

Shengyu Dai

List of Publications by Year in descending order

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papers

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citations

159585

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133252

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59
all docs

59
docs citations

59
times ranked

1011
citing authors

#	ARTICLE	IF	CITATIONS
1	Palladium and Nickel Catalyzed Chain Walking Olefin Polymerization and Copolymerization. ACS Catalysis, 2016, 6, 428-441.	11.2	418
2	Highly Robust Palladium(II) $\hat{\pm}$ -Diimine Catalysts for Slow $\hat{\pm}$ Chain $\hat{\pm}$ Walking Polymerization of Ethylene and Copolymerization with Methyl Acrylate. Angewandte Chemie - International Edition, 2015, 54, 9948-9953.	13.8	309
3	Direct Synthesis of Functionalized High $\hat{\pm}$ Molecular $\hat{\pm}$ Weight Polyethylene by Copolymerization of Ethylene with Polar Monomers. Angewandte Chemie - International Edition, 2016, 55, 13281-13285.	13.8	263
4	Systematic Investigations of Ligand Steric Effects on $\hat{\pm}$ -Diimine Palladium Catalyzed Olefin Polymerization and Copolymerization. Macromolecules, 2016, 49, 8855-8862.	4.8	223
5	Direct Synthesis of Thermoplastic Polyolefin Elastomers from Nickel-Catalyzed Ethylene Polymerization. Macromolecules, 2017, 50, 6074-6080.	4.8	137
6	Direct Synthesis of Polar-Functionalized Linear Low-Density Polyethylene (LLDPE) and Low-Density Polyethylene (LDPE). Macromolecules, 2018, 51, 4040-4048.	4.8	132
7	Ethylene Polymerization and Copolymerization with Polar Monomers by Cationic Phosphine Phosphonic Amide Palladium Complexes. ACS Catalysis, 2015, 5, 5932-5937.	11.2	124
8	Investigations of the Ligand Electronic Effects on $\hat{\pm}$ -Diimine Nickel(II) Catalyzed Ethylene Polymerization. Polymers, 2016, 8, 37.	4.5	116
9	Palladium-Catalyzed Direct Synthesis of Various Branched, Carboxylic Acid-Functionalized Polyolefins: Characterization, Derivatization, and Properties. Macromolecules, 2018, 51, 6818-6824.	4.8	104
10	Ethylene Polymerization and Copolymerization Using Nickel 2-Iminopyridine- $\langle i \rangle N \langle /i \rangle$ -oxide Catalysts: Modulation of Polymer Molecular Weights and Molecular-Weight Distributions. Macromolecules, 2018, 51, 49-56.	4.8	100
11	Systematic Investigations of Ligand Steric Effects on $\hat{\pm}$ -Diimine Nickel Catalyzed Olefin Polymerization and Copolymerization. Organometallics, 2019, 38, 2919-2926.	2.3	99
12	Synthesis of high molecular weight polyethylene using iminopyridyl nickel catalysts. Chemical Communications, 2016, 52, 9113-9116.	4.1	94
13	Synthesis of Various Branched Ultra-High-Molecular-Weight Polyethylenes Using Sterically Hindered Acenaphthene-Based $\hat{\pm}$ -Diimine Ni(II) Catalysts. Organometallics, 2018, 37, 2442-2449.	2.3	88
14	Direct Synthesis of Polar Functionalized Polyethylene Thermoplastic Elastomer. Macromolecules, 2020, 53, 2539-2546.	4.8	87
15	Flexible cycloalkyl substituents in insertion polymerization with $\hat{\pm}$ -diimine nickel and palladium species. Polymer Chemistry, 2020, 11, 1393-1400.	3.9	78
16	Ethylene polymerization by salicylaldimine nickel($\langle scp \rangle ii \langle /scp \rangle$) complexes containing a dibenzhydryl moiety. Dalton Transactions, 2016, 45, 1496-1503.	3.3	74
17	Bulky yet flexible substituents in insertion polymerization with $\hat{\pm}$ -diimine nickel and palladium systems. Polymer Chemistry, 2019, 10, 4866-4871.	3.9	74
18	$\hat{\pm}$ interaction effect in insertion polymerization with $\hat{\pm}$ -Diimine palladium systems. Journal of Catalysis, 2019, 378, 184-191.	6.2	66

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19	Large-scale synthesis of novel sterically hindered acenaphthene-based $\hat{\pm}$ -diimine ligands and their application in coordination chemistry. <i>Journal of Organometallic Chemistry</i> , 2018, 859, 58-67.	1.8	59
20	A Self-Supporting Strategy for Gas-Phase and Slurry-Phase Ethylene Polymerization using Late-Transition-Metal Catalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14884-14890.	13.8	55
21	A remote nonconjugated electron effect in insertion polymerization with $\hat{\pm}$ -diimine nickel and palladium species. <i>Polymer Chemistry</i> , 2020, 11, 2692-2699.	3.9	52
22	Efficient Suppression of Chain Transfer and Branching via σ -Type Shielding in a Neutral Nickel(II) Catalyst. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 4018-4022.	13.8	51
23	Direct Synthesis of Functionalized High-Molecular-Weight Polyethylene by Copolymerization of Ethylene with Polar Monomers. <i>Angewandte Chemie</i> , 2016, 128, 13475-13479.	2.0	48
24	Highly efficient incorporation of polar comonomers in copolymerizations with ethylene using iminopyridyl palladium system. <i>Journal of Catalysis</i> , 2021, 393, 51-59.	6.2	40
25	Suppression of chain transfer via a restricted rotation effect of dibenzosuberyl substituents in polymerization catalysis. <i>Polymer Chemistry</i> , 2021, 12, 3240-3249.	3.9	38
26	Reversion of the chain walking ability of $\hat{\pm}$ -diimine nickel and palladium catalysts with bulky diarylmethyl substituents. <i>Journal of Organometallic Chemistry</i> , 2021, 932, 121649.	1.8	37
27	The synergistic effect of rigid and flexible substituents on insertion polymerization with $\hat{\pm}$ -diimine nickel and palladium catalysts. <i>Polymer Chemistry</i> , 2021, 12, 4643-4653.	3.9	36
28	Direct Synthesis of Branched Carboxylic Acid Functionalized Poly(1-octene) by $\hat{\pm}$ -Diimine Palladium Catalysts. <i>Polymers</i> , 2017, 9, 122.	4.5	35
29	8-Arylnaphthyl substituent retarding chain transfer in insertion polymerization with unsymmetrical $\hat{\pm}$ -diimine systems. <i>Polymer Chemistry</i> , 2020, 11, 7199-7206.	3.9	34
30	Flexible σ -Sandwich-(8-Alkylnaphthyl $\hat{\pm}$ -Diimine) Catalysts in Insertion Polymerization. <i>Inorganic Chemistry</i> , 2021, 60, 5673-5681.	4.0	33
31	Synthesis of Branched Polyethylene and Ethylene-MA Copolymers Using Unsymmetrical Iminopyridyl Nickel and Palladium Complexes. <i>Organometallics</i> , 2021, 40, 3033-3041.	2.3	32
32	Monoligated vs Bisligated Effect in Iminopyridyl Nickel Catalyzed Ethylene Polymerization. <i>Organometallics</i> , 2019, 38, 2800-2806.	2.3	31
33	Effect of aryl orientation on olefin polymerization in iminopyridyl catalytic system. <i>Polymer</i> , 2020, 200, 122607.	3.8	31
34	Synthesis of polyethylene thermoplastic elastomer by using robust $\hat{\pm}$ -diimine Ni(II) catalysts with abundant t -Bu substituents. <i>Journal of Polymer Science</i> , 2021, 59, 638-645.	3.8	30
35	Efficient incorporation of a polar comonomer for direct synthesis of hyperbranched polar functional ethylene oligomers. <i>New Journal of Chemistry</i> , 2021, 45, 4024-4031.	2.8	29
36	Rotation-restricted strategy to synthesize high molecular weight polyethylene using iminopyridyl nickel and palladium catalyst. <i>Applied Organometallic Chemistry</i> , 2021, 35, e6140.	3.5	26

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37	A Dual Steric Enhancement Strategy in $\hat{\pm}$ -Diimine Nickel and Palladium Catalysts for Ethylene Polymerization and Copolymerization. <i>Organometallics</i> , 2022, 41, 124-132.	2.3	23
38	Facile Synthesis of Hyperbranched Ethylene Oligomers and Ethylene/Methyl Acrylate Co-oligomers with Different Microscopic Chain Architectures. <i>ACS Polymers Au</i> , 2022, 2, 88-96.	4.1	21
39	Synthesis of functional and hyperbranched ethylene oligomers using unsymmetrical $\hat{\pm}$ -diimine palladium catalysts. <i>European Polymer Journal</i> , 2019, 115, 185-192.	5.4	19
40	Direct synthesis of hyperbranched ethene oligomers and ethene- $\langle \text{MA} \rangle$ co-oligomers using iminopyridyl systems with weak neighboring group interactions. <i>Journal of Polymer Science</i> , 2022, 60, 1944-1953.	3.8	19
41	Investigations of ligand backbone effects on bulky diarylmethyl-based nickel(II) and palladium(II) catalyzed ethylene polymerization and copolymerization. <i>Journal of Organometallic Chemistry</i> , 2021, 952, 122046.	1.8	18
42	Synthesis of fluorinated polyethylene of different topologies <i>via</i> insertion polymerization with semifluorinated acrylates. <i>Polymer Chemistry</i> , 2020, 11, 6335-6342.	3.9	17
43	A rigid-flexible double-layer steric strategy for ethylene (co)oligomerization with pyridine-imine Ni and Pd complexes. <i>New Journal of Chemistry</i> , 2022, 46, 8669-8678.	2.8	16
44	Second coordination sphere effect of benzothiophene substituents on chain transfer and chain walking in ethylene insertion polymerization. <i>Polymer</i> , 2022, 245, 124707.	3.8	16
45	Synthesis of thermoplastic polyethylene elastomers and ethylene-methyl acrylate copolymers using methylene-bridged binuclear bulky dibenzhydryl $\hat{\pm}$ -diimine Ni(II) and Pd(II) catalysts. <i>European Polymer Journal</i> , 2022, 168, 111105.	5.4	14
46	Electronic Effects of the Backbone on Bis(imino)pyridyliron(II)-Catalyzed Ethylene Polymerization. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 4887-4892.	2.0	12
47	Facile Access to Ultra-Highly Branched Polyethylenes Using Hybrid $\hat{\pm}$ -Sandwich-Ni(II) and Pd(II) Catalysts. <i>Journal of Catalysis</i> , 2022, , .	6.2	12
48	Efficient suppression of the chain transfer reaction in ethylene coordination polymerization with dibenzosuberyl substituents. <i>Polymer Chemistry</i> , 2022, 13, 4090-4099.	3.9	12
49	Direct synthesis of various polar functionalized polypropylene materials with tunable molecular weights and high incorporation ratios. <i>Polymer Chemistry</i> , 2021, 12, 5495-5504.	3.9	10
50	Exploring the Relationship between the Polyethylene Microstructure and Spatial Structure of $\hat{\pm}$ -Diimine Pd(II) Catalysts via a Hybrid Steric Strategy. <i>Inorganic Chemistry</i> , 2022, 61, 6799-6806.	4.0	10
51	Flexible Axial Shielding Strategy for the Synthesis of High-Molecular-Weight Polyethylene and Polar Functionalized Polyethylene with Pyridine-Imine Ni(II) and Pd(II) Complexes. <i>Organometallics</i> , 2022, 41, 2042-2049.	2.3	10
52	Pd(ii)-catalyzed, controllable C-H mono-/diarylation of aryl tetrazoles: concise synthesis of Losartan. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 3198-3201.	2.8	9
53	Propylene polymerization and copolymerization with polar monomers facilitated by flexible cycloalkyl substituents in $\hat{\pm}$ -diimine systems. <i>Polymer</i> , 2022, 254, 125076.	3.8	9
54	Synthesis of High-Molecular-Weight Branched Polyethylene Using a Hybrid $\hat{\pm}$ -Sandwich-Pyridine-Imine Ni(II) Catalyst. <i>Frontiers in Chemistry</i> , 2022, 10, .	3.6	8

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55	A Self-Supporting Strategy for Gas-Phase and Slurry-Phase Ethylene Polymerization using Late-Transition-Metal Catalysts. <i>Angewandte Chemie</i> , 2020, 132, 14994-15000.	2.0	7
56	Synthesis of highly branched polyethylene and ethylene-MA copolymers using hybrid bulky λ^2 -diimine Pd(II) catalysts. <i>Journal of Organometallic Chemistry</i> , 2021, 956, 122118.	1.8	7
57	The electronic effects on unsymmetrical Bis(imino)pyridyl iron(ii) catalyzed ethylene polymerization. <i>Journal of Organometallic Chemistry</i> , 2020, 923, 121457.	1.8	6
58	Efficient Suppression of Chain Transfer and Branching via σ -Type Shielding in a Neutral Nickel(II) Catalyst. <i>Angewandte Chemie</i> , 2021, 133, 4064-4068.	2.0	5