Geoffrey W Coates

List of Publications by Citations

243 papers	25,677 citations	86 h-index	155 g-index
261 ext. papers	28,562 ext. citations	11.9 avg, IF	7.45 L-index

#	Paper	IF	Citations
243	Precise control of polyolefin stereochemistry using single-site metal catalysts. *Chemical Reviews*, **2000**, 100, 1223-52	68.1	1048
242	Polymerization of lactide with zinc and magnesium beta-diiminate complexes: stereocontrol and mechanism. *Journal of the American Chemical Society*, **2001**, 123, 3229-38	16.4	1011
241	Discrete metal-based catalysts for the copolymerization of CO2 and epoxides: discovery, reactivity, optimization, and mechanism. *Angewandte Chemie - International Edition*, **2004**, 43, 6618-39	16.4	973
240	Stereochemistry of lactide polymerization with chiral catalysts: new opportunities for stereocontrol using polymer exchange mechanisms. *Journal of the American Chemical Society*, **2002**, 124, 1316-26	16.4	639
239	Suppression of lithium dendrite growth using cross-linked polyethylene/poly(ethylene oxide) electrolytes: a new approach for practical lithium-metal polymer batteries. *Journal of the American Chemical Society*, **2014**, 136, 7395-402	16.4	600
238	Living alkene polymerization: New methods for the precision synthesis of polyolefins. *Progress in Polymer Science*, **2007**, 32, 30-92	29.6	541
237	Catalysts for the living insertion polymerization of alkenes: access to new polyolefin architectures using Ziegler-Natta chemistry. *Angewandte Chemie - International Edition*, **2002**, 41, 2237-57	16.4	534
236	Single-Site Catalysts for Ring-Opening Polymerization: Synthesis of Heterotactic Poly(lactic acid) from rac-Lactide. *Journal of the American Chemical Society*, **1999**, 121, 11583-11584	16.4	522
235	Single-site beta-diiminate zinc catalysts for the alternating copolymerization of CO2 and epoxides: catalyst synthesis and unprecedented polymerization activity. *Journal of the American Chemical Society*, **2001**, 123, 8738-49	16.4	471
234	Cobalt catalysts for the alternating copolymerization of propylene oxide and carbon dioxide: combining high activity and selectivity. *Journal of the American Chemical Society*, **2005**, 127, 10869-78	16.4	434
233	Stereoselective Ring-Opening Polymerization of meso-Lactide: Synthesis of Syndiotactic Poly(lactic acid). *Journal of the American Chemical Society*, **1999**, 121, 4072-4073	16.4	434
232	Phenyl–Perfluorophenyl Stacking Interactions: Topochemical [2+2] Photodimerization and Photopolymerization of Olefinic Compounds. *Journal of the American Chemical Society*, **1998**, 120, 3641-3649	16.4	411
231	Catalytic Reactions Involving C1 Feedstocks: New High-Activity Zn(II)-Based Catalysts for the Alternating Copolymerization of Carbon Dioxide and Epoxides. *Journal of the American Chemical Society*, **1998**, 120, 11018-11019	16.4	399
230	Mechanism of the alternating copolymerization of epoxides and CO2 using beta-diiminate zinc catalysts: evidence for a bimetallic epoxide enchainment. *Journal of the American Chemical Society*, **2003**, 125, 11911-24	16.4	397
229	Tunable high performance cross-linked alkaline anion exchange membranes for fuel cell applications. *Journal of the American Chemical Society*, **2010**, 132, 3400-4	16.4	392
228	Phosphonium-functionalized polyethylene: a new class of base-stable alkaline anion exchange membranes. *Journal of the American Chemical Society*, **2012**, 134, 18161-4	16.4	364
227	Phenyl–Perfluorophenyl Stacking Interactions: A New Strategy for Supermolecule Construction. *Angewandte Chemie International Edition in English*, **1997**, 36, 248-251		364

226	A new catalyst for highly syndiospecific living olefin polymerization: homopolymers and block copolymers from ethylene and propylene. *Journal of the American Chemical Society*, **2001**, 123, 5134-5	16.4	361
225	Alternating copolymerization of limonene oxide and carbon dioxide. *Journal of the American Chemical Society*, **2004**, 126, 11404-5	16.4	346
224	Single-site beta-diiminate zinc catalysts for the ring-opening polymerization of beta-butyrolactone and beta-valerolactone to poly(3-hydroxyalkanoates). *Journal of the American Chemical Society*, **2002**, 124, 15239-48	16.4	340
223	Cobalt-based complexes for the copolymerization of propylene oxide and CO2: active and selective catalysts for polycarbonate synthesis. *Angewandte Chemie - International Edition*, **2003**, 42, 5484-7	16.4	331
222	Agostic Interactions and Olefin Insertion in Metallocene Polymerization Catalysts. *Accounts of Chemical Research*, **1996**, 29, 85-93	24.3	292
221	Stereoselective epoxide polymerization and copolymerization. *Chemical Reviews*, **2014**, 114, 8129-52	68.1	276
220	Electronic and steric effects on catalysts for CO2/epoxide polymerization: subtle modifications resulting in superior activities. *Angewandte Chemie - International Edition*, **2002**, 41, 2599-602	16.4	267
219	High-activity, single-site catalysts for the alternating copolymerization of CO2 and propylene oxide. *Journal of the American Chemical Society*, **2002**, 124, 14284-5	16.4	267
218	Ring-Opening Copolymerization of Epoxides and Cyclic Anhydrides with Discrete Metal Complexes: Structure-Property Relationships. *Chemical Reviews*, **2016**, 116, 15167-15197	68.1	265
217	Imidazolium Cations with Exceptional Alkaline Stability: A Systematic Study of Structure-Stability Relationships. *Journal of the American Chemical Society*, **2015**, 137, 8730-7	16.4	261
216	Combining polyethylene and polypropylene: Enhanced performance with PE/PP multiblock polymers. *Science*, **2017**, 355, 814-816	33.3	251
215	Chemical recycling to monomer for an ideal, circular polymer economy. *Nature Reviews Materials*, **2020**, 5, 501-516	73.3	235
214	Enantioselective cyclopolymerization of 1,5-hexadiene catalyzed by chiral zirconocenes: a novel strategy for the synthesis of optically active polymers with chirality in the main chain. *Journal of the American Chemical Society*, **1993**, 115, 91-98	16.4	219
213	Stereoselective ring-opening polymerization of rac-lactide with a single-site, racemic aluminum alkoxide catalyst: Synthesis of stereoblock poly(lactic acid). *Journal of Polymer Science Part A*, **2000**, 38, 4686-4692	2.5	218
212	Alternating copolymerization of epoxides and cyclic anhydrides: an improved route to aliphatic polyesters. *Journal of the American Chemical Society*, **2007**, 129, 11330-1	16.4	210
211	Polymerization of enantiopure monomers using syndiospecific catalysts: a new approach to sequence control in polymer synthesis. *Journal of the American Chemical Society*, **2009**, 131, 16042-4	16.4	205
210	A ring-opening metathesis polymerization route to alkaline anion exchange membranes: development of hydroxide-conducting thin films from an ammonium-functionalized monomer. *Journal of the American Chemical Society*, **2009**, 131, 12888-9	16.4	193
209	A C2-symmetric, living alpha-diimine Ni(II) catalyst: regioblock copolymers from propylene. *Journal of the American Chemical Society*, **2005**, 127, 13770-1	16.4	193

208	Enantioselective cyclopolymerization: optically active poly(methylene-1,3-cyclopentane). *Journal of the American Chemical Society*, **1991**, 113, 6270-6271	16.4	193
207	Ring-opening copolymerization of maleic anhydride with epoxides: a chain-growth approach to unsaturated polyesters. *Journal of the American Chemical Society*, **2011**, 133, 10724-7	16.4	190
206	A scanning tip electrospinning source for deposition of oriented nanofibres. *Nanotechnology*, **2003**, 14, 1124-1129	3.4	190
205	Influence of Perfluoroarene-Arene Interactions on the Phase Behavior of Liquid Crystalline and Polymeric Materials. *Angewandte Chemie - International Edition*, **1999**, 38, 2741-2745	16.4	190
204	Homogeneous Ziegler-Natta polymerization of functionalized monomers catalyzed by cationic Group IV metallocenes. *Journal of the American Chemical Society*, **1992**, 114, 9679-9680	16.4	190
203	Polymerization catalysis at the millennium: frontiers in stereoselective, metal-catalyzed polymerization. *Dalton Transactions RSC*, **2002**, 467-475		186
202	Mechanism of propylene insertion using bis(phenoxyimine)-based titanium catalysts: an unusual secondary insertion of propylene in a group IV catalyst system. *Journal of the American Chemical Society*, **2002**, 124, 3614-21	16.4	174
201	Enantiomerically-enriched organic reagents via polymer synthesis: enantioselective copolymerization of cycloalkene oxides and CO2 using homogeneous, zinc-based catalysts. *Chemical Communications*, **2000**, 2007-2008	5.8	164
200	Semi-Crystalline Polar Polyethylene: Ester-Functionalized Linear Polyolefins Enabled by a Functional-Group-Tolerant, Cationic Nickel Catalyst. *Angewandte Chemie - International Edition*, **2016**, 55, 7106-10	16.4	159
199	Pre-rate-determining selectivity in the terpolymerization of epoxides, cyclic anhydrides, and CO2: a one-step route to diblock copolymers. *Angewandte Chemie - International Edition*, **2008**, 47, 6041-4	16.4	159
198	Formation of nanoparticles by intramolecular cross-linking: following the reaction progress of single polymer chains by atomic force microscopy. *Journal of the American Chemical Society*, **2007**, 129, 11350-1	16.4	156
197	Synthesis of beta-lactones: a highly active and selective catalyst for epoxide carbonylation. *Journal of the American Chemical Society*, **2002**, 124, 1174-5	16.4	152
196	Diskrete Metallkatalysatoren zur Copolymerisation von CO2 mit Epoxiden: Entdeckung, Reaktivität, Optimierung, Mechanismus. *Angewandte Chemie*, **2004**, 116, 6784-6806	3.6	151
195	Enantioselective polymerization of epoxides: a highly active and selective catalyst for the preparation of stereoregular polyethers and enantiopure epoxides. *Journal of the American Chemical Society*, **2008**, 130, 17658-9	16.4	145
194	Living polymerization of alpha-olefins with an alpha-diimine Ni(II) catalyst: formation of well-defined ethylene-propylene copolymers through controlled chain-walking. *Journal of the American Chemical Society*, **2006**, 128, 4186-7	16.4	145
193	New phenoxyketimine titanium complexes: combining isotacticity and living behavior in propylene polymerization. *Journal of the American Chemical Society*, **2004**, 126, 16326-7	16.4	143
192	[Lewis acid]+[Co(CO)(4)]- complexes: a versatile class of catalysts for carbonylative ring expansion of epoxides and aziridines. *Angewandte Chemie - International Edition*, **2002**, 41, 2781-4	16.4	138
191	Effect of Metal on the Stereospecificity of 2-Arylindene Catalysts for Elastomeric Polypropylene. *Journal of the American Chemical Society*, **1997**, 119, 11174-11182	16.4	126

190	Alternating copolymerization of propylene oxide and carbon dioxide with highly efficient and selective (salen)Co(III) catalysts: Effect of ligand and cocatalyst variation. *Journal of Polymer Science Part A*, **2006**, 44, 5182-5191	2.5	124
189	Polymerization of Ureidopyrimidinone-Functionalized Olefins by Using Late-Transition Metal Ziegler-Natta Catalysts: Synthesis of Thermoplastic Elastomeric Polyolefins. *Angewandte Chemie - International Edition*, **2001**, 40, 2153-2156	16.4	121
188	Insertion/isomerization polymerization of 1,5-hexadiene: synthesis of functional propylene copolymers and block copolymers. *Journal of the American Chemical Society*, **2002**, 124, 11578-9	16.4	121
187	Copolymerization of cyclohexene oxide and carbon dioxide using (salen)Co(III) complexes: synthesis and characterization of syndiotactic poly(cyclohexene carbonate). *Dalton Transactions*, **2006**, 237-49	4.3	120
186	Systematic Computational and Experimental Investigation of Lithium-Ion Transport Mechanisms in Polyester-Based Polymer Electrolytes. *ACS Central Science*, **2015**, 1, 198-205	16.8	119
185	Chromium(III) octaethylporphyrinato tetracarbonylcobaltate: a highly active, selective, and versatile catalyst for epoxide carbonylation. *Journal of the American Chemical Society*, **2005**, 127, 11426-35	16.4	119
184	Alkaline-stable anion exchange membranes: A review of synthetic approaches. *Progress in Polymer Science*, **2020**, 100, 101177	29.6	119
183	Secondary alkene insertion and precision chain-walking: a new route to semicrystalline "polyethylene" from α-olefins by combining two rare catalytic events. *Journal of the American Chemical Society*, **2014**, 136, 7213-6	16.4	118
182	Poly(propylene succinate): a new polymer stereocomplex. *Journal of the American Chemical Society*, **2014**, 136, 15897-900	16.4	118
181	Stereocomplexed poly(limonene carbonate): a unique example of the cocrystallization of amorphous enantiomeric polymers. *Angewandte Chemie - International Edition*, **2015**, 54, 1215-8	16.4	117
180	Designing Polymer Electrolytes for Safe and High Capacity Rechargeable Lithium Batteries. *Accounts of Chemical Research*, **2017**, 50, 590-593	24.3	116
179	New facets of an old ligand: titanium and zirconium complexes of phenylenediamine bis(phenolate) in lactide polymerisation catalysis. *Chemical Communications*, **2009**, 6804-6	5.8	111
178	Alternating copolymerization of propylene oxide with biorenewable terpene-based cyclic anhydrides: a sustainable route to aliphatic polyesters with high glass transition temperatures. *Angewandte Chemie - International Edition*, **2015**, 54, 2665-8	16.4	109
177	Fluorinated bis(phenoxyketimine)titanium complexes for the living, isoselective polymerization of propylene: multiblock isotactic polypropylene copolymers via sequential monomer addition. *Journal of the American Chemical Society*, **2008**, 130, 4968-77	16.4	109
176	Solvent Processable Tetraalkylammonium-Functionalized Polyethylene for Use as an Alkaline Anion Exchange Membrane. *Macromolecules*, **2010**, 43, 7147-7150	5.5	108
175	Enantioselective epoxide polymerization using a bimetallic cobalt catalyst. *Journal of the American Chemical Society*, **2010**, 132, 16520-5	16.4	107
174	Semicrystalline thermoplastic elastomeric polyolefins: Advances through catalyst development and macromolecular design. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 15327-32	11.5	107
173	Titanium Catalysts with Ancillary Phenoxyketimine Ligands for Living Ethylene Polymerization. *Organometallics*, **2003**, 22, 2542-2544	3.8	104

172	Synthesis and Characterization of Alternating and Multiblock Copolymers from Ethylene and Cyclopentene. *Macromolecules*, **2002**, 35, 9640-9647	5.5	102
171	A highly active, isospecific cobalt catalyst for propylene oxide polymerization. *Journal of the American Chemical Society*, **2005**, 127, 11566-7	16.4	101
170	Alternating Copolymerization of Propylene Oxide and Cyclohexene Oxide with Tricyclic Anhydrides: Access to Partially Renewable Aliphatic Polyesters with High Glass Transition Temperatures. *Macromolecules*, **2016**, 49, 6394-6400	5.5	99
169	Tailored Living Block Copolymerization: Multiblock Poly(cyclohexene carbonate)s with Sequence Control. *Macromolecules*, **2011**, 44, 1110-1113	5.5	96
168	Copolymerization of CO2 and meso epoxides using enantioselective diiminate catalysts: a route to highly isotactic polycarbonates. *Chemical Science*, **2014**, 5, 4004	9.4	95
167	Tetraarylborate polymer networks as single-ion conducting solid electrolytes. *Chemical Science*, **2015**, 6, 5499-5505	9.4	93
166	C2-Symmetric Ni(II) Diimines Featuring Cumyl-Derived Ligands: Synthesis of Improved Elastomeric Regioblock Polypropylenes. *Macromolecules*, **2008**, 41, 9548-9555	5.5	93
165	Electronic Effects of Aluminum Complexes in the Copolymerization of Propylene Oxide with Tricyclic Anhydrides: Access to Well-Defined, Functionalizable Aliphatic Polyesters. *Journal of the American Chemical Society*, **2016**, 138, 2755-61	16.4	92
164	Metal-catalyzed synthesis of alternating copolymers. *Macromolecular Rapid Communications*, **2011**, 32, 169-85	4.8	92
163	Development of Highly Active and Regioselective Catalysts for the Copolymerization of Epoxides with Cyclic Anhydrides: An Unanticipated Effect of Electronic Variation. *Journal of the American Chemical Society*, **2016**, 138, 7107-13	16.4	91
162	Nanofluidic channels with elliptical cross sections formed using a nonlithographic process. *Applied Physics Letters*, **2003**, 83, 4836-4838	3.4	90
161	Catalytic double carbonylation of epoxides to succinic anhydrides: catalyst discovery, reaction scope, and mechanism. *Journal of the American Chemical Society*, **2007**, 129, 4948-60	16.4	89
160	Carbonylation of heterocycles by homogeneous catalysts. *Chemical Communications*, **2007**, 657-74	5.8	88
159	Practical beta-lactone synthesis: epoxide carbonylation at 1 atm. *Organic Letters*, **2006**, 8, 3709-12	6.2	88
158	Polymerization of Olefins with Pyridylamidohafnium Catalysts: Living Behavior and Unexpected Isoselectivity from a Cs-Symmetric Catalyst Precursor. *Macromolecules*, **2007**, 40, 3510-3513	5.5	87
157	Controlled Chain Walking for the Synthesis of Thermoplastic Polyolefin Elastomers: Synthesis, Structure, and Properties. *Macromolecules*, **2016**, 49, 6743-6751	5.5	85
156	Gel permeation chromatography as a combinatorial screening method: identification of highly active heteroligated phenoxyimine polymerization catalysts. *Journal of the American Chemical Society*, **2004**, 126, 10798-9	16.4	84
155	Mechanistic Insights into the Alternating Copolymerization of Epoxides and Cyclic Anhydrides Using a (Salph)AlCl and Iminium Salt Catalytic System. *Journal of the American Chemical Society*, **2017**, 139, 15222-15231	16.4	83

154	Structure and reactivity of mono- and dinuclear diiminate zinc alkyl complexes. *Journal of Organometallic Chemistry*, **2003**, 683, 137-148	2.3	79
153	Optically Transparent and High Molecular Weight Polyolefin Block Copolymers toward Self-Assembled Photonic Band Gap Materials. *Macromolecules*, **2006**, 39, 1913-1919	5.5	78
152	Two-dimensional double metal cyanide complexes: highly active catalysts for the homopolymerization of propylene oxide and copolymerization of propylene oxide and carbon dioxide. *Dalton Transactions*, **2006**, 5390-5	4.3	78
151	Catalytic upcycling of high-density polyethylene via a processive mechanism. *Nature Catalysis*, **2020**, 3, 893-901	36.5	78
150	The mechanism of epoxide carbonylation by [Lewis Acid]+[Co(CO)4]- catalysts. *Journal of the American Chemical Society*, **2006**, 128, 10125-33	16.4	77
149	Enantioselective polymerization of epoxides using biaryl-linked bimetallic cobalt catalysts: a mechanistic study. *Journal of the American Chemical Society*, **2013**, 135, 18901-11	16.4	76
148	Highly conductive and chemically stable alkaline anion exchange membranes via ROMP of -cyclooctene derivatives. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 9729-9734	11.5	71
147	Chiral anilines: development of C2-symmetric, late-transition metal catalysts for isoselective 2-butene polymerization. *Chemical Communications*, **2003**, 2566-7	5.8	68
146	Synthesis of Alkaline Anion Exchange Membranes with Chemically Stable Imidazolium Cations: Unexpected Cross-Linked Macrocycles from Ring-Fused ROMP Monomers. *Macromolecules*, **2018**, 51, 3212-3218	5.5	67
145	Synthesis of Allyl-Terminated Syndiotactic Polypropylene:□Macromonomers for the Synthesis of Branched Polyolefins. *Macromolecules*, **2005**, 38, 6259-6268	5.5	67
144	Semi-Crystalline Polar Polyethylene: Ester-Functionalized Linear Polyolefins Enabled by a Functional-Group-Tolerant, Cationic Nickel Catalyst. *Angewandte Chemie*, **2016**, 128, 7222-7226	3.6	66
143	Sustainable Polyester Elastomers from Lactones: Synthesis, Properties, and Enzymatic Hydrolyzability. *Journal of the American Chemical Society*, **2018**, 140, 963-973	16.4	64
142	Morphology and Thermodynamic Behavior of Syndiotactic Polypropylene□Poly(ethylene-co-propylene) Block Polymers Prepared by Living Olefin Polymerization. *Macromolecules*, **2005**, 38, 851-860	5.5	63
141	A readily synthesized and highly active epoxide carbonylation catalyst based on a chromium porphyrin framework: expanding the range of available beta-lactones. *Organic Letters*, **2004**, 6, 373-6	6.2	63
140	Multicomponent Nanomaterials with Complex Networked Architectures from Orthogonal Degradation and Binary Metal Backfilling in ABC Triblock Terpolymers. *Journal of the American Chemical Society*, **2015**, 137, 6026-33	16.4	61
139	Katalysatoren f□ die lebende Insertionspolymerisation von Alkenen: mit Ziegler-Natta-Chemie zu neuartigen Polyolefin-Architekturen. *Angewandte Chemie*, **2002**, 114, 2340-2361	3.6	60
138	Optimizing Ion Transport in Polyether-Based Electrolytes for Lithium Batteries. *Macromolecules*, **2018**, 51, 2847-2858	5.5	59
137	Investigating polypropylene-poly(ethylene oxide)-polypropylene triblock copolymers as solid polymer electrolytes for lithium batteries. *Solid State Ionics*, **2014**, 263, 87-94	3.3	58

136	Structure-property study of cross-linked hydrocarbon/poly(ethylene oxide) electrolytes with superior conductivity and dendrite resistance. *Chemical Science*, **2016**, 7, 6832-6838	9.4	58
135	Compatibilization of Isotactic Polypropylene (iPP) and High-Density Polyethylene (HDPE) with iPP–PE Multiblock Copolymers. *Macromolecules*, **2018**, 51, 8585-8596	5.5	57
134	Stereoselective ring-opening polymerization ofrac-lactide with a single-site, racemic aluminum alkoxide catalyst: Synthesis of stereoblock poly(lactic acid). *Journal of Polymer Science Part A*, **2000**, 38, 4686-4692	2.5	57
133	Acid-catalyzed ortho-alkylation of anilines with styrenes: an improved route to chiral anilines with bulky substituents. *Organic Letters*, **2005**, 7, 5135-7	6.2	56
132	Quantitative Ring-Closing Metathesis of Polyolefins. *Journal of the American Chemical Society*, **1996**, 118, 229-230	16.4	56
131	Mechanism-Inspired Design of Bifunctional Catalysts for the Alternating Ring-Opening Copolymerization of Epoxides and Cyclic Anhydrides. *Journal of the American Chemical Society*, **2019**, 141, 12760-12769	16.4	55
130	A new multicomponent reaction catalyzed by a [Lewis Acid](+)[Co(CO)(4)](-) catalyst: stereospecific synthesis of 1,3-oxazinane-2,4-diones from epoxides, isocyanates, and CO. *Journal of the American Chemical Society*, **2007**, 129, 8156-62	16.4	55
129	Carbonylative polymerization of propylene oxide: a multicatalytic approach to the synthesis of poly(3-hydroxybutyrate). *Journal of the American Chemical Society*, **2010**, 132, 11412-3	16.4	53
128	Mechanoactivation of Spiropyran Covalently Linked PMMA: Effect of Temperature, Strain Rate, and Deformation Mode. *Macromolecules*, **2015**, 48, 1335-1342	5.5	52
127	Controlling the Shape of Molecular Weight Distributions in Coordination Polymerization and Its Impact on Physical Properties. *Journal of the American Chemical Society*, **2020**, 142, 1443-1448	16.4	51
126	Effect of monomer structure on ionic conductivity in a systematic set of polyester electrolytes. *Solid State Ionics*, **2016**, 289, 118-124	3.3	50
125	Electronic and Steric Effects on Catalysts for CO2/Epoxide Polymerization: Subtle Modifications Resulting in Superior Activities. *Angewandte Chemie*, **2002**, 114, 2711-2714	3.6	50
124	Chiral polymers via cyclopolymerization. *Journal of Molecular Catalysis*, **1992**, 76, 189-194		48
123	Universal Relationship between Conductivity and Solvation-Site Connectivity in Ether-Based Polymer Electrolytes. *Macromolecules*, **2016**, 49, 5244-5255	5.5	47
122	Total synthesis of tetrahydrolipstatin and stereoisomers via a highly regio- and diastereoselective carbonylation of epoxyhomoallylic alcohols. *Journal of the American Chemical Society*, **2014**, 136, 10814-20	16.4	46
121	Synthesis and Polymerization of Norbornenyl-Terminated Multiblock Poly(cyclohexene carbonate)s: A Consecutive Ring-Opening Polymerization Route to Multisegmented Graft Polycarbonates. *Macromolecules*, **2012**, 45, 7878-7883	5.5	46
120	Comprehensive Understanding of Polyester Stereocomplexation. *Journal of the American Chemical Society*, **2019**, 141, 14780-14787	16.4	45
119	Regioselective carbonylation of trans-disubstituted epoxides to β-lactones: a viable entry into syn-aldol-type products. *Journal of the American Chemical Society*, **2013**, 135, 10930-3	16.4	45

118	Isospecific, Chain Shuttling Polymerization of Propylene Oxide Using a Bimetallic Chromium Catalyst: A New Route to Semicrystalline Polyols. *Journal of the American Chemical Society*, **2017**, 139, 11048-11054	16.4	44
117	Isospecific polymerization of racemic epoxides: a catalyst system for the synthesis of highly isotactic polyethers. *Chemical Communications*, **2010**, 46, 2935-7	5.8	44
116	A SANS Study of the Self-Assembly in Solution of Syndiotactic Polypropylene Homopolymers, Syndiotactic Polypropylene-block-poly(ethylene-co-propylene) Diblock Copolymers, and an Alternating Atactic□Isotactic Multisegment Polypropylene. *Macromolecules*, **2004**, 37, 6962-6971	5.5	44
115	Cobalt-Based Complexes for the Copolymerization of Propylene Oxide and CO2: Active and Selective Catalysts for Polycarbonate Synthesis. *Angewandte Chemie*, **2003**, 115, 5642-5645	3.6	44
114	Syndiospecific Living Catalysts for Propylene Polymerization: Effect of Fluorination on Activity, Stereoselectivity, and Termination. *Israel Journal of Chemistry*, **2002**, 42, 301-306	3.4	44
113	Phenothiazine-Based Polymer Cathode Materials with Ultrahigh Power Densities for Lithium Ion Batteries. *ACS Applied Energy Materials*, **2018**, 1, 3560-3564	6.1	43
112	Understanding the Insertion Pathways and Chain Walking Mechanisms of □Diimine Nickel Catalysts for □Olefin Polymerization: A 13C NMR Spectroscopic Investigation. *Macromolecules*, **2017**, 50, 7010-7027	5.5	43
111	Single polymer growth dynamics. *Science*, **2017**, 358, 352-355	33.3	42
110	On the mechanism of isospecific epoxide polymerization by salen cobalt(III) complexes: evidence for solid-state catalysis. *Dalton Transactions*, **2009**, 8828-30	4.3	41
109	Nickel Catalysts for the Dehydrative Decarbonylation of Carboxylic Acids to Alkenes. *Organometallics*, **2016**, 35, 2391-2400	3.8	41
108	Reversible-deactivation anionic alternating ring-opening copolymerization of epoxides and cyclic anhydrides: access to orthogonally functionalizable multiblock aliphatic polyesters. *Chemical Science*, **2018**, 9, 134-142	9.4	41
107	Chemically recyclable thermoplastics from reversible-deactivation polymerization of cyclic acetals. *Science*, **2021**, 373, 783-789	33.3	41
106	Crystallization of Alternating Limonene Oxide/Carbon Dioxide Copolymers: Determination of the Crystal Structure of Stereocomplex Poly(limonene carbonate). *Macromolecules*, **2015**, 48, 2534-2550	5.5	40
105	Allyl-Terminated Polypropylene Macromonomers: A Route to Polyolefin Elastomers with Excellent Elastic Behavior. *Macromolecules*, **2015**, 48, 7489-7494	5.5	40
104	Synthesis of a new olefin polymerization catalyst supported by an sp3-C donor via insertion of a ligand-appended alkene into the Hf-C bond of a neutral pyridylamidohafnium trimethyl complex. *Chemical Communications*, **2008**, 6137-9	5.8	39
103	Cross metathesis functionalization of polyolefins. *Chemical Communications*, **2004**, 422-3	5.8	39
102	Catalytic carbonylation of beta-lactones to succinic anhydrides. *Journal of the American Chemical Society*, **2004**, 126, 6842-3	16.4	39
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99	Synthesis of Semicrystalline Polyolefin Materials: Precision Methyl Branching via Stereoretentive Chain Walking. *Journal of the American Chemical Society*, **2018**, 140, 6208-6211	16.4	38
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