

# Shengyu Dai

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

3,622  
citations

159585

30  
h-index

133252

59  
g-index

59  
all docs

59  
docs citations

59  
times ranked

1011  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | A rigid-flexible double-layer steric strategy for ethylene (co)oligomerization with pyridine-imine Ni( $\sigma$ -) and Pd( $\sigma$ -) complexes. <i>New Journal of Chemistry</i> , 2022, 46, 8669-8678.  | 2.8  | 16        |
| 2  | Direct synthesis of hyperbranched ethene oligomers and ethene-MA co-oligomers using iminopyridyl systems with weak neighboring group interactions. <i>Journal of Polymer Science</i> , 2022, 60, 1944-1953.   | 3.8  | 19        |
| 3  | Synthesis of thermoplastic polyethylene elastomers and ethylene-methyl acrylate copolymers using methylene-bridged binuclear bulky dibenzhydryl $\sigma$ -diimine Ni(II) and Pd(II) catalysts. <i>European Polymer Journal</i> , 2022, 168, 111105. | 5.4  | 14        |
| 4  | 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        |
| 5  | 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        |
| 6  | A Dual Steric Enhancement Strategy in $\sigma$ -Diimine Nickel and Palladium Catalysts for Ethylene Polymerization and Copolymerization. <i>Organometallics</i> , 2022, 41, 124-132.  | 2.3  | 23        |
| 7  | Exploring the Relationship between the Polyethylene Microstructure and Spatial Structure of $\sigma$ -Diimine Pd(II) Catalysts via a Hybrid Steric Strategy. <i>Inorganic Chemistry</i> , 2022, 61, 6799-6806.                                      | 4.0  | 10        |
| 8  | Synthesis of High-Molecular-Weight Branched Polyethylene Using a Hybrid $\sigma$ -Sandwich-Pyridine-Imine Ni(II) Catalyst. <i>Frontiers in Chemistry</i> , 2022, 10, .  | 3.6  | 8         |
| 9  | Facile Access to Ultra-Highly Branched Polyethylenes Using Hybrid $\sigma$ -Sandwich-Ni(II) and Pd(II) Catalysts. <i>Journal of Catalysis</i> , 2022, , .   | 6.2  | 12        |
| 10 | 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        |
| 11 | Propylene polymerization and copolymerization with polar monomers facilitated by flexible cycloalkyl substituents in $\sigma$ -diimine systems. <i>Polymer</i> , 2022, 254, 125076.   | 3.8  | 9         |
| 12 | 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        |
| 13 | Reversion of the chain walking ability of $\sigma$ -diimine nickel and palladium catalysts with bulky diarylmethyl substituents. <i>Journal of Organometallic Chemistry</i> , 2021, 932, 121649.  | 1.8  | 37        |
| 14 | Efficient Suppression of Chain Transfer and Branching via $\sigma$ -Type Shielding in a Neutral Nickel(II) Catalyst. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 4018-4022.  | 13.8 | 51        |
| 15 | Efficient Suppression of Chain Transfer and Branching via $\sigma$ -Type Shielding in a Neutral Nickel(II) Catalyst. <i>Angewandte Chemie</i> , 2021, 133, 4064-4068.   | 2.0  | 5         |
| 16 | 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        |
| 17 | The synergistic effect of rigid and flexible substituents on insertion polymerization with $\sigma$ -diimine nickel and palladium catalysts. <i>Polymer Chemistry</i> , 2021, 12, 4643-4653.  | 3.9  | 36        |
| 18 | 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        |

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|----|--|------|-----------|
| 19 | 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        |
| 20 | Suppression of chain transfer <i>via</i> a restricted rotation effect of dibenzosuberyl substituents in polymerization catalysis. <i>Polymer Chemistry</i> , 2021, 12, 3240-3249.  | 3.9  | 38        |
| 21 | Synthesis of polyethylene thermoplastic elastomer by using robust $\lambda^2$ -diimine Ni(II) catalysts with abundant $t$ -Bu substituents. <i>Journal of Polymer Science</i> , 2021, 59, 638-645.                         | 3.8  | 30        |
| 22 | Flexible $\lambda^2$ -(8-Alkyl)naphthyl $\lambda^2$ -Diimine) Catalysts in Insertion Polymerization. <i>Inorganic Chemistry</i> , 2021, 60, 5673-5681.   | 4.0  | 33        |
| 23 | 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        |
| 24 | 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        |
| 25 | 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        |
| 26 | Synthesis of highly branched polyethylene and ethylene-MA copolymers using hybrid bulky $\lambda^2$ -diimine Pd(II) catalysts. <i>Journal of Organometallic Chemistry</i> , 2021, 956, 122118.                             | 1.8  | 7         |
| 27 | 8-Arylnaphthyl substituent retarding chain transfer in insertion polymerization with unsymmetrical $\lambda^2$ -diimine systems. <i>Polymer Chemistry</i> , 2020, 11, 7199-7206.   | 3.9  | 34        |
| 28 | 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         |
| 29 | 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        |
| 30 | 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        |
| 31 | 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         |
| 32 | Effect of aryl orientation on olefin polymerization in iminopyridyl catalytic system. <i>Polymer</i> , 2020, 200, 122607.  | 3.8  | 31        |
| 33 | A remote nonconjugated electron effect in insertion polymerization with $\lambda^2$ -diimine nickel and palladium species. <i>Polymer Chemistry</i> , 2020, 11, 2692-2699.   | 3.9  | 52        |
| 34 | Direct Synthesis of Polar Functionalized Polyethylene Thermoplastic Elastomer. <i>Macromolecules</i> , 2020, 53, 2539-2546.  | 4.8  | 87        |
| 35 | Flexible cycloalkyl substituents in insertion polymerization with $\lambda^2$ -diimine nickel and palladium species. <i>Polymer Chemistry</i> , 2020, 11, 1393-1400.   | 3.9  | 78        |
| 36 | Systematic Investigations of Ligand Steric Effects on $\lambda^2$ -Diimine Nickel Catalyzed Olefin Polymerization and Copolymerization. <i>Organometallics</i> , 2019, 38, 2919-2926.                                      | 2.3  | 99        |

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|----|--|------|-----------|
| 37 | Bulky yet flexible substituents in insertion polymerization with $\hat{\pm}$ -diimine nickel and palladium systems. <i>Polymer Chemistry</i> , 2019, 10, 4866-4871.  | 3.9  | 74        |
| 38 | Monoligated vs Bisligated Effect in Iminopyridyl Nickel Catalyzed Ethylene Polymerization. <i>Organometallics</i> , 2019, 38, 2800-2806.   | 2.3  | 31        |
| 39 | $\hat{\pm}$ -Diimine interaction effect in insertion polymerization with $\hat{\pm}$ -Diimine palladium systems. <i>Journal of Catalysis</i> , 2019, 378, 184-191.   | 6.2  | 66        |
| 40 | Synthesis of functional and hyperbranched ethylene oligomers using unsymmetrical $\hat{\pm}$ -diimine palladium catalyts. <i>European Polymer Journal</i> , 2019, 115, 185-192.  | 5.4  | 19        |
| 41 | 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        |
| 42 | Ethylene Polymerization and Copolymerization Using Nickel 2-Iminopyridine- <i>N</i> -oxide Catalysts: Modulation of Polymer Molecular Weights and Molecular-Weight Distributions. <i>Macromolecules</i> , 2018, 51, 49-56. | 4.8  | 100       |
| 43 | 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        |
| 44 | Direct Synthesis of Polar-Functionalized Linear Low-Density Polyethylene (LLDPE) and Low-Density Polyethylene (LDPE). <i>Macromolecules</i> , 2018, 51, 4040-4048.   | 4.8  | 132       |
| 45 | Synthesis of Various Branched Ultra-High-Molecular-Weight Polyethylenes Using Sterically Hindered Acenaphthene-Based $\hat{\pm}$ -Diimine Ni(II) Catalysts. <i>Organometallics</i> , 2018, 37, 2442-2449.                  | 2.3  | 88        |
| 46 | Palladium-Catalyzed Direct Synthesis of Various Branched, Carboxylic Acid-Functionalized Polyolefins: Characterization, Derivatization, and Properties. <i>Macromolecules</i> , 2018, 51, 6818-6824.                       | 4.8  | 104       |
| 47 | Direct Synthesis of Thermoplastic Polyolefin Elastomers from Nickel-Catalyzed Ethylene Polymerization. <i>Macromolecules</i> , 2017, 50, 6074-6080.  | 4.8  | 137       |
| 48 | 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        |
| 49 | Investigations of the Ligand Electronic Effects on $\hat{\pm}$ -Diimine Nickel(II) Catalyzed Ethylene Polymerization. <i>Polymers</i> , 2016, 8, 37.   | 4.5  | 116       |
| 50 | Systematic Investigations of Ligand Steric Effects on $\hat{\pm}$ -Diimine Palladium Catalyzed Olefin Polymerization and Copolymerization. <i>Macromolecules</i> , 2016, 49, 8855-8862.                                    | 4.8  | 223       |
| 51 | 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        |
| 52 | Direct Synthesis of Functionalized High-Molecular-Weight Polyethylene by Copolymerization of Ethylene with Polar Monomers. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13281-13285.                       | 13.8 | 263       |
| 53 | Palladium and Nickel Catalyzed Chain Walking Olefin Polymerization and Copolymerization. <i>ACS Catalysis</i> , 2016, 6, 428-441.  | 11.2 | 418       |
| 54 | Synthesis of high molecular weight polyethylene using iminopyridyl nickel catalyts. <i>Chemical Communications</i> , 2016, 52, 9113-9116.  | 4.1  | 94        |

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|----|--|------|-----------|
| 55 | Ethylene polymerization by salicylaldimine nickel( $\eta^5$ -indenyl) complexes containing a dibenzhydryl moiety. Dalton Transactions, 2016, 45, 1496-1503.  | 3.3  | 74        |
| 56 | Highly Robust Palladium(II) $\eta^5$ -indenyl Diimine Catalysts for Slow "Chain-Walking" Polymerization of Ethylene and Copolymerization with Methyl Acrylate. Angewandte Chemie - International Edition, 2015, 54, 9948-9953. | 13.8 | 309       |
| 57 | Pd(II)-catalyzed, controllable C-H mono-/diarylation of aryl tetrazoles: concise synthesis of Losartan. Organic and Biomolecular Chemistry, 2015, 13, 3198-3201.   | 2.8  | 9         |
| 58 | Ethylene Polymerization and Copolymerization with Polar Monomers by Cationic Phosphine Phosphonic Amide Palladium Complexes. ACS Catalysis, 2015, 5, 5932-5937.  | 11.2 | 124       |