Roberta Cipullo

List of Publications by Year
in descending order

98 papers	4,666 citations	87888 38 h-index	106344 65 g-index
100 all docs	100 docs citations	100 times ranked	1562 citing authors

#	Article	IF	Citations
1	Microstructure of polypropylene. Progress in Polymer Science, 2001, 26, 443-533.	24.7	404
2	Nonconventional Catalysts for Isotactic Propene Polymerization in Solution Developed by Using High-Throughput-Screening Technologies. Angewandte Chemie - International Edition, 2006, 45, 3278-3283.	13.8	232
3	High-Resolution13C NMR Configurational Analysis of Polypropylene Made with MgCl2-Supported Zieglerâ^'Natta Catalysts. 1. The â€œModelâ€•System MgCl2/TiCl4â^'2,6-Dimethylpyridine/Al(C2H5)3. Macromolecules, 1999, 32, 4173-4182.	4.8	195
4	Improving the Performance of Methylalumoxane:Â A Facile and Efficient Method to Trap â€œFreeâ€• Trimethylaluminum. Journal of the American Chemical Society, 2003, 125, 12402-12403.	13.7	174
5	Effects of Regiochemical and Stereochemical Errors on the Course of Isotactic Propene Polyinsertion Promoted by Homogeneous Ziegler-Natta Catalysts. Macromolecules, 1994, 27, 7538-7543.	4.8	149
6	Influence of Monomer Concentration on the Stereospecificity of 1-Alkene Polymerization Promoted by C2-symmetric ansa-Metallocene Catalysts. Journal of the American Chemical Society, 1994, 116, 9329-9330.	13.7	143
7	Periodic DFT and High-Resolution Magic-Angle-Spinning (HR-MAS) ¹H NMR Investigation of the Active Surfaces of MgCl₂-Supported Zieglerâ^'Natta Catalysts. The MgCl₂ Matrix. Journal of Physical Chemistry C, 2008, 112, 1081-1089.	3.1	123
8	Polypropylene â€œChain Shuttlingâ€•at Enantiomorphous and Enantiopure Catalytic Species:â€‰ Direct and Quantitative Evidence from Polymer Microstructure. Macromolecules, 2007, 40, 7736-7738.	4.8	111
9	Intra- and Intermolecular NMR Studies on the Activation of Arylcyclometallated Hafnium Pyridyl-Amido Olefin Polymerization Precatalysts. Journal of the American Chemical Society, 2008, 130, 10354-10368.	13.7	107
10	Block Copolymers of Highly Isotactic Polypropylene via Controlled Zieglerâ^'Natta Polymerization. Macromolecules, 2004, 37, 8201-8203.	4.8	101
11	On the First Insertion of Î±-Olefins in Hafnium Pyridyl-Amido Polymerization Catalysts. Organometallics, 2009, 28, 5445-5458.	2.3	98
12	Influence of Zieglerâ^'Natta Catalyst Regioselectivity on Polypropylene Molecular Weight Distribution and Rheological and Crystallization Behavior. Macromolecules, 2004, 37, 9722-9727.	4.8	89
13	Design of stereoselective Ziegler-Natta propene polymerization catalysts. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15321-15326.	7.1	89
14	Demystifying Zieglerâ€"Natta Catalysts: The Origin of Stereoselectivity. ACS Catalysis, 2017, 7, 4509-4518.	11.2	87
15	The First Molecularly Characterized Isotactic Polypropylene-block-polyethylene Obtained via â€œQuasi-Livingâ€•Insertion Polymerization. Macromolecules, 2003, 36, 3806-3808.	4.8	83
16	Propene/Ethene-[1-13C] Copolymerization as a Tool for Investigating Catalyst Regioselectivity. MgCl2/Internal Donor/TiCl4â^'External Donor/AlR3Systems. Macromolecules, 2004, 37, 7437-7443.	4.8	80
17	â€œOscillatingâ€•Metallocene Catalysts:Â What Stops the Oscillation?. Journal of the American Chemical Society, 2003, 125, 5451-5460.	13.7	78
18	Stopped-flow polymerizations of ethene and propene in the presence of the catalyst systemrac-Me2Si(2-methyl-4-phenyl-1-indenyl)2ZrCl2/methylaluminoxane. Macromolecular Rapid Communications, 1999, 20, 116-121.	3.9	75

#	Article	IF	Citations
19	Mimicking Ziegler-Natta Catalysts in Homogeneous Phase, 1.C2-Symmetric Octahedral Zr(IV) Complexes with Tetradentate [ONNO]-Type Ligands. Macromolecular Rapid Communications, 2001, 22, 1405-1410.	3.9	74
20	Title is missing!. Die Makromolekulare Chemie Rapid Communications, 1992, 13, 15-20.	1.1	73
21	Hafnocenes and MAO: Beware of Trimethylaluminum!. Macromolecules, 2009, 42, 1789-1791.	4.8	69
22	â€œOscillatingâ€•Metallocene Catalysts: How Do They Oscillate?. Angewandte Chemie - International Edition, 2002, 41, 505-508.	13.8	67
23	Accelerating the Research Approach to Zieglerâ€"Natta Catalysts. Industrial & Engineering Chemistry Research, 2016, 55, 2686-2695.	3.7	67
24	Propene/Ethene-[1-13C] Copolymerization as a Tool for Investigating Catalyst Regioselectivity. 2. The MgCl2/TiCl4â^'AlR3 System. Macromolecules, 2003, 36, 2616-2622.	4.8	63
25	Title is missing!. Die Makromolekulare Chemie Rapid Communications, 1993, 14, 97-103.	1.1	62
26	Molecular Kinetic Study of â€œChain Shuttlingâ€•Olefin Copolymerization. ACS Catalysis, 2018, 8, 5051-5061.	11.2	61
27	â€œUni et Triniâ€• In Situ Diversification of (Pyridylamide)hafnium(IV) Catalysts. Macromolecules, 2009, 42, 4369-4373.	4.8	60
28	C2-symmetric ansa-metallocene catalysts for propene polymerization: Stereoselectivity and enantioselectivity. Journal of Molecular Catalysis A, 1998, 128, 53-64.	4.8	57
29	Interfering Effects of Growing Chain Epimerization on Metallocene-Catalyzed Isotactic Propene Polymerization. Macromolecules, 1997, 30, 3971-3977.	4.8	56
30	Growing chain isomerizations in metallocene-catalyzed Ziegler-Natta 1-alkene polymerization. Journal of Organometallic Chemistry, 1995, 497, 113-118.	1.8	52
31	New Evidence on the Nature of the Active Sites in Heterogeneous Zieglerâ^'Natta Catalysts for Propene Polymerization. Macromolecules, 1997, 30, 4786-4790.	4.8	49
32	Reactivity of Secondary Metalâ^'Alkyls in Catalytic Propene Polymerization:Â How Dormant Are â€œDormant Chainsâ€?. Journal of the American Chemical Society, 2005, 127, 1608-1609.	13.7	49
33	1H NMR Analysis of Chain Unsaturations in Ethene/1-Octene Copolymers Prepared with Metallocene Catalysts at High Temperature. Macromolecules, 2005, 38, 6988-6996.	4.8	48
34	Improving the Behavior of Bis(phenoxyamine) Group 4 Metal Catalysts for Controlled Alkene Polymerization. Macromolecules, 2009, 42, 3869-3872.	4.8	48
35	Propene/Ethene-[1-13C] Copolymerization as a Tool for Investigating Catalyst Regioselectivity. 1. Theory and Calibration. Macromolecules, 2002, 35, 1537-1542.	4.8	46
36	Highly Regioselective Transition-Metal-Catalyzed 1-Alkene Polymerizations:Â A Simple Method for the Detection and Precise Determination of Regioirregular Monomer Enchainments. Macromolecules, 1998, 31, 2387-2390.	4.8	45

#	Article	IF	Citations
37	Title is missing!. Die Makromolekulare Chemie, 1993, 194, 1079-1093.	1.1	43
38	Highâ€Throughput Screening in Olefinâ€Polymerization Catalysis: From Serendipitous Discovery Towards Rational Understanding. Macromolecular Rapid Communications, 2009, 30, 1697-1708.	3.9	42
39	Structureâˆ’Activity Relationship in Olefin Polymerization Catalysis: Is Entropy the Key?. Journal of the American Chemical Society, 2010, 132, 13651-13653.	13.7	40
40	Connection of Stereoselectivity, Regioselectivity, and Molecular Weight Capability in <i>rac</i>-Râ€²₂Si(2-Me-4-R-indenyl)₂ZrCl₂ Type Catalysts. Macromolecules, 2018, 51, 8073-8083.	4.8	40
41	Advances in the 13C NMR characterization of ethene/propene copolymers, 1. Macromolecular Chemistry and Physics, 2002, 203, 1403-1412.	2.2	39
42	Backbone rearrangement during olefin capture as the rate limiting step in molecular olefin polymerization catalysis and its effect on comonomer affinity. Journal of Polymer Science Part A, 2017, 55, 2807-2814.	2.3	39
43	Selectivity of Metallocene-Catalyzed Olefin Polymerization: A Combined Experimental and Quantum Mechanical Study. 1. Nonchiral Bis(cyclopentadienyl) Systems. Macromolecules, 2002, 35, 2835-2844.	4.8	36
44	Metallocene-Catalyzed Propene Polymerization:Â From Microstructure to Kinetics.Cs-Symmetricansa-Zirconocenes. Macromolecules, 2003, 36, 4258-4261.	4.8	36
45	Of Poisons and Antidotes in Polypropylene Catalysis. Angewandte Chemie - International Edition, 2016, 55, 8590-8594.	13.8	35
46	Selectivity of Metallocene-Catalyzed Olefin Polymerization:Â A Combined Experimental and Quantum Mechanical Study. Theansa-Me2Si(Ind)2Zr andansa-Me2C(Cp)(Flu)Zr Systems. Macromolecules, 2003, 36, 8171-8177.	4.8	34
47	High-Field13C NMR Characterization of Ethene-1-13C/Propene Copolymers Prepared withCs-Symmetricansa-Metallocene Catalysts:Â A Deeper Insight into the Regio- and Stereoselectivity of Syndiotactic Propene Polymerization. Macromolecules, 1998, 31, 8720-8724.	4.8	32
48	Metallocene-Catalyzed Propene Polymerization:Â From Microstructure to Kinetics. 1.C2-Symmetricansa-Metallocenes and the "Trigger" Hypothesis. Macromolecules, 2002, 35, 349-354.	4.8	31
49	Chain Transfer to Solvent in Propene Polymerization with Ti Cp-phosphinimide Catalysts: Evidence for Chain Termination via Tiâ€“C Bond Homolysis. ACS Catalysis, 2016, 6, 7989-7993.	11.2	31
50	An Integrated High Throughput Experimentation/Predictive QSAR Modeling Approach to ansa-Zirconocene Catalysts for Isotactic Polypropylene. Polymers, 2020, 12, 1005.	4.5	29
51	Reactivity Trends of Lewis Acidic Sites in Methylaluminoxane and Some of Its Modifications. Inorganic Chemistry, 2020, 59, 5751-5759.	4.0	28
52	<i>ansa</i>-Zirconocene Catalysts for Isotactic-Selective Propene Polymerization at High Temperature: A Long Story Finds a Happy Ending. Journal of the American Chemical Society, 2021, 143, 7641-7647.	13.7	28
53	Structure/Properties Relationship for Bis(phenoxyamine)Zr(IV)-Based Olefin Polymerization Catalysts: A Simple DFT Model To Predict Catalytic Activity. Macromolecules, 2012, 45, 4046-4053.	4.8	27
54	Extraction of Reliable Molecular Information from Diffusion NMR Spectroscopy: Hydrodynamic Volume or Molecular Mass?. Chemistry - A European Journal, 2019, 25, 9930-9937.	3.3	26

#	Article	IF	Citations
55	BHT-Modified MAO: Cage Size Estimation, Chemical Counting of Strongly Acidic Al Sites, and Activation of a Ti-Phosphinimide Precatalyst. ACS Catalysis, 2019, 9, 2996-3010.	11.2	26
56	High-Throughput Experimentation in Olefin Polymerization Catalysis: Facing the Challenges of Miniaturization. Industrial & Engineering Chemistry Research, 2020, 59, 13940-13947.	3.7	26
57	A Systematic Study of the Temperature-Induced Performance Decline of <i>ansa</i>-Metallocenes for iPP. Macromolecules, 2020, 53, 9325-9336.	4.8	26
58	Methylaluminoxaneâ€™s Molecular Cousin: A Well-defined and â€œCompleteâ€•Al-Activator for Molecular Olefin Polymerization Catalysts. ACS Catalysis, 2021, 11, 4464-4475.	11.2	26
59	Syndiotactic Poly(propylene) from [Me2Si(3,6-di-tert-butyl-9-fluorenyl)(N-tert-butyl)]TiCl2â€“Based Catalysts: Chain-End or Enantiotopic-Sites Stereocontrol?. Macromolecular Chemistry and Physics, 2003, 204, 1269-1274.	2.2	25
60	Living Ziegler-Natta Polymerizations: True or False?. Macromolecular Symposia, 2005, 226, 1-16.	0.7	25
61	On the Nature of the Lewis Acidic Sites in â€œTMAâ€Freeâ€•Phenolâ€Modified Methylaluminoxane. European Journal of Inorganic Chemistry, 2020, 2020, 1088-1095.	2.0	25
62	Zieglerâ€“Natta Catalysts: Regioselectivity and â€œHydrogen Responseâ€•. ACS Catalysis, 2020, 10, 644-651.	11.2	23
63	Alk-1-ene Polymerization in the Presence of a Monocyclopentadienyl Zirconium(IV) Acetamidinate Catalyst: Microstructural and Mechanistic Insights. Macromolecular Rapid Communications, 2007, 28, 1128-1134.	3.9	22
64	Yield behavior of random copolymers of isotactic polypropylene. Polymer, 2017, 129, 235-246.	3.8	21
65	Relationships among lamellar morphology parameters, structure and thermal behavior of isotactic propene-pentene copolymers: The role of incorporation of comonomeric units in the crystals. European Polymer Journal, 2018, 103, 251-259.	5.4	21
66	Internal Donors in Zieglerâ€“Natta Systems: is Reduction by AlR₃ a Requirement for Donor Cleanâ€Up?. ChemCatChem, 2018, 10, 984-988.	3.7	21
67	Identification and Count of the Active Sites in Olefin Polymerization Catalysis by Oxygen Quench. Macromolecular Chemistry and Physics, 2014, 215, 1728-1734.	2.2	20
68	Olefin polymerisation catalysts: when perfection is not enough. Dalton Transactions, 2015, 44, 12304-12311.	3.3	20
69	On the limits of tuning comonomer affinity of â€˜Spaleck-typeâ€™ <i>ansa</i>-zirconocenes in ethene/1-hexene copolymerization: a high-throughput experimentation/QSAR approach. Dalton Transactions, 2020, 49, 10162-10172.	3.3	19
70	High Throughput Experimentation Protocol for Quantitative Measurements of Regioselectivity in Zieglerâ€“Natta Polypropylene Catalysis. Industrial & Engineering Chemistry Research, 2019, 58, 14729-14735.	3.7	18
71	<i>C</i>₁-Symmetric Si-bridged (2-indenyl)(1-indenyl) <i>ansa</i>-metallocenes as efficient ethene/1-hexene copolymerization catalysts. Dalton Transactions, 2020, 49, 3015-3025.	3.3	17
72	In-Depth Analysis of the Nonuniform Chain Microstructure of Multiblock Copolymers from Chain-Shuttling Polymerization. Macromolecules, 2021, 54, 10891-10902.	4.8	17

#	Article	IF	Citations
73	Catalyst Mileage in Olefin Polymerization: The Peculiar Role of Toluene. Organometallics, 2018, 37, 2872-2879.	2.3	15
74	Alkynyl Ether Labeling: A Selective and Efficient Approach to Count Active Sites of Olefin Polymerization Catalysts. ACS Catalysis, 2019, 9, 3098-3103.	11.2	15
75	Structureâ€Activity Relationships for Bis(phenolateâ€ether) Zr/Hf Propene Polymerization Catalysts. European Journal of Inorganic Chemistry, 2020, 2020, 541-550.	2.0	14
76	Toluene and Î±-Olefins as Radical Scavengers: Direct NMR Evidence for Homolytic Chain Transfer Mechanism Leading to Benzyl and â€œDormantâ€•Titanium Allyl Complexes. Organometallics, 2018, 37, 4189-4194.	2.3	13
77	Transmission electron microscopy analysis of multiblock ethylene/1-octene copolymers. Polymer, 2020, 193, 122347.	3.8	12
78	Role of Solvent Coordination on the Structure and Dynamics of <i>ansa</i>-Zirconocenium Ion Pairs in Aromatic Hydrocarbons. Organometallics, 2022, 41, 547-560.	2.3	11
79	Extending the High-Throughput Experimentation (HTE) Approach to Catalytic Olefin Polymerizations: From Catalysts to Materials. Macromolecules, 2022, 55, 5017-5026.	4.8	11
80	â€œChain-End-Controlled Isotacticâ€•and â€œStereoblock-Isotacticâ€•Polypropylene: Where Is the Difference?. Israel Journal of Chemistry, 2002, 42, 295-299.	2.3	9
81	Separating Electronic from Steric Effects in Ethene/Î±-Olefin Copolymerization: A Case Study on Octahedral [ONNO] Zr-Catalysts. Processes, 2019, 7, 384.	2.8	9
82	Hafnium vs. Zirconium, the Perpetual Battle for Supremacy in Catalytic Olefin Polymerization: A Simple Matter of Electrophilicity?. Polymers, 2021, 13, 2621.	4.5	9
83	Selection of Low-Dimensional 3-D Geometric Descriptors for Accurate Enantioselectivity Prediction. ACS Catalysis, 2022, 12, 6934-6945.	11.2	9
84	Thermal Fractionation of Ethylene/1-Octene Multiblock Copolymers from Chain Shuttling Polymerization. Macromolecules, 2022, 55, 5656-5668.	4.8	9
85	Monitoring the Kinetics of Internal Donor Clean-up from Zieglerâ€“Natta Catalytic Surfaces: An Integrated Experimental and Computational Study. Journal of Physical Chemistry C, 2020, 124, 14245-14252.	3.1	8
86	Chain Transfer to Solvent and Monomer in Early Transition Metal Catalyzed Olefin Polymerization: Mechanisms and Implications for Catalysis. Catalysts, 2021, 11, 215.	3.5	8
87	Of Poisons and Antidotes in Polypropylene Catalysis. Angewandte Chemie, 2016, 128, 8732-8736.	2.0	6
88	Regioirregular Monomeric Units in Zieglerâ€“Natta Polypropylene: A Sensitive Probe of the Catalytic Sites. Macromolecules, 2020, 53, 3789-3795.	4.8	5
89	Polyolefin chain shuttling at ansa-metallocene catalysts: legend and reality. European Polymer Journal, 2021, 150, 110396.	5.4	5
90	A Highâ€Throughput Approach to Repurposing Olefin Polymerization Catalysts for Polymer Upcycling. Angewandte Chemie - International Edition, 2022, 61, .	13.8	5

#	Article	IF	Citations
91	From Mechanistic Investigation to Quantitative Prediction. , 2019, , 287-326.		4
92	New insight into propene polymerization promoted by heterogeneous Ziegler-Natta catalysts. , 1999, , 76-88.		3
93	Assignment of Regioirregular Sequences in the 13C NMR Spectrum of Syndiotactic Polypropylene. Polymers, 2018, 10, 863.	4.5	2
94	Synthesis and olefin polymerization performance of new ansa-zirconocene with OSiO-bridged bis(2-indenyl) ligand. Mendeleev Communications, 2020, 30, 449-452.	1.6	2
95	Microstructural insight on strain-induced crystallization of ethylene/propylene(/diene) random copolymers. Polymer, 2021, 227, 123848.	3.8	2
96	Internal Donors in Ziegler-Natta Systems: is Reduction by AlR3 a Requirement for Donor Clean-Up?. ChemCatChem, 2018, 10, 863-863.	3.7	1
97	Synthesis, structure and properties of copolymers of syndiotactic polypropylene with 1-hexene and 1-octene. Polymer Chemistry, 0, , .	3.9	1
98	A Highâ€Throughput Approach to Repurposing Olefin Polymerization Catalysts for Polymer Upcycling. Angewandte Chemie, 0, , .	2.0	0