Lutz Greb

List of Publications by Year
in descending order

61 papers	2,716 citations	201674 27 h-index	189892 50 g-index
67 all docs	67 docs citations	67 times ranked	1672 citing authors

#	Article	IF	Citations
1	What Distinguishes the Strength and the Effect of a Lewis Acid: Analysis of the Gutmannâ€“Beckett Method. Angewandte Chemie - International Edition, 2022, 61, .	13.8	68
2	What Distinguishes the Strength and the Effect of a Lewis Acid: Analysis of the Gutmannâ€“Beckett Method. Angewandte Chemie, 2022, 134, .	2.0	10
3	The inversion of tetrahedral p-block element compounds: general trends and the relation to the second-order Jahnâ€“Teller effect. Chemical Science, 2022, 13, 510-521.	7.4	11
4	Calix[4]pyrrolato Stannate(II): A Tetraamido Tin(II) Dianion and Strong Metalâ€Centered Ïƒâ€Donor. Angewandte Chemie - International Edition, 2022, 61, .	13.8	10
5	Calix[4]pyrrolatostannat(II): Ein Tetraamidozinn(II)dianion als starker, metallzentrierter Ïƒâ€Donor. Angewandte Chemie, 2022, 134, .	2.0	2
6	Calix[4]pyrrolato Aluminate Catalyzes the Dehydrocoupling of Phenylphosphine Borane to High Molar Weight Polymers. Angewandte Chemie - International Edition, 2022, 61, .	13.8	11
7	Calix[4]pyrrolato Aluminate Catalyzes the Dehydrocoupling of Phenylphosphine Borane to High Molar Weight Polymers. Angewandte Chemie, 2022, 134, .	2.0	3
8	Valence Tautomerism of pâ€Block Element Compounds â€“ An Eligible Phenomenon for Main Group Catalysis?. European Journal of Inorganic Chemistry, 2022, 2022, .	2.0	15
9	Synthesis and Characterization of Hypercoordinated Silicon Anions: Catching Intermediates of Lewis Base Catalysis. Angewandte Chemie, 2022, 134, .	2.0	4
10	Synthesis and Characterization of Hypercoordinated Silicon Anions: Catching Intermediates of Lewis Base Catalysis. Angewandte Chemie - International Edition, 2022, 61, .	13.8	15
11	Stereoinversion of tetrahedral <i>p</i>-block element hydrides. Journal of Chemical Physics, 2022, 156, .	3.0	4
12	Bis(perchlorocatecholato)silane and heteroleptic bidonors: hidden frustrated Lewis pairs resulting from ring strain. Chemical Communications, 2021, 57, 8572-8575.	4.1	9
13	Calix[4]pyrrolato Aluminates: The Effect of Ligand Modification on the Reactivity of Squareâ€Planar Aluminum Anions. Chemistry - A European Journal, 2021, 27, 5120-5124.	3.3	17
14	Bis(pertrifluoromethylcatecholato)silane: Extreme Lewis Acidity Broadens the Catalytic Portfolio of Silicon. Chemistry - A European Journal, 2021, 27, 10422-10427.	3.3	41
15	Multidimensional Lewis Acidity: A Consistent Data Set of Chloride, Hydride, Methide, Water and Ammonia Affinities for 183 pâ€Block Element Lewis Acids. ChemPhysChem, 2021, 22, 935-943.	2.1	40
16	Dioxygen Activation and Pyrrole Î±â€Cleavage with Calix[4]pyrrolato Aluminates: Enzyme Model by Structural Constraint. Angewandte Chemie - International Edition, 2021, 60, 15632-15640.	13.8	24
17	Disauerstoffaktivierung und Pyrrolâ€Î±â€Spaltung mit Calix[4]pyrrolatoaluminaten: Enzymmodell durch strukturellen Zwang. Angewandte Chemie, 2021, 133, 15761-15769.	2.0	7
18	An isolable, crystalline complex of square-planar silicon(IV). CheM, 2021, 7, 2151-2159.	11.7	49

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19	Lewis Superacidic Catecholato Phosphonium Ions: Phosphorusâ€“Ligand Cooperative Câ€“H Bond Activation. Journal of the American Chemical Society, 2021, 143, 15845-15851.	13.7	35
20	Bis(perfluoropinacolato)silane: A Neutral Silane Lewis Superacid Activates Siâˆ’F Bonds. Angewandte Chemie - International Edition, 2021, 60, 25799-25803.	13.8	17
21	Calix[4]pyrroles as ligands: recent progress with a focus on the emerging p-block element chemistry. Chemical Communications, 2021, 57, 11751-11763.	4.1	16
22	The Structure of Bis(catecholato)silanes: Phase Adaptation by Dynamic Covalent Chemistry of the Siâ€“O Bond. Journal of the American Chemical Society, 2021, 143, 18784-18793.	13.7	31
23	UngewÃ¶hnliches fÃ¼r gewÃ¶hnliche pâ€Blockâ€Elemente. Nachrichten Aus Der Chemie, 2021, 69, 65-66.	0.0	0
24	Bis(perchlorocatecholato)germane: Hard and Soft Lewis Superacid with Unlimited Water Stability. Angewandte Chemie - International Edition, 2020, 59, 20930-20934.	13.8	45
25	[Si(O₂C₆F₄)₂]₁₄: Selfâ€Assembly of a Giant Perfluorinated Macrocyclic Host by Lowâ€Barrier Siâˆ’O Bond Metathesis. Angewandte Chemie - International Edition, 2020, 59, 22510-22513.	13.8	19
26	[Si(O 2 C 6 F 4) 2] 14 : Selbstassemblierung eines perfluorierten makrocyclischen Wirts durch Siâ€Oâ€Bindungsmetathese mit niedriger Barriere. Angewandte Chemie, 2020, 132, 22699-22702.	2.0	2
27	Completing the Redoxâ€Series of Silicon Trisdioxolene:<i>ortho</i>â€Quinone and Lewis Superacid Make a Powerful Redox Catalyst. Chemistry - A European Journal, 2020, 26, 17386-17389.	3.3	17
28	Bis(alizarinato)silane: In Silico Design and Synthesis of a Powerful Chromogenic Lewis Acid as a Dual-Gated Fluoride Ion Probe. Organometallics, 2020, 39, 4340-4349.	2.3	7
29	Bis(perchlorocatecholato)germane: Hard and Soft Lewis Superacid with Unlimited Water Stability. Angewandte Chemie, 2020, 132, 21116-21120.	2.0	14
30	Reversible OH-bond activation and amphoterism by metalâ€“ligand cooperativity of calix[4]pyrrolato aluminate. Chemical Science, 2020, 11, 9611-9616.	7.4	19
31	Metalâ€“Ligand Cooperativity of the Calix[4]pyrrolato Aluminate: Triggerable Câˆ’C Bond Formation and Rate Control in Catalysis. Angewandte Chemie - International Edition, 2020, 59, 17118-17124.	13.8	30
32	An Extensive Set of Accurate Fluoride Ion Affinities for <i>p</i>â€Block Element Lewis Acids and Basic Design Principles for Strong Fluoride Ion Acceptors. ChemPhysChem, 2020, 21, 987-994.	2.1	145
33	Metalâ€“Ligand Cooperativity of the Calix[4]pyrrolato Aluminate: Triggerable Câˆ’C Bond Formation and Rate Control in Catalysis. Angewandte Chemie, 2020, 132, 17266-17272.	2.0	11
34	Elementâ€Ligand Cooperativity with pâ€Block Elements. European Journal of Inorganic Chemistry, 2020, 2020, 3030-3047.	2.0	73
35	An Airâ€Stable, Neutral Phenothiazinyl Radical with Substantial Radical Stabilization Energy. Chemistry - A European Journal, 2020, 26, 3152-3156.	3.3	8
36	Calix[4]pyrrole Aluminate: A Planar Tetracoordinate Aluminum(III) Anion and Its Unusual Lewis Acidity. Journal of the American Chemical Society, 2019, 141, 18009-18012.	13.7	64

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37	On the Metal Cooperativity in a Dinuclear Copperâ€“Guanidine Complex for Aliphatic Câˆ’H Bond Cleavage by Dioxygen. Chemistry - A European Journal, 2019, 25, 11257-11268.	3.3	4
38	Bis(catecholato)silanes: assessing, rationalizing and increasing silicon's Lewis superacidity. Chemical Science, 2019, 10, 7379-7388.	7.4	65
39	Tris(dimethylamino)silylium ion: structure and reactivity of a dimeric silaguanidinium. Chemical Communications, 2019, 55, 7764-7767.	4.1	7
40	Silicon Tris(perchloro)dioxolene: A Neutral Triplet Diradical. Angewandte Chemie - International Edition, 2019, 58, 3616-3619.	13.8	13
41	Bis(perchlorocatecholato)silan â€“ eine neutrale Siliciumâ€Lewisâ€SupersÃure. Angewandte Chemie, 2018, 130, 1733-1736.	2.0	48
42	Bis(perchlorocatecholato)silaneâ€”A Neutral Silicon Lewis Super Acid. Angewandte Chemie - International Edition, 2018, 57, 1717-1720.	13.8	100
43	Silicon tris(perchloro)dioxolene: a neutral triplet diradical. Angewandte Chemie, 2018, 131, 3655.	2.0	2
44	Frontispiece: Lewis Superacids: Classifications, Candidates, and Applications. Chemistry - A European Journal, 2018, 24, .	3.3	0
45	Calix[4]pyrrole Hydridosilicate: The Elusive Planar Tetracoordinate Silicon Imparts Striking Stability to Its Anionic Silicon Hydride. Journal of the American Chemical Society, 2018, 140, 17409-17412.	13.7	62
46	Twofold Oxidized and Twofold Protonated Redoxâ€Active Guanidine: An Ultimate Intermediate in Protonâ€Coupled Electronâ€Transfer Reactions. European Journal of Organic Chemistry, 2018, 2018, 5910-5915.	2.4	16
47	Lewis Superacids: Classifications, Candidates, and Applications. Chemistry - A European Journal, 2018, 24, 17881-17896.	3.3	206
48	Synthesis of Electronâ€Rich, Planarized Silicon(IV) Species and a Theoretical Analysis of Dimerizing Aminosilanes. Chemistry - A European Journal, 2017, 23, 17764-17774.	3.3	16
49	Internal Câ€“C Bond Rotation in Photoisomers of Î±â€Bisimines: a Lightâ€Responsive Twoâ€Step Molecular Speed Regulator Based on Double Imine Photoswitching. European Journal of Organic Chemistry, 2016, 2016, 1243-1246.	2.4	11
50	Photo- and Metallo-responsive <i>N</i>-Alkyl Î±-Bisimines as Orthogonally Addressable Main-Chain Functional Groups in Metathesis Polymers. Journal of the American Chemical Society, 2016, 138, 1142-1145.	13.7	41
51	Synthetic Molecular Motors: Thermal N Inversion and Directional Photoinduced Cï£¾N Bond Rotation of Camphorquinone Imines. Angewandte Chemie - International Edition, 2015, 54, 14345-14348.	13.8	83
52	Autoinduced Catalysis and Inverse Equilibrium Isotope Effect in the Frustrated Lewis Pair Catalyzed Hydrogenation of Imines. Chemistry - A European Journal, 2015, 21, 8056-8059.	3.3	58
53	Catalytic metal-free Siâ€“N cross-dehydrocoupling. Chemical Communications, 2014, 50, 2318-2320.	4.1	113
54	Switchable fluorescence by click reaction of a novel azidocarbazole dye. RSC Advances, 2014, 4, 11528-11534.	3.6	15

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55	Light-Driven Molecular Motors: Imines as Four-Step or Two-Step Unidirectional Rotors. Journal of the American Chemical Society, 2014, 136, 13114-13117.	13.7	241
56	Functionalâ€Group Tolerance in Frustrated Lewis Pairs: Hydrogenation of Nitroolefins and Acrylates. Angewandte Chemie - International Edition, 2013, 52, 5876-5879.	13.8	140
57	Electronic effects of triarylphosphines in metal-free hydrogen activation: a kinetic and computational study. Chemical Science, 2013, 4, 2788.	7.4	93
58	Metalâ€free Catalytic Olefin Hydrogenation: Lowâ€Temperature H₂â€…Activation by Frustrated Lewis Pairs. Angewandte Chemie - International Edition, 2012, 51, 10164-10168.	13.8	230
59	Paracyclophane Derivatives in Frustrated Lewis Pair Chemistry. Topics in Current Chemistry, 2012, 334, 81-100.	4.0	4
60	[2.2]Paracyclophane derived bisphosphines for the activation of hydrogen by FLPs: application in domino hydrosilylation/hydrogenation of enones. Dalton Transactions, 2012, 41, 9056.	3.3	58
61	Bis(perfluoropinacolato)silane: A Neutral Silane Lewis Superacid Activates Siâ€F bonds. Angewandte Chemie, 0, , .	2.0	2