

Jarl Ivar van der Vlugt

List of Publications by Year in descending order

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80
papers

5,480
citations

81743

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73
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86
all docs

86
docs citations

86
times ranked

4420
citing authors

#	ARTICLE	IF	CITATIONS
1	Cooperative Catalysis with First-Row Late Transition Metals. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 363-375.	1.0	418
2	Neutral Tridentate PNP Ligands and Their Hybrid Analogues: Versatile Non-Innocent Scaffolds for Homogeneous Catalysis. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8832-8846.	7.2	407
3	New avenues for ligand-mediated processes – expanding metal reactivity by the use of redox-active catechol, o-aminophenol and o-phenylenediamine ligands. <i>Chemical Society Reviews</i> , 2015, 44, 6886-6915.	18.7	367
4	Hydrogenation of carboxylic acids with a homogeneous cobalt catalyst. <i>Science</i> , 2015, 350, 298-302.	6.0	314
5	Ligands that Store and Release Electrons during Catalysis. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3356-3358.	7.2	249
6	Complexes with Nitrogen-Centered Radical Ligands: Classification, Spectroscopic Features, Reactivity, and Catalytic Applications. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 12510-12529.	7.2	243
7	Catalytic Synthesis of N-Heterocycles via Direct C(sp ³)-H Amination Using an Air-Stable Iron(III) Species with a Redox-Active Ligand. <i>Journal of the American Chemical Society</i> , 2017, 139, 5117-5124.	6.6	172
8	Nitrene Radical Intermediates in Catalytic Synthesis. <i>Chemistry - A European Journal</i> , 2017, 23, 13819-13829.	1.7	164
9	Intramolecular Redox-Active Ligand-to-Substrate Single-Electron Transfer: Radical Reactivity with a Palladium(II) Complex. <i>Journal of the American Chemical Society</i> , 2014, 136, 11574-11577.	6.6	152
10	Radical-Type Reactivity and Catalysis by Single-Electron Transfer to or from Redox-Active Ligands. <i>Chemistry - A European Journal</i> , 2019, 25, 2651-2662.	1.7	150
11	Confinement Effects in Catalysis Using Well-Defined Materials and Cages. <i>Frontiers in Chemistry</i> , 2018, 6, 623.	1.8	132
12	Cobalt-Porphyrin-Catalysed Intramolecular Ring-Closing C-H Amination of Aliphatic Azides: A Nitrene-Radical Approach to Saturated Heterocycles. <i>Chemistry - A European Journal</i> , 2017, 23, 7945-7952.	1.7	129
13	Tunable Hemilabile Ligands for Adaptive Transition Metal Complexes. <i>Organometallics</i> , 2011, 30, 499-510.	1.1	119
14	Base-Free Production of H ₂ by Dehydrogenation of Formic Acid Using An Iridium-bisMETAMORPhos Complex. <i>Chemistry - A European Journal</i> , 2013, 19, 11507-11511.	1.7	87
15	Cu ^I Complexes with a Noninnocent PNP Ligand: Selective Dearomatization and Electrophilic Addition Reactivity. <i>Inorganic Chemistry</i> , 2009, 48, 7513-7515.	1.9	83
16	Redox-Active Ligand-Induced Homolytic Bond Activation. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 1516-1520.	7.2	83
17	Catalytic Dibenzocyclooctene Synthesis via Cobalt(III)-Carbene Radical and <i>ortho</i> -Quinodimethane Intermediates. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 140-145.	7.2	83
18	T-Shaped Cationic Cu ^I Complexes with Hemilabile PNP-Type Ligands. <i>Inorganic Chemistry</i> , 2008, 47, 4442-4444.	1.9	76

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19	Dehydrogenation of formic acid by Ir ^{III} -bis(METAMORPhos) complexes: experimental and computational insight into the role of a cooperative ligand. <i>Chemical Science</i> , 2015, 6, 1027-1034.	3.7	75
20	Cationic and neutral Ni ^{II} complexes containing a non-innocent PNP ligand: formation of alkyl and thiolate species. <i>Dalton Transactions</i> , 2009, , 1016-1023.	1.6	74
21	An Isolated Nitridyl Radical-Bridged {Rh(N ^{III})Rh} Complex. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6814-6818.	7.2	71
22	Reversible Redox Chemistry and Catalytic C(sp ³)-H Amination Reactivity of a Paramagnetic Pd Complex Bearing a Redox-Active <i>o</i> -Aminophenol-Derived NNO Pincer Ligand. <i>Inorganic Chemistry</i> , 2016, 55, 8603-8611.	1.9	70
23	A Cationic AgI(PNPtBu) Species Acting as PNP Transfer Agent: Facile Synthesis of Pd(PNPtBu)(alkyl) Complexes and Their Reactivity Compared to PCPtBu Analogues. <i>Organometallics</i> , 2009, 28, 7025-7032.	1.1	66
24	Ligand Redox Noninnocence in [Co ^{III} (TAML)] ⁰ Complexes Affects Nitrene Formation. <i>Journal of the American Chemical Society</i> , 2020, 142, 552-563.	6.6	62
25	Dinuclear Copper(I) Thiolate Complexes with a Bridging Noninnocent PNP Ligand. <i>Chemistry - A European Journal</i> , 2011, 17, 3850-3854.	1.7	59
26	Efficient Copper-Catalyzed Multicomponent Synthesis of <i>N</i> -Acyl Amidines via Acyl Nitrenes. <i>Journal of the American Chemical Society</i> , 2019, 141, 15240-15249.	6.6	58
27	C ₆ H ₆ Activation of Benzene by a Photoactivated Ni ^{II} (azide): Formation of a Transient Nickel Nitrido Complex. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7055-7059.	7.2	57
28	N-H bond activation by palladium(II) and copper(I) complexes featuring a reactive bidentate PN-ligand. <i>Dalton Transactions</i> , 2012, 41, 11276.	1.6	53
29	Ruthenium PNN(O) Complexes: Cooperative Reactivity and Application as Catalysts for Acceptorless Dehydrogenative Coupling Reactions. <i>Organometallics</i> , 2017, 36, 1541-1549.	1.1	53
30	Pincer ligands with an all-phosphorus donor set: subtle differences between rhodium and palladium. <i>Dalton Transactions</i> , 2011, 40, 8822.	1.6	52
31	CuI click catalysis with cooperative noninnocent pyridylphosphine ligands. <i>Inorganica Chimica Acta</i> , 2012, 380, 336-342.	1.2	51
32	Transition-Metal-Free Cleavage of CO. <i>Chemistry - A European Journal</i> , 2017, 23, 13628-13632.	1.7	46
33	Reactivity of a Mononuclear Iridium(I) Species Bearing a Terminal Phosphido Fragment Embedded in a Triphosphorus Ligand. <i>Inorganic Chemistry</i> , 2013, 52, 1682-1684.	1.9	45
34	Well-Defined Dinuclear Gold Complexes for Preorganization-Induced Selective Dual Gold Catalysis. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10042-10046.	7.2	45
35	Observations of tetrel bonding between sp ³ -carbon and THF. <i>Chemical Science</i> , 2020, 11, 5289-5293.	3.7	43
36	Metal-Metal Interactions in Heterobimetallic Complexes with Dinucleating Redox-Active Ligands. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2406-2410.	7.2	42

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37	Reversible cyclometalation at Rh ^I as a motif for metal–ligand bifunctional bond activation and base-free formic acid dehydrogenation. <i>Catalysis Science and Technology</i> , 2016, 6, 1320-1327.	2.1	40
38	Hydrogenation of CO ₂ to formic acid with iridium(III)(bisMETAMORPhos)(hydride): the role of a dormant fac-Ir(III)(trihydride) and an active trans-Ir(III)(dihydride) species. <i>Catalysis Science and Technology</i> , 2016, 6, 404-408.	2.1	39
39	Catalytic Synthesis of 8-Membered Ring Compounds via Cobalt(III)–Carbene Radicals. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11073-11079.	7.2	38
40	Dynamic Ligand Reactivity in a Rhodium Pincer Complex. <i>Chemistry - A European Journal</i> , 2015, 21, 12683-12693.	1.7	35
41	Dinuclear Palladium Complexes with Two Ligand-Centered Radicals and a Single Bridging Ligand: Subtle Tuning of Magnetic Properties. <i>Chemistry - A European Journal</i> , 2015, 21, 5879-5886.	1.7	33
42	Arene C(sp ²)-H Metalation at Ni(II) Modeled with a Reactive PONC _{Ph} Ligand. <i>Inorganic Chemistry</i> , 2016, 55, 8041-8047.	1.9	32
43	How to Control the Rate of Heterogeneous Electron Transfer across the Rim of M ₆ L ₁₂ and M ₁₂ L ₂₄ Nanospheres. <i>Journal of the American Chemical Society</i> , 2020, 142, 8837-8847.	6.6	32
44	Rhodium catalysed conversion of carbenes into ketenes and ketene imines using PNN pincer complexes. <i>Organic Chemistry Frontiers</i> , 2015, 2, 1561-1577.	2.3	31
45	Catalytic Dibenzocyclooctene Synthesis via Cobalt(III)–Carbene Radical and <i>ortho</i> -Quinodimethane Intermediates. <i>Angewandte Chemie</i> , 2018, 130, 146-151.	1.6	31
46	Electronically Asynchronous Transition States for C–N Bond Formation by Electrophilic [Co(III)(TAML)] -Nitrene Radical Complexes Involving Substrate-to-Ligand Single-Electron Transfer and a Cobalt-Centered Spin Shuttle. <i>ACS Catalysis</i> , 2020, 10, 7449-7463.	5.5	30
47	N-Atom transfer via thermal or photolytic activation of a Co-azido complex with a PNP pincer ligand. <i>Dalton Transactions</i> , 2017, 46, 7145-7149.	1.6	29
48	Facile Synthesis and Versatile Reactivity of an Unusual Cyclometalated Rhodium(I) Pincer Complex. <i>Chemistry - A European Journal</i> , 2015, 21, 7297-7305.	1.7	28
49	Engineering Crystals Using sp ³ -Centred Tetrel Bonding Interactions. <i>Chemistry - A European Journal</i> , 2020, 26, 10126-10132.	1.7	28
50	Well-Defined BisMETAMORPhos Pd ^I –Pd ^I Complex: Synthesis, Structural Characterization, and Reactivity. <i>Organometallics</i> , 2014, 33, 7293-7298.	1.1	26
51	Localized Mixed-Valence and Redox Activity within a Triazole-Bridged Dinucleating Ligand upon Coordination to Palladium. <i>Chemistry - A European Journal</i> , 2016, 22, 13965-13975.	1.7	26
52	Tuning the supramolecular isomerism of MOF-74 by controlling the synthesis conditions. <i>Dalton Transactions</i> , 2019, 48, 10043-10050.	1.6	26
53	Redox-Active-Ligand-Mediated Formation of an Acyclic Trinuclear Ruthenium Complex with Bridging Nitrido Ligands. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8381-8385.	7.2	22
54	Controlled Interconversion of a Dinuclear Au Species Supported by a Redox-Active Bridging PNP Ligand Facilitates Ligand-to-Gold Electron Transfer. <i>Chemistry - A European Journal</i> , 2017, 23, 5585-5594.	1.7	21

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55	Reductive Elimination at an Ortho-Metalated Iridium(III) Hydride Bearing a Tripodal Tetraphosphorus Ligand. <i>Organometallics</i> , 2013, 32, 4284-4291.	1.1	20
56	C ₆ H ₆ Activation of Benzene by a Photoactivated Ni ^{II} (azide): Formation of a Transient Nickel Nitrido Complex. <i>Angewandte Chemie</i> , 2015, 127, 7161-7165.	1.6	20
57	Versatile coordination of a reactive P,N-ligand toward boron, aluminum and gallium and interconversion reactivity. <i>Dalton Transactions</i> , 2016, 45, 10989-10998.	1.6	20
58	Nickel ^{II} -Alkyl Complexes with a Reactive PNC ⁺ Pincer Ligand. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 2408-2418.	1.0	20
59	Catalytic Chemoselective Sulfimidation with an Electrophilic [Co ^{III} (TAML)] ⁺ Nitrene Radical Complex**. <i>Chemistry - A European Journal</i> , 2021, 27, 371-378.	1.7	20
60	Uncatalyzed Oxidative C ⁺ H Amination of 9,10-Dihydro-9H-heteroanthracenes: A Mechanistic Study. <i>Chemistry - A European Journal</i> , 2019, 25, 5987-5993.	1.7	19
61	Reversible multi-electron storage in dual-site redox-active supramolecular cages. <i>Chemical Communications</i> , 2019, 55, 12619-12622.	2.2	18
62	Metal ^{II} -Metal Interactions in Heterobimetallic Complexes with Dinucleating Redox-Active Ligands. <i>Angewandte Chemie</i> , 2016, 128, 2452-2456.	1.6	17
63	Intermolecular C ⁺ H activation with an Ir-METAMORPhos piano-stool complex ⁺ multiple reaction steps at a reactive ligand. <i>Chemical Communications</i> , 2015, 51, 15200-15203.	2.2	14
64	Titanium ^{IV} -catalyzed esterification reactions: beyond Lewis acidity. <i>ChemCatChem</i> , 2020, 12, 5229-5235.	1.8	14
65	Ligand-Mediated Spin-State Changes in a Cobalt-Dipyrriin-Bisphenol Complex. <i>Inorganic Chemistry</i> , 2020, 59, 12903-12912.	1.9	14
66	Formation and Site-Selective Reactivity of a Nonsymmetric Dinuclear Iridium BisMETAMORPhos Complex. <i>Organometallics</i> , 2015, 34, 3209-3215.	1.1	13
67	Well-Defined Dinuclear Gold Complexes for Preorganization-Induced Selective Dual Gold Catalysis. <i>Angewandte Chemie</i> , 2016, 128, 10196-10200.	1.6	13
68	Electrocatalytic Azide Oxidation Mediated by a Rh(PNP) Pincer Complex. <i>Chemistry - A European Journal</i> , 2017, 23, 17438-17443.	1.7	13
69	Reactivity of Me ⁺ ma Rh ^I and Ir ^I Complexes upon Deprotonation and Their Application in Catalytic Carbene Carbonylation Reactions. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 963-974.	1.0	11
70	A Covalent and Modular Synthesis of Homo- and Hetero[<i>n</i>]rotaxanes. <i>Journal of Organic Chemistry</i> , 2020, 85, 3146-3159.	1.7	11
71	Advances in the Design and Application of Redox-Active and Reactive Pincer Ligands for Substrate Activation and Homogeneous Catalysis. , 2018, , 599-621.		8
72	Selective Carbanion ⁻ Pyridine Coordination of a Reactive P,N Ligand to Rh I. <i>Chemistry - A European Journal</i> , 2019, 25, 3875-3883.	1.7	8

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73	Catalytic Synthesis of 8-Membered Ring Compounds via Cobalt(III)-Carbene Radicals. <i>Angewandte Chemie</i> , 2020, 132, 11166-11172.	1.6	8
74	Dinuclear Gold Complexes Supported by Wide Bite Angle Diphosphines for Preorganization-Induced Selective Dual-Gold Catalysis. <i>Inorganics</i> , 2019, 7, 28.	1.2	7
75	Redox-Active-Ligand-Mediated Formation of an Acyclic Trinuclear Ruthenium Complex with Bridging Nitrido Ligands. <i>Angewandte Chemie</i> , 2016, 128, 8521-8525.	1.6	6
76	Steric Protection of Rhodium-Nitridyl Radical Species. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 4249-4255.	1.0	6
77	Redox-Active Supramolecular Heteroleptic M ₄ L ₂ L ² Assemblies with Tunable Interior Binding Site. <i>Chemistry - A European Journal</i> , 2020, 26, 13241-13248.	1.7	6
78	3-Methylindole-Based Tripodal Tetrakisphosphine Ruthenium Complexes in N ₂ Coordination and Reduction and Formic Acid Dehydrogenation. <i>Inorganics</i> , 2017, 5, 73.	1.2	5
79	Frontispiece: Nitrene Radical Intermediates in Catalytic Synthesis. <i>Chemistry - A European Journal</i> , 2017, 23, .	1.7	0
80	Redox-Active Pincer Ligands. <i>Topics in Organometallic Chemistry</i> , 2020, , 135.	0.7	0