Edwin Otten

List of Publications by Year
in descending order

74 papers	3,799 citations	126907 33 h-index	128289 60 g-index
87 all docs	87 docs citations	87 times ranked	3248 citing authors

#	Article	IF	Citations
1	Reversible Metalâ€Free Carbon Dioxide Binding by Frustrated Lewis Pairs. Angewandte Chemie - International Edition, 2009, 48, 6643-6646.	13.8	680
2	Complexation of Nitrous Oxide by Frustrated Lewis Pairs. Journal of the American Chemical Society, 2009, 131, 9918-9919.	13.7	270
3	The synthesis and exchange chemistry of frustrated Lewis pairâ€“nitrous oxide complexes. Chemical Science, 2011, 2, 170-176.	7.4	163
4	A chemically powered unidirectional rotary molecular motor based on a palladium redox cycle. Nature Chemistry, 2016, 8, 860-866.	13.6	142
5	Frustrated Lewis Pair Behavior of Intermolecular Amine/B(C₆F₅)₃ Pairs. Organometallics, 2012, 31, 2367-2378.	2.3	133
6	Locked synchronous rotor motion in a molecular motor. Science, 2017, 356, 964-968.	12.6	114
7	The Formazanate Ligand as an Electron Reservoir: Bis(Formazanate) Zinc Complexes Isolated in Three Redox States. Angewandte Chemie - International Edition, 2014, 53, 4118-4122.	13.8	92
8	Dual stereocontrol over the Henry reaction using a light- and heat-triggered organocatalyst. Chemical Communications, 2014, 50, 7773.	4.1	90
9	Synthesis and ligand-based reduction chemistry of boron difluoride complexes with redox-active formazanate ligands. Chemical Communications, 2014, 50, 7431-7433.	4.1	89
10	Spin-Crossover in a Pseudo-tetrahedral Bis(formazanate) Iron Complex. Journal of the American Chemical Society, 2016, 138, 5503-5506.	13.7	63
11	Formazanate coordination compounds: synthesis, reactivity, and applications. Chemical Society Reviews, 2020, 49, 85-113.	38.1	62
12	Boron difluorides with formazanate ligands: redox-switchable fluorescent dyes with large stokes shifts. Dalton Transactions, 2016, 45, 9477-9484.	3.3	61
13	Bridging Binding Modes of Phosphineâ€Stabilized Nitrous Oxide to Zn(C₆F₅)₂. Angewandte Chemie - International Edition, 2009, 48, 9709-9712.	13.8	60
14	Versatile Coordination of Cyclopentadienyl-Arene Ligands and Its Role in Titanium-Catalyzed Ethylene Trimerization. Journal of the American Chemical Society, 2009, 131, 5298-5312.	13.7	58
15	Consecutive dynamic resolutions of phosphine oxides. Chemical Science, 2014, 5, 1322.	7.4	57
16	Central-to-Helical-to-Axial-to-Central Transfer of Chirality with a Photoresponsive Catalyst. Journal of the American Chemical Society, 2018, 140, 17278-17289.	13.7	57
17	Third-Generation Light-Driven Symmetric Molecular Motors. Journal of the American Chemical Society, 2017, 139, 9650-9661.	13.7	54
18	Hydration of nitriles using a metalâ€“ligand cooperative ruthenium pincer catalyst. Chemical Science, 2019, 10, 10647-10652.	7.4	54

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19	Formazanate Ligands as Structurally Versatile, Redox-Active Analogues of Î²-Diketiminates in Zinc Chemistry. Inorganic Chemistry, 2015, 54, 379-388.	4.0	52
20	Arylazoindazole Photoswitches: Facile Synthesis and Functionalization via S_NAr Substitution. Journal of the American Chemical Society, 2017, 139, 3328-3331.	13.7	50
21	A Metalâ€“Ligand Cooperative Pathway for Intermolecular Oxaâ€Michael Additions to Unsaturated Nitriles. Angewandte Chemie - International Edition, 2015, 54, 4236-4240.	13.8	48
22	Palladiumâ€Catalyzed, tertâ€Butyllithiumâ€Mediated Dimerization of Aryl Halides and Its Application in the Atropselective Total Synthesis of Mastigophoreneâ€…A. Angewandte Chemie - International Edition, 2016, 55, 3620-3624.	13.8	47
23	Manganese(I)-Catalyzed Hâ€“P Bond Activation via Metalâ€“Ligand Cooperation. Journal of the American Chemical Society, 2021, 143, 20071-20076.	13.7	46
24	An â€œIngredientsâ€•Approach to Functional Selfâ€Synthesizing Materials: A Metalâ€Ionâ€Selective, Multiâ€Responsive, Selfâ€Assembled Hydrogel. Chemistry - A European Journal, 2014, 20, 15709-15714.	3.3	42
25	Reduction of (Formazanate)boron Difluoride Provides Evidence for an N-Heterocyclic B(I) Carbenoid Intermediate. Inorganic Chemistry, 2015, 54, 8656-8664.	4.0	42
26	Catalytic Asymmetric Synthesis of Phosphine Boronates. Angewandte Chemie - International Edition, 2015, 54, 7867-7871.	13.8	41
27	Alkene Isomerisation Catalysed by a Ruthenium PNN Pincer Complex. Chemistry - A European Journal, 2014, 20, 15434-15442.	3.3	39
28	A chiral self-sorting photoresponsive coordination cage based on overcrowded alkenes. Beilstein Journal of Organic Chemistry, 2019, 15, 2767-2773.	2.2	36
29	Alkali metal salts of formazanate ligands: diverse coordination modes as a result of the nitrogen-rich [NNCNN] ligand backbone. Dalton Transactions, 2014, 43, 18035-18041.	3.3	35
30	Dynamic Ligand Reactivity in a Rhodium Pincer Complex. Chemistry - A European Journal, 2015, 21, 12683-12693.	3.3	35
31	Lewis Acid Catalyzed Conversion of 5-Hydroxymethylfurfural to 1,2,4-Benzenetriol, an Overlooked Biobased Compound. ACS Sustainable Chemistry and Engineering, 2018, 6, 3419-3425.	6.7	35
32	Mono(amidinate) Yttrium Alkyl Complexes: The Effect of Ligand Variation on Ethene Polymerization Catalysis. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2006, 632, 1950-1952.	1.2	34
33	Stable, crystalline boron complexes with mono-, di- and trianionic formazanate ligands. Chemical Communications, 2017, 53, 513-516.	4.1	34
34	Highly Selective Singleâ€Component Formazanate Ferrate(II) Catalysts for the Conversion of CO 2 into Cyclic Carbonates. ChemSusChem, 2019, 12, 3635-3641.	6.8	33
35	Blatter Radicals as Bipolar Materials for Symmetrical Redox-Flow Batteries. Journal of the American Chemical Society, 2022, 144, 5051-5058.	13.7	32
36	Zirconium Bisamidinate Complexes with Sterically Demanding Ligands:Â Structure, Solution Dynamics, and Reactivity. Organometallics, 2005, 24, 4374-4386.	2.3	29

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37	Niâ†'B Interactions in Nickel Phosphinoâ€Alkynylâ€Borane Complexes. Chemistry - A European Journal, 2010, 16, 2040-2044.	3.3	27
38	Asymmetric synthesis of N,O-heterocycles via enantioselective iridium-catalysed intramolecular allylic amidation. Chemical Science, 2014, 5, 4216-4220.	7.4	27
39	Metalâ€"ligand cooperative activation of nitriles by a ruthenium complex with a de-aromatized PNN pincer ligand. Dalton Transactions, 2016, 45, 16033-16039.	3.3	27
40	Electronic Control of Spin-Crossover Properties in Four-Coordinate Bis(formazanate) Iron(II) Complexes. Journal of the American Chemical Society, 2020, 142, 20170-20181.	13.7	27
41	Desymmetrization of meso-Dibromocycloalkenes through Copper(I)-Catalyzed Asymmetric Allylic Substitution with Organolithium Reagents. Journal of the American Chemical Society, 2018, 140, 7052-7055.	13.7	26
42	Catalytic enantioselective addition of Grignard reagents to aromatic silyl ketimines. Nature Communications, 2016, 7, 13780.	12.8	23
43	Structure and Reactivity of the Î²-Agostic [ansa-Cp-arene]Ta(ⁿPr) Cation:â€‰ Ambivalent Behavior Induced by Intramolecular Arene Coordination. Journal of the American Chemical Society, 2007, 129, 10100-10101.	13.7	22
44	Copperâ€Catalyzed Enantioselective Alkylation of Enolizable Ketimines with Organomagnesium Reagents. Angewandte Chemie - International Edition, 2017, 56, 3041-3044.	13.8	21
45	Aluminum Complexes with Redox-Active Formazanate Ligand: Synthesis, Characterization, and Reduction Chemistry. Inorganic Chemistry, 2019, 58, 6344-6355.	4.0	21
46	Stereoselective Synthesis of 1-Tuberculosinyl Adenosine; a Virulence Factor of Mycobacterium tuberculosis. Journal of Organic Chemistry, 2016, 81, 6686-6696.	3.2	20
47	Ferrate(<scp>ii</scp>) complexes with redox-active formazanate ligands. Dalton Transactions, 2018, 47, 8817-8823.	3.3	20
48	Widening the Window of Spin-Crossover Temperatures in Bis(formazanate)iron(II) Complexes via Steric and Noncovalent Interactions. Inorganic Chemistry, 2021, 60, 2045-2055.	4.0	19
49	Stabilizing Zr and Ti Cations by Interaction With a Ferrocenyl Fragment. Journal of the American Chemical Society, 2009, 131, 15610-15611.	13.7	18
50	Intramolecular Hydride Transfer Reactions in (Formazanate)Boron Dihydride Complexes. Organometallics, 2016, 35, 534-542.	2.3	18
51	Palladiumâ€Catalyzed, tertâ€Butyllithiumâ€Mediated Dimerization of Aryl Halides and Its Application in the Atropselective Total Synthesis of Mastigophoreneâ€…A. Angewandte Chemie, 2016, 128, 3684-3688.	2.0	16
52	Three-State Switching of an Anthracene Extended Bis-thiaxanthylidene with a Highly Stable Diradical State. Journal of the American Chemical Society, 2021, 143, 18020-18028.	13.7	15
53	Asymmetric Synthesis of Second-Generation Light-Driven Molecular Motors. Journal of Organic Chemistry, 2017, 82, 5027-5033.	3.2	14
54	Oxaâ€Michael Addition to Î±,Î²â€Unsaturated Nitriles: An Expedient Route to Î³â€Amino Alcohols and Derivatives. ChemCatChem, 2018, 10, 2868-2872.	3.7	14

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55	Reactivity of Two-Electron-Reduced Boron Formazanate Compounds with Electrophiles: Facile Nâ€“H/Nâ€“C Bond Homolysis Due to the Formation of Stable Ligand Radicals. Inorganic Chemistry, 2018, 57, 9720-9727.	4.0	14
56	New synthetic pathways to the preparation of near-blue emitting heteroleptic Ir(iii)N6 coordinated compounds with microsecond lifetimes. Chemical Communications, 2014, 50, 6461-6463.	4.1	13
57	Reversible On/Off Switching of Lactide Cyclopolymerization with a Redox-Active Formazanate Ligand. ACS Catalysis, 2022, 12, 4125-4130.	11.2	12
58	Pyridyl-1,2,4-triazole diphenyl boron complexes as efficient tuneable blue emitters. Dalton Transactions, 2014, 43, 17740-17745.	3.3	10
59	Catalytic Asymmetric Synthesis of Phosphine Boronates. Angewandte Chemie, 2015, 127, 7978-7982.	2.0	10
60	Copperâ€Catalyzed Enantioselective Alkylation of Enolizable Ketimines with Organomagnesium Reagents. Angewandte Chemie, 2017, 129, 3087-3090.	2.0	8
61	Switching Pathways for Reversible Ligand Photodissociation in Ru(II) Polypyridyl Complexes with Steric Effects. Inorganic Chemistry, 2017, 56, 900-907.	4.0	8
62	Formazanate boron difluoride dyes: discrepancies between TD-DFT and wavefunction descriptions. Journal of Molecular Modeling, 2016, 22, 263.	1.8	7
63	Palladium alkyl complexes with a formazanate ligand: synthesis, structure and reactivity. Dalton Transactions, 2018, 47, 14445-14451.	3.3	7
64	Structure and bonding in reduced boron and aluminium complexes with formazanate ligands. Dalton Transactions, 2019, 48, 13981-13988.	3.3	7
65	Ruthenium Complexes with PNN Pincer Ligands Based on (Chiral) Pyrrolidines: Synthesis, Structure, and Dynamic Stereochemistry. Organometallics, 2020, 39, 544-555.	2.3	7
66	Three-Coordinate Zinc Methyl Complexes with Sterically Demanding Formazanate Ligands. Organometallics, 2021, 40, 63-71.	2.3	5
67	ansa-Cyclopentadienyl-Arene Tantalum Complexes: Structure and Reactivity of Neutral, Cationic, and Dicationic Derivatives. Organometallics, 2012, 31, 6071-6079.	2.3	3
68	Cation effects on dynamics of ligand-benzylated formazanate boron and aluminium complexes. Dalton Transactions, 2020, 49, 9094-9098.	3.3	2
69	Cover Picture: Reversible Metalâ€Free Carbon Dioxide Binding by Frustrated Lewis Pairs (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Ov	13.8	1
70	Selective Î±â€Deuteration of Cinnamonitriles using D₂O as Deuterium Source. Advanced Synthesis and Catalysis, 0, , .	4.3	1
71	InnenrÃ¼cktitelbild: The Formazanate Ligand as an Electron Reservoir: Bis(Formazanate) Zinc Complexes Isolated in Three Redox States (Angew. Chem. 16/2014). Angewandte Chemie, 2014, 126, 4335-4335.	2.0	0
72	Innentitelbild: Catalytic Asymmetric Synthesis of Phosphine Boronates (Angew. Chem. 27/2015). Angewandte Chemie, 2015, 127, 7832-7832.	2.0	0

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73	Dynamic Ligand Reactivity in a Rhodium Pincer Complex. Chemistry - A European Journal, 2015, 21, 12533-12533.	3.3	0
74	Catalytic Conversion of Nitriles by Metal Pincer Complexes. Topics in Organometallic Chemistry, 2020, , 321.	0.7	0