

# Rudolf J Wehmschulte

## List of Publications by Year in descending order

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68  
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2,826  
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126708

33  
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174990

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72  
all docs

72  
docs citations

72  
times ranked

1844  
citing authors

#	ARTICLE	IF	CITATIONS
1	Isolation and structural characterization of unsolvated lithium aryls. <i>Journal of the American Chemical Society</i> , 1993, 115, 11353-11357.	6.6	197
2	Deoxygenative Reduction of Carbon Dioxide to Methane, Toluene, and Diphenylmethane with $[\text{Et}(\text{THF})_2\text{Al}]^+$ as Catalyst. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 7323-7326.	7.2	167
3	Reduction of a tetraaryldialane to generate aluminum-aluminum $\pi$ -bonding. <i>Inorganic Chemistry</i> , 1993, 32, 2983-2984.	1.9	163
4	Reactions of $(\text{H}_2\text{AlMes}^*)_2$ ( $\text{Mes}^* = 2,4,6\text{-}(t\text{-Bu})_3\text{C}_6\text{H}_2$ ) with $\text{H}_2\text{EAr}$ ( $\text{E} = \text{N}, \text{P}, \text{or As}; \text{Ar} = \text{aryl}$ ): Characterization of the Ring Compounds $(\text{Mes}^*\text{AlNPh})_2$ and $(\text{Mes}^*\text{AlEPh})_3$ ( $\text{E} = \text{P or As}$ ). <i>Journal of the American Chemical Society</i> , 1996, 118, 791-797.	6.6	109
5	Synthesis and characterization of bulky aryl derivatives of the heavier Main Group 3 elements. <i>Organometallics</i> , 1993, 12, 1086-1093.	1.1	104
6	Synthesis and Characterization of the $\sigma$ -Bonded, Quasi-Linear, Metal(II) Diaryls $\text{MMes}_2$ ( $\text{M} = \text{Mg}$ ). <i>Inorganic Chemistry</i> , 1994, 33, 6300-6306.	1.1	102
7	Recent Developments on the Use of Group 13 Metal Complexes in Catalysis. <i>ChemCatChem</i> , 2018, 10, 2509-2520.	1.8	94
8	Synthesis and Characterization of Sterically Encumbered Derivatives of Aluminum Hydrides and Halides: Assessment of Steric Properties of Bulky Terphenyl Ligands. <i>Inorganic Chemistry</i> , 1996, 35, 6694-6702.	1.9	84
9	A New Synthetic Route to Organoalumoxanes ( $\text{RAIO}_n$ ): Synthesis of $(\text{Mes}^*\text{AlO})_4(\text{Mes}^* = )$ . <i>Inorganic Chemistry</i> , 1997, 36, 8387-8388.	6.6	78
10	Synthesis, Structure, and Spectroscopic Characterization of Unassociated Mono-, Di- and Triamido Derivatives of Aluminum and Gallium. <i>Organometallics</i> , 1994, 13, 2792-2799.	1.1	76
11	$\text{CO}_2$ Activation with Bulky Neutral and Cationic Phenoxyalanes. <i>Organometallics</i> , 2013, 32, 6812-6819.	1.1	73
12	New Base-Free Alanes and Gallanes: Synthesis and Characterization of Monomeric $\text{Mes}^*_2\text{GaH}$ ( $\text{Mes}^* = )$ and Crowded Arylaluminum Species. <i>Inorganic Chemistry</i> , 1994, 33, 6300-6306.	1.9	68
13	Large Thick Flattened Carbon Nanotubes. <i>Nano Letters</i> , 2002, 2, 1439-1442.	4.5	58
14	$[\text{2,6-Mes}_2\text{C}_6\text{H}_3]_2\text{Ga}+\text{Li}[\text{Al}\{\text{OCH}(\text{CF}_3)_2\}_4]^-$ ( $\text{Mes} = 2,4,6\text{-Me}_3\text{C}_6\text{H}_2$ ): A Compound Containing a Linear Unsolvated Two-Coordinate Gallium Cation. <i>Journal of the American Chemical Society</i> , 2003, 125, 1470-1471.	6.6	57
15	Cationic Ethylzinc Compound: A Benzene Complex with Catalytic Activity in Hydroamination and Hydrosilylation Reactions. <i>Inorganic Chemistry</i> , 2011, 50, 11300-11302.	1.9	55
16	Synthesis and characterization of the monomeric gallium monoamides $\text{tert-Bu}_2\text{GaN(R)SiPh}_3$ ( $\text{R} = )$ and $\text{Trip}_2\text{GaNPh}_2$ . <i>Inorganic Chemistry</i> , 1993, 32, 2557-2561.	1.9	54
17	Unsymmetrical 9-Borafluorenes via Low-Temperature $\text{C-H}$ Activation of <i>m</i> -Terphenylboranes. <i>Organometallics</i> , 2003, 22, 83-92.	1.1	52
18	Synthesis and Characterization of a Sterically Encumbered Unsymmetrical 9-Borafluorene, Its Pyridine Adduct, and Its Dilithium Salt. <i>Organometallics</i> , 2001, 20, 844-849.	1.1	50

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19	Synthesis and Characterization of [Mes*AlH <sub>2</sub> ] <sub>2</sub> (Mes* = 2,4,6-(tert-Bu) <sub>3</sub> C <sub>6</sub> H <sub>2</sub> ): A Base-Free Arylalane. <i>Inorganic Chemistry</i> , 1994, 33, 5611-5612.	1.9	49
20	Primary alanes and alanates: useful synthetic reagents in aluminum chemistry. <i>Polyhedron</i> , 2000, 19, 1649-1661.	1.0	48
21	Synthesis and Characterization of an Almost Linear, Quasi-Two-Coordinate, Cationic Diorganoaluminum Compound. <i>Organometallics</i> , 2004, 23, 1965-1967.	1.1	47
22	Synthesis and Characterization of Lewis Base-Free, $\sigma$ -Bonded Lithium Aryls: A Structural Model for Unsolvated Phenyllithium in the Solid State. <i>Journal of the American Chemical Society</i> , 1997, 119, 2847-2852.	6.6	46
23	A novel hybrid of carbon nanotubes/iron nanoparticles: iron-filled nodule-containing carbon nanotubes. <i>Carbon</i> , 2005, 43, 1550-1555.	5.4	42
24	Facile Synthesis of Unsymmetrical 9-Phospha- and 9-Arsafluorenes. <i>Inorganic Chemistry</i> , 2006, 45, 5568-5575.	1.9	42
25	Reaction of the Primary Alane (2,4,6-t-Bu <sub>3</sub> H <sub>2</sub> C <sub>6</sub> AlH <sub>2</sub> ) <sub>2</sub> with Nitriles, Isonitriles, and Primary Amines. <i>Inorganic Chemistry</i> , 1998, 37, 6906-6911.	1.9	40
26	Synthesis and Structure of Unassociated Mono-, Di- and Trithiolate Derivatives of Aluminum and Gallium: Investigation of Al-S and Ga-S $\pi$ -Bonding. <i>Inorganic Chemistry</i> , 1995, 34, 2593-2599.	1.9	39
27	Low-Temperature Synthesis of Aluminum Sulfide as the Solvate Al <sub>4</sub> S <sub>6</sub> (NMe <sub>3</sub> ) <sub>4</sub> in Hydrocarbon Solution. <i>Journal of the American Chemical Society</i> , 1997, 119, 9566-9567.	6.6	39
28	Catalytic Reduction of Carbon Dioxide Using Cationic Organoaluminum and -Gallium Compounds. <i>Organometallics</i> , 2017, 36, 4810-4815.	1.1	38
29	m-Terphenylaluminum and -gallium Compounds: Synthesis and Conversion into Low-Coordinate Organogallium Cations. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 1671-1681.	1.0	36
30	Cationic organoaluminum compounds as intramolecular hydroamination catalysts. <i>Journal of Organometallic Chemistry</i> , 2012, 696, 4179-4183.	0.8	36
31	New Routes to Synthetically Useful, Sterically Encumbered Arylaluminum Halides and Hydride Halides. <i>Inorganic Chemistry</i> , 1996, 35, 3262-3267.	1.9	35
32	Synthesis and Characterization of Bulky Cationic Arylalkylaluminum Compounds. <i>Organometallics</i> , 2011, 30, 2563-2570.	1.1	35
33	Chlorination of 1-Carba-closo-dodecaborate and 1-Ammonio-closo-dodecaborate Anions. <i>Inorganic Chemistry</i> , 2016, 55, 10617-10627.	1.9	33
34	Synthesis and Structure of Mes*AlN(Ph)Al(Mes*)N(Ph)NPh: A Formal Aluminum-Nitrogen Analog of the Cyclopentadienide Ion. <i>Inorganic Chemistry</i> , 1996, 35, 2717-2718.	1.9	30
35	Reaction of m-Terphenyldichlorophosphanes with Sodium Azide: Synthesis and Characterization of Stable Azidocyclophosphazenes. <i>Inorganic Chemistry</i> , 2001, 40, 2756-2762.	1.9	30
36	Synthesis and Characterization of Unassociated Aluminum Monophosphides. <i>Inorganic Chemistry</i> , 1994, 33, 3205-3207.	1.9	28

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37	Synthesis and Characterization of an Unsolvated Dimeric Diarylmagnesium Compound and Its Magnesium Iodide Byproducts. <i>Inorganic Chemistry</i> , 2001, 40, 6004-6008.	1.9	28
38	Diterphenylgallium Alkyls and Hydride: Synthesis, Characterization, and Reactivity. <i>Organometallics</i> , 2003, 22, 4678-4684.	1.1	28
39	New route to organoaluminium sulfides: synthesis of (Mes*AlS) <sub>2</sub> (Mes* = -C <sub>6</sub> H <sub>2</sub> But <sub>3-2,4,6</sub> ) and its dimethyl sulfoxide adduct [Mes*AlS(OSMe <sub>2</sub> ) <sub>2</sub> ]. <i>Chemical Communications</i> , 1998, , 335-336.	2.2	27
40	Multiple Ga <sup>+</sup> -Ga Bonding Character in Na <sub>2</sub> [Ga(GaTrip <sub>2</sub> ) <sub>3</sub> ], and a Comparison with Neutral Ga(GaTrip <sub>2</sub> ) <sub>3</sub> (Trip=2,4,6-iPr <sub>3</sub> C <sub>6</sub> H <sub>2</sub> ). <i>Angewandte Chemie - International Edition</i> , 1998, 37, 3152-3154.	7.2	26
41	Convenient Access to Gallium(I) Cations through Hydrogen Elimination from Cationic Gallium(III) Hydrides. <i>Inorganic Chemistry</i> , 2019, 58, 12441-12445.	1.9	26
42	Novel Aluminum Hydride Derivatives from the Reaction of H <sub>3</sub> Al-NMe <sub>3</sub> with the Cyclosilazanes [Me <sub>2</sub> SiNH] <sub>3</sub> and [Me <sub>2</sub> SiNH] <sub>4</sub> . <i>Inorganic Chemistry</i> , 2001, 40, 1316-1322.	1.9	25
43	m-Terphenylphosphines: Synthesis, structures and coordination properties. <i>Inorganica Chimica Acta</i> , 2009, 362, 3465-3474.	1.2	24
44	Synthesis and Characterization of Amorphous Nanostructured HAIO, a Novel Aluminumoxyhydride. <i>Chemistry of Materials</i> , 2003, 15, 2803-2808.	3.2	23
45	Monomeric Alanes: Synthesis, Structure, and Thermolysis of Mes*Al(H)N(SiMe <sub>3</sub> ) <sub>2</sub> and a One-Pot Synthetic Route to Mes* <sub>2</sub> AlH (Mes* = <i>i</i> -C <sub>6</sub> H <sub>2</sub> -2,4,6-t-Bu <sub>3</sub> ). <i>Inorganic Chemistry</i> , 1998, 37, 2106-2109.	1.9	19
46	Reaction of cyclopentadienyl zirconium derivatives with sterically encumbered arylaluminum hydrides: X-ray crystal structure of (i-5-C <sub>5</sub> H <sub>5</sub> ) <sub>2</sub> (H)Zr( <i>i</i> -1/2-H) <sub>2</sub> Al(H)C <sub>6</sub> H <sub>2</sub> -2,4,6-But <sub>3</sub> . <i>Polyhedron</i> , 1999, 18, 1885-1888.	1.0	19
47	Synthesis of novel nanostructured $\gamma$ -Al <sub>2</sub> O <sub>3</sub> by pyrolysis of aluminumoxyhydride HAIO. <i>Journal of Materials Chemistry</i> , 2003, 13, 3107-3111.	6.7	18
48	Room temperature synthesis of silver nanowires from tabular silver bromide crystals in the presence of gelatin. <i>Journal of Solid State Chemistry</i> , 2006, 179, 696-701.	1.4	18
49	Size Matters: Room Temperature C-H Bond Formation Through C-H Activation in <i>m</i> -Terphenyldiiodophosphines. <i>Inorganic Chemistry</i> , 2008, 47, 2858-2863.	1.9	18
50	Towards Naked Zinc(II) in the Condensed Phase: A Highly Lewis Acidic Zn <sup>II</sup> Dication Stabilized by Weakly Coordinating Carborate Anions. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2084-2088.	7.2	16
51	Interaction of the bulky alane (H <sub>2</sub> AlC <sub>6</sub> H <sub>3</sub> -2,6-Mes <sub>2</sub> ) <sub>2</sub> (Mes = <i>i</i> -C <sub>6</sub> H <sub>3</sub> -2,4,6-Me <sub>3</sub> ) with H <sub>2</sub> EPh (E=N, P or As). <i>New Journal of Chemistry</i> , 1998, 22, 1125-1130.	1.4	13
52	Synthesis and Reactivity of Indium(I) 1-Carba-closo-undecachlorododecaborate. <i>Inorganic Chemistry</i> , 2015, 54, 9195-9200.	1.9	13
53	At Last: A Stable Univalent Gallium Cation. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 4708-4709.	7.2	12
54	Synthesis and Reactivity of Amidoaluminum Hydride Compounds as Potential Precursors to AlN. <i>Journal of Cluster Science</i> , 2002, 13, 503-520.	1.7	11

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55	Low Valent Organoaluminum (+I, +II) Species. Topics in Organometallic Chemistry, 2012, , 91-124.	0.7	11
56	Synthesis and Structure of the First Bridgehead Silylium Ion. Organometallics, 2014, 33, 2146-2149.	1.1	11
57	Evidence for $\pi$ bonding in the boron $\pi$ -thiolate compounds (2,4,6-Me <sub>3</sub> C <sub>6</sub> H <sub>2</sub> ) <sub>2</sub> B(SPh) and (2,4,6-Pri <sub>3</sub> C <sub>6</sub> H <sub>2</sub> )B(SPh) <sub>2</sub> . Journal of the Chemical Society Dalton Transactions, 1994, , 2113-2117.	1.1	10
58	Synthesis of aryloxyaluminium hydrides and their conversion into aryloxyalumoxanes (ArOAlO) <sub>n</sub> . Dalton Transactions, 2009, , 9322.	1.6	8
59	Aluminumoxyhydride: A Improved Synthesis and Application as a Selective Reducing Agent. Inorganic Chemistry, 2006, 45, 8807-8811.	1.9	7
60	Facile Synthesis of Monoazidotitanium Isopropoxides. Inorganic Chemistry, 2008, 47, 10804-10806.	1.9	7
61	Zinc Ammonio-dodecaborates: Synthesis, Lewis Acid Strength, and Reactivity. Inorganic Chemistry, 2022, 61, 7032-7042.	1.9	6
62	Low-Coordinate Aluminum Amides from Silylanilines and Alkylalanes. European Journal of Inorganic Chemistry, 2011, 2011, 521-526.	1.0	5
63	A Direct Stereoselective Preparation of a Fish Pheromone and Application of the Zinc Porphyrin Tweezer Chiroptical Protocol in Its Stereochemical Assignment. Chirality, 2013, 25, 575-581.	1.3	5
64	Towards Naked Zinc(II) in the Condensed Phase: A Highly Lewis Acidic Zn <sup>II</sup> Dication Stabilized by Weakly Coordinating Carborate Anions. Angewandte Chemie, 2021, 133, 2112-2116.	1.6	4
65	Synthesis, Structure, and Spectroscopic Characterization of Unassociated Mono-, Di and Triamido Derivatives of Aluminum and Gallium. [Erratum to document cited in CA121:83423]. Organometallics, 1994, 13, 3374-3374.	1.1	3
66	Alkylaluminum, -gallium, -magnesium, and -zinc monophenolates with bulky substituents. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2018, 73, 943-951.	0.3	2
67	Synthesis and Characterization of Amorphous Nanostructured HAIO, a Novel Aluminumoxyhydride.. ChemInform, 2003, 34, no.	0.1	0
68	Lewis base adducts of diisobutylaluminum azide: synthesis and thermal stability. Journal of Coordination Chemistry, 2015, 68, 2470-2479.	0.8	0