Maurice Brookhart

List of Publications by Year
in descending order

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72 papers	14,999 citations	53660 45 h-index	82410 72 g-index
76 all docs	76 docs citations	76 times ranked	6512 citing authors

#	Article	IF	Citations
1	Late-Metal Catalysts for Ethylene Homo- and Copolymerization. Chemical Reviews, 2000, 100, 1169-1204.	23.0	2,956
2	New Pd(II)- and Ni(II)-Based Catalysts for Polymerization of Ethylene and .alpha.-Olefins. Journal of the American Chemical Society, 1995, 117, 6414-6415.	6.6	2,550
3	Highly Active Iron and Cobalt Catalysts for the Polymerization of Ethylene. Journal of the American Chemical Society, 1998, 120, 4049-4050.	6.6	1,410
4	Agostic interactions in transition metal compounds. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6908-6914.	3.3	965
5	Mechanistic Studies of the Palladium-Catalyzed Copolymerization of Ethylene and Î±-Olefins with Methyl Acrylate. Journal of the American Chemical Society, 1998, 120, 888-899.	6.6	924
6	Synthesis of Branched Polyethylene Using (Î±-Diimine)nickel(II) Catalysts:Â Influence of Temperature, Ethylene Pressure, and Ligand Structure on Polymer Properties. Macromolecules, 2000, 33, 2320-2334.	2.2	678
7	Carbon-Hydrogen-Transition Metal Bonds. Progress in Inorganic Chemistry, 0, , 1-124.	3.0	457
8	Ethylene Oligomerization and Propylene Dimerization Using Cationic (Î±-Diimine)nickel(II) Catalysts. Organometallics, 1999, 18, 65-74.	1.1	395
9	Exploring Ethylene/Polar Vinyl Monomer Copolymerizations Using Ni and Pd Î±-Diimine Catalysts. Accounts of Chemical Research, 2018, 51, 1831-1839.	7.6	293
10	Low-Temperature Spectroscopic Observation of Chain Growth and Migratory Insertion Barriers in (Î±-Diimine)Ni(II) Olefin Polymerization Catalysts. Journal of the American Chemical Society, 1999, 121, 10634-10635.	6.6	276
11	Synthesis of Highly Branched Polyethylene Using â€œSandwichâ€•(8-p-Tolyl naphthyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	1.1	190
12	Palladium(II) Î²-Agostic Alkyl Cations and Alkyl Ethylene Complexes:Â Investigation of Polymer Chain Isomerization Mechanisms. Journal of the American Chemical Society, 2001, 123, 11539-11555.	6.6	176
13	Co(I)-Catalyzed Inter- and Intramolecular Hydroacylation of Olefins with Aromatic Aldehydes. Journal of the American Chemical Society, 1997, 119, 3165-3166.	6.6	165
14	Living Polymerization of Ethylene and Copolymerization of Ethylene/Methyl Acrylate Using â€œSandwichâ€•Diimine Palladium Catalysts. ACS Catalysis, 2015, 5, 456-464.	5.5	163
15	Selective electrocatalytic reduction of carbon dioxide to formate by a water-soluble iridium pincer catalyst. Chemical Science, 2013, 4, 3497.	3.7	142
16	A Mechanistic Investigation of the Polymerization of Ethylene Catalyzed by Neutral Ni(II) Complexes Derived from Bulky Anilinotropone Ligands. Journal of the American Chemical Society, 2004, 126, 5827-5842.	6.6	140
17	Highly Active Supported Nickel Diimine Catalysts for Polymerization of Ethylene. Macromolecules, 2002, 35, 6074-6076.	2.2	136
18	Synthesis and Ethylene Polymerization Activity of a Series of 2-Anilinotropone-Based Neutral Nickel(II) Catalysts. Organometallics, 2003, 22, 3533-3545.	1.1	135

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19	A Highly Active Anilinoperinaphthenone-Based Neutral Nickel(II) Catalyst for Ethylene Polymerization. Organometallics, 2003, 22, 250-256.	1.1	134
20	Ethylene Polymerization and Ethylene/Methyl 10-Undecenoate Copolymerization Using Nickel(II) and Palladium(II) Complexes Derived from a Bulky P,O Chelating Ligand. Organometallics, 2002, 21, 2836-2838.	1.1	122
21	Highly Active and Recyclable Heterogeneous Iridium Pincer Catalysts for Transfer Dehydrogenation of Alkanes. Advanced Synthesis and Catalysis, 2009, 351, 188-206.	2.1	120
22	Measurement of the Barrier to Î²-Hydride Elimination in a Î²-Agostic Palladiumâ^'Ethyl Complex:Â A Model for the Energetics of Chain-Walking in (Î±-Diimine)PdR+Olefin Polymerization Catalysts. Organometallics, 2001, 20, 3975-3982.	1.1	116
23	Polyolefin graft copolymers via living polymerization techniques: Preparation of poly(n-butyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf atom transfer radical polymerization. Journal of Polymer Science Part A, 2002, 40, 2736-2749.	2.5	110
24	Mechanistic Studies of Pd(II)-Catalyzed Copolymerization of Ethylene and Vinylalkoxysilanes: Evidence for a Î²-Silyl Elimination Chain Transfer Mechanism. Journal of the American Chemical Society, 2016, 138, 16120-16129.	6.6	105
25	Stable, Cationic Alkylâ^'Olefin Complexes of Ruthenium(II) and Rhodium(III):Â Effects of Ligand Geometry upon Olefin Insertion/Alkyl Migration. Organometallics, 2000, 19, 4995-5004.	1.1	98
26	Synthesis of Branched Ultrahigh-Molecular-Weight Polyethylene Using Highly Active Neutral, Single-Component Ni(II) Catalysts. ACS Catalysis, 2015, 5, 631-636.	5.5	98
27	Ni(II)-Catalyzed Polymerization of trans-2-Butene. Macromolecules, 2001, 34, 2748-2750.	2.2	92
28	Nickel-Catalyzed Copolymerization of Ethylene and Vinyltrialkoxysilanes: Catalytic Production of Cross-Linkable Polyethylene and Elucidation of the Chain-Growth Mechanism. Journal of the American Chemical Society, 2017, 139, 16013-16022.	6.6	91
29	Structural Characterization of an Intermediate in Arene Câ^'H Bond Activation and Measurement of the Barrier to Câ^'H Oxidative Addition:â€‰ A Platinum(II) Î·2-Benzene Adduct. Journal of the American Chemical Society, 2001, 123, 12724-12725.	6.6	90
30	Polymerization and Oligomerization of Ethylene by Cationic Nickel(II) and Palladium(II) Complexes Containing Bidentate Phenacyldiarylphosphine Ligands. Organometallics, 2003, 22, 5324-5335.	1.1	90
31	Electrocatalytic Reduction of Carbon Dioxide: Let the Molecules Do the Work. Topics in Catalysis, 2015, 58, 30-45.	1.3	85
32	Synthesis, Characterization, and Ethylene Polymerization Activities of Neutral Nickel(II) Complexes Derived from Anilino-Substituted Enone Ligands Bearing Trifluoromethyl and Trifluoroacetyl Substituents. Organometallics, 2006, 25, 1868-1874.	1.1	80
33	Five-Coordinate Trispyrazolylborate Dihydridosilyl Platinum(IV) Complexes. Journal of the American Chemical Society, 2001, 123, 6425-6426.	6.6	79
34	Kinetics and Mechanism of Iridium-Catalyzed Dehydrogenation of Primary Amines to Nitriles. Organometallics, 2008, 27, 2036-2045.	1.1	76
35	Efficient Heterogeneous Dual Catalyst Systems for Alkane Metathesis. Advanced Synthesis and Catalysis, 2010, 352, 125-135.	2.1	73
36	Acid-Assisted Reductive Elimination as a Route to Platinum(II) Products from Platinum(IV) Tris(pyrazolyl)borate Reagents. Organometallics, 2000, 19, 3854-3866.	1.1	70

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37	Applications of PC(sp³)P Iridium Complexes in Transfer Dehydrogenation of Alkanes. ACS Catalysis, 2014, 4, 3411-3420.	5.5	67
38	The Dynamics of the Î²-Agostic Isopropyl Complex (ArNC(R)â^'C(R)NAr)Pd(CH(CH2-Î¼-H)(CH3))+BAr4â€˜-(Ar =) Tj ETQq0 0 0 rgBT /Over Organometallics, 1998, 17, 2290-2296.	1.1	66
39	New Neutral Nickel and Palladium Sandwich Catalysts: Synthesis of Ultra-High Molecular Weight Polyethylene (UHMWPE) via Highly Controlled Polymerization and Mechanistic Studies of Chain Propagation. Journal of the American Chemical Society, 2020, 142, 7198-7206.	6.6	64
40	Reduction of Alkyl Halides by Triethylsilane Based on a Cationic Iridium Bis(phosphinite) Pincer Catalyst: Scope, Selectivity and Mechanism. Advanced Synthesis and Catalysis, 2009, 351, 175-187.	2.1	62
41	Copolymerization of Ethylene and Acrylates by Nickel Catalysts. ACS Symposium Series, 2003, , 131-142.	0.5	61
42	A highly active Ni(II)-triadamantylphosphine catalyst for ultrahigh-molecular-weight polyethylene synthesis. Nature Communications, 2019, 10, 438.	5.8	61
43	Controlled, Copper-Catalyzed Functionalization of Polyolefins. Macromolecules, 2005, 38, 4966-4969.	2.2	55
44	Synthesis of Branched Polyethylene with â€œHalf-Sandwichâ€•Pyridine-Imine Nickel Complexes. Organometallics, 2016, 35, 1756-1760.	1.1	54
45	Structure and Reactivity of a Cobalt(I) Phthalaldehyde Complex with Both Ïƒ- and Ï€-Bonded Aldehyde Groups. Angewandte Chemie - International Edition, 1999, 38, 552-555.	7.2	51
46	Synthesis and properties of a stable, cationic, rhodium Lewis-acid catalyst for hydrosilation, Mukaiyama aldol and cyclopropanation reactions. Chemical Communications, 2001, , 423-424.	2.2	43
47	The quest for stable Ïƒ-methane complexes: computational and experimental studies. New Journal of Chemistry, 2011, 35, 2884.	1.4	33
48	Alkene Isomerization by â€œSandwichâ€•Diimine-Palladium Catalysts. Organometallics, 2017, 36, 787-790.	1.1	33
49	Isomerization of Aldehydes Catalyzed by Rhodium(I) Olefin Complexes. Angewandte Chemie - International Edition, 1999, 38, 3533-3537.	7.2	32
50	Synthesis, Structure, and Reactivity of [C5Me5CoLâ€˜] Complexes with L = Pyridine and Lâ€˜ = Olefin or Lâ^'Lâ€˜ = Bipyridine. Organometallics, 2000, 19, 1247-1254.	1.1	31
51	Experimental and computational study of alkane dehydrogenation catalyzed by a carbazolide-based rhodium PNP pincer complex. Chemical Science, 2016, 7, 2579-2586.	3.7	31
52	Single and Multiple Insertion of Carbonâ^'Carbon Triple Bonds into the Palladiumâ^'Aryl Bond of Cationic and Neutral Arylpalladium Complexes with a 2,2â€˜-Bipyridine Ligand. Organometallics, 2000, 19, 2125-2129.	1.1	30
53	Iridium Pincer-Catalyzed Dehydrogenation of Ethers Featuring Ethylene as the Hydrogen Acceptor. Organometallics, 2015, 34, 4058-4062.	1.1	30
54	Oligomerization of ethylene to branched alkenes using neutral phosphinosulfonamide nickel(II) complexes. Journal of Polymer Science Part A, 2000, 38, 4627-4640.	2.5	26

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55	Vinyl addition polymerization of norbornene with cationic (allyl)Ni catalysts: Mechanistic insights and characterization of first insertion products. Journal of Polymer Science Part A, 2009, 47, 2560-2573.	2.5	26
56	Polymerization of 1,3â€dienes and styrene catalyzed by cationic allyl Ni(II) complexes. Journal of Polymer Science Part A, 2010, 48, 1901-1912.	2.5	23
57	The insertion of sulfur dioxide into palladiumâ€“methyl bonds: the synthesis and X-ray crystal structure of an unusual [(dppp)PdOS(Me)O]2[BArâ€²4]2 dimer. Chemical Communications, 2000, , 47-48.	2.2	21
58	Synthesis, structure and computational studies of a cationic T-shaped Pd-complex. New Journal of Chemistry, 2013, 37, 1128.	1.4	19
59	Oligomerization and polymerization of 5-ethylidene-2-norbornene by cationic palladium and nickel catalysts. Polymer Chemistry, 2020, 11, 2576-2584.	1.9	18
60	Cationic Î±-Diimine Nickel and Palladium Complexes Incorporating Phenanthrene Substituents: Highly Active Ethylene Polymerization Catalysts and Mechanistic Studies of syn/anti Isomerization. Organometallics, 2020, 39, 4704-4716.	1.1	17
61	Polymerization of Ethylene Catalyzed by Phosphine-Iminophosphorane Palladium Complexes. Organometallics, 2017, 36, 2947-2951.	1.1	16
62	Unsaturated Alcohols as Chain-Transfer Agents in Olefin Polymerization: Synthesis of Aldehyde End-Capped Oligomers and Polymers. Journal of the American Chemical Society, 2020, 142, 15431-15437.	6.6	15
63	A Cationic Terminal Methylene Complex of Ir(I) Supported by a Pincer Ligand. Organometallics, 2013, 32, 3423-3426.	1.1	14
64	2,4,6â€Triphenylpyridinium: A Bulky, Highly Electronâ€Withdrawing Substituent That Enhances Properties of Nickel(II) Ethylene Polymerization Catalysts. Angewandte Chemie - International Edition, 2021, 60, 4566-4569.	7.2	11
65	CHEMISTRY OF DIENE AND ENONE IRON TRICARBONYL COMPLEXES. Annals of the New York Academy of Sciences, 1977, 295, 254-270.	1.8	7
66	Isomerization of Aldehydes Catalyzed by Rhodium(I) Olefin Complexes. Angewandte Chemie - International Edition, 1999, 38, 3533-3537.	7.2	6
67	Synthesis of End-Functionalized Poly(norbornenes) and Poly(ethylidene norbornenes) Using a Pd(II) Catalyst in Combination with Chain Transfer Agents. Organometallics, 2021, 40, 2709-2715.	1.1	5
68	Virtual Issue on Research in the Center for Enabling New Technologies Through Catalysis (CENTC). ACS Catalysis, 2014, 4, 1318-1319.	5.5	3
69	Syntheses of 1,1â€²-Bicobaltocene Salts of Tetracyano-P-Quinodimethane, Tetrabromoquinone, and Tetrabromodiphenoquinone; and the Structure of 1,1â€²-Bicobaltocene[Co(III)Co(III)][TCNQ]3. Molecular Crystals and Liquid Crystals, 1982, 86, 131-138.	0.9	1
70	Intramolecular hydrogen transfer reactions catalyzed by pentamethylcyclopentadienyl rhodium and cobalt olefin complexes: Mechanistic studies. Polyhedron, 2016, 103, 51-57.	1.0	1
71	Structure and Reactivity of a Cobalt(I) Phthalaldehyde Complex with Both Ïƒ- and Ï€-Bonded Aldehyde Groups. , 1999, 38, 552.		1
72	2,4,6â€Triphenylpyridinium: A Bulky, Highly Electronâ€Withdrawing Substituent That Enhances Properties of Nickel(II) Ethylene Polymerization Catalysts. Angewandte Chemie, 2021, 133, 4616-4619.	1.6	0