	Iridium Pincer Catalysts for Silane Dehydrocoupling: Ligand Effects on Selectivity and Activity. Organometallics, 2015, 34, 3865-3872.	1.1	37
46	Cobalt-catalyzed ammonia borane dehydrocoupling and transfer hydrogenation under aerobic conditions. Dalton Transactions, 2015, 44, 12074-12077.	1.6	51
47	Macroscopic Molecular Ordering and Exciton Delocalization in Crystalline Phthalocyanine Thin Films. Journal of Physical Chemistry Letters, 2015, 6, 1834-1840.	2.1	19
48	Phenylsilane as a safe, versatile alternative to hydrogen for the synthesis of actinide hydrides. Chemical Communications, 2015, 51, 17379-17381.	2.2	52
49	Unexpected formal insertion of CO₂ into the Câ€“Si bonds of a zinc compound. Chemical Communications, 2015, 51, 15804-15807.	2.2	14
50	Carbonâ€“Hydrogen Bond Activation, Câ€“N Bond Coupling, and Cycloaddition Reactivity of a Three-Coordinate Nickel Complex Featuring a Terminal Imido Ligand. Inorganic Chemistry, 2014, 53, 13227-13238.	1.9	51
51	Dehydrocoupling of amine boranes via tin(IV) and tin(II) catalysts. Journal of Organometallic Chemistry, 2014, 751, 541-545.	0.8	21
52	Cottrell Scholars Collaborative New Faculty Workshop: Professional Development for New Chemistry Faculty and Initial Assessment of Its Efficacy. Journal of Chemical Education, 2014, 91, 1874-1881.	1.1	38
53	Synthesis, structure, and reactivity of platinum compounds featuring terminal amido and phosphido ligands. Inorganica Chimica Acta, 2014, 422, 57-64.	1.2	6
54	Exploration of tin-catalyzed phosphine dehydrocoupling: Catalyst effects and observation of tin-catalyzed hydrophosphination. Inorganica Chimica Acta, 2014, 422, 141-145.	1.2	30

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55	Intermolecular Zirconium-Catalyzed Hydrophosphination of Alkenes and Dienes with Primary Phosphines. Journal of the American Chemical Society, 2014, 136, 9240-9243.	6.6	80
56	Metal Complexes (M = Zn, Sn, and Pb) of 2-Phosphinobenzenethiolates: Insights into Ligand Folding and Hemilability. Inorganic Chemistry, 2013, 52, 9875-9884.	1.9	14
57	Ïƒ-Bond Metathesis: A 30-Year Retrospective. Organometallics, 2013, 32, 7249-7263.	1.1	243
58	A general synthesis of phosphaalkenes at zirconium with liberation of phosphaformamides. Dalton Transactions, 2013, 42, 1159-1167.	1.6	22
59	Mechanisms of metal-catalyzed dehydrocoupling reactions. Chemical Society Reviews, 2013, 42, 5629.	18.7	158
60	Zirconium-Mediated Synthesis of Arsaalkene Compounds from Arsines and Isocyanides. Inorganic Chemistry, 2013, 52, 7811-7816.	1.9	12
61	Bis(4-methyl-N-{(2Z,4E)-4-[(4-methylphenyl)imino]pent-2-en-2-yl}anilinido)zinc. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, m343-m343.	0.2	1
62	rac-18-Methoxycoronaridine hydrochloride. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, o1041-o1041.	0.2	0
63	Dehydrogenative Bond-Forming Catalysis Involving Phosphines: Updated Through 2010. Current Organic Chemistry, 2012, 16, 1313-1331.	0.9	22
64	Asâ€“As Bond Formation via Reductive Elimination from a Zirconocene Bis(dimesitylarsenide) Compound. Organometallics, 2012, 31, 5204-5207.	1.1	12
65	High Activity and Selectivity for Silane Dehydrocoupling by an Iridium Catalyst. ACS Catalysis, 2012, 2, 1404-1407.	5.5	16
66	Synthesis and characterization of zinc complexes and reactivity with primary phosphines. Journal of Organometallic Chemistry, 2012, 696, 4327-4331.	0.8	10
67	Terminal hafnium phosphinidene complexes and phosphinidene ligand exchange. Chemical Science, 2011, 2, 1320.	3.7	35
68	Differences in the stability of zirconium(IV) complexes related to catalytic phosphine dehydrocoupling reactions. Dalton Transactions, 2011, 40, 7683.	1.6	15
69	Câ€“N Bond formation via ligand-induced nucleophilicity at a coordinated triamidoamine ligand. Chemical Communications, 2011, 47, 11769.	2.2	14
70	Triamidoamine-supported zirconium complexes in the catalytic dehydrocoupling of 1,2-bisphosphinobenzene and -ethane. Polyhedron, 2010, 29, 42-45.	1.0	23
71	Insertion Reactions and Catalytic Hydrophosphination by Triamidoamine-Supported Zirconium Complexes. Organometallics, 2010, 29, 2557-2565.	1.1	75
72	Insertion reactions involving a triamidoamine-supported zirconium complex. Dalton Transactions, 2010, 39, 9073.	1.6	11

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73	General Preparation of (N₃N)ZrX (N₃N =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 747 Td (N(CH₂ Hydride Surrogate. Organometallics, 2009, 28, 573-581.	1.1	37
74	A Hydrogen-Substituted Osmium Stannylene Complex: Isomerization to a Metallostannylene Complex via an Unusual Î±-Hydrogen Migration from Tin to Osmium. Journal of the American Chemical Society, 2009, 131, 4606-4607.	6.6	64
75	Synthesis, Structure, and Reactivity of Neutral Hydrogen-Substituted Ruthenium Silylene and Germylene Complexes. Organometallics, 2009, 28, 5082-5089.	1.1	70
76	Sequential Insertion Reactions of Carbon Monoxide and Ethylene into the Niâ^'C Bond of a Cationic Nickel(II) Alkyl Complex. Organometallics, 2009, 28, 2568-2571.	1.1	15
77	Group-Transfer Reactions of Nickelâ^'Carbene and â^'Nitrene Complexes with Organoazides and Nitrous Oxide that Form New Câ•N, Câ•O, and Nâ•N Bonds. Journal of the American Chemical Society, 2009, 131, 12872-12873.	6.6	120
78	Metal-phosphido and -phosphinidene complexes in Pâ€“E bond-forming reactions. Dalton Transactions, 2009, , 18-26.	1.6	200
79	Mechanistic variety in zirconium-catalyzed bond-forming reaction of arsines. Dalton Transactions, 2008, , 4488.	1.6	54
80	Paramagnetic Vanadium Silyl Complexes: Synthesis, Structure, and Reactivity. Organometallics, 2008, 27, 5717-5722.	1.1	16
81	Î²-Phosphinoethylboranes as Ambiphilic Ligands in Nickelâ^'Methyl Complexes. Organometallics, 2008, 27, 1135-1139.	1.1	76
82	Î·²-Organoazide Complexes of Nickel and Their Conversion to Terminal Imido Complexes via Dinitrogen Extrusion. Journal of the American Chemical Society, 2008, 130, 12628-12629.	6.6	105
83	Dehydrogenative Bond-Forming Catalysis Involving Phosphines. Current Organic Chemistry, 2008, 12, 1322-1339.	0.9	70
84	{N,N-Bis[2-(trimethylsilylamino)ethyl]-Nâ€²-(trimethylsilyl)ethane-1,2-diaminato(3â€“)-Î¹⁴N}me Acta Crystallographica Section E: Structure Reports Online, 2008, 64, m477-m477.	0.2	4
85	Insertion of benzyl isocyanide into a Zrâ€“P bond and rearrangement. Atom-economical synthesis of a phosphaalkene. Chemical Communications, 2007, , 4172.	2.2	29
86	Selective Dehydrocoupling of Phosphines by Triamidoamine Zirconium Catalysts. Organometallics, 2007, 26, 2492-2494.	1.1	89
87	Zirconium-Catalyzed Heterodehydrocoupling of Primary Phosphines with Silanes and Germanes. Inorganic Chemistry, 2007, 46, 6855-6857.	1.9	58
88	Synthetic Development and Chemical Reactivity of Transition-Metal Silylene Complexes. Accounts of Chemical Research, 2007, 40, 712-719.	7.6	322
89	Terminal stibinidene ligands. Generation of CpCp*Hfî€Sb(dmp) and trapping reactions with PMe3and 2-butyne. Chemical Communications, 2006, , 4030-4032.	2.2	20
90	Antimonyâ^'Antimony Bond Formation by Reductive Elimination from a Hafnium Bis(stibido) Complex. Inorganic Chemistry, 2006, 45, 9625-9627.	1.9	17

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91	Hydrogen-Substituted Osmium Silylene Complexes:Â Effect of Charge Localization on Catalytic Hydrosilation. Journal of the American Chemical Society, 2006, 128, 428-429.	6.6	128
92	Catalytic Antimonyâ€“Antimony Bond Formation through Stibinidene Elimination from Zirconocene and Hafnocene Complexes. Angewandte Chemie - International Edition, 2006, 45, 2926-2929.	7.2	64
93	Synthesis and structure of a terminal dinitrogen complex of nickel. Canadian Journal of Chemistry, 2005, 83, 328-331.	0.6	32
94	Synthesis of 1,2-bis(di-tert-butylphosphino)ethane (dtbpe) complexes of nickel: radical coupling and reduction reactions promoted by the nickel(I) dimer [(dtbpe)NiCl]2. Inorganica Chimica Acta, 2003, 345, 299-308.	1.2	83
95	Group Transfer from Nickel Imido, Phosphinidene, and Carbene Complexes to Ethylene with Formation of Aziridine, Phosphirane, and Cyclopropane Products. Journal of the American Chemical Society, 2003, 125, 13350-13351.	6.6	164
96	Formation of Phosphirenes by Phosphinidene Group-Transfer Reactions from (dtbpe)NiP(dmp) to Alkynes. Organometallics, 2003, 22, 5182-5184.	1.1	64
97	Monomeric Phosphido and Phosphinidene Complexes of Nickel. Journal of the American Chemical Society, 2002, 124, 3846-3847.	6.6	151
98	Synthesis, structure, and reactions of a nitroxyl complex of iridium(iii), cis,trans-IrHCl2(NHî€Ō)(PPh3)2. Chemical Communications, 2002, , 660-661.	2.2	38
99	A New Route to Coordination Complexes of Nitroxyl (HNO) via Insertion Reactions of Nitrosonium Triflate with Transition-Metal Hydrides. Journal of the American Chemical Society, 2002, 124, 12068-12069.	6.6	37