

Jens Langer

List of Publications by Year in descending order

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109
papers

2,954
citations

159585

30
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214800

47
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117
all docs

117
docs citations

117
times ranked

1480
citing authors

#	ARTICLE	IF	CITATIONS
1	Ir(IV) Sulfoxide-Pincer Complexes by Three-Electron Oxidative Additions of Br ₂ and I ₂ . Unprecedented Trap-Free Reductive Elimination of I ₂ from a formal d ⁵ Metal. <i>Inorganic Chemistry</i> , 2022, 61, 1236-1248.	4.0	4
2	Access to a Labile Monomeric Magnesium Radical by Ball-Milling. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	37
3	Access to a Labile Monomeric Magnesium Radical by Ball-Milling. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	5
4	Formation and Reactivity of Non-Stabilized Monomeric Alumoxane Intermediates. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2022, 648, .	1.2	5
5	Low-valent Mg(I) complexes by ball-milling. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2022, 648, .	1.2	16
6	Unsupported Mg-Alkene Bonding. <i>Chemistry - A European Journal</i> , 2021, 27, 2513-2522.	3.3	16
7	Comparison of Magnesium and Zinc in Cationic η^6 -Arene and Halobenzene Complexes. <i>Organometallics</i> , 2021, 40, 448-457.	2.3	16
8	Retro-Diels-Alder decomposition of norbornadiene mediated by a cationic magnesium complex. <i>Chemical Communications</i> , 2021, 57, 5278-5281.	4.1	3
9	Dinitrogen complexation and reduction at low-valent calcium. <i>Science</i> , 2021, 371, 1125-1128.	12.6	131
10	Application of a Stable and Soluble Dibenzylbarium Reagent in the Synthesis of a Barium Imido Cluster. <i>Organometallics</i> , 2021, 40, 1395-1401.	2.3	4
11	Strongly reducing magnesium(0) complexes. <i>Nature</i> , 2021, 592, 717-721.	27.8	86
12	Dinuclear Zn Complex: Phenoxy Radical Formation Driven by Superoxide Coordination. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2021, 647, 809-814.	1.2	3
13	Cationic Aluminium Complexes as Catalysts for Imine Hydrogenation. <i>Chemistry - A European Journal</i> , 2021, 27, 7756-7763.	3.3	18
14	Lewis Acidic Cationic Strontium and Barium Complexes. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 2643-2653.	2.0	10
15	Cationic Heterobimetallic Mg(Zn)/Al(Ga) Combinations for Cooperative C-F Bond Cleavage. <i>Angewandte Chemie</i> , 2021, 133, 16628-16635.	2.0	3
16	Cationic Heterobimetallic Mg(Zn)/Al(Ga) Combinations for Cooperative C-F Bond Cleavage. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16492-16499.	13.8	14
17	Carbon-Halogen Bond Activation with Powerful Heavy Alkaline Earth Metal Hydrides. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 3731-3741.	2.0	8
18	Chromium(II) Alkylcyclopentadienyl Complexes with Carbon or Hydride Donor Ligands. <i>Organometallics</i> , 2021, 40, 2951-2969.	2.3	5

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19	Heterometallic Mg ²⁺ Ba Hydride Clusters in Hydrogenation Catalysis. <i>ChemCatChem</i> , 2021, 13, 4567-4577.	3.7	10
20	Calcium catalyzed enantioselective intramolecular alkene hydroamination with chiral C_2 -symmetric bis-amide ligands. <i>Dalton Transactions</i> , 2021, 50, 3178-3185.	3.3	8
21	Magnesium ²⁺ halobenzene bonding: mapping the halogen sigma-hole with a Lewis-acidic complex. <i>Chemical Science</i> , 2021, 12, 2410-2418.	7.4	20
22	Oxygen-rich tetrahedral surface phase on high-temperature rutile V_2O_5 . <i>Physical Review Materials</i> , 2021, 5.	2.4	3
23	Low-coordinate Monomeric Zinc Hydride Complexes with Encapsulating Dipyrromethene Ligands and Reactivity with $B(C_6F_5)_3$. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2020, 646, 593-602.	1.2	7
24	Alkaline Earth Metal Imido Complexes with Doubly Deprotonated Amidine and β -diketimine Ligands. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 3573-3579.	2.0	2
25	d Dative Bonding Between Iron and the Alkaline Earth Metals Calcium, Strontium, and Barium. <i>Angewandte Chemie</i> , 2020, 132, 14723-14728.	2.0	7
26	Intramolecular Alkene Hydroamination with Hybrid Catalysts Consisting of a Metal Salt and a Neutral Organic Base. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 3387-3394.	2.0	4
27	Mg ²⁺ Mg bond polarization induced by a superbulky β -diketiminate ligand. <i>Chemical Communications</i> , 2020, 56, 11402-11405.	4.1	27
28	Alkaline Earth Metal Aluminates as Catalysts for Imine Hydrogenation. <i>Organometallics</i> , 2020, 39, 4238-4246.	2.3	16
29	Boosting Low-valent Aluminum(I) Reactivity with a Potassium Reagent. <i>Angewandte Chemie</i> , 2020, 132, 16116-16120.	2.0	49
30	d Dative Bonding Between Iron and the Alkaline Earth Metals Calcium, Strontium, and Barium. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14615-14620.	13.8	30
31	Dibenzotropyliene Substituted Ligands for Early Main Group Metal-Alkene Bonding. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 2582-2595.	2.0	10
32	Large decanuclear calcium and strontium hydride clusters. <i>Chemical Communications</i> , 2020, 56, 9178-9181.	4.1	14
33	Highly Active Superbulky Alkaline Earth Metal Amide Catalysts for Hydrogenation of Challenging Alkenes and Aromatic Rings. <i>Angewandte Chemie</i> , 2020, 132, 9187-9197.	2.0	10
34	Highly Active Superbulky Alkaline Earth Metal Amide Catalysts for Hydrogenation of Challenging Alkenes and Aromatic Rings. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9102-9112.	13.8	56
35	Ligand Effects in Calcium Catalyzed Ketone Hydroboration. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 1728-1735.	2.0	24
36	Boosting Low-valent Aluminum(I) Reactivity with a Potassium Reagent. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15982-15986.	13.8	99

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37	Multiple π -Porphyrin Functionalized Hexabenzocoronenes. Chemistry - A European Journal, 2019, 25, 15083-15090.	3.3	25
38	Calcium π -Catalyzed Arene C-H Bond Activation by Low-Valent Al ^I . Angewandte Chemie - International Edition, 2019, 58, 15496-15503.	13.8	68
39	Calcium π -Catalyzed Arene C-H Bond Activation by Low-Valent Al ^I . Angewandte Chemie, 2019, 131, 15642-15649.	2.0	28
40	Chromium(III) and Chromium(II) Phenolate Complexes with Bulky Alkylcyclopentadienyl Ligands. European Journal of Inorganic Chemistry, 2019, 2019, 2742-2749.	2.0	4
41	Heteroleptic Heavier Alkaline Earth Metal Amide Complexes Stabilized by a Superbulky λ^2 -Diketiminato Ligand. Organometallics, 2019, 38, 2485-2493.	2.3	32
42	Lewis acidic alkaline earth metal complexes with a perfluorinated diphenylamide ligand. Dalton Transactions, 2019, 48, 6757-6766.	3.3	14
43	Nucleophilic Aromatic Substitution at Benzene with Powerful Strontium Hydride and Alkyl Complexes. Angewandte Chemie, 2019, 131, 5450-5455.	2.0	32
44	Nucleophilic Aromatic Substitution at Benzene with Powerful Strontium Hydride and Alkyl Complexes. Angewandte Chemie - International Edition, 2019, 58, 5396-5401.	13.8	85
45	Low Valent Magnesium Chemistry with a Super Bulky λ^2 -Diketiminato Ligand. Angewandte Chemie, 2019, 131, 617-621.	2.0	22
46	Low Valent Magnesium Chemistry with a Super Bulky λ^2 -Diketiminato Ligand. Angewandte Chemie - International Edition, 2019, 58, 607-611.	13.8	75
47	Porphyrin π -Hexaphenylbenzene Conjugates via Mixed Cyclotrimerization Reactions. Journal of Organic Chemistry, 2019, 84, 1489-1499.	3.2	22
48	RuBisCO π -inspired CO ₂ π -Aktivierung und Umwandlung durch einen Iridium(I) π -Komplex. Angewandte Chemie, 2018, 130, 2480-2483.	2.0	9
49	RuBisCO π -inspired CO ₂ Activation and Transformation by an Iridium(I) Complex. Angewandte Chemie - International Edition, 2018, 57, 2455-2458.	13.8	16
50	Facile Benzene Reduction by a Ca ²⁺ /Al ^I Lewis Acid/Base Combination. Angewandte Chemie, 2018, 130, 14365-14369.	2.0	40
51	Paramagnetic Chromium(II) Complexes and Chromium(IV) Nitrides with Bulky Alkylcyclopentadienyl Ligands. European Journal of Inorganic Chemistry, 2018, 2018, 4472-4480.	2.0	5
52	Facile Benzene Reduction by a Ca ²⁺ /Al ^I Lewis Acid/Base Combination. Angewandte Chemie - International Edition, 2018, 57, 14169-14173.	13.8	74
53	Switching between Inner- and Outer-Sphere PCET Mechanisms of Small-Molecule Activation: Superoxide Dismutation and Oxygen/Superoxide Reduction Reactivity Deriving from the Same Manganese Complex. Journal of the American Chemical Society, 2017, 139, 1472-1484.	13.7	37
54	Lithium and Potassium Complexes with dbn π - and dbu π -Based Enamido Phosphine Ligands: Syntheses and Applications. European Journal of Inorganic Chemistry, 2017, 2017, 2671-2681.	2.0	4

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55	Self-Assembly of Magnesium Hydride Clusters Driven by Chameleon-Type Ligands. <i>Angewandte Chemie</i> , 2017, 129, 5103-5107.	2.0	12
56	Self-Assembly of Magnesium Hydride Clusters Driven by Chameleon-Type Ligands. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5021-5025.	13.8	30
57	A Simple Route to Calcium and Strontium Hydride Clusters. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11880-11884.	13.8	91
58	A Simple Route to Calcium and Strontium Hydride Clusters. <i>Angewandte Chemie</i> , 2017, 129, 12042-12046.	2.0	37
59	A Soft Grip: Magnesium Complexes with a Phosphine-Modified Phosphonium Diylidic Lewis Base. <i>Chemistry - A European Journal</i> , 2016, 22, 17425-17435.	3.3	20
60	Magnesiacycloalkanes with Different Ring Sizes. <i>Organometallics</i> , 2016, 35, 587-594.	2.3	5
61	An unsymmetrical phosphonium diylidic with a fluorenylidene subunit and its lithium complexes. <i>Journal of Coordination Chemistry</i> , 2015, 68, 3302-3316.	2.2	5
62	Homoleptic Tris(<i>i</i> -alkenediyl)yttrates of the Type $\{Li(dme)\}_3\{Y(CH_2)_2-X-CH_2\}_3$ ($X =$ Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (2.3	7
63	Solution Stability of Organocalcium Compounds in Ethereal Media. <i>Organometallics</i> , 2014, 33, 6381-6388.	2.3	21
64	Syntheses and Structures of Potassium Complexes Containing Bis(diphenylphosphanyl)methanide Anions. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 1413-1420.	2.0	5
65	Alkenylcalcium Iodide: Synthesis and Stability. <i>Chemistry - A European Journal</i> , 2014, 20, 5237-5239.	3.3	22
66	Arylcalcium halides as substrates in Kumada-type cross-coupling reactions. <i>Journal of Organometallic Chemistry</i> , 2014, 751, 563-567.	1.8	11
67	Synthesis, characterization and reactivity of potassium and barium complexes containing phosphane-borane stabilized methanides. <i>Dalton Transactions</i> , 2014, 43, 458-468.	3.3	5
68	Nickelalactones with an allyl subunit – the effect of penta-coordination on structures and stability. <i>Dalton Transactions</i> , 2014, 43, 13988-14000.	3.3	10
69	Tris(borane) Adducts of Diphosphanylmethanides: The $[H_3BCH(PPh)_2BH_3]^{2-}$ Anion and Its Alkali Metal Complexes. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 5940-5947.	2.0	2
70	Halide-Free Diarylcalcium Complexes – Syntheses, Structures, and Stability. <i>Chemistry - A European Journal</i> , 2014, 20, 3154-3161.	3.3	16
71	Phosphanides of calcium and their oxidation products. <i>Coordination Chemistry Reviews</i> , 2013, 257, 1049-1066.	18.8	14
72	Formation of a $Ph_2PCH(BH_3)P(BH_3)Ph_2$ ligand via formal 1,2-borane migration. <i>Chemical Communications</i> , 2013, 49, 1121.	4.1	14

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73	Silyl group migration in a P-silylated phosphonium ylide derived from dppm – A combined experimental and theoretical study. <i>Inorganic Chemistry Communication</i> , 2013, 32, 28-31.	3.9	6
74	Stabilization and Reactivity of the Lewis Acidic Solvated Phenylcalcium Cation. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 3507-3510.	13.8	20
75	4-Biphenylcalcium Iodide and 9-Phenanthrylcalcium Bromide: Grignard-Type Reagents of Polycyclic Aromatic Hydrocarbons. <i>Chemistry - A European Journal</i> , 2013, 19, 10497-10500.	3.3	20
76	Heavier Group 2 Grignard Reagents of the Type Aryl-Ae(L) _n -X (Post-Grignard Reagents). <i>Topics in Organometallic Chemistry</i> , 2013, , 29-72.	0.7	48
77	Arylcalcium Iodides in Tetrahydropyran: Solution Stability in Comparison to Aryllithium Reagents. <i>Organometallics</i> , 2012, 31, 6172-6182.	2.3	38
78	Synthesis and Molecular Structures of Meta-Substituted Arylcalcium Iodides. <i>Organometallics</i> , 2012, 31, 8647-8653.	2.3	17
79	Nickelacyclic carboxylates derived from 3-hexyne and CO ₂ and their application in the synthesis of a new muconic acid derivative. <i>Polyhedron</i> , 2012, 32, 60-67.	2.2	13
80	Dppm-derived phosphonium salts and ylides as ligand precursors for s-block organometallics. <i>Arkivoc</i> , 2012, 2012, 210-225.	0.5	4
81	Coordination Behavior of Calcocene and Its Use as a Synthon for Heteroleptic Organocalcium Compounds. <i>Organometallics</i> , 2011, 30, 1359-1365.	2.3	25
82	Structural diversity and solution behavior of low-valent iridium complexes bearing 1,4-diazabutadiene ligands. <i>Inorganic Chemistry Communication</i> , 2011, 14, 1612-1615.	3.9	4
83	Coordination Behavior and Coligand-Dependent cis/trans Isomerism of Calcium Bis(diphenylphosphanides). <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 3002-3007.	2.0	18
84	Nickelacyclic Carboxylates with Pyridine-Based Ligand Sets – From Mononuclear Complexes to Supramolecular Architectures by Hydrogen Bonding. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 275-281.	2.0	14
85	Dppm stabilized nickelacyclic carboxylates as building blocks of oligonuclear nickel complexes. <i>Inorganic Chemistry Communication</i> , 2010, 13, 488-490.	3.9	9
86	Post-Grignard Reagents: Influence of the Coligands <i>L</i> on the Molecular Structures of Phenylcalcium Iodides [<i>L</i> _n Ca(<i>R</i>) ₂] and Calcium Diiodides [<i>L</i> _n CaI ₂]. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2010, 636, 1190-1198.	1.2	42
87	Reversible CO ₂ Fixation by Iridium(I) Complexes Containing Me ₂ PhP as Ligand. <i>Organometallics</i> , 2010, 29, 1642-1651.	2.3	25
88	Organic heterobimetallic complexes of the alkaline earth metals (Ae = Ca, Sr, Ba) with tetrahedral metallate anions of three-valent metals (M = B, Al, Ga, and V). <i>New Journal of Chemistry</i> , 2010, 34, 1667.	2.8	31
89	Stability and Reactivity of Phenylstrontium Compounds in Solution. <i>Organometallics</i> , 2010, 29, 2034-2039.	2.3	26
90	An iridium-mediated C-H activation/CO ₂ -carboxylation reaction of 1,1-bisdiphenylphosphinomethane. <i>Dalton Transactions</i> , 2010, 39, 7813.	3.3	9

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91	An Efficient General Synthesis of Halide-Free Diarylcalcium. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 5741-5744.	13.8	52
92	1,4-Dioxane Adducts of Grignard Reagents: Synthesis, Ether Fragmentation Reactions, and Structural Diversity of Grignard Reagent/1,4-Dioxane Complexes. <i>Organometallics</i> , 2009, 28, 5814-5820.	2.3	43
93	Synthesis and crystal structures of bis(diphenylphosphanyl)methanides of lithium and calcium as well as of their borane adducts. <i>Dalton Transactions</i> , 2009, , 2951.	3.3	43
94	A C-H activation-CO ₂ -carboxylation reaction sequence mediated by an Iridium(dppm) species. Formation of the anionic ligand (Ph ₂ P) ₂ C-COOH. <i>Chemical Communications</i> , 2008, , 4822.	4.1	15
95	Bis[1/4-1,2-bis(diphenylphosphino)methane]bis[1,2-ethene]nickel(0) toluene disolvate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2008, 64, m412-m412.	0.2	3
96	Syntheses and Structures of Alkaline Earth Metal Bis(diphenylamides). <i>Inorganic Chemistry</i> , 2007, 46, 5118-5124.	4.0	48
97	Heavy Grignard Reagents: Challenges and Possibilities of Aryl Alkaline Earth Metal Compounds. <i>Chemistry - A European Journal</i> , 2007, 13, 6292-6306.	3.3	157
98	Aryl Calcium Compounds: Syntheses, Structures, Physical Properties, and Chemical Behavior. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 1950-1956.	13.8	102
99	Low-Valent Nickel and Palladium Complexes with 1,1-Bis(phosphanyl)ferrocenes: Syntheses and Structures of Acrylic Acid and Ethylene Complexes. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 2257-2264.	2.0	22
100	Phenylcalcium iodides with silyl substituents in para-position. <i>Inorganic Chemistry Communication</i> , 2007, 10, 853-855.	3.9	21
101	Reinvestigation of the reaction of strontium and barium with iodobenzene and molecular structure of the heavy Grignard reagent [((thf) ₂ BaPh ₂) ₄ ·(thf)BaO] with an oxygen-centered square Ba ₅ pyramid. <i>Inorganic Chemistry Communication</i> , 2007, 10, 1001-1004.	3.9	32
102	Nickel(I)-Komplexe mit 1,1-Bis(phosphino)ferrocenen als Liganden. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2007, 633, 557-562.	1.2	16
103	A key step in the formation of acrylic acid from CO ₂ and ethylene: the transformation of a nickelalactone into a nickel-acrylate complex. <i>Chemical Communications</i> , 2006, , 2510-2512.	4.1	119
104	A new synthesis for thermolabile low-valent palladium complexes by electron transfer reactions from nickel(0) to palladium(II) compounds. <i>Journal of Organometallic Chemistry</i> , 2006, 691, 4868-4873.	1.8	20
105	Saturated and unsaturated nickelalactones with N-heterocyclic carbene ligands: Synthesis and structures. <i>Journal of Organometallic Chemistry</i> , 2006, 691, 4874-4881.	1.8	22
106	Five- and Six-Membered Nickelacyclic Carboxylates as Reagents for the Facile Synthesis of α -Ketocarboxylic Acids, Isocoumarins, and 1,3-Dicarbonyl Derivatives of Benzoic Acid. <i>Synthesis</i> , 2006, 2006, 2697-2706.	2.3	4
107	Übergangsmetallorganische Reaktionskaskaden zum Aufbau höher aggregierter Systeme: Nickelacyclische Carboxylate als Precursoren für die Synthese eines Oxinato-Nickel(II)-Tetramers. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2005, 631, 2719-2726.	1.2	25
108	Organometallic Nickelamacrocycles of the Type [(R ₂ R'P)Ni(C ₂ H ₄ COO)] _n : Synthesis and Self-Assembly to Form Different Molecular Architectures Tuned by the Phosphine. <i>Organometallics</i> , 2005, 24, 272-279.	2.3	21

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109	A new set of nickelacyclic carboxylates (nickelalactones) containing pyridine as supporting ligand: synthesis, structures and application in C-C and C-S linkage reactions. Journal of Organometallic Chemistry, 2004, 689, 2952-2962.	1.8	33