Alan J Welch

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9209556/publications.pdf

Version: 2024-02-01

76	1,820	218677	302126
papers	citations	26 h-index	39 g-index

89	89	89	716
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular and crystal structure of 3,3-bis(triethylphosphine)-1,2-di-carba-3-platinadodecaborane(11), and molecular-orbital analysis of the â€˜slipâ€™ distortion in carbametallaboranes. Journal of the Chemical Society Dalton Transactions, 1978, , 1363-1374.	1.1	93
2	A 15-Vertex Heteroborane. Angewandte Chemie - International Edition, 2006, 45, 4313-4316.	13.8	73
3	Roomâ€Temperature Cï£¿C Bond Cleavage of an Arene by a Metallacarborane. Angewandte Chemie - International Edition, 2010, 49, 4943-4945.	13.8	73
4	1-Phenyl-1,2-dicarba-closo-dodecaborane, 1-Ph-1,2-closo-C2B10H11. Synthesis, Characterization, and Structure As Determined in the Gas Phase by Electron Diffraction, in the Crystalline Phase at 199 K by X-ray Diffraction, and byab InitioComputations. Inorganic Chemistry, 1996, 35, 1701-1708.	4.0	72
5	Amidophosphineâ^'Phosphinites:â€‰ Synthesis and Use in Rhodium-Based Asymmetric Hydrogenation of Activated Keto Compounds. Crystal Structure of Bis[(Î¼-chloro)((S)-2-((diphenylphosphino)oxy)-2-phenyl-) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 572 Td (N-(diphenylphosphino)	2.3	65
6	Pentafluorophenyl Complexes of Platinum Containing Intramolecular PtÂ·Â·Â·H Hydrogen Bridging Interactions. Crystal Structures of [NBu4][Pt(C6F5)3(8-hydroxyquinaldine)] and [NBu4][Pt(C6F5)3(8-methylquinoline)]. Inorganic Chemistry, 1996, 35, 6009-6014.	4.0	58
7	Indenylmetallacarboranes. 1. The 18-valence-electron complex 3-(.eta.5-C9H7)-3,1,2-CoC2B9H11 and comparative molecular structures of this complex and 3-(.eta.5-C5H5)-3,1,2-CoC2B9H11. Organometallics, 1986, 5, 760-766.	2.3	56
8	Self-assembly of carborane molecules via Câ€“Hâ‹¯I hydrogen bonding: the molecular and crystal structures of 3-I-1,2-closo-C2B10H11. Dalton Transactions RSC, 2002, , 3647-3648.	2.3	54
9	The structure of [7,8-C2B9H12]â€“; correction of a popular misconception. Journal of the Chemical Society Dalton Transactions, 1990, , 677-680.	1.1	53
10	Steric effects in heteroboranes. Part 7. Journal of Organometallic Chemistry, 1994, 481, 283-293.	1.8	53
11	The VCD method â€“ a simple and reliable way to distinguish cage C and B atoms in (hetero)carborane structures determined crystallographically. Dalton Transactions, 2013, 42, 645-664.	3.3	53
12	Unprecedented flexibility of the 1,1â€²-bis(o-carborane) ligand: catalytically-active species stabilised by B-agostic Bâ€“Hâ‡€Ru interactions. Dalton Transactions, 2016, 45, 1127-1137.	3.3	40
13	Asymmetric 1,8/13,2,x-M2C2B1014-vertex metallacarboranes by direct electrophilic insertion reactions; the VCD and BHD methods in critical analysis of cage C atom positions. Dalton Transactions, 2014, 43, 5095-5105.	3.3	38
14	Sterically induced opening of a closo carbametallaborane: synthesis and characterisation of 1,2-Ph2-3-(Î·-C5Me5)-3,1,2-pseudocloso-RhC2B9H9. Journal of Organometallic Chemistry, 1992, 430, C45-C50.	1.8	37
15	Synthesis and characterisation of pseudocloso iridium and ruthenium diphenyl carbaboranes. Molecular structures of 1,2-Ph2-3-(Î·-C6H6)-3,1,2-pseudocloso-RuC2B9H9and 1,2-Ph2-3-(cym)-3,1,2-pseudocloso-RuC2B9H9(cym =p-cymene) and individual gauge for localised orbitals calculations on carbametallaboranes. Journal of the Chemical Society Dalton Transactions, 1996, , 231-237.	1.1	35
16	Mixed Sandwich Carborane/Thiamacrocycle Compounds. Synthesis and Characterization of 1-Ph-3,3,3-[9]aneS3-Î·3-S,Sâ€˜,Sâ€˜â€˜-3,1,2-closo-RuC2B9H10 and 1,2-Ph2-3,3,3-[9]aneS3-Î·3-S,Sâ€˜,Sâ€˜â€˜-3,1,2-pseudocloso-RuC2B9H9,. Inorganic Chemistry, 1996, 35, 4548-4554.	4.0	34
17	Fourteen-vertex homo- and heterobimetallic metallacarboranes. Chemical Communications, 2005, , 1917.	4.1	34
18	Icosahedral metallacarborane/carborane species derived from 1,1â€²-bis(o-carborane). Dalton Transactions, 2015, 44, 5628-5637.	3.3	34

#	Article	IF	Citations
19	Metallaborane chemistry. Part 14. Icosahedral Î·6-arena carbametallaboranes of iron and ruthenium; molecular structures of closo-[1-(Î·6-C6H5Me)-2,4-Me2-1,2,4-FeC2B9H9] and closo-[3-(Î·6-C6H6)-3,1,2-RuC2B9H11]. Journal of the Chemical Society Dalton Transactions, 1985, , 2343-2348.	1.1	33
20	Sterically Encumbered, Charge-Compensated Metallacarboranes.â€Synthesis and Structures of Ruthenium Pentamethylcyclopentadienyl Derivatives. Organometallics, 1998, 17, 3227-3235.	2.3	33
21	13-Vertex Carbacobaltaboranes: Synthesis and Molecular Structures of the 4,1,6-, 4,1,8- and 4,1,12-Isomers of Cp*CoC2B10H12. Collection of Czechoslovak Chemical Communications, 2002, 67, 991-1006.	1.0	33
22	Synthetic, spectroscopic, computational and structural studies of some 13-vertex ruthenacarboranes. Dalton Transactions, 2005, , 1716.	3.3	33
23	The first supraicosahedral bis(heteroborane). Chemical Communications, 2010, 46, 7394.	4.1	32
24	Synthesis, characterisation and molecular structures of the closo and pseudocloso heptamethylindenyl carbarhodaboranes 1-Ph-3-(Î·-C9Me7)-3,1,2-closo-RhC2B9H10and 1,2-Ph2-3-(Î·-C9Me7)-3,1,2-pseudocloso-RhC2B9H9. Experimental assignment of the11B NMR spectrum of a pseudocloso carbametallaborane. Journal of the Chemical Society Dalton Transactions, 1996, , 335-342.	1.1	30
25	Supraicosahedral (metalla) carboranes. Pure and Applied Chemistry, 2003, 75, 1325-1333.	1.9	30
26	Symmetric and asymmetric 13-vertex bimetallacarboranes by polyhedral expansion. Chemical Communications, 2007, , 2243.	4.1	27
27	The first examples of Î·5-bonding of a carbaborylphosphine ligand to transition metals. Synthesis and characterisation of 7-{PPh2AuPPh3}-8-Ph-7,8-nido-C2B9H10, 1-{PPh2AuCl}-2-Ph-3-(p-cymene)-3,1,2-pseudocloso-RuC2B9H9 and 1-{PPh2AuCl}-2-Ph-3-(Î·-C5Me5)-3,1,2-pseudocloso-RhC2B9H9,. Journal of Organometallic Chemistry, 1999, 573, 165-170.	1.8	26
28	Flexibility in co-ordinative behaviour of N-(3-hydroxypropyl)ethane-1,2-diamine toward cadmium(ii) halides: syntheses, crystal structures and solid state thermal studies. Dalton Transactions RSC, 2002, , 1066-1071.	2.3	24
29	Supraicosahedral indenyl cobaltacarboranes. Dalton Transactions, 2010, 39, 5286.	3.3	24
30	Isomerisation of nido-[C₂B₁₀H₁₂]^{2â¯} dianions: unprecedented rearrangements and new structural motifs in carborane cluster chemistry. Chemical Science, 2015, 6, 3117-3128.	7.4	24
31	Nickelation of [3-Et-7,8-Ph2-7,8-nido-C2B9H8]2?: synthesis and characterization of 1,2 ? 1,2 and 1,2 ? 1,7 isomerized products. Applied Organometallic Chemistry, 2003, 17, 518-524.	3.5	22
32	What Can We Learn from the Crystal Structures of Metallacarboranes?. Crystals, 2017, 7, 234.	2.2	22
33	Areneâ€“Ruthenium Complexes of 1,1â€²-Bis(ortho-carborane): Synthesis, Characterization, and Catalysis. Inorganic Chemistry, 2019, 58, 11751-11761.	4.0	22
34	Double deboronation and homometalation of 1,1â€²-bis(ortho-carborane). Dalton Transactions, 2017, 46, 1811-1821.	3.3	20
35	1,1â€²-Bis(ortho -carborane) as a Î² 2 co-ligand. Journal of Organometallic Chemistry, 2015, 798, 36-40.	1.8	19
36	Carborane Substituents Promote Direct Electrophilic Insertion over Reductionâ€“Metalation Reactions. Angewandte Chemie - International Edition, 2016, 55, 4596-4599.	13.8	19

#	Article	IF	Citations
37	How to Make 8,1,2â€closoâ€MC₂B₉ Metallacarboranes. Angewandte Chemie - International Edition, 2014, 53, 12222-12225.	13.8	18
38	Large, weakly basic bis(carboranyl)phosphines: an experimental and computational study. Dalton Transactions, 2017, 46, 5218-5228.	3.3	18
39	Steric versus electronic factors in metallacarborane isomerisation: nickelacarboranes with 3,1,2-, 4,1,2- and 2,1,8-NiC2B9 architectures and pendant carborane groups, derived from 1,1â€²-bis(o-carborane). Dalton Transactions, 2016, 45, 15013-15025.	3.3	17
40	Facile synthesis of closo-nido bis(carborane) and its highly regioselective halogenation. Journal of Organometallic Chemistry, 2016, 805, 1-5.	1.8	17
41	The Lewis acidity of borylcarboranes. Journal of Organometallic Chemistry, 2020, 907, 121057.	1.8	17
42	Bis(phosphine)hydridorhodacarborane Derivatives of 1,1â€²-Bis(ortho-carborane) and Their Catalysis of Alkene Isomerization and the Hydrosilylation of Acetophenone. Inorganic Chemistry, 2020, 59, 2011-2023.	4.0	17
43	Metallaborane chemistry. Part 11. Lower rotational barriers in seven-vertex than in twelve-vertex carbaplatinaboranes: synthesis, and molecular and crystal structures of [closo-1,1-(Et3P)2-2,3-Me2-1,2,3-PtC2B4H4] and [closo-1,1-(Et3P)2-1,2,4-PtC2B4H6]. Journal of the Chemical Society Dalton Transactions, 1980, , 1186.	1.1	15
44	The synthesis and characterisation of homo- and heterobimetallic 1,14,2,9- and 1,14,2,10-M₂C₂B₁₀14-vertex metallacarboranes. Dalton Transactions, 2013, 42, 671-679.	3.3	15
45	Metallaborane chemistry. Part II. Molecular and crystal structure of 1,1 -bis(dimethylphenylphosphine)-2,4-dimethyl-2,4-dicarba-1-platina-closo-dodecaborane. Journal of the Chemical Society Dalton Transactions, 1975, , 1473.	1.1	14
46	closo-Carbametallaboranes from direct insertion into nido-carbaboranes: the molecular structures of [6,6-(Et3P)2-1,2,6-C2CoB7H9] and [1,1-(Et3P)2-1,2,4-CoC2B8H10]. Journal of the Chemical Society Chemical Communications, 1981, , 652.	2.0	14
47	Synthesis and/or molecular structures of some simple 2,1,7- and 2,1,12-ruthena- and cobaltacarboranes. Collection of Czechoslovak Chemical Communications, 2010, 75, 853-869.	1.0	14
48	14â€Vertex Heteroboranes with 14 Skeletal Electron Pairs: An Experimental and Computational Study. Angewandte Chemie - International Edition, 2016, 55, 8706-8710.	13.8	14
49	Heterometalation of 1,1â€²-Bis(ortho-carborane). Inorganic Chemistry, 2018, 57, 8002-8011.	4.0	14
50	Synthesis and Reactivity of Dinuclear Complexes Containing Î·2-Phenylâ^'Metal Interactions. Crystal Structures of [NBu4][(C6F5)3Pt{Î¼-Ph2PCH2PPh(Î·2-Ph)}Pt(C6F5)2] and [NBu4][(C6F5)3Pt(Î¼-dppm)Pt(C6F5)2(CO)]. Inorganic Chemistry, 1999, 38, 1529-1534.	4.0	13
51	Developing nitrosocarborane chemistry. Dalton Transactions, 2016, 45, 3635-3647.	3.3	13
52	Application of the NOE experiment to the analysis of boron hydride derivatives: confirming the assignments of the pseudocloso-complex [1,2-Ph2-3-{Cp*}-3,1,2-IrC2B9H9] (Cp*=Î·5-C5Me5) and the closo-compounds 1-Ph-1,2-C2B10H11 and 1-Ph-2-Me-1,2-C2B10H10. Inorganica Chimica Acta, 1999, 289, 125-133.	2.4	12
53	On the Basicity of Carboranylphosphines. Inorganic Chemistry, 2019, 58, 14818-14829.	4.0	12
54	Do Gold(III) Complexes Form Hydrogen Bonds? An Exploration of Au III Dicarboranyl Chemistry. Chemistry - A European Journal, 2020, 26, 939-947.	3.3	12

#	Article	IF	Citations
55	Definitive crystal structure of 1,1â€²-bis[1,2-dicarba-closo-dodecaborane(11)]. Acta Crystallographica Section E: Structure Reports Online, 2014, 70, 462-465.	0.2	11
56	Exopolyhedral ligand flipping on isomerisation of novel supraicosahedral stannacarboranes. Chemical Communications, 2009, , 5403.	4.1	10
57	Icosahedral and supraicosahedral naphthalene ruthenacarboranes. Journal of Organometallic Chemistry, 2012, 721-722, 78-84.	1.8	10
58	Further studies of the Enhanced Structural Carborane Effect: tricarbonylruthenium and related derivatives of benzocarborane, dihydrobenzocarborane and biphenylcarborane. Dalton Transactions, 2016, 45, 11742-11752.	3.3	9
59	Mixed-ligand (triphenylphosphine)ruthenium complexes of diphenylcarborane by ligand manipulation and an asymmetric, bimolecular â€œsymbioticâ€•cluster. Journal of Organometallic Chemistry, 2018, 865, 65-71.	1.8	9
60	Facile Isomerization and Unprecedented Decarbonation of Metallacarboranes with Fluorinated Aryl Substituents. Organometallics, 2012, 31, 2523-2525.	2.3	8
61	Exploiting the Electronic Tuneability of Carboranes as Supports for Frustrated Lewis Pairs. Molecules, 2018, 23, 3099.	3.8	7
62	Exopolyhedral Ligand Orientation Controls Diastereoisomer in Mixed-Metal Bis(Carboranes). Molecules, 2020, 25, 519.	3.8	6
63	Bis(carboranes) and Their Derivatives. Structure and Bonding, 2021, , 163-195.	1.0	6
64	Synthesis and crystal structures of theracemicandmesoforms of [1-{1â€²-4â€²-cyclopentadienyl-4â€²-cobalta-1â€²,12â€²-dicarba-closo-dodecaboranyl(10)}-4-cyclopentadienyl-4-cobalta-1,12-di the former as its tetrahydrofuran disolvate. Acta Crystallographica Section C, Structural Chemistry, 2015, 71, 793-798.	0.5	5
65	Balancing Steric and Electronic Effects in Carbonyl-Phosphine Molybdacarboranes. European Journal of Inorganic Chemistry, 2017, 2017, 4581-4588.	2.0	5
66	Reduction-induced facile isomerisation of metallacarboranes: synthesis and crystallographic characterisation of 4-Cp-4,1,2-closo-CoC2B9H11. Dalton Transactions, 2015, 44, 15417-15419.	3.3	4
67	Isolierung einer nichtâ€ikosaedrischen Zwischenstufe der Isomerisierung eines ikosaedrischen Metallacarborans. Angewandte Chemie, 1997, 109, 617-619.	2.0	3
68	Carborane Substituents Promote Direct Electrophilic Insertion over Reductionâ€“Metalation Reactions. Angewandte Chemie, 2016, 128, 4672-4675.	2.0	3
69	14â€Vertex Heteroboranes with 14 Skeletal Electron Pairs: An Experimental and Computational Study. Angewandte Chemie, 2016, 128, 8848-8852.	2.0	2
70	Crystal structure of a second polymorph of 2-cyclopentadienyl-1,7-dicarba-2-cobalta-closo-dodecaborane(11). Acta Crystallographica Section E: Crystallographic Communications, 2015, 71, m141-m142.	0.5	2
71	Metalation of Bis(meta-carborane). Journal of Organometallic Chemistry, 2021, 950, 121980.	1.8	1
72	Crystal structure of 1,1â€²-bis[1,7-dicarba-closo-dodecaborane(11)]. Acta Crystallographica Section E: Structure Reports Online, 2014, 70, 376-378.	0.2	1

#	Article	IF	Citations
73	Crystal structure of 1-heptafluorotolyl-closo-1,2-dicarbadodecaborane. Acta Crystallographica Section E: Crystallographic Communications, 2019, 75, 512-515.	0.5	1
74	C,Câ€²-Ru to C,Bâ€²-Ru isomerisation in bis(phosphine)Ru complexes of [1,1â€²-bis(ortho-carborane)]. Chemical Communications, 2021, 58, 64-67.	4.1	1
75	Anthracene and pyrene ruthenacarboranes. Journal of Organometallic Chemistry, 2021, 941, 121805.	1.8	0
76	The exopolyhedral ligand orientation (ELO) in 3-(nitrato-ÎºO)-3,3-bis(triphenylphosphane-ÎºP)-3-rhoda-1,2-dicarba-closo-dodecaborane(11) dichloromethane 2.2-solvate. Acta Crystallographica Section C, Structural Chemistry, 2015, 71, 461-464.	0.5	0