

Sven Schneider

List of Publications by Year in descending order

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108
papers

6,681
citations

70961

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64668

79
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125
all docs

125
docs citations

125
times ranked

4234
citing authors

#	ARTICLE	IF	CITATIONS
1	First-Row Transition Metal (De)Hydrogenation Catalysis Based On Functional Pincer Ligands. Chemical Reviews, 2019, 119, 2681-2751.	23.0	608
2	Lewis Acid-Assisted Formic Acid Dehydrogenation Using a Pincer-Supported Iron Catalyst. Journal of the American Chemical Society, 2014, 136, 10234-10237.	6.6	377
3	Well-Defined Iron Catalysts for the Acceptorless Reversible Dehydrogenation-Hydrogenation of Alcohols and Ketones. ACS Catalysis, 2014, 4, 3994-4003.	5.5	330
4	Ruthenium Complexes with Cooperative PNP Ligands: Bifunctional Catalysts for the Dehydrogenation of Ammonia-Borane. Angewandte Chemie - International Edition, 2009, 48, 905-907.	7.2	289
5	Catalytic Dehydrocoupling/Dehydrogenation of <i>N</i> -Methylamine-Borane and Ammonia-Borane: Synthesis and Characterization of High Molecular Weight Polyaminoboranes. Journal of the American Chemical Society, 2010, 132, 13332-13345.	6.6	280
6	Cooperative Aliphatic PNP Amido Pincer Ligands – Versatile Building Blocks for Coordination Chemistry and Catalysis. European Journal of Inorganic Chemistry, 2012, 2012, 412-429.	1.0	257
7	Ammonia formation by metal-ligand cooperative hydrogenolysis of a nitrido ligand. Nature Chemistry, 2011, 3, 532-537.	6.6	204
8	Ruthenium-Catalyzed Dimethylamineborane Dehydrogenation: Stepwise Metal-Centered Dehydrocyclization. Chemistry - A European Journal, 2009, 15, 10339-10342.	1.7	192
9	Closed-shell and open-shell square-planar iridium nitrido complexes. Nature Chemistry, 2012, 4, 552-558.	6.6	188
10	Dinitrogen Splitting and Functionalization in the Coordination Sphere of Rhenium. Journal of the American Chemical Society, 2014, 136, 6881-6883.	6.6	172
11	Nitrene Radical Intermediates in Catalytic Synthesis. Chemistry - A European Journal, 2017, 23, 13819-13829.	1.7	164
12	The Mechanism of Borane-Amine Dehydrocoupling with Bifunctional Ruthenium Catalysts. Journal of the American Chemical Society, 2013, 135, 13342-13355.	6.6	141
13	Highly Active Iron Catalyst for Ammonia Borane Dehydrocoupling at Room Temperature. ACS Catalysis, 2015, 5, 7214-7217.	5.5	135
14	Conversion of Dinitrogen into Acetonitrile under Ambient Conditions. Angewandte Chemie - International Edition, 2016, 55, 4786-4789.	7.2	128
15	Acceptorless Dehydrogenation of Alcohols: Perspectives for Synthesis and H ₂ Storage.. ChemCatChem, 2009, 1, 72-73.	1.8	125
16	Nitrogen Fixation via Splitting into Nitrido Complexes. Chemical Reviews, 2021, 121, 6522-6587.	23.0	122
17	Synthesis and Reactivity of a Transient, Terminal Nitrido Complex of Rhodium. Journal of the American Chemical Society, 2013, 135, 17719-17722.	6.6	120
18	Mechanism of Chemical and Electrochemical N ₂ Splitting by a Rhenium Pincer Complex. Journal of the American Chemical Society, 2018, 140, 7922-7935.	6.6	110

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19	Synthesis and Structure of Six-Coordinate Iron Borohydride Complexes Supported by PNP Ligands. <i>Inorganic Chemistry</i> , 2014, 53, 2133-2143.	1.9	97
20	Highly Stereoselective Proton/Hydride Exchange: Assistance of Hydrogen Bonding for the Heterolytic Splitting of H ₂ . <i>Journal of the American Chemical Society</i> , 2009, 131, 17552-17553.	6.6	94
21	Ruthenium Complexes with Cooperative PNP-Pincer Amine, Amido, Imine, and Enamido Ligands: Facile Ligand Backbone Functionalization Processes. <i>Inorganic Chemistry</i> , 2010, 49, 5482-5494.	1.9	94
22	Homolytic N-H Activation of Ammonia: Hydrogen Transfer of Parent Iridium Ammine, Amide, Imide, and Nitride Species. <i>Inorganic Chemistry</i> , 2015, 54, 9290-9302.	1.9	94
23	Learning from the Neighbors: Improving Homogeneous Catalysts with Functional Ligands Motivated by Heterogeneous and Biocatalysis. <i>ChemCatChem</i> , 2012, 4, 307-320.	1.8	93
24	Metal-Ligand Cooperative Synthesis of Benzonitrile by Electrochemical Reduction and Photolytic Splitting of Dinitrogen. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 830-834.	7.2	89
25	Dinitrogen Splitting Coupled to Protonation. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5872-5876.	7.2	88
26	An Isolated Nitridyl Radical-Bridged {Rh(N ⁺)Rh} Complex. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6814-6818.	7.2	71
27	A platinum(ii) metallonitrene with a triplet ground state. <i>Nature Chemistry</i> , 2020, 12, 1054-1059.	6.6	70
28	Facile palladium catalyzed Suzuki-Miyaura coupling in air and water at ambient temperature. <i>Green Chemistry</i> , 2010, 12, 35-38.	4.6	66
29	Facile Double C-H Activation of Tetrahydrofuran by an Iridium PNP Pincer Complex. <i>Organometallics</i> , 2009, 28, 6331-6338.	1.1	63
30	A Terminal Osmium(IV) Nitride: Ammonia Formation and Ambiphilic Reactivity. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 11417-11420.	7.2	63
31	A Square-Planar Ruthenium(II) Complex with a Low-Spin Configuration. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 7566-7569.	7.2	60
32	Square-Planar Cobalt(III) Pincer Complex. <i>Inorganic Chemistry</i> , 2016, 55, 4529-4536.	1.9	55
33	Coupling of terminal iridium nitrido complexes. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 469-477.	3.0	53
34	The elusive abnormal CO ₂ insertion enabled by metal-ligand cooperative photochemical selectivity inversion. <i>Nature Communications</i> , 2018, 9, 1161.	5.8	53
35	Functionalization of N ₂ by Mid to Late Transition Metals via N-N Bond Cleavage. <i>Topics in Organometallic Chemistry</i> , 2017, , 71-112.	0.7	50
36	A Disilene Base Adduct with a Dative Si-Si Single Bond. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1782-1786.	7.2	47

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37	Iridium Olefin Complexes Bearing Dialkylamino/amido PNP Pincer Ligands: Synthesis, Reactivity, and Solution Dynamics. <i>Organometallics</i> , 2009, 28, 708-718.	1.1	46
38	Square-Planar Iridium(II) and Iridium(III) Amido Complexes Stabilized by a PNP Pincer Ligand. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 8184-8187.	7.2	46
39	Conversion of Dinitrogen into Acetonitrile under Ambient Conditions. <i>Angewandte Chemie</i> , 2016, 128, 4864-4867.	1.6	46
40	An iridium(III/IV/V) redox series featuring a terminal imido complex with triplet ground state. <i>Chemical Science</i> , 2018, 9, 4325-4332.	3.7	44
41	Chemical Non-Innocence of an Aliphatic PNP Pincer Ligand. <i>Chemistry - A European Journal</i> , 2017, 23, 33-37.	1.7	43
42	Selectivity of tungsten mediated dinitrogen splitting vs. proton reduction. <i>Chemical Science</i> , 2019, 10, 10275-10282.	3.7	38
43	(Electro)chemical Splitting of Dinitrogen with a Rhenium Pincer Complex. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 1402-1410.	1.0	37
44	A Terminal Iridium Oxo Complex with a Triplet Ground State. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10971-10974.	7.2	35
45	Cyanate Formation via Photolytic Splitting of Dinitrogen. <i>Jacs Au</i> , 2021, 1, 879-894.	3.6	32
46	ortho-Metalation of Triarylphosphane at Cobalt and Template Synthesis of Chelating 2-(Diarylphosphanyl)aryl Ligands. <i>European Journal of Inorganic Chemistry</i> , 2000, 2000, 2295-2301.	1.0	31
47	Copper(I)tert-Butylthiolato Clusters as Single-Source Precursors for High-Quality Chalcocite Thin Films: A Film Growth and Microstructure Control. <i>Chemistry of Materials</i> , 2007, 19, 2780-2785.	3.2	31
48	Tris(phosphino)borato Silver(I) Complexes as Precursors for Metallic Silver Aerosol-Assisted Chemical Vapor Deposition. <i>Inorganic Chemistry</i> , 2008, 47, 2534-2542.	1.9	31
49	Palladium N(CH ₂ CH ₂ PC ⁱ Pr ₂) ₂ -Dialkylamides: Synthesis, Structural Characterization, and Reactivity. <i>Inorganic Chemistry</i> , 2009, 48, 3699-3709.	1.9	31
50	Oxidative Coupling of Terminal Rhenium Pnictide Complexes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10966-10970.	7.2	31
51	Mixed Diketonate Thiolate Copper(I) Precursors for Materials Synthesis: Control of Cu ₂ S-Forming Thermolysis Pathways by Manipulating Lewis Acid and Base Cluster Building Blocks. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 1733-1736.	7.2	30
52	Dinitrogen Splitting Coupled to Protonation. <i>Angewandte Chemie</i> , 2017, 129, 5966-5970.	1.6	29
53	Nitrogen Atom Transfer Catalysis by Metallonitrene C-H Insertion: Photocatalytic Amidation of Aldehydes. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	29
54	A Pair of Remarkably Stable Mononuclear Chromium(III) and Chromium(IV) Hydrides. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 4486-4489.	7.2	28

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55	Square-Planar Ruthenium(II) Complexes: Control of Spin State by Pincer Ligand Functionalization. <i>Chemistry - A European Journal</i> , 2015, 21, 579-589.	1.7	26
56	Hydrosilane Synthesis by Catalytic Hydrogenolysis of Chlorosilanes and Silyl Triflates. <i>Inorganic Chemistry</i> , 2018, 57, 13822-13828.	1.9	24
57	A Disilene Base Adduct with a Dative Si-Si Single Bond. <i>Angewandte Chemie</i> , 2016, 128, 1814-1818.	1.6	23
58	Photochemically Driven Reverse Water-Gas Shift at Ambient Conditions mediated by a Nickel Pincer Complex. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14482-14487.	7.2	23
59	Growth of Highly Oriented Chalcocite Thin Films on Glass by Aerosol-Assisted Spray Pyrolysis Using a New Single-Source Copper Thiolate Precursor. <i>Chemistry of Materials</i> , 2005, 17, 4286-4288.	3.2	22
60	$[\text{IrCl}(\text{N}(\text{CH}_2\text{CH}_2\text{PtBu}_2)_2)]^+$: a versatile source of the Ir(PNP) pincer platform. <i>Dalton Transactions</i> , 2014, 43, 4506-4513.	1.6	22
61	Iron catalyzed hydrogenation and electrochemical reduction of CO ₂ : The role of functional ligands. <i>Journal of Organometallic Chemistry</i> , 2018, 861, 159-173.	0.8	22
62	Synthesis of Benzonitrile from Dinitrogen. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2018, 644, 916-919.	0.6	22
63	Triamidoamine Complexes of Chromium(III) and Chromium(IV). <i>Inorganic Chemistry</i> , 2001, 40, 4674-4677.	1.9	21
64	A Terminal Osmium(IV) Nitride: Ammonia Formation and Ambiphilic Reactivity. <i>Angewandte Chemie</i> , 2016, 128, 11589-11592.	1.6	21
65	A square-planar osmium(II) complex. <i>Chemical Communications</i> , 2017, 53, 5511-5514.	2.2	21
66	Metal-Ligand Cooperative Synthesis of Benzonitrile by Electrochemical Reduction and Photolytic Splitting of Dinitrogen. <i>Angewandte Chemie</i> , 2019, 131, 840-844.	1.6	21
67	Interconversion of Phosphinyl Radical and Phosphinidene Complexes by Proton Coupled Electron Transfer. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6338-6341.	7.2	21
68	Unusually Stable Chromium(IV) Alkyls Bearing a Triamidoamine Ligand. <i>Organometallics</i> , 2003, 22, 3010-3012.	1.1	20
69	$[\text{Na}(\text{THF})_2\text{Cr}(\text{N}_3\text{N})]$: The First Trigonal Monopyramidal Chromium(II) Complex. <i>Inorganic Chemistry</i> , 2003, 42, 6974-6976.	1.9	19
70	Four- and Five-Coordinate Osmium(IV) Nitrides and Imides: Circumventing the "Nitrido Wall". <i>Organometallics</i> , 2018, 37, 802-811.	1.1	19
71	Copper(I)tert-Butylthiolato Clusters as Single-Source Precursors for High-Quality Chalcocite Thin Films: Precursor Chemistry in Solution and the Solid State. <i>Chemistry of Materials</i> , 2007, 19, 2768-2779.	3.2	18
72	Reactivity of iridium(I) PNP amido complexes toward protonation and oxidation. <i>Journal of Organometallic Chemistry</i> , 2013, 744, 35-40.	0.8	17

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73	New Insights into the Biological and Synthetic Fixation of Nitrogen. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4529-4531.	7.2	16
74	Stabilizing P ₂ , P ₂ , and P ₂ as bridging ligands. <i>Chem</i> , 2021, 7, 1952-1962.	5.8	16
75	Photoelectrochemical Conversion of Dinitrogen to Benzonitrile: Selectivity Control by Electrophile versus Proton-Coupled Electron Transfer. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	16
76	Syntheses and Molecular Structures of Chromium(IV) Halides and Pseudohalides Bearing a Triamidoamine Ligand. <i>European Journal of Inorganic Chemistry</i> , 2002, 2002, 2928-2935.	1.0	15
77	Oxygen Reduction with a Bifunctional Iridium Dihydride Complex. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15271-15275.	7.2	15
78	A Ruthenium Hydrido Dinitrogen Core Conserved across Multielectron/Multiproton Changes to the Pincer Ligand Backbone. <i>Inorganic Chemistry</i> , 2018, 57, 1964-1975.	1.9	15
79	Ein quadratisch-planarer Ruthenium(II)-Komplex mit Low-Spin-Konfiguration. <i>Angewandte Chemie</i> , 2010, 122, 7728-7731.	1.6	13
80	Electrocatalytic Azide Oxidation Mediated by a Rh(PNP) Pincer Complex. <i>Chemistry - A European Journal</i> , 2017, 23, 17438-17443.	1.7	13
81	Oxidative Coupling of Terminal Rhenium Pnictide Complexes. <i>Angewandte Chemie</i> , 2019, 131, 11082-11086.	1.6	13
82	Thionitrosyl- and Selenonitrosyliridium Complexes. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 3836-3839.	1.0	12
83	Rhenium-Mediated Conversion of Dinitrogen and Nitric Oxide to Nitrous Oxide. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	12
84	Facile conversion of ammonia to a nitride in a rhenium system that cleaves dinitrogen. <i>Chemical Science</i> , 2022, 13, 4010-4018.	3.7	11
85	Electron-Rich, Nitrido-Bridged Ruthenium Complexes. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2015, 641, 49-51.	0.6	10
86	Examination of Protonation-Induced Dinitrogen Splitting by <i>in Situ</i> EXAFS Spectroscopy. <i>Inorganic Chemistry</i> , 2020, 59, 14367-14375.	1.9	10
87	Photo-Initiated Cobalt-Catalyzed Radical Olefin Hydrogenation. <i>Chemistry - A European Journal</i> , 2021, 27, 16978-16989.	1.7	8
88	A Terminal Iridium Oxo Complex with a Triplet Ground State. <i>Angewandte Chemie</i> , 2019, 131, 11087-11090.	1.6	7
89	Interconversion of Phosphinyl Radical and Phosphinidene Complexes by Proton Coupled Electron Transfer. <i>Angewandte Chemie</i> , 2019, 131, 6404-6407.	1.6	7
90	The Metaphosphite (PO ₂ ⁻) Anion as a Ligand. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 23574-23578.	7.2	7

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91	Exploring the Coordination Chemistry of N_2 with Technetium PNP Pincer-Type Complexes. <i>Inorganic Chemistry</i> , 2021, 60, 6696-6701.	1.9	7
92	Inelastic H Atom Scattering from Ultrathin Aluminum Oxide Films Grown by Atomic Layer Deposition on Pt(111). <i>Journal of Physical Chemistry C</i> , 2018, 122, 10096-10102.	1.5	6
93	The Renaissance of Base Metal Catalysis Enabled by Functional Ligands. <i>Structure and Bonding</i> , 2019, , 1-36.	1.0	6
94	Photochemically Driven Reverse Water-Gas Shift at Ambient Conditions mediated by a Nickel Pincer Complex. <i>Angewandte Chemie</i> , 2018, 130, 14690-14695.	1.6	4
95	Nitrogen Atom Transfer Catalysis by Metallonitrene C-H Insertion: Photocatalytic Amidation of Aldehydes. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
96	Thionitrosyl- and Selenonitrosyliridium Complexes. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 3454-3457.	1.0	3
97	A Terminal Chlorophosphinidene Complex. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2020, 646, 565-569.	0.6	3
98	Solvent dependent C-H Bond Strength in a Nickel Pincer Complex. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2021, 647, 1478-1485.	0.6	3
99	Photoelectrochemical Conversion of Dinitrogen to Benzonitrile: Selectivity Control by Electrophile- versus Proton-Coupled Electron Transfer. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	3
100	Ligand metalation in an iridiumtris(diisopropylphosphinomethyl)borato complex: Synthesis, molecular structure and reactivity. <i>Journal of Organometallic Chemistry</i> , 2008, 693, 3943-3946.	0.8	2
101	The Metaphosphite (PO_2^-) Anion as a Ligand. <i>Angewandte Chemie</i> , 2020, 132, 23780-23784.	1.6	2
102	Rhenium-mediated Conversion of Dinitrogen and Nitric Oxide to Nitrous Oxide. <i>Angewandte Chemie</i> , 0, , .	1.6	2
103	Frontispiz: Photochemically Driven Reverse Water-Gas Shift at Ambient Conditions mediated by a Nickel Pincer Complex. <i>Angewandte Chemie</i> , 2018, 130, .	1.6	1
104	Growth of Highly Oriented Chalcocite Thin Films on Glass by Aerosol-Assisted Spray Pyrolysis Using A New Single-Source Copper Thiolate Precursor.. <i>ChemInform</i> , 2005, 36, no.	0.1	0
105	Frontispiece: Chemical Non-Innocence of an Aliphatic PNP Pincer Ligand. <i>Chemistry - A European Journal</i> , 2017, 23, .	1.7	0
106	Frontispiece: Nitrene Radical Intermediates in Catalytic Synthesis. <i>Chemistry - A European Journal</i> , 2017, 23, .	1.7	0
107	Frontispiece: Photochemically Driven Reverse Water-Gas Shift at Ambient Conditions mediated by a Nickel Pincer Complex. <i>Angewandte Chemie - International Edition</i> , 2018, 57, .	7.2	0
108	Current Frontiers in Pincer Chemistry. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2021, 647, 1530-1530.	0.6	0