Hansgeorg SchnÃ¶ckel

List of Publications by Year
in descending order

100 papers	5,810 citations	61984 43 h-index	85541 71 g-index
126 all docs	126 docs citations	126 times ranked	1511 citing authors

#	Article	IF	Citations
1	Magnesium(I) Halide versus Magnesium Metal: Differences in Reaction Energy and Reactivity Monitored in Reduction Processes of Pâ^'Cl Bonds. Angewandte Chemie, 2019, 131, 726-731.	2.0	3
2	Frontispiz: Magnesium(I) Halide versus Magnesium Metal: Differences in Reaction Energy and Reactivity Monitored in Reduction Processes of Pâ^'Cl Bonds. Angewandte Chemie, 2019, 131, .	2.0	0
3	Magnesium(I) Halide versus Magnesium Metal: Differences in Reaction Energy and Reactivity Monitored in Reduction Processes of Pâ^'Cl Bonds. Angewandte Chemie - International Edition, 2019, 58, 716-721.	13.8	9
4	Frontispiece: Magnesium(I) Halide versus Magnesium Metal: Differences in Reaction Energy and Reactivity Monitored in Reduction Processes of Pâ^'Cl Bonds. Angewandte Chemie - International Edition, 2019, 58, .	13.8	0
5	Realization of an Alâ‰¡Al Triple Bond in the Gasâ€Phase Na 3 Al 2 â^' Cluster via Double Electronic Transmutation. Angewandte Chemie - International Edition, 2018, 57, 14060-14064.	13.8	29
6	Low oxidation state aluminum-containing cluster anions: Cpâ^—AlnHâ^', n = 1â€“3. Journal of Chemical Physics, 2016, 145, 074305.	3.0	5
7	Synthesis, Structure, and Properties of Al(^Rbpy)₃ Complexes (R = t-Bu,) Tj ETQq1 1 0.784314 rgBT /Ov	4.0	14
8	Synthesis, structure, and properties of a dialumane supported by pyrazolate ligands. Dalton Transactions, 2015, 44, 2956-2958.	3.3	4
9	The Influence of a Single Transition Metal Atom on the Reactivity of Main Group Metal Clusters in the Gas Phase. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 2701-2707.	1.2	13
10	Aluminum Zintl anion moieties within sodium aluminum clusters. Journal of Chemical Physics, 2014, 140, 054301.	3.0	37
11	The Reaction Rates of O₂ with Closed-Shell and Open-Shell Al_x^{â€“} and Ga_x^{â€“} Clusters under Single-Collision Conditions: Experimental and Theoretical Investigations toward a Generally Valid Model for the Hindered Reactions of O₂ with Metal Atom Clusters. Journal of the American Chemical Society, 2014, 136, 2607-2616.	13.7	37
12	Nanoscale Molecular Silver Cluster Compounds in Gram Quantities. Angewandte Chemie - International Edition, 2014, 53, 3064-3066.	13.8	20
13	K[Al₄(PPh₂)₇PPh]: An Al^{II} Phosphanide / Phosphinidene Intermediate on the Path to AlP Formation. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 2558-2560.	1.2	6
14	Hunting for the Magnesium(I) Species: Formation, Structure, and Reactivity of some Donorâ€Free Grignard Compounds. Angewandte Chemie - International Edition, 2012, 51, 9025-9029.	13.8	30
15	A Chemical View of the Giant Au102(SR)44 (SR = P-Mercaptobenzoic Acid) Cluster: Metalloid Aluminum and Gallium Clusters as Path Making Examples of This Novel Type Open Our Eyes for Structure and Bonding of Metalloid Aun(SR)m (n > m) Clusters. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2011, 637, 15-23.	1.2	27
16	A Convenient Synthesis of Cyclopentadienylgallium - The Awakening of a Sleeping Beauty in Organometallic Chemistry. European Journal of Inorganic Chemistry, 2011, 2011, n/a-n/a.	2.0	24
17	Al₁₂K₈[OC(CH₃)₃]₁₈: A Wade, Zintl, or Metalloid Cluster, or a Hybrid of All Three?. Angewandte Chemie - International Edition, 2010, 49, 3146-3150.	13.8	15
18	Ga8Br8Â·6NEt3: Formation and Structure of Donor-Stabilized GaBr. A Nanoscaled Step on the Way to Î²-Gallium?. Journal of the American Chemical Society, 2010, 132, 1323-1327.	13.7	7

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19	Structures and Properties of Metalloid Al and Ga Clusters Open Our Eyes to the Diversity and Complexity of Fundamental Chemical and Physical Processes during Formation and Dissolution of Metals. Chemical Reviews, 2010, 110, 4125-4163.	47.7	182
20	On the kinetics of the Al13â¯+Cl2 reaction: Cluster degradation in consecutive steps. Journal of Chemical Physics, 2009, 131, 174304.	3.0	7
21	Metastable Aluminum(I) Compounds: Experimental and Quantum Chemical Investigations on Aluminum(I) Phosphanidesâ€"An Alternative Channel to the Disproportionation Reaction?. Chemistry - A European Journal, 2009, 15, 13391-13398.	3.3	17
22	Experimentally Based DFT Calculations on the Hindered Disproportionation of [Al₄Cp*₄]: Formation of Metalloid Clusters as Intermediates on the Way to Solid Al Prevents the Decomposition of a Textbook Molecule. Chemistry - A European Journal, 2009, 15, 12180-12183.	3.3	23
23	Snapshots of the Alï£¿Al Ïƒâ€Bond Formation Starting from {AlR₂} Units: Experimental and Computational Observations. Angewandte Chemie - International Edition, 2009, 48, 8141-8145.	13.8	81
24	Inside Cover: Snapshots of the Alï£¿Al Ïƒ-Bond Formation Starting from {AlR2} Units: Experimental and Computational Observations (Angew. Chem. Int. Ed. 43/2009). Angewandte Chemie - International Edition, 2009, 48, 7942-7942.	13.8	1
25	Si@Al₁₄(N(Dipp)SiMe₃)₆: A Siâ€Centered Metalloid Aluminum Cluster and the Reinvestigation of Si@Al₁₄Cp*₆. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2009, 635, 423-430.	1.2	13
26	Al4(PtBu2)6 â¯ a Derivative of Al4H6 â¯ and Other Al4 Species: A Challenge for Bonding Interpretation between Zintl Ions and Metalloid Clusters. Journal of the American Chemical Society, 2009, 131, 5698-5704.	13.7	29
27	Isomeric Al₂R₄, Mg₂R₂ Species and Oligomerisation Products: Investigation of Alâ€"Al and Mgâ€"Mg Ïƒ Bonding. European Journal of Inorganic Chemistry, 2008, 2008, 4879-4890.	2.0	28
28	Si@Al₅₆[N(2,6â€iPr₂C₆H₃)SiMe₃]₁₂: The Largest Neutral Metalloid Aluminum Cluster, a Molecular Model for a Siliconâ€Poor Aluminumâ€"Silicon Alloy?. Angewandte Chemie - International Edition, 2008, 47, 8201-8206.	13.8	27
29	MgCl and Mg₂Cl₂: From Theoretical and Thermodynamic Considerations to Spectroscopy and Chemistry of Species with Mgï£¿Mg Bonds. Angewandte Chemie - International Edition, 2008, 47, 8740-8744.	13.8	59
30	Al4(C5Me4H)4: Structure, reactivity and bonding. Inorganica Chimica Acta, 2008, 361, 457-461.	2.4	36
31	Ein molekulares Korrosionsmodell fÃ¼r Metalle?. Nachrichten Aus Der Chemie, 2008, 56, 999-1004.	0.0	6
32	Formation, structure and bonding of metalloid Al and Ga clusters. A challenge for chemical efforts in nanosciences. Dalton Transactions, 2008, , 4344.	3.3	88
33	Monitoring the dissolution process of metals in the gas phase: reactions of nanoscale Al and Ga metal atom clusters and their relationship to similar metalloid clusters. Chemical Communications, 2008, , 2075.	4.1	40
34	A Metalloid [Ga23{N(SiMe3)2}11] Cluster: The Jellium Model Put to Test. Angewandte Chemie - International Edition, 2007, 46, 1658-1662.	13.8	59
35	[Al(Al3R3)2]: Prototype of a Metalloid Al Cluster or a Sandwich-Stabilized Al Atom?. Angewandte Chemie - International Edition, 2007, 46, 3579-3583.	13.8	22
36	From Icosahedral Boron Subhalides to Octahedral Metalloid Aluminum and Gallium Analogues: Quo vadis, Wade's Rules?. Angewandte Chemie - International Edition, 2007, 46, 5795-5798.	13.8	25

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37	Ga₂₄Br₁₈Se₂: A Highly Symmetrical Metalloid Cluster and Its Oneâ€Dimensional Arrangement in the Crystalline State as a Model for the Photoconductivity of Solid GaSe. Angewandte Chemie - International Edition, 2007, 46, 6549-6552.	13.8	14
38	Modellbetrachtungen zum VerstÃndnis unerwarteter Eigenschaften der metalloiden Clusterverbindung [Ga84(N(SiMe3)2)20][Li6Br2(THF)20]Â·2Toluol. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2007, 633, 63-76.	1.2	25
39	The Anion [Mg6Cl8Cp*5]-:â€‰A Final Intermediate on the Way to the Molecular Donor-Free Grignard Compound MgClCp*?. Organometallics, 2006, 25, 2101-2103.	2.3	12
40	The Stepwise Fragmentation and Modification of a Structurally well-defined Metalloid Cluster in the Gas-Phase â€“ from [Ge9R3]â^' (R = Si(SiMe3)3) to [Ge9]â^' and [Ge9Si]â^'. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2006, 632, 1710-1716.	1.2	30
41	A Second Metalloid Ga18 Cluster and Its Topological Similarity to the High-Pressure Ga-II Modification. Chemistry - A European Journal, 2006, 12, 5429-5433.	3.3	17
42	The Chlorination of the [Al13]â^' Cluster and the Stepwise Formation of Its Intermediate Products, [Al11]â^', [Al9]â^', and [Al7]â^': A Model Reaction for the Oxidation of Metals?. Angewandte Chemie - International Edition, 2006, 45, 1476-1479.	13.8	36
43	Clusters of the Heavier Group 13 Elements. , 2005, , 126-168.		31
44	Ga10Br10(4-tert-Butylpyridine)10: A Mixed-Valent Gallium(I) Subhalide as an Intermediate during the Formation of Elemental Gallium?. Angewandte Chemie - International Edition, 2005, 44, 2973-2975.	13.8	18
45	The Molecules AlO2, Al(O2)2, and Al(O2)3: Experimental and Quantum-Chemical Investigations on the Oxidation of Aluminum Atoms. Angewandte Chemie - International Edition, 2005, 44, 4261-4264.	13.8	27
46	Al20X10 (X=Cl, Br): Snapshots of the Formation of Metalloid Clusters from Polyhedral AlnXm Molecules?. Angewandte Chemie - International Edition, 2005, 44, 6956-6960.	13.8	42
47	[Ga51(PtBu2)14Br6]3â^': An Elementoid Gallium Cluster with Metalloid and Nonmetalloid Structural Elements. Angewandte Chemie - International Edition, 2004, 43, 302-305.	13.8	32
48	Al50C120H180: A Pseudofullerene Shell of 60 Carbon Atoms and 60 Methyl Groups Protecting a Cluster Core of 50 Aluminum Atoms. Angewandte Chemie - International Edition, 2004, 43, 3186-3189.	13.8	112
49	The Polyhedral Gallium Subhalide[Ga24Br22]â‹…10â€‰THF: The First Step on the Path to a New Modification of Gallium?. Angewandte Chemie - International Edition, 2004, 43, 3190-3192.	13.8	38
50	[Ga22(PtBu2)12]: Diversity in the Arrangement of 22 Gallium Atoms-A Unique Case in the Field of Metalloid Clusters?. Angewandte Chemie - International Edition, 2004, 43, 6549-6552.	13.8	21
51	Two Metalloid Ga22 Clusters Containing a Novel Ga22 Core with an Icosahedral Ga12 Center. Chemistry - A European Journal, 2004, 10, 1977-1981.	3.3	28
52	[Ga16(PtBu2)10]: ein mit Galliumphosphid ummantelter Kern aus vier nackten Ga-Atomen?. Angewandte Chemie, 2003, 115, 2016-2019.	2.0	12
53	[Ga16(PtBu2)10]: A Gallium Phosphide Sheathed Core of Four Naked Ga Atoms?. Angewandte Chemie - International Edition, 2003, 42, 1971-1974.	13.8	24
54	Title is missing!. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2003, 629, 1175-1183.	1.2	30

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55	Preparation and Precise Structural Determination of a Second Ga84Cluster Compound. A First Hint for Cluster Doping and Its Fundamental Consequences in the Field of Chemistry and Physics of Nanoscaled Metalloid Cluster Material. Inorganic Chemistry, 2003, 42, 7731-7733.	4.0	48
56	Matrix Reactivity of AlF and AlCl in the Presence of HCl and HBr:Â Generation and Characterization of the New Al(III) Hydrides HAlFCl, HAlFBr, and HAlClBr and the Monomeric Mixed Al(III) Halides AlX2Y (X,) Tj ETQq0 0 0 rgBT /Overlock 10 T	4.0	30
57	Nanostructural Element Modifications: Synthesis and Structure of Elementoid Gallium Clusters. ACS Symposium Series, 2002, , 154-167.	0.5	21
58	[Ga6R8]2- (Râ€Š=â€ŠSiPh2Me): Eine metalloide Clusterverbindung mit einem unerwarteten Ga6-GerÃ¼st. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2002, 628, 157-161.	1.2	23
59	Metalloide Aluminium- und Galliumcluster: Elementmodifikationen im molekularen MaÃŸstab?. Angewandte Chemie, 2002, 114, 3682-3704.	2.0	169
60	[Ga22{N(SiMe3)2}10]2â^': A Metalloid Cluster Compound with a Variation of the Ga22 Framework This work was supported by the Deutsche Forschungsgemeinschaft and the Fonds der Chemische Industrie.. Angewandte Chemie - International Edition, 2002, 41, 1882.	13.8	27
61	Metalloid Aluminum and Gallium Clusters: Element Modifications on the Molecular Scale?. Angewandte Chemie - International Edition, 2002, 41, 3532-3554.	13.8	270
62	Disodium Tetrasupersilyltetragallanediide Na2Ga4R*4Â·2THF (R* = SitBu3) â^' Preparation of a Novel Gallium Cluster Compound via Dichlorodisupersilyldigallane R*2Ga2Cl2. European Journal of Inorganic Chemistry, 2002, 2002, 351-356.	2.0	43
63	Ga19(C(SiMe3)3)6â^' as a precursor for pure and silicon-doped gallium clusters: a mass spectrometric study of a Ga13â^' and a Ga12Siâ^' anion. International Journal of Mass Spectrometry, 2002, 214, 383-395.	1.5	30
64	Synthesis and structure of metalloid aluminum clustersâ€"intermediates on the way to the elements. Polyhedron, 2002, 21, 489-501.	2.2	48
65	Al22Cl20Â·12L (L = THF, THP):Â The First Polyhedral Aluminum Chlorides. Journal of the American Chemical Society, 2001, 123, 9099-9106.	13.7	65
66	[Ga18(SitBu3)8] and [Ga22(SitBu3)8]â€"Syntheses and Structural Characterization of Novel Gallium Cluster Compounds. Chemistry - A European Journal, 2001, 7, 3348-3353.	3.3	38
67	Synthesis and Structure of a Ga84R204â^' Cluster-A Link between Metalloid Clusters and Fullerenes?. Angewandte Chemie - International Edition, 2001, 40, 711-715.	13.8	73
68	A Ga8R6 Cluster as an Ideal Model for a Metal-Metal Bond?. Angewandte Chemie - International Edition, 2001, 40, 1241-1243.	13.8	31
69	The First Dectection of Peroxo and Bis-superoxo Complexes of Aluminum: FAlO2 and FAlO4. Angewandte Chemie - International Edition, 2001, 40, 4696-4700.	13.8	26
70	From AlX/GaX monohalide molecules to metalloid aluminum and gallium clusters. Advances in Organometallic Chemistry, 2001, 47, 235-281.	1.0	75
71	GaGa- und AlFe-Mehrfachbindungen? Ein Interpretationsversuch auf der Grundlage von Kraftkonstanten. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2000, 626, 1095-1099.	1.2	42
72	A Metalloid Al14 Cluster with the Structure of a â€œNano-Wheelâ€. Angewandte Chemie - International Edition, 2000, 39, 799-801.	13.8	35

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73	Al5Br7â‹…5â€‰THFâ€”The First Saltlike Aluminum Subhalide. Angewandte Chemie - International Edition, 2000, 39, 3691-3694.	13.8	32
74	Synthesis and Structure of a Neutral SiAl14 Cluster. Journal of the American Chemical Society, 2000, 122, 6955-6959.	13.7	70
75	Al22Br20â‹…12 THF: The First Polyhedral Aluminum Subhalideâ€”A Step on the Path to a New Modification of Aluminum?. Angewandte Chemie - International Edition, 1999, 38, 1739-1743.	13.8	49
76	[Al7{N(SiMe3)2}6]â^': A First Step towards Aluminum Metal Formation by Disproportionation. Angewandte Chemie - International Edition, 1999, 38, 2926-2928.	13.8	96
77	Ga22[Si(SiMe3)3]8: The Largest Atom-Centered Neutral Main Group Metal Cluster. Angewandte Chemie - International Edition, 1999, 38, 3381-3383.	13.8	60
78	An Al12R8â^' cluster as an intermediate on the way from aluminium(I) compounds to aluminium metalâ€. Chemical Communications, 1999, , 1933-1934.	4.1	60
79	Synthesis, Structure, and Bonding of a Polyhedral Al2Co2Cluster. Organometallics, 1998, 17, 2373-2375.	2.3	50
80	Molecular Structure of Fluorenyllithium,. Organometallics, 1998, 17, 3512-3515.	2.3	47
81	Hexameric Aggregates in Crystalline(Pentamethylcyclopentadienyl)gallium(I) at 200 K. Angewandte Chemie International Edition in English, 1997, 36, 860-862.	4.4	112
82	Synthesis, Structure, and Oxidation of Donor-Stabilized Gallium(I) Iodide: Ga8I8Â·6PEt3. Angewandte Chemie International Edition in English, 1997, 36, 1969-1971.	4.4	47
83	Pentabenzylcyclopentadienides of Lithium. Organometallics, 1996, 15, 4702-4706.	2.3	54
84	Aluminium(<scp>I</scp>)â€•und Gallium(<scp>I</scp>)â€•Verbindungen: Synthesen, Strukturen und Reaktionen. Angewandte Chemie, 1996, 108, 141-161.	2.0	188
85	Aluminum(I) and Gallium(I) Compounds: Syntheses, Structures, and Reactions. Angewandte Chemie International Edition in English, 1996, 35, 129-149.	4.4	331
86	Donorstabilisiertes Aluminium(I)-iodid. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1996, 622, 149-152.	1.2	45
87	[(CpNi)2(Cp*Al)2]: Cp*Al as a Bridging Two-Electron Ligand. Angewandte Chemie International Edition in English, 1995, 33, 2482-2483.	4.4	51
88	[P4(Cp*Al)6]: A Compound with an Unusual P4Al6 Cage Structure. Angewandte Chemie International Edition in English, 1994, 33, 199-200.	4.4	82
89	Donor-Stabilized Aluminum(II) Bromide. Angewandte Chemie International Edition in English, 1994, 33, 862-863.	4.4	56
90	Donor-Stabilized Aluminum(I) Bromide. Angewandte Chemie International Edition in English, 1994, 33, 1754-1755.	4.4	59

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91	Donorâ€stabilisiertes Aluminium(II)â€bromid. Angewandte Chemie, 1994, 106, 946-948.	2.0	23
92	Donorstabilisiertes Aluminium(<scp>I</scp>)â€bromid. Angewandte Chemie, 1994, 106, 1860-1861.	2.0	44
93	[(CpNi)₂(Cp*Al)₂]: Cp*Al als verbrÃ¼ckender Zweielektronenâ€Ligand. Angewandte Chemie, 1994, 106, 2570-2571.	2.0	40
94	The Molecular Structure of Pentamethylcyclopentadienylgallium, Ga(eta-C5Me5), by Gas-Phase Electron Diffraction. The First Monomeric Organogallium(I) Compound.. Acta Chemica Scandinavica, 1994, 48, 172-174.	0.7	70
95	[{(Et2O)2ClGa}Ga{GaCl2(Et2O)}3]: A Molecular Compound with a Tetrahedral Ga5unit. Angewandte Chemie International Edition in English, 1993, 32, 1059-1060.	4.4	56
96	(Cyclopentadienyl)-Gallium(I)-Verbindungen. Journal of Organometallic Chemistry, 1993, 463, 37-40.	1.8	85
97	[Ga(C5H5)]: Synthesis, Identification, and Ab Initio Investigations. Angewandte Chemie International Edition in English, 1992, 31, 1362-1364.	4.4	63
98	[Ga(C₅H₅)]: Synthese, Identifizierung und abâ€initioâ€Untersuchungen. Angewandte Chemie, 1992, 104, 1376-1378.	2.0	41
99	The Tetrameric Aluminum(I) Compound [{Al(η-5-C5Me5)}4]. Angewandte Chemie International Edition in English, 1991, 30, 564-565.	4.4	357
100	Die tetramere Aluminium(<scp>I</scp>)â€Verbindung [{Al(η⁵â€C₅Me₅)}₄]. Angewandte Chemie, 1991, 103, 594-595.	2.0	231