## Zhi-Qiang Fan

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1708427/publications.pdf

Version: 2024-02-01

222 4,956 papers citations

94381 37 h-index 55 g-index

224 all docs 224 docs citations 224 times ranked 3180 citing authors

#	Article	IF	CITATIONS
1	Micellar Morphologies of Poly(ε-caprolactone)- <i>b</i> -vi>b-vi>b-voly(ethylene oxide) Block Copolymers in Water with a Crystalline Core. Macromolecules, 2007, 40, 7633-7637.	2.2	222
2	Structure and properties of polypropylene/poly(ethylene-co-propylene) in-situ blends synthesized by spherical Ziegler–Natta catalyst. Polymer, 2001, 42, 5559-5566.	1.8	168
3	Sonochemical Transformation of Epoxy–Amine Thermoset into Soluble and Reusable Polymers. Macromolecules, 2015, 48, 316-322.	2.2	113
4	Two Growth Modes of Semicrystalline Cylindrical Poly(Îμ-caprolactone)- <i>b</i> -poly(ethylene oxide) Micelles. Macromolecules, 2012, 45, 9768-9778.	2.2	111
5	Regulation of Micellar Morphology of PCLâ€∢i>b∢/i>â€PEO Block Copolymers by Crystallization Temperature. Macromolecular Rapid Communications, 2008, 29, 467-471.	2.0	98
6	Toward a Unified Model Explaining Heterogeneous Ziegler–Natta Catalysis. ACS Catalysis, 2015, 5, 5431-5435.	5 <b>.</b> 5	96
7	Regioselective and Alternating Copolymerization of Carbonyl Sulfide with Racemic Propylene Oxide. Macromolecules, 2013, 46, 5899-5904.	2.2	80
8	Inorganicâ€Saltâ€Induced Morphological Transformation of Semicrystalline Micelles of PCL <i>â€bâ€</i> PEO Block Copolymer in Aqueous Solution. Macromolecular Chemistry and Physics, 2010, 211, 1909-1916.	1.1	71
9	Mechanism of Propylene Polymerization with MgCl <sub>2</sub> -Supported Ziegler–Natta Catalysts Based on Counting of Active Centers: The Role of External Electron Donor. Journal of Physical Chemistry C, 2013, 117, 15174-15182.	1.5	69
10	Hydrogen-Bonding-Mediated Fragmentation and Reversible Self-assembly of Crystalline Micelles of Block Copolymer. Macromolecules, 2016, 49, 367-372.	2.2	68
11	Alternating copolymerization of carbon dioxide and cyclohexene oxide catalyzed by silicon dioxide/ZnCo <sup>III</sup> double metal cyanide complex hybrid catalysts with a nanolamellar structure. Journal of Polymer Science Part A, 2008, 46, 3128-3139.	2.5	67
12	Stabilization of water-in-octane nano-emulsion. Part I: Stabilized by mixed surfactant systems. Fuel, 2010, 89, 2838-2843.	3.4	65
13	Crystallization-Driven Co-Assembly of Micrometric Polymer Hybrid Single Crystals and Nanometric Crystalline Micelles. Macromolecules, 2017, 50, 2006-2015.	2.2	64
14	Regulation of Crystallization Kinetics, Morphology, and Mechanical Properties of Olefinic Blocky Copolymers. Macromolecules, 2014, 47, 333-346.	2.2	62
15	Efficient Activators for an Iron Catalyst in the Polymerization of Ethylene. Macromolecular Rapid Communications, 2002, 23, 639.	2.0	61
16	Counting the number of active centers in MgCl2-supported Ziegler–Natta catalysts by quenching with 2-thiophenecarbonyl chloride and study on the initial kinetics of propylene polymerization. Catalysis Communications, 2013, 30, 66-69.	1.6	58
17	Synthesis of Multiblock Polymer Containing Narrow Polydispersity Blocks. Macromolecular Rapid Communications, 2006, 27, 57-62.	2.0	57
18	Styrene Polymerization in the Presence of Cyclic Trithiocarbonate. Macromolecules, 2005, 38, 2691-2695.	2.2	56

#	Article	IF	CITATIONS
19	Well-defined high refractive index poly(monothiocarbonate) with tunable Abbe's numbers and glass-transition temperatures via terpolymerization. Polymer Chemistry, 2015, 6, 4978-4983.	1.9	56
20	Crystallization-driven one-dimensional self-assembly of polyethylene-b-poly(tert-butylacrylate) diblock copolymers in DMF: effects of crystallization temperature and the corona-forming block. Soft Matter, 2016, 12, 67-76.	1.2	54
21	Structure and morphology of polypropylene/poly(ethylene-co-propylene) in situ blends synthesized by spherical Ziegler–Natta catalyst. European Polymer Journal, 2003, 39, 795-804.	2.6	53
22	Synthesis and application of binuclear $\hat{l}_{\pm}$ -diimine nickel/palladium catalysts with a conjugated backbone. Dalton Transactions, 2014, 43, 2900-2906.	1.6	53
23	Distribution of active centers on TiCl4/MgCL2 catalyst for olefin polymerization. Journal of Polymer Science Part A, 1996, 34, 3329-3335.	2.5	52
24	Highly efficient one-pot/one-step synthesis of multiblock copolymers from three-component polymerization of carbon dioxide, epoxide and lactone. Chemical Science, 2015, 6, 1530-1536.	3.7	51
25	Mechanistic insight into initiation and chain transfer reaction of CO <sub>2</sub> /cyclohexene oxide copolymerization catalyzed by zinccobalt double metal cyanide complex catalysts. Journal of Polymer Science Part A, 2012, 50, 2924-2934.	2.5	50
26	Poly[ <i>N</i> -isopropylacrylamide- <i>co</i> -3-(trimethoxysilyl)-propylmethacrylate] Coated Aqueous Dispersed Thermosensitive Fe <sub>3</sub> O <sub>4</sub> Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 10090-10096.	1.5	48
27	Use of different alkoxysilanes as external donors in MgCl2-supported Ziegler-Natta catalysts to obtain propene/1-butene copolymers with different microstructure. Macromolecular Chemistry and Physics, 1994, 195, 2805-2816.	1.1	47
28	13C NMR Studies of Ethylene-Propylene Copolymers Prepared with Homogeneous Metallocene-Based Ziegler-Natta Catalysts. Macromolecules, 1995, 28, 3342-3350.	2.2	46
29	Chain structure and mechanical properties of polyethylene/polypropylene/poly(ethylene-co-propylene)in-reactor alloys synthesized with a spherical Ziegler-Natta catalyst by gas-phase polymerization. Journal of Applied Polymer Science, 2005, 97, 640-647.	1.3	45
30	Effect of pH on the Micellar Morphology of Semicrystalline PCLâ€∢i>b⟨/i>â€PEO Block Copolymers in Aqueous Solution. Macromolecular Chemistry and Physics, 2012, 213, 952-964.	1.1	45
31	Copolymerization of propylene with 1-octene catalyzed byrac-Me2Si(2,4,6-Me3-Ind)2ZrCl2/methyl aluminoxane. Journal of Polymer Science Part A, 2000, 38, 4299-4307.	2.5	43
32	Kinetics and mechanism of ethylene polymerization with TiCl4/MgCl2 model catalysts: Effects of titanium content. Journal of Catalysis, 2018, 360, 57-65.	3.1	43
33	Crystallization and coalescence of block copolymer micelles in semicrystalline block copolymer/amorphous homopolymer blends. Polymer, 2005, 46, 1709-1716.	1.8	42
34	Salt-induced microphase separation in poly(l̂µ-caprolactone)-b-poly(ethylene oxide) block copolymer. Polymer, 2013, 54, 3098-3106.	1.8	42
35	Effects of ethylene as comonomer on the active center distribution of 1-hexene polymerization with MgCl2-supported Ziegler–Natta catalysts. Journal of Molecular Catalysis A, 2011, 351, 93-99.	4.8	40
36	Ethylene/1-hexene copolymerization with TiCl4/MgCl2/AlCl3 catalyst in the presence of hydrogen. European Polymer Journal, 2006, 42, 2441-2449.	2.6	39

#	Article	IF	CITATIONS
37	Synthesis of fully alternating polycarbonate with low T <sub>g</sub> from carbon dioxide and bio-based fatty acid. RSC Advances, 2014, 4, 36183-36188.	1.7	39
38	Periodic Switching of Monomer Additions for Controlling the Compositions and Microstructures of Segmented and Random Ethylene-Propylene Copolymers in Polypropylene in-Reactor Alloys. Industrial & Lamp; Engineering Chemistry Research, 2011, 50, 5992-5999.	1.8	37
39	Isothermal crystallization kinetics of multi-walled carbon nanotubes-graft-poly(Îμ-caprolactone) with high grafting degrees. CrystEngComm, 2013, 15, 7824.	1.3	37
40	Synthesis and characterization of poly ( $\hat{l}\mu$ -caprolactone)-b-poly (ethylene glycol) block copolymers prepared by a salicylaldimine-aluminum complex. Journal of Applied Polymer Science, 2007, 105, 771-776.	1.3	36
41	Synthesis of bis(cyclic carbonate) and propylene carbonate via a one-pot coupling reaction of CO2, bisepoxide and propylene oxide. RSC Advances, 2013, 3, 17307.	1.7	35
42	Chain Microstructure, Crystallization, and Morphology of Olefinic Blocky Copolymers. Macromolecular Chemistry and Physics, 2013, 214, 605-616.	1.1	34
43	Mechanistic study on comonomer effect in ethylene/1-hexene copolymerization with TiCl4/MgCl2 model Ziegler-Natta catalysts. Journal of Catalysis, 2019, 369, 324-334.	3.1	34
44	Effects of comonomer on active center distribution of TCl4/MgCl2–AlEt3 catalyst in ethylene/1-hexene copolymerization. Journal of Organometallic Chemistry, 2015, 798, 328-334.	0.8	33
45	Observation of Regime III Crystallization in Polyethylene/Montmorillonite Nanocomposites. Macromolecular Rapid Communications, 2005, 26, 620-625.	2.0	32
46	Effect of internal electron donor on the active center distribution in MgCl2-supported Ziegler–Natta catalyst. Catalysis Communications, 2015, 69, 147-149.	1.6	32
47	Molecular weight distribution of polyethylene catalyzed by Ziegler–Natta catalyst supported on MgCl2 doped with AlCl3. Journal of Applied Polymer Science, 2006, 102, 1768-1772.	1.3	31
48	Specific Disassembly of Lamellar Crystalline Micelles of Block Copolymer into Cylinders. Macromolecules, 2018, 51, 2138-2144.	2.2	31
49	Effect of local chain deformability on the temperature-induced morphological transitions of polystyrene-b-poly(N-isopropylacrylamide) micelles in aqueous solution. Soft Matter, 2014, 10, 5201-5211.	1.2	30
50	Synthesis and Crystallization Behavior of Equisequential ADMET Polyethylene Containing Arylene Ether Defects: Remarkable Effects of Substitution Position and Arylene Size. Macromolecules, 2016, 49, 6001-6011.	2.2	30
51	A Generalized Avrami Equation for Crystallization Kinetics of Polymers with Concomitant Double Crystallization Processes. Crystal Growth and Design, 2017, 17, 5908-5917.	1.4	30
52	Kinetics and mechanism of metalloceneâ€eatalyzed olefin polymerization: Comparison of ethylene, propylene homopolymerizations, and their copolymerization. Journal of Polymer Science Part A, 2017, 55, 867-875.	2.5	30
53	Influences of copolymerization conditions on the structure and properties of isotactic polypropylene/ethylene-propylene random copolymerin situ blends. Journal of Applied Polymer Science, 2002, 84, 445-453.	1.3	28
54	Influence of Ionic Species on the Microphase Separation Behavior of PCL- <i>b</i> -PEO/Salt Hybrids. Macromolecules, 2014, 47, 8359-8367.	2.2	28

#	Article	IF	CITATIONS
55	Substituent effect of bisindenyl zirconene catalyst on ethylene/1-hexene copolymerization and propylene polymerization. European Polymer Journal, 2005, 41, 83-89.	2.6	27
56	Influence of different inorganic salts on crystallization-driven morphological transformation of PCL-b-PEO micelles in aqueous solutions. Chinese Journal of Polymer Science (English Edition), 2014, 32, 1128-1138.	2.0	27
57	Probing the roles of diethylaluminum chloride in propylene polymerization with MgCl2-supported ziegler-natta catalysts. Chinese Journal of Polymer Science (English Edition), 2013, 31, 583-590.	2.0	26
58	Functional poly(carbonate-co-ether) synthesis from glycidyl methacrylate/CO <sub>2</sub> copolymerization catalyzed by Zn–Co( <scp>iii</scp> ) double metal cyanide complex catalyst. RSC Advances, 2014, 4, 3188-3194.	1.7	26
59	Kinetics of shortâ€duration ethylene–propylene copolymerization with MgCl <sub>2</sub> â€supported Ziegler–Natta catalyst: Differentiation of active centers on the external and internal surfaces of the catalyst particles. Journal of Applied Polymer Science, 2018, 135, 46030.	1.3	26
60	Effect of molecular weight on spherulitic growth rate of poly(Îμ-caprolactone) and poly(Îμ-caprolactone)-b-poly(ethylene glycol). Journal of Applied Polymer Science, 2007, 104, 2986-2991.	1.3	25
61	Effects of Switching Frequency of a Periodic Switching Polymerization Process on the Microstructures of Ethylene–Propylene Copolymers in Polypropylene/Poly(ethylene- <i>co</i> -propylene) in-Reactor Alloys. Industrial & Engineering Chemistry Research. 2012. 51. 2257-2270.	1.8	25
62	Design and Regulation of Lower Disorder-to-Order Transition Behavior in the Strongly Interacting Block Copolymers. Macromolecules, 2018, 51, 2302-2311.	2.2	25
63	Effect of alkylaluminium on the regio- and stereoselectivity in copolymerization of isoprene and butadiene using TiCl4/MgCl2 type Ziegler-Natta catalyst. Molecular Catalysis, 2019, 471, 1-8.	1.0	25
64	Enhancing stereoselectivity of propylene polymerization with MgCl2-supported Ziegler-Natta catalysts by electron donor: Strong effects of titanium dispersion state. Catalysis Communications, 2019, 121, 38-42.	1.6	25
65	Chain structure of polyethylene/polypropylene in-reactor alloy synthesized in gas phase with spherical Ziegler–Natta catalyst. Polymer International, 2004, 53, 1169-1175.	1.6	24
66	DEPENDENCE OF THE DISTRIBUTION OF ACTIVE CENTERS ON MONOMER IN SUPPORTED ZIEGLER-NATTA CATALYSTS. Chinese Journal of Polymer Science (English Edition), 2008, 26, 605.	2.0	24
67	Regulated Fragmentation of Crystalline Micelles of Block Copolymer via Monoamine-Induced Corona Swelling. Macromolecules, 2018, 51, 7637-7648.	2.2	24
68	Influence of mixed aluminoxane systems on ethylenenorbornene copolymerization catalyzed by metallocene. Macromolecular Rapid Communications, 1997, 18, 1101-1107.	2.0	23
69	Effect of the Combined External Electron Donors on the Structure and Properties of Polypropylene/Poly(ethylene-co-propylene) In-Reactor Alloys Prepared by High-Efficiency Industrial Ziegler–Natta Catalyst. Industrial & Engineering Chemistry Research, 2013, 52, 5887-5894.	1.8	23
70	Kinetic and Thermal Study of Ethylene and Propylene Homo Polymerization Catalyzed by ansa-Zirconocene Activated with Alkylaluminum/Borate: Effects of Alkylaluminum on Polymerization Kinetics and Polymer Structure. Polymers, 2021, 13, 268.	2.0	23
71	Copolymerization of propylene with various higher ?-olefins using silica-supportedrac-Me2Si(lnd)2ZrCl2. Journal of Polymer Science Part A, 2001, 39, 3294-3303.	2.5	22
72	Fractionation and characterization of an ethylene–propylene copolymer produced with a MgCl <sub>2</sub> /SiO <sub>2</sub> /TiCl <sub>4</sub> /diesterâ€type ziegler–natta catalyst. Journal of Applied Polymer Science, 2008, 107, 1301-1309.	1.3	22

#	Article	IF	CITATIONS
73	Ethylene/1-hexene copolymerization with MgCl2-supported Ziegler–Natta catalysts containing aryloxy ligands. Part I: Catalysts prepared by immobilizing TiCl3(OAr) onto MgCl2 in batch reaction. Journal of Molecular Catalysis A, 2012, 355, 161-167.	4.8	22
74	Comparison of chain structure and morphology of an olefinic blocky copolymer and a Ziegler–Nattaâ€based ethylene random copolymer. Polymer International, 2013, 62, 228-237.	1.6	22
75	Phase behavior of LiClO4-doped poly( $\hat{l}\mu$ -caprolactone)-b-poly(ethylene oxide) hybrids in the presence of competitive interactions. Polymer, 2014, 55, 1070-1077.	1.8	22
76	Effects of alkylaluminum as cocatalyst on the active center distribution of 1-hexene polymerization with MgCl2-supported Ziegler–Natta catalysts. Catalysis Communications, 2015, 62, 104-106.	1.6	22
77	Regulation of the self-assembly morphology of azobenzene-bearing double hydrophobic block copolymers in aqueous solution by shifting the dynamic host–guest complexation. Polymer Chemistry, 2015, 6, 2214-2225.	1.9	22
78	Insight into the Mechanism of Thermal Stability of $\hat{l}_{\pm}$ -Diimine Nickel Complex in Catalyzing Ethylene Polymerization. Organometallics, 2017, 36, 1196-1203.	1.1	22
79	1-Hexene polymerization with supported Ziegler-Natta catalyst: Correlation between catalyst particle fragmentation and active center distribution. Molecular Catalysis, 2018, 447, 13-20.	1.0	22
80	Effect of ethoxy- and methoxysilane donors in propene/1-hexene copolymerization with high-yield supported Ziegler-Natta catalysts. Macromolecular Chemistry and Physics, 1994, 195, 3889-3899.	1.1	20
81	ESR study on SiO2-supported half-titanocene catalyst for syndiospecific polymerization of styrene. Macromolecular Rapid Communications, 1997, 18, 875-882.	2.0	20
82	Improving microisotacticity of Ziegler–Natta catalyzed polypropylene by using triethylaluminum/triisobutylaluminum mixtures as cocatalyst. Polymer, 2014, 55, 4865-4872.	1.8	20
83	Influence of trimethylaluminum on kinetics of rac -Et(Ind) 2 ZrCl 2 /aluminoxane catalyzed ethylene polymerization. Journal of Organometallic Chemistry, 2016, 808, 109-116.	0.8	20
84	Ethylene–propylene copolymerization and their terpolymerization with dienes using ⟨i⟩ansa⟨ i⟩-Zirconocene catalysts activated by borate alkylaluminum. Journal of Macromolecular Science - Pure and Applied Chemistry, 2020, 57, 156-164.	1.2	20
85	Comparative Analysis of Ethylene/Diene Copolymerization and Ethylene/Propylene/Diene Terpolymerization Using Ansa-Zirconocene Catalyst with Alkylaluminum/Borate Activator: The Effect of Conjugated and Nonconjugated Dienes on Catalytic Behavior and Polymer Microstructure. Molecules. 2021. 26. 2037.	1.7	20
86	Straightening Single-Walled Carbon Nanotubes by Adsorbed Rigid Poly(3-hexylthiophene) Chains via π–π Interaction. Journal of Physical Chemistry C, 2016, 120, 27665-27674.	1.5	19
87	Mechanism of internal and external electron donor effects on propylene polymerization with <scp>M</scp> g <scp>C</scp> l <sub>2</sub> â€supported <scp>Z</scp> iegler– <scp>N</scp> atta catalyst: New evidences based on active center counting. Journal of Applied Polymer Science, 2018, 135, 46605.	1.3	19
88	Comparative Study on Kinetics of Ethylene and Propylene Polymerizations with Supported Ziegler–Natta Catalyst: Catalyst Fragmentation Promoted by Polymer Crystalline Lamellae. Polymers, 2019, 11, 358.	2.0	19
89	Synthesis and properties of organic-inorganic hybrid P(NIPAM-co-AM-co-TMSPMA) microgels. Chinese Journal of Polymer Science (English Edition), 2011, 29, 439-449.	2.0	18
90	Fixation of carbon dioxide concurrently or in tandem with free radical polymerization for highly transparent polyacrylates with specific UV absorption. Polymer Chemistry, 2016, 7, 3731-3739.	1.9	18

#	Article	IF	CITATIONS
91	Kinetics of shortâ€duration ethylene polymerization with MgCl <sub>2</sub> â€supported Ziegler–Natta catalyst: Twoâ€stage initiation evidenced by changes in active center concentration. Journal of Applied Polymer Science, 2017, 134, 45187.	1.3	18
92	Synthesis of functional polyolefins via ring-opening metathesis polymerization of ester-functionalized cyclopentene and its copolymerization with cyclic comonomers. Polymer Chemistry, 2017, 8, 5924-5933.	1.9	18
93	Effects of titanium dispersion state on distribution and reactivity of active centers in propylene polymerization with MgCl <sub>2</sub> â€supported Zieglerâ€Natta catalysts: A kinetic study based on active center counting. ChemCatChem, 2020, 12, 5140-5148.	1.8	18
94	Synthesis and characterization of PBMA-b-PDMS-b-PBMA copolymers by atom transfer radical polymerization. Journal of Applied Polymer Science, 2004, 92, 532-538.	1.3	17
95	Effect of alkylaluminum on ethylene polymerization catalyzed by 2,6-bis(imino)pyridyl complexes of Fe(II). Journal of Polymer Science Part A, 2005, 43, 1599-1606.	2.5	17
96	Functional polyethylene with regularly distributed ester pendants via ring-opening metathesis polymerization of ester functionalized cyclopentene: Synthesis and characterization. Polymer, 2017, 129, 135-143.	1.8	17
97	Polymer-supported half-titanocene catalysts for the syndiospecific polymerization of styrene. Journal of Polymer Science Part A, 2000, 38, 127-135.	2.5	16
98	Ethylene polymerization and ethylene/1-hexene copolymerization using homogeneous and heterogeneous unbridged bisindenyl zirconocene catalysts. European Polymer Journal, 2005, 41, 2380-2387.	2.6	16
99	Strong influences of cocatalyst on ethylene/propylene copolymerization with a MgCl2/SiO2/TiCl4/diester type Ziegler–Natta catalyst. European Polymer Journal, 2007, 43, 3442-3451.	2.6	16
100	Thermal fractionation and effect of comonomer distribution on the crystal structure of ethylene–propylene copolymers. Polymer, 2009, 50, 2510-2515.	1.8	16
101	Efficient solventâ€free alternating copolymerization of CO <sub>2</sub> with 1, 2â€epoxydodecane and terpolymerization with styrene oxide via heterogeneous catalysis. Journal of Polymer Science Part A, 2015, 53, 737-744.	2.5	16
102	Hierarchical self-assembly, photo-responsive phase behavior and variable tensile property of azobenzene-containing ABA triblock copolymers. RSC Advances, 2015, 5, 4030-4040.	1.7	16
103	Closed-Loop Phase Behavior of Block Copolymers in the Presence of Competitive Hydrogen-Bonding and Coulombic Interaction. Macromolecules, 2018, 51, 4727-4734.	2.2	16
104	Kinetics and mechanism of ethylene and propylene polymerizations catalyzed with ansa-zirconocene activated by borate/TIBA. Journal of Organometallic Chemistry, 2020, 922, 121366.	0.8	16
105	Study of crystallization and melting behavior of polypropylene-block-polyethylenes copolymers fractionated from polypropylene and polyethylene mixtures. Polymer International, 2004, 53, 1314-1320.	1.6	15
106	A new method of active center determination for olefin polymerization with supported Ziegler-Natta catalysts. Macromolecular Research, 2010, 18, 695-700.	1.0	15
107	Polymerisation of Norbornene Catalysed by Highly Active Tetradentate Chelated αâ€Diimine Nickel Complexes. Macromolecular Chemistry and Physics, 2011, 212, 367-374.	1.1	15
108	Polyethylene containing aliphatic ring and aromatic ring defects in the main chain: Synthesis via ADMET and comparisons of thermal properties and crystalline structure. Polymer, 2016, 107, 113-121.	1.8	15

#	Article	IF	CITATIONS
109	Effect of alkylaluminum cocatalyst on ethylene/1-hexene copolymerization and active center distribution of MgCl <sub>2</sub> -supported Ziegler-Natta catalyst. Journal of Macromolecular Science - Pure and Applied Chemistry, 2021, 58, 539-549.	1.2	15
110	Synthesis and characterization of Pst-b-PDMS-b-PSt copolymers by atom transfer radical polymerization. Journal of Applied Polymer Science, 2004, 92, 3764-3770.	1.3	14
111	Study of amphiphilic poly(1-dodecene-co-para-methylstyrene)-graft-poly (ethylene glycol): Part I. Preparation of poly(1-dodecene-co-para-methylstyrene) copolymer and its molecular weight regulation. European Polymer Journal, 2008, 44, 3239-3245.	2.6	14
112	Synthesis of Polypropylene/poly(ethylene- <i>co</i> -propylene) In-Reactor Alloys by Periodic Switching Polymerization Process: Dynamic Change of Gas-Phase Monomer Composition and Its Influences on Polymer Structure and Properties. Industrial & Description Chemistry Research, 2013, 52, 9775-9782.	1.8	14
113	Hierarchical structures of olefinic blocky copolymer/montmorillonite nanocomposites with collapsed and intercalated clay layers. RSC Advances, 2014, 4, 15678-15688.	1.7	14
114	Precision ADMET polyolefins containing dithiane: Synthesis, thermal properties, and macromolecular transformation. Journal of Polymer Science Part A, 2016, 54, 2468-2475.	2.5	14
115	Synthesis and characterization of functional polyethylene with regularly distributed thioester pendants via ringâ€opening metathesis polymerization. Journal of Polymer Science Part A, 2017, 55, 4027-4036.	2.5	14
116	Interfacial self-assembly of amphiphilic conjugated block copolymer into 2D nanotapes. Soft Matter, 2019, 15, 8790-8799.	1.2	14
117	Rapid kinetic evaluation of homogeneous single-site metallocene catalysts and cyclic diene: how do the catalytic activity, molecular weight, and diene incorporation rate of olefins affect each other?. RSC Advances, 2021, 11, 31817-31826.	1.7	14
118	Construction of Glycosylated Surfaces for Poly(propylene) Beads with a Photoinduced Grafting/Chemical Reaction Sequence. Macromolecular Rapid Communications, 2007, 28, 2325-2331.	2.0	13
119	Study of amphiphilic poly(1-dodecene-co-para-methylstyrene)-graft-poly(ethylene glycol). Part II: Preparation and micellization behavior of the amphiphilic copolymers. European Polymer Journal, 2008, 44, 4122-4128.	2.6	13
120	Chain Structure, Aggregation State Structure, and Tensile Behavior of Segmented Ethylene–Propylene Copolymers Produced by an Oscillating Unbridged Metallocene Catalyst. Journal of Physical Chemistry B, 2015, 119, 6050-6061.	1.2	13
121	Microphase separation and crystallization behaviors of bi-phased triblock terpolymers with a competitively dissolved middle block. Polymer, 2017, 117, 140-149.	1.8	13
122	Composition distributions of different particles of a polypropylene/poly(ethylene-co-propylene)in situ alloy analyzed by temperature-rising elution fractionation. Journal of Applied Polymer Science, 2005, 98, 243-246.	1.3	12
123	Control of the molecular weight distribution and tacticity in 1-hexylene polymerization catalyzed by TiCl4/MgCl2-NaCl/TEA catalysis system. Journal of Molecular Catalysis A, 2007, 275, 72-76.	4.8	12
124	Synthesis of Polypropylene/Poly(ethylene-co-propylene) In-Reactor Alloys by Periodic Switching Polymerization Process—Effects of Gas Phase Polymerization Time on Polymer Properties. Industrial & Lamp; Engineering Chemistry Research, 2013, 52, 13556-13563.	1.8	12
125	A highly efficient βâ€nucleating agent for impactâ€resistant polypropylene copolymer. Journal of Applied Polymer Science, 2014, 131, .	1.3	12

 $\label{thm:condition} \textit{Hydrogen-bonding induced abnormal microphase separation behavior of poly(ethylene)} \ \textit{Tj} \ \textit{ETQq0 0 0 0 rgBT /Overlock 10 Tf} \ 50,62 \ \textit{Td} \ (oxintegral oxintegral oxintegral$ 

8

126

#	Article	IF	CITATIONS
127	Study on 2-thiophenecarbonyl chloride-quenched olefin polymerization with α-diimine nickel catalysts. Iranian Polymer Journal (English Edition), 2018, 27, 153-159.	1.3	12
128	Determination and tracing of active and dormant propagation chains in 1-hexene polymerization with supported Ziegler-Natta catalyst. Applied Catalysis A: General, 2020, 595, 117469.	2.2	12
129	Kinetic and thermal study of ethylene-propylene copolymerization catalyzed by ansa-zirconocene activated with Alkylaluminium/borate: Effects of linear and branched alkylaluminium compounds as cocatalyst. Journal of Polymer Research, 2021, 28, 1.	1.2	12
130	Synthesis and characterization of low-molecular-weight hydrogenated polybutadiene-b-poly(ethylene) Tj ETQq0	0 0 rgBT /	Overlock 10 T
131	Influence of copolymerization conditions on the structure and properties of polyethylene/polypropylene/poly(ethylene-co-propylene) in-reactor alloys synthesized in gas-phase with spherical ziegler-natta catalyst. Journal of Applied Polymer Science, 2006, 102, 2481-2487.	1.3	11
132	Crystallization and morphology of cholesterol end-capped poly(ethylene glycol). Journal of Applied Polymer Science, 2007, 103, 2464-2471.	1.3	11
133	Cleavage of polystyreneâ€∢i>b∢/i>â€poly(ethylene oxide) block copolymers with a trithiocarbonate linkage in solutions. Journal of Polymer Science Part A, 2010, 48, 3834-3840.	2.5	11
134	Effect of phase separation on overall isothermal crystallization kinetics of PP/EPR inâ€reactor alloys. Journal of Applied Polymer Science, 2013, 127, 1346-1358.	1.3	11
135	Regio-selective synthesis of polyepichlorohydrin diol using Zn–Co(⟨scp⟩iii⟨/scp⟩) double metal cyanide complex. RSC Advances, 2014, 4, 21765-21771.	1.7	11
136	Kinetics and mechanistic investigations of ethylene-propylene copolymerizations catalyzed with symmetrical metallocene and activated by TIBA/borate. Journal of Organometallic Chemistry, 2021, 949, 121929.	0.8	11
137	Isothermal crystallization of metallocene-based polypropylenes with different isotacticity and regioregularity. Journal of Applied Polymer Science, 2003, 90, 3215-3221.	1.3	10
138	Effect of the structure on the morphology and spherulitic growth kinetics of polyolefin in-reactor alloys. Journal of Applied Polymer Science, 2005, 98, 632-638.	1.3	10
139	Studies on atom transfer radical emulsion polymerization of n-butyl methacrylate. Polymer Engineering and Science, 2005, 45, 297-302.	1.5	10
140	Surface modification of linear lowâ€density polyethylene film by amphiphilic graft copolymers based on poly(higher αâ€olefin)â€ <i>graft</i> å€poly(ethylene glycol). Journal of Applied Polymer Science, 2011, 119, 1111-1121.	1.3	10
141	Copolymerization of ethylene and 1-hexene with TiCl4/MgCl2 catalysts modified by 2,6-diisopropylphenol. Chinese Journal of Polymer Science (English Edition), 2013, 31, 110-121.	2.0	10
142	Inhibitory effect of hydrogen bonding on thermal decomposition of the nanocrystalline cellulose/poly(propylene carbonate) nanocomposite. Journal of Applied Polymer Science, 2014, 131, .	1.3	10
143	Mechanistic Study of the Influence of Salt Species on the Lower Disorder-to-Order Transition Behavior of Poly(ethylene oxide)- <i>b</i> -Poly(ionic liquid)/Salt Hybrids. Macromolecules, 2020, 53, 4560-4567.	2.2	10
144	Atom transfer radical polymerization ofn-butyl methacrylate in an aqueous dispersed system. Journal of Applied Polymer Science, 2003, 89, 3175-3179.	1.3	9

#	Article	IF	CITATIONS
145	Synthesis of block copolymers from PDMS macroinitiators. Polymer International, 2004, 53, 833-837.	1.6	9
146	Performance of various activators in ethylene polymerization based on an iron(II) catalyst system. Journal of Polymer Science Part A, 2004, 42, 1093-1099.	2.5	9
147	Nonisothermal crystallization of metallocene propylene-decene-1 copolymers. Journal of Applied Polymer Science, 2004, 93, 1724-1730.	1.3	9
148	Influence of polymerization conditions on the structure and properties of polyethylene/polypropylene in-reactor alloy synthesized in the gas phase with a spherical Ziegler–Natta catalyst. Journal of Applied Polymer Science, 2006, 101, 2136-2143.	1.3	9
149	Structure and morphology of polyethylene/polypropylene in-reactor alloys synthesized by spherical high-yield Ziegler–Natta catalyst. Journal of Applied Polymer Science, 2007, 103, 2075-2085.	1.3	9
150	Gel formed during the solid-state graft copolymerization of styrene and spherical polypropylene granules. I. Influence of reaction conditions on the gelation and its mechanism. Journal of Applied Polymer Science, 2007, 104, 3682-3687.	1.3	9
151	Solidâ€state graft polymerization of styrene in spherical polypropylene granules in the presence of TEMPO. Journal of Applied Polymer Science, 2009, 112, 275-282.	1.3	9
152	Chain transfer reactions of propylene polymerization catalyzed by AlEt3 activated TiCl4/MgCl2 catalyst under very low monomer addition rate. Journal of Molecular Catalysis A, 2012, 363-364, 134-139.	4.8	9
153	Comonomer effects in copolymerization of ethylene and 1â€hexene with MgCl <sub>2</sub> â€supported <scp>Z</scp> ieglerâ€ <scp>N</scp> atta catalysts: New evidences from active center concentration and molecular weight distribution. Journal of Applied Polymer Science, 2015, 132, .	1.3	9
154	ETHYLENE-1-HEXENE COPOLYMERIZATION WITH A 2,6-DIISOPROPYLPHENOL MODIFIED SUPPORTED ZIEGLER-NATTA CATALYST. Acta Polymerica Sinica, 2009, 009, 748-755.	0.0	9
155	Synthesis of unbridged metallocene catalyst for propylene polymerization. European Polymer Journal, 2004, 40, 517-522.	2.6	8
156	Influence of the reaction conditions on the solid-state graft copolymerization of methyl methacrylate and polyethylene/polypropylenein situ alloys. Journal of Applied Polymer Science, 2005, 98, 195-202.	1.3	8
157	Synthesis and characterization of poly(n-butyl methacrylate)-b-polystyrene diblock copolymers by atom transfer radical emulsion polymerization. Journal of Applied Polymer Science, 2005, 98, 2123-2129.	1.3	8
158	Effect of phase separation on spherulitic growth rate of PP/EPR inâ€reactor alloys. Journal of Applied Polymer Science, 2012, 123, 535-542.	1.3	8
159	The influence of combined external donor and combined cocatalyst on propylene polymerization with a MgCl <sub>2</sub> â€supported <scp>Z</scp> iegler– <scp>N</scp> atta catalyst in the presence of hydrogen. Journal of Applied Polymer Science, 2015, 132, .	1.3	8
160	Synthesis of multiblock ethylene/longâ€chain αâ€olefin copolymer via chain walking polymerization using thermostable αâ€diimine nickel catalyst. Journal of Polymer Science Part A, 2017, 55, 2725-2729.	2.5	8
161	Deactivation Effect Caused by Catalyst-Cocatalyst Pre-contact in Propylene Polymerization with MgCl2-supported Ziegler-Natta Catalyst. Chinese Journal of Polymer Science (English Edition), 2019, 37, 1023-1030.	2.0	8
162	Responses of a Supported Ziegler–Natta Catalyst to Comonomer Feed Ratios in Ethylene–Propylene Copolymerization: Differentiation of Active Centers with Different Catalytic Features. Industrial & Lamp; Engineering Chemistry Research, 2021, 60, 4575-4588.	1.8	8

#	Article	IF	Citations
163	Characterization of Aluminoxanes by ESR Spin Probe Method. Macromolecular Chemistry and Physics, 2001, 202, 448-452.	1.1	7
164	Improved high-temperature performance of iron(II) complexes for ethylene polymerization by variation of aluminoxanes. Polymer International, 2004, 53, 37-40.	1.6	7
165	Isothermal crystallization of metallocene-based propylene/?-olefin copolymers. Journal of Applied Polymer Science, 2005, 97, 240-247.	1.3	7
166	Improvement of Structure and Properties of Polypropylene/Poly(ethyleneâ€ <i>co</i> â€propylene) Inâ€reactor Alloy by Modifying the Cocatalyst. Macromolecular Symposia, 2007, 260, 127-132.	0.4	7
167	Crystallization Behavior of the Blends of Isotactic Polypropylene and Ethylene-Propylene Blocky Copolymers. Polymer-Plastics Technology and Engineering, 2009, 48, 333-341.	1.9	7
168	Preparation and characterization of high <scp>MFR</scp> polypropylene and polypropylene/poly(ethyleneâ€ <i>co</i> â€propylene) inâ€reactor alloys. Journal of Applied Polymer Science, 2016, 133, .	1.3	7
169	Millimeterâ€size polyethylene hollow spheres synthesized with MgCl <sub>2</sub> â€supported <scp>Z</scp> ieglerâ€ <scp>N</scp> atta catalyst. Journal of Applied Polymer Science, 2016, 133, .	1.3	7
170	Structure and properties of ethylene/propylene copolymers synthesized with bis(2,4,7-trimethylindenyl)zirconium dichloride activated by methyl aluminoxanes containing different amount of trimethylaluminum. Polymer, 2017, 122, 77-86.	1.8	7
171	Effect of interface and confinement size on the crystallization behavior of PLLA confined in coaxial electrospun fibers. Journal of Applied Polymer Science, 2018, 135, 45980.	1.3	7
172	Ethyl-iso-butylaluminoxane activated metallocene catalyst for olefin polymerization. Journal of Polymer Science Part A, 2003, 41, 998-1003.	2.5	6
173	Synthesis of polystyrene-b-poly(ethylene-co-butene) block copolymers by anionic living polymerization and subsequent noncatalytic hydrogenation. Journal of Applied Polymer Science, 2006, 102, 2632-2638.	1.3	6
174	Microstructure of Ethylene/Propylene Random Copolymers Prepared by a Fluorinated Bis(phenoxy-imine)Ti Catalyst. Polymer Bulletin, 2007, 58, 903-911.	1.7	6
175	Selfâ€nucleation behaviors of olefinic blocky copolymer/montmorillonite nanocomposites with collapsed and intercalated clay layers. Journal of Applied Polymer Science, 2015, 132, .	1.3	6
176	Nonconjugated diene homopolymerization and copolymerization with ethylene catalyzed by αâ€diimine Ni(II) complex/Et <sub>2</sub> AlCl. Journal of Polymer Science Part A, 2017, 55, 1900-1909.	2.5	6
177	Methods for Predicting Ethylene/Cyclic Olefin Copolymerization Rates Promoted by Single-Site Metallocene: Kinetics Is the Key. Polymers, 2022, 14, 459.	2.0	6
178	Polymerization kinetics of bicyclic olefins and mechanism with symmetrical ansa-metallocene catalysts associated with active center count: relationship between their activities and structure and activation path. RSC Advances, 2022, 12, 15284-15295.	1.7	6
179	Effect of temperature on the isospecific propylene polymerization catalyzed by rac-dimethylsilylbis(2,4,6-trimethyl-1-indenyl)zirconium dichloride/methyl aluminoxane. Polyhedron, 2005, 24, 1262-1268.	1.0	5
180	Synthesis and characterization of PBMA-b-PSt-b-PBMA triblock copolymers by atom transfer radical emulsion polymerization. Polymer Engineering and Science, 2005, 45, 1508-1514.	1.5	5

#	Article	IF	Citations
181	Effect of Microstructure of EPR on Crystallization and Morphology of PP/EPR Blends. Polymer-Plastics Technology and Engineering, 2008, 47, 1242-1249.	1.9	5
182	Structure and Rheological Properties of the Products of Solid-State Graft Polymerization of Styrene in Annealed Polypropylene Reactor Granules. Polymer-Plastics Technology and Engineering, 2009, 48, 516-524.	1.9	5
183	Synthesis and micellization behavior of amphiphilic graft copolymer with 1â€octene as hydrophobic moiety. Journal of Applied Polymer Science, 2010, 115, 2423-2431.	1.3	5
184	Influences of silane/ether composite external donors on propylene polymerization with MgCl2-supported Ziegler-Natta catalyst in the presence of hydrogen. E-Polymers, $2011,11,\ldots$	1.3	5
185	Polyethyleneâ€bâ€poly(ethylene glycol) diblock copolymers: New synthetic strategy and application. Journal of Applied Polymer Science, 2015, 132, .	1.3	5
186	Morphology and thermoresponsive behavior of hybrid micelles of polystyrene-b-poly((N-isopropyl) Tj ETQq0 0 0 rg (English Edition), 2015, 33, 1038-1047.	gBT /Overl 2.0	lock 10 Tf 50 5
187	Ethylene/1â€hexene copolymerization with supported <scp>Z</scp> iegler– <scp>N</scp> atta catalysts prepared by immobilizing TiCl <sub>3</sub> (OAr) onto MgCl <sub>2</sub> . Journal of Applied Polymer Science, 2015, 132, .	1.3	5
188	Synthesis of polyethylene/poly(ethylene-co-propylene) in-reactor alloys by periodic switching polymerization process: Effects of switching frequency on polymer structure and properties. Macromolecular Research, 2017, 25, 534-541.	1.0	5
189	Particle morphology and morphogenesis of nascent polyethylene produced with a spherical <scp>M</scp> g <scp>C</scp> l <sub>2</sub> â€supported <scp>Z</scp> iegler– <scp>N</scp> atta catalyst in slurry process. Journal of Applied Polymer Science, 2018, 135, 45679.	1.3	5
190	<i>Trans</i> â€1,4â€stereospecific copolymerization of ethylene and isoprene catalyzed by MgCl <sub>2</sub> â€supported Ziegler–Natta catalyst. Journal of Polymer Science Part A, 2018, 56, 2715-2722.	2.5	5
191	Solution-grown composite single crystals of poly(L-lactic acid)-b-polystyrene block copolymers and poly(L-lactic acid) homopolymers. Polymer, 2020, 208, 122979.	1.8	5
192	Polyethylene/crystalline ethylene-propylene copolymer/amorphous ethylene-propylene copolymer in-reactor alloys synthesized by periodic switching polymerization process: An excellent toughener for polypropylene. European Polymer Journal, 2021, 154, 110563.	2.6	5
193	Comparison of Crystallization Rate and Macroscopic Morphology of Two Oxyethylene/Oxybutylene Triblock Copolymers. The Effect of Molecular Architecture. Polymer Journal, 2004, 36, 465-471.	1.3	4
194	Effects of Doping LiCl into MgCl2-Supported Zieglerâ^'Natta Catalyst on the Molecular Weight Distribution and Isotacticity of Polypropylene. Industrial & Engineering Chemistry Research, 2011, 50, 259-266.	1.8	4
195	Influence of cocatalyst on the structure and properties of polypropylene/poly (ethyleneâ€ <i>co</i> â€propylene) inâ€reactor alloys prepared by MgCl <sub>2</sub> /TiCl <sub>4</sub> /diester type Zieglerâ€Natta catalyst. Journal of Applied Polymer Science, 2012, 124, 5154-5164.	1.3	4
196	Novel hyperbranched polymers synthesized via A <sub>3</sub> + B(B′) approach by radical addition-coupling polymerization. Journal of Polymer Science Part A, 2015, 53, 904-913.	2.5	4
197	Well-defined gels prepared by radical addition-coupling polymerization. Designed Monomers and Polymers, 2015, 18, 251-261.	0.7	4
198	Improvement of Catalytic Activity for $\hat{l}\pm \hat{a}\in D$ iimine Nickel Complex with Active Sites Stabilized by Bulky Boron Counterions at Elevated Temperature. Applied Organometallic Chemistry, $0$ , , .	1.7	4

#	Article	IF	CITATIONS
199	TiCl4/MgCl2/MCM-41 Bi-Supported Ziegler–Natta Catalyst: Effects of Catalyst Composition on Ethylene/1-Hexene Copolymerization. Catalysts, 2021, 11, 1535.	1.6	4
200	Combining 1,2-diketopyracene with bulky benzhydryl-substituted anilines to obtain highly active α-diimine nickel catalysts at elevated temperature. Journal of Catalysis, 2022, 413, 311-320.	3.1	4
201	Melting–Recrystallization of Block Copolymer Crystals in Confined Environments. Polymer Journal, 2005, 37, 43-46.	1.3	3
202	Characterization of a Poly(propylene- <i>g</i> -styrene) Graft Copolymer by Temperature Rising Elution Fractionation. International Journal of Polymer Analysis and Characterization, 2009, 14, 437-453.	0.9	3
203	Influences of the chain structure of PEâ€∢i>bà€PEG on the properties of PE/PEâ€∢i>bà€PEG blend membranes prepared by TIPS. Journal of Applied Polymer Science, 2018, 135, 46499.	1.3	3
204	Facile synthesis of ethylene–propylene fully alternating copolymer and comparison with random copolymer of similar composition. Journal of Applied Polymer Science, 2018, 135, 45816.	1.3	3
205	Effect of annealingâ€induced interfacial demixing on crystallization of <scp>PEO</scp> confined in coaxial electrospun nanofibers. Journal of Applied Polymer Science, 2018, 135, 45760.	1.3	3
206	Influence of ligand substituents of unbridged metallocene complexes on stability of their active centers in ethylene polymerization. Catalysis Communications, 2019, 120, 6-10.	1.6	3
207	Effect of alkylaluminum structure and aggregation state on the micro-kinetics of ethylene polymerization catalyzed by α-diimine nickel complex. Inorganica Chimica Acta, 2022, 536, 120900.	1.2	3
208	Influence of an annealing treatment on the solidâ€state grafting of styrene onto spherical isotactic polypropylene granules. Journal of Applied Polymer Science, 2008, 110, 1990-1996.	1.3	2
209	Effect of montmorillonite on orientation of drawn polypropylene films. Journal of Applied Polymer Science, 2012, 123, 3321-3330.	1.3	2
210	Ethyleneâ€Butadiene Copolymerization and Ethyleneâ€1â€Hexeneâ€Butadiene Terpolymerization with a MgCl <sub>2</sub> â€Supported Zieglerâ€Natta Catalyst: Polymer Structure and Active Centers. ChemistrySelect, 2021, 6, 8288-8298.	0.7	2
211	Effect of internal electron donor on copolymerization of ethylene and 1-hexene catalyzed by supported Ziegler- Natta catalysts. E-Polymers, 2008, 8, .	1.3	1
212	Effects of comonomer content, comonomer distribution and crystallization condition on crystallinity and dimension of crystal lattice of ethylene-propylene copolymers. E-Polymers, 2010, 10, .	1.3	1
213	Preparation and application of sulfonated poly(1â€octeneâ€ <i>co</i> â€styrene). Journal of Applied Polymer Science, 2011, 119, 677-684.	1.3	1
214	Structure, morphology and interfacial behaviour of ethylene/methacrylate copolymers. Journal of Polymer Research, 2013, 20, 1.	1.2	1
215	Comparative Studies on Properties of Polymers with Bulky Side Groups Synthesized by Cyclopolymerization of $\hat{l}_{\pm}$ , $\hat{l}_{\infty}$ -Dienes and $\hat{l}_{\pm}$ , $\hat{l}_{\infty}$ -Diynes. Chinese Journal of Polymer Science (English Edition), 2019, 37, 149-156.	2.0	1
216	Modification of the Acyl Chloride Quench-Labeling Method for Counting Active Sites in Catalytic Olefin Polymerization. Catalysts, 2021, 11, 683.	1.6	1

#	Article	IF	CITATIONS
217	Copolymerization of propylene with 1-octene catalyzed by rac-Me2Si(2,4,6-Me3-Ind)2ZrCl2/methyl aluminoxane., 2000, 38, 4299.		1
218	Influences of copolymerization conditions on the structure and properties of isotactic polypropylene/ethylene–propylene random copolymer in situ blends. Journal of Applied Polymer Science, 2002, 84, 445.	1.3	1
219	Composition distribution of poly(propylene-g-styrene) synthesized by solid-state grafting of styrene onto spherical polypropylene reactor granules. E-Polymers, 2006, 6, .	1.3	O
220	Dependence of comonomer effect and hydrogen effect on internal donor in ethylene/1-hexene copolymerizations with MgCl2-supported catalysts. E-Polymers, 2010, 10, .	1.3	0
221	Solidâ€state graft polymerization of styrene in spherical polypropylene particles in the presence of montmorillonite. Journal of Applied Polymer Science, 2012, 126, 1497-1504.	1.3	O
222	Synthesis of hyperbranched polymers by free radical addition $\hat{\epsilon}$ oupling polymerization with A <sub>3</sub>  B <sub>2</sub> and A <sub>2</sub> A $\hat{\epsilon}^2$  B <sub>2</sub> approaches. Journal of Applied Polymer Science, 2015, 132, .	1.3	0