Nemat Hossieny

List of Publications by Year
in descending order

374 papers	22,578 citations	6233 80 h-index	16127 124 g-index
380 all docs	380 docs citations	380 times ranked	8713 citing authors

#	Article	IF	Citations
1	Poly(lactic acid) crystallization. Progress in Polymer Science, 2012, 37, 1657-1677.	11.8	1,190
2	Poly (lactic acid) foaming. Progress in Polymer Science, 2014, 39, 1721-1741.	11.8	401
3	Effect of the pressure drop rate on cell nucleation in continuous processing of microcellular polymers. Polymer Engineering and Science, 1995, 35, 432-440.	1.5	377
4	Lightweight Polypropylene/Stainless-Steel Fiber Composite Foams with Low Percolation for Efficient Electromagnetic Interference Shielding. ACS Applied Materials & Interfaces, 2014, 6, 11091-11100.	4.0	295
5	A study of cell nucleation in the extrusion of polypropylene foams. Polymer Engineering and Science, 1997, 37, 1-10.	1.5	285
6	Flexible, Ultrathin, and High-Efficiency Electromagnetic Shielding Properties of Poly(Vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	4.0	264
7	Low density microcellular foam processing in extrusion using CO2. Polymer Engineering and Science, 1998, 38, 1812-1823.	1.5	248
8	Strategies for achieving ultra low-density polypropylene foams. Polymer Engineering and Science, 2002, 42, 1481-1492.	1.5	243
9	Ultralow-Threshold and Lightweight Biodegradable Porous PLA/MWCNT with Segregated Conductive Networks for High-Performance Thermal Insulation and Electromagnetic Interference Shielding Applications. ACS Applied Materials & Interfaces, 2018, 10, 1195-1203.	4.0	241
10	Fundamental foaming mechanisms governing the volume expansion of extruded polypropylene foams. Journal of Applied Polymer Science, 2004, 91, 2661-2668.	1.3	236
11	Cell morphology and property relationships of microcellular foamed pvc/wood-fiber composites. Polymer Engineering and Science, 1998, 38, 1862-1872.	1.5	223
12	A microcellular processing study of poly(ethylene terephthalate) in the amorphous and semicrystalline states. Part I: Microcell nucleation. Polymer Engineering and Science, 1996, 36, 1437-1445.	1.5	207
13	Past and present developments in polymer bead foams and bead foaming technology. Polymer, 2015, 56, 5-19.	1.8	189
14	Advances in electromagnetic shielding properties of composite foams. Journal of Materials Chemistry A, 2021, 9, 8896-8949.	5.2	184
15	Processing and cell morphology relationships for microcellular foamed PVC/wood-fiber composites. Polymer Engineering and Science, 1997, 37, 1137-1147.	1.5	180
16	Crystallization Kinetics of Linear and Long-Chain-Branched Polylactide. Industrial & Engineering Chemistry Research, 2011, 50, 13789-13798.	1.8	179
17	Effects of die geometry on cell nucleation of PS foams blown with CO2. Polymer Engineering and Science, 2003, 43, 1378-1390.	1.5	176
18	Mechanism of extensional stress-induced cell formation in polymeric foaming processes with the presence of nucleating agents. Journal of Supercritical Fluids, 2012, 63, 187-198.	1.6	174

#	Article	IF	Citations
19	Fundamental mechanisms of cell nucleation in polypropylene foaming with supercritical carbon dioxideâ€"Effects of extensional stresses and crystals. Journal of Supercritical Fluids, 2013, 79, 142-151.	1.6	174
20	Synergism between carbon materials and Ni chains in flexible poly(vinylidene fluoride) composite films with high heat dissipation to improve electromagnetic shielding properties. Carbon, 2018, 127, 469-478.	5.4	169
21	Ultra-tough and super thermal-insulation nanocellular PMMA/TPU. Chemical Engineering Journal, 2017, 325, 632-646.	6.6	165
22	Incorporating a microcellular structure into PVDF/grapheneâ€"nanoplatelet composites to tune their electrical conductivity and electromagnetic interference shielding properties. Journal of Materials Chemistry C, 2018, 6, 10292-10300.	2.7	165
23	Filamentary extrusion of microcellular polymers using a rapid decompressive element. Polymer Engineering and Science, 1996, 36, 34-48.	1.5	161
24	High thermal insulation and compressive strength polypropylene foams fabricated by high-pressure foam injection molding and mold opening of nano-fibrillar composites. Materials and Design, 2017, 131, 1-11.	3.3	161
25	Influence of interfacial interactions on the properties of PVC/cellulosic fiber composites. Polymer Composites, 1998, 19, 446-455.	2.3	158
26	Heat transfer in microcellular polystyrene/multi-walled carbon nanotube nanocomposite foams. Carbon, 2015, 93, 819-829.	5.4	158
27	Continuous processing of low-density, microcellular poly(lactic acid) foams with controlled cell morphology and crystallinity. Chemical Engineering Science, 2012, 75, 390-399.	1.9	157
28	Poly(lactic acid)-Based in Situ Microfibrillar Composites with Enhanced Crystallization Kinetics, Mechanical Properties, Rheological Behavior, and Foaming Ability. Biomacromolecules, 2015, 16, 3925-3935.	2.6	157
29	Enhanced Electrical and Electromagnetic Interference Shielding Properties of Polymerâ€"Graphene Nanoplatelet Composites Fabricated via Supercritical-Fluid Treatment and Physical Foaming. ACS Applied Materials & Interfaces, 2018, 10, 30752-30761.	4.0	156
30	Extruded PLA/clay nanocomposite foams blown with supercritical CO2. Polymer, 2014, 55, 4077-4090.	1.8	155
31	Lightweight and tough nanocellular PP/PTFE nanocomposite foams with defect-free surfaces obtained using in situ nanofibrillation and nanocellular injection molding. Chemical Engineering Journal, 2018, 350, 1-11.	6.6	154
32	Measurements and modeling of PS/supercritical CO2 solution viscosities. Polymer Engineering and Science, 1999, 39, 99-109.	1.5	152
33	Effects of nano-/micro-sized additives on the crystallization behaviors of PLA andÂPLA/CO2 mixtures. Polymer, 2013, 54, 2382-2391.	1.8	150
34	Extruded Open-Cell Foams Using Two Semicrystalline Polymers with Different Crystallization Temperatures. Industrial & Engineering Chemistry Research, 2006, 45, 175-181.	1.8	148
35	Cell Structure Evolution and the Crystallization Behavior of Polypropylene/Clay Nanocomposites Foams Blown in Continuous Extrusion. Industrial & Engineering Chemistry Research, 2010, 49, 9834-9845.	1.8	147
36	Microcellular extrusionâ€foaming of polylactide with chainâ€extender. Polymer Engineering and Science, 2009, 49, 1653-1660.	1.5	146

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37	Superhydrophobic and Oleophilic Open-Cell Foams from Fibrillar Blends of Polypropylene and Polytetrafluoroethylene. ACS Applied Materials & Interfaces, 2014, 6, 21131-21140.	4.0	145
38	Development of polylactide bead foams with double crystal melting peaks. Polymer, 2015, 69, 83-94.	1.8	142
39	Synthesis and processing of PMMA carbon nanotube nanocomposite foams. Polymer, 2010, 51, 655-664.	1.8	141
40	Tunable electromagnetic shielding properties of conductive poly(vinylidene fluoride)/Ni chain composite films with negative permittivity. Journal of Materials Chemistry C, 2017, 5, 6954-6961.	2.7	139
41	Lightweight and flexible graphene/SiC-nanowires/ poly(vinylidene fluoride) composites for electromagnetic interference shielding and thermal management. Carbon, 2020, 156, 58-66.	5.4	138
42	Low-density and structure-tunable microcellular PMMA foams with improved thermal-insulation and compressive mechanical properties. European Polymer Journal, 2017, 95, 382-393.	2.6	136
43	Injection-molded microcellular PLA/graphite nanocomposites with dramatically enhanced mechanical and electrical properties for ultra-efficient EMI shielding applications. Journal of Materials Chemistry C, 2018, 6, 6847-6859.	2.7	136
44	A microcellular processing study of poly(ethylene terephthalate) in the amorphous and semicrystalline states. Part II: Cell growth and process design. Polymer Engineering and Science, 1996, 36, 1446-1453.	1.5	129
45	Development of PLA/cellulosic fiber composite foams using injection molding: Crystallization and foaming behaviors. Composites Part A: Applied Science and Manufacturing, 2016, 83, 130-139.	3.8	129
46	Advanced bimodal polystyrene/multi-walled carbon nanotube nanocomposite foams for thermal insulation. Carbon, 2017, 120, 1-10.	5.4	124
47	Modelling of thermal transport through a nanocellular polymer foam: toward the generation of a new superinsulating material. Nanoscale, 2017, 9, 5996-6009.	2.8	124
48	Tailoring poly(lactic acid) for packaging applications via the production of fully bio-based in situ microfibrillar composite films. Chemical Engineering Journal, 2017, 308, 772-782.	6.6	123
49	Achieving wideband microwave absorption properties in PVDF nanocomposite foams with an ultra-low MWCNT content by introducing a microcellular structure. Journal of Materials Chemistry C, 2020, 8, 58-70.	2.7	120
50	In situ fibrillation of CO2-philic polymers: Sustainable route to polymer foams in a continuous process. Polymer, 2013, 54, 4645-4652.	1.8	118
51	Development of high thermal insulation and compressive strength BPP foams using mold-opening foam injection molding with in-situ fibrillated PTFE fibers. European Polymer Journal, 2018, 98, 1-10.	2.6	117
52	Enhanced Thermal Conductivity of Graphene Nanoplateletâ€“Polymer Nanocomposites Fabricated via Supercritical Fluid-Assisted in Situ Exfoliation. ACS Applied Materials & Interfaces, 2018, 10, 1225-1236.	4.0	114
53	Double Crystal Melting Peak Generation for Expanded Polypropylene Bead Foam Manufacturing. Industrial & Engineering Chemistry Research, 2013, 52, 2297-2303.	1.8	113
54	Effect of surface properties on the adhesion between PVC and wood veneer laminates. Polymer Engineering and Science, 1998, 38, 765-773.	1.5	112

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55	Use of stereocomplex crystallites for fully-biobased microcellular low-density poly(lactic acid) foams for green packaging. Chemical Engineering Journal, 2017, 327, 1151-1162.	6.6	112
56	An Effective Design Strategy for the Sandwich Structure of PVDF/GNP-Ni-CNT Composites with Remarkable Electromagnetic Interference Shielding Effectiveness. ACS Applied Materials & Interfaces, 2020, 12, 36568-36577.	4.0	112
57	Extrusion of PE/PS blends with supercritical carbon dioxide. Polymer Engineering and Science, 1998, 38, 1112-1120.	1.5	111
58	The construction of carbon-coated Fe3O4 yolk-shell nanocomposites based on volume shrinkage from the release of oxygen anions for wide-band electromagnetic wave absorption. Journal of Colloid and Interface Science, 2018, 511, 307-317.	5.0	111
59	A versatile foaming platform to fabricate polymer/carbon composites with high dielectric permittivity and ultra-low dielectric loss. Journal of Materials Chemistry A, 2019, 7, 133-140.	5.2	111
60	Poly(vinylidene fluoride) foams: a promising low-<i>k</i> dielectric and heat-insulating material. Journal of Materials Chemistry C, 2018, 6, 3065-3073.	2.7	110
61	Change in the critical nucleation radius and its impact on cell stability during polymeric foaming processes. Chemical Engineering Science, 2009, 64, 4899-4907.	1.9	109
62	The effects of extensional stresses on the foamability of polystyreneâ€“talc composites blown with carbon dioxide. Chemical Engineering Science, 2012, 75, 49-62.	1.9	109
63	A facile method to increase the charge storage capability of polymer nanocomposites. Nano Energy, 2015, 15, 54-65.	8.2	108
64	Fiber-spun polypropylene/polyethylene terephthalate microfibrillar composites with enhanced tensile and rheological properties and foaming ability. Polymer, 2017, 110, 139-148.	1.8	103
65	Strong and super thermally insulating in-situ nanofibrillar PLA/PET composite foam fabricated by high-pressure microcellular injection molding. Chemical Engineering Journal, 2020, 390, 124520.	6.6	103
66	Glass fiber reinforced PLA composite with enhanced mechanical properties, thermal behavior, and foaming ability. Polymer, 2019, 181, 121803.	1.8	102
67	A novel technology to manufacture biodegradable polylactide bead foam products. Materials and Design, 2015, 83, 413-421.	3.3	101
68	Strong and thermal-resistance glass fiber-reinforced polylactic acid (PLA) composites enabled by heat treatment. International Journal of Biological Macromolecules, 2019, 129, 448-459.	3.6	101
69	An extrusion system for the processing of microcellular polymer sheets: Shaping and cell growth control. Polymer Engineering and Science, 1996, 36, 1425-1435.	1.5	99
70	Advances in precursor system for silica-based aerogel production toward improved mechanical properties, customized morphology, and multifunctionality: A review. Advances in Colloid and Interface Science, 2020, 276, 102101.	7.0	99
71	A Microcellular Foaming Simulation System with a High Pressure-Drop Rate. Industrial & Engineering Chemistry Research, 2006, 45, 6153-6161.	1.8	95
72	Crystallization of hard segment domains with the presence of butane for microcellular thermoplastic polyurethane foams. Polymer, 2014, 55, 651-662.	1.8	94

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73	Surface-engineered sponges for recovery of crude oil microdroplets from wastewater. Nature Sustainability, 2020, 3, 136-143.	11.5	94
74	Role of elastic strain energy in cell nucleation of polymer foaming and its application for fabricating sub-microcellular TPU microfilms. Polymer, 2017, 119, 28-39.	1.8	91
75	Facile production of biodegradable PCL/PLA in situ nanofibrillar composites with unprecedented compatibility between the blend components. Chemical Engineering Journal, 2018, 351, 976-984.	6.6	88
76	The effect of low levels of plasticizer on the rheological and mechanical properties of polyvinyl chloride/newsprint-fiber composites. Journal of Vinyl and Additive Technology, 1997, 3, 265-273.	1.8	85
77	Foaming of PS/wood fiber composites using moisture as a blowing agent. Polymer Engineering and Science, 2000, 40, 2124-2132.	1.5	85
78	Comparison of melting and crystallization behaviors of polylactide under high-pressure CO2, N2, and He. Polymer, 2013, 54, 6471-6478.	1.8	85
79	Fabrication of Open-Cell, Microcellular Silicon Carbide Ceramics by Carbothermal Reduction. Journal of the American Ceramic Society, 2005, 88, 2949-2951.	1.9	84
80	Dispersed polypropylene fibrils improve the foaming ability of a polyethylene matrix. Polymer, 2014, 55, 4199-4205.	1.8	83
81	Rheological and foaming behavior of linear and branched polylactides. Rheologica Acta, 2014, 53, 779-790.	1.1	81
82	Tuning viscoelastic and crystallization properties of polypropylene containing in-situ generated high aspect ratio polyethylene terephthalate fibrils. Polymer, 2015, 68, 83-91.	1.8	80
83	Steam-Chest Molding of Expanded Polypropylene Foams. 2. Mechanism of Interbead Bonding. Industrial & Engineering Chemistry Research, 2011, 50, 5523-5531.	1.8	79
84	Ultralight Microcellular Polymerâ€"Graphene Nanoplatelet Foams with Enhanced Dielectric Performance. ACS Applied Materials & Interfaces, 2018, 10, 19987-19998.	4.0	79
85	Strategies to Achieve a Uniform Cell Structure with a High Void Fraction in Advanced Structural Foam Molding. Industrial & Engineering Chemistry Research, 2008, 47, 9457-9464.	1.8	77
86	A batch foaming visualization system with extensional stress-inducing ability. Chemical Engineering Science, 2011, 66, 55-63.	1.9	77
87	Mechanisms of nanoclay-enhanced plastic foaming processes: effects of nanoclay intercalation and exfoliation. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	77
88	Novel separator skimmer for oil spill cleanup and oily wastewater treatment: From conceptual system design to the first pilot-scale prototype development. Environmental Technology and Innovation, 2020, 18, 100598.	3.0	77
89	Layered Foam/Film Polymer Nanocomposites with Highly Efficient EMI Shielding Properties and Ultralow Reflection. Nano-Micro Letters, 2022, 14, 19.	14.4	76
90	Design and development of novel bio-based functionally graded foams for enhanced acoustic capabilities. Journal of Materials Science, 2015, 50, 1248-1256.	1.7	74

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91	Scalable Fabrication of Thermally Insulating Mechanically Resilient Hierarchically Porous Polymer Foams. ACS Applied Materials & Interfaces, 2018, 10, 38410-38417.	4.0	74
92	Processing of closed-cell silicon oxycarbide foams from a preceramic polymer. Journal of Materials Science, 2004, 39, 5647-5652.	1.7	73
93	Mechanical and morphological properties of injection molded linear and branched-polylactide (PLA) nanocomposite foams. European Polymer Journal, 2015, 73, 455-465.	2.6	73
94	A novel gas-assisted microcellular injection molding method for preparing lightweight foams with superior surface appearance and enhanced mechanical performance. Materials and Design, 2017, 127, 115-125.	3.3	73
95	Structure-tunable thermoplastic polyurethane foams fabricated by supercritical carbon dioxide foaming and their compressive mechanical properties. Journal of Supercritical Fluids, 2019, 149, 127-137.	1.6	73
96	Effects of supercritical CO2 on the viscosity and morphology of polymer blends. Advances in Polymer Technology, 2000, 19, 300-311.	0.8	71
97	Dependence of electromagnetic interference shielding ability of conductive polymer composite foams with hydrophobic properties on cellular structure. Journal of Materials Chemistry C, 2020, 8, 7401-7410.	2.7	70
98	Effect of Processing Parameters on the Mechanical Properties of Injection Molded Thermoplastic Polyolefin (TPO) Cellular Foams. Macromolecular Materials and Engineering, 2008, 293, 605-613.	1.7	69
99	Effect of Unexpected CO₂â€™s Phase Transition on the High-Pressure Differential Scanning Calorimetry Performance of Various Polymers. ACS Sustainable Chemistry and Engineering, 2016, 4, 1810-1818.	3.2	69
100	Effect of Supercritical Gas on Crystallization of Linear and Branched Polypropylene Resins with Foaming Additives. Industrial & Engineering Chemistry Research, 2005, 44, 6685-6691.	1.8	68
101	HDPE-Clay Nanocomposite Foams Blown with Supercritical CO2. Journal of Cellular Plastics, 2005, 41, 487-502.	1.2	67
102	The synergy of supercritical CO2 and supercritical N2 in foaming of polystyrene for cell nucleation. Journal of Supercritical Fluids, 2014, 90, 35-43.	1.6	67
103	Enhancing the electrical conductivity of PP/CNT nanocomposites through crystal-induced volume exclusion effect with a slow cooling rate. Composites Part B: Engineering, 2020, 183, 107663.	5.9	67
104	A review on physical foaming of thermoplastic and vulcanized elastomers. Polymer Reviews, 2022, 62, 95-141.	5.3	66
105	Enhanced electromagnetic wave absorption performance of polymer/SiC-nanowire/MXene (Ti3C2Tx) composites. Carbon, 2021, 179, 408-416.	5.4	66
106	Processing of Porous Silicon Carbide Ceramics from Carbonâ€Filled Polysiloxane by Extrusion and Carbothermal Reduction. Journal of the American Ceramic Society, 2008, 91, 1361-1364.	1.9	65
107	Study of the bubble nucleation and growth mechanisms in high-pressure foam injection molding through in-situ visualization. European Polymer Journal, 2016, 76, 2-13.	2.6	65
108	Transition from microcellular to nanocellular PLA foams by controlling viscosity, branching and crystallization. European Polymer Journal, 2017, 91, 283-296.	2.6	64

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109	Characterization of the Structure, Acoustic Property, Thermal Conductivity, and Mechanical Property of Highly Expanded Openâ€Cell Polycarbonate Foams. Macromolecular Materials and Engineering, 2015, 300, 48-56.	1.7	63
110	Fabrication of high-expansion microcellular PLA foams based on pre-isothermal cold crystallization and supercritical CO2 foaming. Polymer Degradation and Stability, 2018, 156, 75-88.	2.7	63
111	Research on a New Variotherm Injection Molding Technology and its Application on the Molding of a Large LCD Panel. Polymer-Plastics Technology and Engineering, 2009, 48, 671-681.	1.9	62
112	Microcellular extrusion foaming of poly(lactide)/poly(butylene adipate-co-terephthalate) blends. Materials Science and Engineering C, 2010, 30, 255-262.	3.8	62
113	Ultra-high expansion linear polypropylene foams prepared in a semi-molten state under supercritical CO2. Journal of Supercritical Fluids, 2019, 145, 140-150.	1.6	62
114	Sustainable and efficient technologies for removal and recovery of toxic and valuable metals from wastewater: Recent progress, challenges, and future perspectives. Chemosphere, 2022, 292, 133102.	4.2	62
115	Fabrication of Microcellular Ceramics Using Gaseous Carbon Dioxide. Journal of the American Ceramic Society, 2003, 86, 2231-2233.	1.9	61
116	Steam-Chest Molding of Expanded Polypropylene Foams. 1. DSC Simulation of Bead Foam Processing. Industrial & Engineering Chemistry Research, 2010, 49, 9822-9829.	1.8	61
117	Steam-chest molding of expanded thermoplastic polyurethane bead foams and their mechanical properties. Chemical Engineering Science, 2017, 174, 337-346.	1.9	61
118	Processing and characterization of solid and foamed injection-molded polylactide with talc. Journal of Cellular Plastics, 2013, 49, 351-374.	1.2	60
119	Rheology, thermal properties, and foaming behavior of high <scp>d</scp>-content polylactic acid/cellulose nanofiber composites. RSC Advances, 2015, 5, 91544-91557.	1.7	60
120	Fabrication and Characterization of Closed-Cell Rubber Foams Based on Natural Rubber/Carbon Black by One-Step Foam Processing. Industrial & Engineering Chemistry Research, 2016, 55, 2407-2416.	1.8	60
121	Characterization of hard-segment crystalline phase of poly(ether- block -amide) (PEBAX Â®) thermoplastic elastomers in the presence of supercritical CO 2 and its impact on foams. Polymer, 2017, 114, 15-27.	1.8	60
122	Biodegradable PLA/PBS open-cell foam fabricated by supercritical CO2 foaming for selective oil-adsorption. Separation and Purification Technology, 2021, 257, 117949.	3.9	60
123	A comprehensive review of cell structure variation and general rules for polymer microcellular foams. Chemical Engineering Journal, 2022, 430, 132662.	6.6	60
124	Foaming Poly(vinyl alcohol)/Microfibrillated Cellulose Composites with CO₂ and Water as Co-blowing Agents. Industrial & Engineering Chemistry Research, 2014, 53, 11962-11972.	1.8	59
125	Characterization of hard-segment crystalline phase of thermoplastic polyurethane in the presence of butane and glycerol monosterate and its impact on mechanical property and microcellular morphology. Polymer, 2017, 112, 208-218.	1.8	59
126	Evaluation and modeling of electrical conductivity in conductive polymer nanocomposite foams with multiwalled carbon nanotube networks. Chemical Engineering Journal, 2021, 411, 128382.	6.6	59

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127	Production of low-density LLDPE foams in rotational molding. Polymer Engineering and Science, 1998, 38, 1997-2009.	1.5	58
128	Acidâ€"Base Polymeric Foams for the Adsorption of Micro-oil Droplets from Industrial Effluents. Environmental Science & Technology, 2017, 51, 8552-8560.	4.6	57
129	Comparative study on air gasification of plastic waste and conventional biomass based on coupling of AHP/TOPSIS multi-criteria decision analysis. Chemosphere, 2022, 286, 131867.	4.2	57
130	The orientation of carbon nanotubes in poly(ethyleneâ€<i>co</i>â€octene) microcellular foaming and its suppression effect on cell coalescence. Polymer Engineering and Science, 2012, 52, 2078-2089.	1.5	56
131	High-expansion polypropylene foam prepared in non-crystalline state and oil adsorption performance of open-cell foam. Journal of Colloid and Interface Science, 2019, 542, 233-242.	5.0	56
132	Research and application of a new rapid heat cycle molding with electric heating and coolant cooling to improve the surface quality of large LCD TV panels. Polymers for Advanced Technologies, 2011, 22, 476-487.	1.6	55
133	Lightweight, thermally insulating, and low dielectric microcellular high-impact polystyrene (HIPS) foams fabricated by high-pressure foam injection molding with mold opening. Journal of Materials Chemistry C, 2018, 6, 12294-12305.	2.7	55
134	The rheological and physical properties of linear and branched polypropylene blends. Polymer Engineering and Science, 2007, 47, 1133-1140.	1.5	53
135	The effects of viscoelastic properties on the cellular morphology of silicone rubber foams generated by supercritical carbon dioxide. RSC Advances, 2015, 5, 106981-106988.	1.7	53
136	Effect of foam processing parameters on bubble nucleation and growth dynamics in high-pressure foam injection molding. Chemical Engineering Science, 2016, 155, 27-37.	1.9	53
137	Conductive network formation and destruction in polypropylene/carbon nanotube composites via crystal control using supercritical carbon dioxide. Polymer, 2017, 129, 179-188.	1.8	53
138	Solubility and diffusivity of CO2 and N2 in TPU and their effects on cell nucleation in batch foaming. Journal of Supercritical Fluids, 2019, 154, 104623.	1.6	53
139	Nanocellular poly(ether-<i>block</i>-amide)/MWCNT nanocomposite films fabricated by stretching-assisted microcellular foaming for high-performance EMI shielding applications. Journal of Materials Chemistry C, 2021, 9, 1245-1258.	2.7	53
140	Hydrophobic Porous Polypropylene with Hierarchical Structures for Ultrafast and Highly Selective Oil/Water Separation. ACS Applied Materials & Interfaces, 2021, 13, 16859-16868.	4.0	53
141	Processing of Microcellular Mullite. Journal of the American Ceramic Society, 2005, 88, 3311-3315.	1.9	52
142	Bi-cellular Foam Structure of Polystyrene from Extrusion Foaming Process. Journal of Cellular Plastics, 2009, 45, 539-553.	1.2	51
143	Non-isothermal crystallization behaviors of poly(lactic acid)/cellulose nanofiber composites in the presence of CO2. European Polymer Journal, 2015, 71, 231-247.	2.6	51
144	Experimental observation and modeling of fiber rotation and translation during foam injection molding of polymer composites. Composites Part A: Applied Science and Manufacturing, 2016, 88, 67-74.	3.8	51

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145	The effects of clay dispersion on the mechanical, physical, and flameâ€retarding properties of wood fiber/polyethylene/clay nanocomposites. Journal of Applied Polymer Science, 2010, 118, 452-461.	1.3	50
146	Determination of Solubilities of CO₂ in Linear and Branched Polypropylene Using a Magnetic Suspension Balance and a <i>PVT</i> Apparatus. Journal of Chemical & Engineering Data, 2010, 55, 4885-4895.	1.0	50
147	Enhancing the mechanical performance of PA6 based composites by altering their crystallization and rheological behavior via in-situ generated PPS nanofibrils. Composites Part B: Engineering, 2020, 195, 108067.	5.9	50
148	Use of Nitrogen as a Blowing Agent for the Production of Fine-Celled High-Density Polyethylene Foams. Macromolecular Materials and Engineering, 2006, 291, 1233-1244.	1.7	49
149	Effects of clay dispersion and content on the rheological, mechanical properties, and flame retardance of HDPE/clay nanocomposites. Journal of Applied Polymer Science, 2007, 105, 1993-1999.	1.3	49
150	Development of high-porosity resorcinol formaldehyde aerogels with enhanced mechanical properties through improved particle necking under CO 2 supercritical conditions. Journal of Colloid and Interface Science, 2017, 485, 65-74.	5.0	49
151	Environmentally Friendly Polylactic Acid-Based Thermal Insulation Foams Blown with Supercritical CO₂. Industrial & Engineering Chemistry Research, 2018, 57, 5464-5471.	1.8	49
152	Highly stretchable conductive thermoplastic vulcanizate/carbon nanotube nanocomposites with segregated structure, low percolation threshold and improved cyclic electromechanical performance. Journal of Materials Chemistry C, 2018, 6, 350-359.	2.7	48
153	Strong and thermally insulating polylactic acid/glass fiber composite foam fabricated by supercritical carbon dioxide foaming. International Journal of Biological Macromolecules, 2019, 138, 144-155.	3.6	48
154	CVD carbon-coated carbonized loofah sponge loaded with a directionally arrayed MXene aerogel for electromagnetic interference shielding. Journal of Materials Chemistry A, 2021, 9, 358-370.	5.2	48
155	Increase of open-cell content by plasticizing soft regions with secondary blowing agent. Polymer Engineering and Science, 2005, 45, 1445-1451.	1.5	47
156	Effect of nanoclay addition on the foaming behavior of linear polypropyleneâ€based soft thermoplastic polyolefin foam blown in continuous extrusion. Polymer Engineering and Science, 2011, 51, 2387-2397.	1.5	47
157	Preparation and characterization of high melt strength thermoplastic polyester elastomer with different topological structure using a two-step functional group reaction. Polymer, 2019, 179, 121628.	1.8	47
158	Highly Compressible Polymer Composite Foams with Thermal Heating-Boosted Electromagnetic Wave Absorption Abilities. ACS Applied Materials & Interfaces, 2020, 12, 50793-50802.	4.0	47
159	Nanofibrillated polymer systems: Design, application, and current state of the art. Progress in Polymer Science, 2021, 113, 101346.	11.8	47
160	Microcellular sheet extrusion system process design models for shaping and cell growth control. Polymer Engineering and Science, 1998, 38, 674-688.	1.5	46
161	Ideal surface geometries of nucleating agents to enhance cell nucleation in polymeric foaming processes. Journal of Applied Polymer Science, 2008, 108, 3997-4003.	1.3	46
162	Origins of the failure of classical nucleation theory for nanocellular polymer foams. Soft Matter, 2011, 7, 7351.	1.2	46

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163	Non-crosslinked thermoplastic reticulated polymer foams from crystallization-induced structural heterogeneities. Polymer, 2018, 135, 185-192.	1.8	46
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