

Guoqun Zhao

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205
papers

3,494
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49
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221
ext. papers

4,605
ext. citations

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avg, IF

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L-index

#	Paper	IF	Citations
205	Ultralow-Threshold and Lightweight Biodegradable Porous PLA/MWCNT with Segregated Conductive Networks for High-Performance Thermal Insulation and Electromagnetic Interference Shielding Applications. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 1195-1203	9.5	171
204	Ultra-tough and super thermal-insulation nanocellular PMMA/TPU. <i>Chemical Engineering Journal</i> , 2017 , 325, 632-646	14.7	123
203	Lightweight and tough nanocellular PP/PTFE nanocomposite foams with defect-free surfaces obtained using in situ nanofibrillation and nanocellular injection molding. <i>Chemical Engineering Journal</i> , 2018 , 350, 1-11	14.7	106
202	Modelling of thermal transport through a nanocellular polymer foam: toward the generation of a new superinsulating material. <i>Nanoscale</i> , 2017 , 9, 5996-6009	7.7	98
201	Injection-molded microcellular PLA/graphite nanocomposites with dramatically enhanced mechanical and electrical properties for ultra-efficient EMI shielding applications. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 6847-6859	7.1	94
200	Low-density and structure-tunable microcellular PMMA foams with improved thermal-insulation and compressive mechanical properties. <i>European Polymer Journal</i> , 2017 , 95, 382-393	5.2	87
199	A review on the recent development of incremental sheet-forming process. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 92, 2439-2462	3.2	83
198	Highly stable hybrid selenophene-3,4-ethylenedioxythiophene as electrically conducting and electrochromic polymers. <i>Polymer Chemistry</i> , 2014 , 5, 4896-4908	4.9	77
197	Microstructure analysis of an Al-Zn-Mg alloy during porthole die extrusion based on modeling of constitutive equation and dynamic recrystallization. <i>Journal of Alloys and Compounds</i> , 2017 , 710, 80-91	5.7	67
196	Lightweight, super-elastic, and thermal-sound insulation bio-based PEBA foams fabricated by high-pressure foam injection molding with mold-opening. <i>European Polymer Journal</i> , 2018 , 103, 68-79	5.2	66
195	Role of elastic strain energy in cell nucleation of polymer foaming and its application for fabricating sub-microcellular TPU microfilms. <i>Polymer</i> , 2017 , 119, 28-39	3.9	62
194	Lightweight and strong microcellular injection molded PP/talc nanocomposite. <i>Composites Science and Technology</i> , 2018 , 168, 38-46	8.6	60
193	Strong and thermal-resistance glass fiber-reinforced polylactic acid (PLA) composites enabled by heat treatment. <i>International Journal of Biological Macromolecules</i> , 2019 , 129, 448-459	7.9	59
192	Glass fiber reinforced PLA composite with enhanced mechanical properties, thermal behavior, and foaming ability. <i>Polymer</i> , 2019 , 181, 121803	3.9	57
191	Research on the reduction of sink mark and warpage of the molded part in rapid heat cycle molding process. <i>Materials & Design</i> , 2013 , 47, 779-792		56
190	Research on a New Variotherm Injection Molding Technology and its Application on the Molding of a Large LCD Panel. <i>Polymer-Plastics Technology and Engineering</i> , 2009 , 48, 671-681		52
189	Constitutive modeling, processing map establishment and microstructure analysis of spray deposited Al-Cu-Li alloy 2195. <i>Journal of Alloys and Compounds</i> , 2019 , 779, 735-751	5.7	52

188	A novel gas-assisted microcellular injection molding method for preparing lightweight foams with superior surface appearance and enhanced mechanical performance. <i>Materials and Design</i> , 2017 , 127, 115-125	8.1	50
187	Strong and super thermally insulating in-situ nanofibrillar PLA/PET composite foam fabricated by high-pressure microcellular injection molding. <i>Chemical Engineering Journal</i> , 2020 , 390, 124520	14.7	49
186	Microstructures and mechanical properties of spray deposited 2195 Al-Cu-Li alloy through thermo-mechanical processing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 727, 78-89	5.3	48
185	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. <i>Polymers for Advanced Technologies</i> , 2011 , 22, 476-487	3.2	48
184	Fabrication of high-expansion microcellular PLA foams based on pre-isothermal cold crystallization and supercritical CO ₂ foaming. <i>Polymer Degradation and Stability</i> , 2018 , 156, 75-88	4.7	39
183	Controllable Phosphorylation Strategy for Free-Standing Phosphorus/Nitrogen Cofunctionalized Porous Carbon Monoliths as High-Performance Potassium Ion Battery Anodes. <i>ACS Nano</i> , 2020 , 14, 14057-14069	16.7	39
182	Lightweight, thermally insulating, and low dielectric microcellular high-impact polystyrene (HIPS) foams fabricated by high-pressure foam injection molding with mold opening. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 12294-12305	7.1	37
181	Numerical simulation and metal flow analysis of hot extrusion process for a complex hollow aluminum profile. <i>International Journal of Advanced Manufacturing Technology</i> , 2012 , 60, 101-110	3.2	36
180	Analysis and porthole die design for a multi-hole extrusion process of a hollow, thin-walled aluminum profile. <i>International Journal of Advanced Manufacturing Technology</i> , 2014 , 74, 383-392	3.2	35
179	Green and tunable fabrication of graphene-like N-doped carbon on a 3D metal substrate as a binder-free anode for high-performance potassium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 21966-21975	13	34
178	Structure-tunable thermoplastic polyurethane foams fabricated by supercritical carbon dioxide foaming and their compressive mechanical properties. <i>Journal of Supercritical Fluids</i> , 2019 , 149, 127-137	4.2	34
177	Microstructure and mechanical properties of Mg-3.0Zn-1.0Sn-0.3Mn-0.3Ca alloy extruded at different temperatures. <i>Journal of Alloys and Compounds</i> , 2018 , 732, 257-269	5.7	34
176	Ultra-high expansion linear polypropylene foams prepared in a semi-molten state under supercritical CO ₂ . <i>Journal of Supercritical Fluids</i> , 2019 , 145, 140-150	4.2	32
175	Optimization of an aluminum profile extrusion process based on Taguchi's method with S/N analysis. <i>International Journal of Advanced Manufacturing Technology</i> , 2012 , 60, 589-599	3.2	31
174	Numerical Simulation of Extrusion Process and Die Structure Optimization for a Complex Aluminum Multicavity Wallboard of High-Speed Train. <i>Materials and Manufacturing Processes</i> , 2011 , 26, 1530-1538	4.1	31
173	Enhancing Nanofiller Dispersion Through Prefoaming and Its Effect on the Microstructure of Microcellular Injection Molded Polylactic Acid/Clay Nanocomposites. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 7122-7130	3.9	30
172	Hot Deformation Behaviors and Processing Maps of 2024 Aluminum Alloy in As-cast and Homogenized States. <i>Journal of Materials Engineering and Performance</i> , 2015 , 24, 5002-5012	1.6	30
171	Influence of relative low gas counter pressure on melt foaming behavior and surface quality of molded parts in microcellular injection molding process. <i>Journal of Cellular Plastics</i> , 2014 , 50, 415-435	1.5	30

170	Mechanical and thermal properties of conventional and microcellular injection molded poly (lactic acid)/poly (ε-caprolactone) blends. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 53, 59-67	4.1	29
169	Effects of cavity surface temperature on mechanical properties of specimens with and without a weld line in rapid heat cycle molding. <i>Materials & Design</i> , 2013 , 46, 457-472		28
168	Microstructure evolution and mechanical properties of 2196 Al-Li alloy in hot extrusion process. <i>Journal of Materials Processing Technology</i> , 2020 , 275, 116348	5.3	27
167	A green strategy to regulate cellular structure and crystallization of poly(lactic acid) foams based on pre-isothermal cold crystallization and CO foaming. <i>International Journal of Biological Macromolecules</i> , 2019 , 129, 171-180	7.9	26
166	Microstructure and texture evolution during porthole die extrusion of Mg-Al-Zn alloy. <i>Journal of Materials Processing Technology</i> , 2018 , 259, 346-352	5.3	26
165	Optimal Design of Second-Step Welding Chamber for a Condenser Tube Extrusion Die Based on the Response Surface Method and the Genetic Algorithm. <i>Materials and Manufacturing Processes</i> , 2013 , 28, 823-834	4.1	26
164	High-expansion polypropylene foam prepared in non-crystalline state and oil adsorption performance of open-cell foam. <i>Journal of Colloid and Interface Science</i> , 2019 , 542, 233-242	9.3	25
163	Effects of heat treatment on the microstructure and mechanical properties of extruded 2196 Al-Cu-Li alloy. <i>Materials and Design</i> , 2020 , 192, 108746	8.1	25
162	Strong and thermally insulating polylactic acid/glass fiber composite foam fabricated by supercritical carbon dioxide foaming. <i>International Journal of Biological Macromolecules</i> , 2019 , 138, 144-155	7.5	24
161	Formation mechanism of porous structure in plastic parts injected by microcellular injection molding technology with variable mold temperature. <i>Applied Thermal Engineering</i> , 2017 , 114, 484-497	5.8	23
160	Microstructure and mechanical properties of Mg-Al-Zn alloy extruded by porthole die with different initial billets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 718, 390-397	5.3	22
159	Multiobjective optimization design of porthole extrusion die using Pareto-based genetic algorithm. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 69, 1547-1556	3.2	22
158	Process simulation and optimization of laser tube bending. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 65, 333-342	3.2	22
157	A Comparative Study of Different Necking Criteria for Numerical and Experimental Prediction of FLCs. <i>Journal of Materials Engineering and Performance</i> , 2011 , 20, 1036-1042	1.6	22
156	Research on optimum heating system design for rapid thermal response mold with electric heating based on response surface methodology and particle swarm optimization. <i>Journal of Applied Polymer Science</i> , 2011 , 119, 902-921	2.9	22
155	Constitutive Equations and Flow Behavior of an As-Extruded AZ31 Magnesium Alloy Under Large Strain Condition. <i>Journal of Materials Engineering and Performance</i> , 2016 , 25, 2267-2281	1.6	22
154	Effects of asymmetric feeder on microstructure and mechanical properties of high strength Al-Zn-Mg alloy by hot extrusion. <i>Journal of Alloys and Compounds</i> , 2018 , 749, 293-304	5.7	21
153	Experimental research on the effects of cavity surface temperature on surface appearance properties of the moulded part in rapid heat cycle moulding process. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 68, 1293-1310	3.2	20

152	Nanocellular poly(ether-block-amide)/MWCNT nanocomposite films fabricated by stretching-assisted microcellular foaming for high-performance EMI shielding applications. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 1245-1258	7.1	20
151	Effects of ram velocity on pyramid die extrusion of hollow aluminum profile. <i>International Journal of Advanced Manufacturing Technology</i> , 2015 , 79, 2117-2125	3.2	19
150	Study on mechanical and flow properties of acrylonitrile-butadiene-styrene/poly(methyl methacrylate)/nano-calcium carbonate composites. <i>Polymer Composites</i> , 2010 , 31, 1593-1602	3	19
149	Biodegradable PLA/PBS open-cell foam fabricated by supercritical CO ₂ foaming for selective oil-adsorption. <i>Separation and Purification Technology</i> , 2021 , 257, 117949	8.3	19
148	Formation mechanism and structural characteristics of unfoamed skin layer in microcellular injection-molded parts. <i>Journal of Cellular Plastics</i> , 2016 , 52, 419-439	1.5	18
147	Influence of aging treatment on the microstructure, mechanical properties and anisotropy of hot extruded Al-Mg-Si plate. <i>Materials and Design</i> , 2019 , 182, 107999	8.1	18
146	Virtual tryout and optimization of the extrusion die for an aluminum profile with complex cross-sections. <i>International Journal of Advanced Manufacturing Technology</i> , 2015 , 78, 927-937	3.2	18
145	Microcellular injection molded polylactic acid/poly (ε-caprolactone) blends with supercritical CO ₂ : Correlation between rheological properties and their foaming behavior. <i>Polymer Engineering and Science</i> , 2016 , 56, 939-946	2.3	18
144	Influence of extrusion parameters on microstructure, texture, and second-phase particles in an Al-Mg-Si alloy. <i>Journal of Materials Processing Technology</i> , 2019 , 270, 323-334	5.3	17
143	Bubble morphological evolution and surface defect formation mechanism in the microcellular foam injection molding process. <i>RSC Advances</i> , 2015 , 5, 70032-70050	3.7	17
142	Automatic optimization design of a feeder extrusion die with response surface methodology and mesh deformation technique. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 91, 3181-3193	3.2	16
141	Effect of surface modifiers and surface modification methods on properties of acrylonitrileButadieneEtyrene/poly(methyl methacrylate)/nano-calcium carbonate composites. <i>Journal of Applied Polymer Science</i> , 2013 , 127, 2520-2528	2.9	16
140	Microstructure evolution and precipitation characteristics of spray-formed and subsequently extruded 2195 Al-Li alloy plate during solution and aging process. <i>Journal of Materials Processing Technology</i> , 2020 , 283, 116718	5.3	16
139	Effect of rapid heating cycle injection mold temperature on crystal structures, morphology of polypropylene and surface quality of plastic parts. <i>Journal of Polymer Research</i> , 2015 , 22, 1	2.7	15
138	Design of a Multihole Porthole Die for Aluminum Tube Extrusion. <i>Materials and Manufacturing Processes</i> , 2012 , 27, 147-153	4.1	15
137	Preform design in forging process of complex parts by using quasi-equipotential field and response surface methods. <i>International Journal of Advanced Manufacturing Technology</i> , 2015 , 79, 21-29	3.2	14
136	A nonlinear numerical analysis for metal-forming process using the rigid-(visco)plastic element-free Galerkin method. <i>International Journal of Advanced Manufacturing Technology</i> , 2009 , 42, 83-92	3.2	14
135	Numerical simulation of reactive extrusion processes of PA6. <i>Journal of Applied Polymer Science</i> , 2007 , 103, 2331-2336	2.9	14

134	Large cyclic deformability of microcellular TPU/MWCNT composite film with conductive stability, and electromagnetic interference shielding and self-cleaning performance. <i>Composites Science and Technology</i> , 2020 , 197, 108247	8.6	13
133	Die optimization design and experimental study of a large wallboard aluminum alloy profile used for high-speed train. <i>International Journal of Advanced Manufacturing Technology</i> , 2014 , 74, 539-549	3.2	13
132	Investigation on Effects of Die Orifice Layout on Three-Hole Porthole Extrusion of Aluminum Alloy 6063 Tubes. <i>Journal of Materials Engineering and Performance</i> , 2013 , 22, 1223-1232	1.6	13
131	A mixed hardening rule coupled with Hill48 yielding function to predict the springback of sheet U-bending. <i>International Journal of Material Forming</i> , 2008 , 1, 169-175	2	13
130	Thermal-Insulation, Electrical, and Mechanical Properties of Highly-Expanded PMMA/MWCNT Nanocomposite Foams Fabricated by Supercritical CO ₂ Foaming. <i>Macromolecular Materials and Engineering</i> , 2019 , 304, 1800789	3.9	13
129	Review on the performances, foaming and injection molding simulation of natural fiber composites. <i>Polymer Composites</i> , 2021 , 42, 1305-1324	3	13
128	Novel Method of Fabricating Free-Standing and Nitrogen-Doped 3D Hierarchically Porous Carbon Monoliths as Anodes for High-Performance Sodium-Ion Batteries by Supercritical CO Foaming. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 9125-9135	9.5	12
127	Effect of electrolytes on the electropolymerization and optoelectronic properties of poly(3-methylselenophene). <i>RSC Advances</i> , 2015 , 5, 70649-70660	3.7	12
126	Numerical and experimental investigation on thermo-mechanical behavior during transient extrusion process of high-strength 7050 aluminum alloy profile. <i>International Journal of Advanced Manufacturing Technology</i> , 2016 , 85, 1915-1926	3.2	12
125	Research on thermal stress, deformation, and fatigue lifetime of the rapid heating cycle injection mold. <i>International Journal of Advanced Manufacturing Technology</i> , 2009 , 45, 261-275	3.2	12
124	Effects of extrusion parameters and post-heat treatments on microstructures and mechanical properties of extrusion weld seams in 2195 Al-Li alloy profiles. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 2662-2678	5.5	12
123	Response of mechanical properties and corrosion behavior of Al ₇₀ Zn ₂₀ Mg alloy treated by aging and annealing: A comparative study. <i>Journal of Alloys and Compounds</i> , 2020 , 848, 156561	5.7	12
122	Constitutive modeling and microstructure characterization of 2196 Al-Li alloy in various hot deformation conditions. <i>Journal of Manufacturing Processes</i> , 2020 , 59, 326-342	5	12
121	Lightweight and flexible poly(ether-block-amide)/multiwalled carbon nanotube composites with porous structure and segregated conductive networks for electromagnetic shielding applications. <i>Composites Part A: Applied Science and Manufacturing</i> , 2021 , 144, 106356	8.4	12
120	Investigation on longitudinal weld seams during porthole die extrusion process of high strength 7075 aluminum alloy. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 91, 1897-1907	3.2	11
119	Correlation between homogenization treatment and subsequent hot extrusion of Al ₇₀ Mg ₂₀ Si alloy. <i>Journal of Materials Science</i> , 2019 , 54, 9843-9856	4.3	11
118	Quality improvement methods for hexahedral element meshes adaptively generated using grid-based algorithm. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 726-761	2.4	11
117	Modeling and simulation of three-dimensional extrusion swelling of viscoelastic fluids with PTT, Giesekus and FENE-P constitutive models. <i>International Journal for Numerical Methods in Fluids</i> , 2013 , 72, 846-863	1.9	11

116	Effect of Process Parameters on Die Wear Behavior of Aluminum Alloy Rod Extrusion. <i>Materials and Manufacturing Processes</i> , 2013 , 28, 312-318	4.1	11
115	Topology optimization of plane structures using smoothed particle hydrodynamics method. <i>International Journal for Numerical Methods in Engineering</i> , 2017 , 110, 726-744	2.4	11
114	Fully Coupled Transient Heat Transfer and Melt Filling Simulations in Rapid Heat Cycle Molding with Steam Heating. <i>Polymer-Plastics Technology and Engineering</i> , 2011 , 50, 423-437		11
113	Measurement and simulation of low-density polyethylene extrudate swell through a circular die. <i>Polymer International</i> , 2009 , 58, 475-483	3.3	11
112	An optimization strategy for die design in the low-density polyethylene annular extrusion process based on FES/BPNN/NSGA-II. <i>International Journal of Advanced Manufacturing Technology</i> , 2010 , 50, 517-532	3.2	11
111	Evaluation of a pyramid die extrusion for a hollow aluminum profile using FE simulation. <i>Journal of Mechanical Science and Technology</i> , 2015 , 29, 2195-2203	1.6	10
110	Application and analysis of spread die and flat container in the extrusion of a large-size, hollow, and flat-wide aluminum alloy profile. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 94, 4247-4263	3.2	10
109	Fabrication of macroporous carbon monoliths with controllable structure via supercritical CO ₂ foaming of polyacrylonitrile. <i>Journal of CO₂ Utilization</i> , 2019 , 33, 330-340	7.6	10
108	Effect of Acrylonitrile-Butadiene-Styrene High-Rubber Powder and Strain Rate on the Morphology and Mechanical Properties of Acrylonitrile-Butadiene-Styrene/Poly (Methyl Methacrylate) Blends. <i>Polymer-Plastics Technology and Engineering</i> , 2010 , 49, 296-304		10
107	Computer simulation of reactive extrusion processes for free radical polymerization. <i>Polymer Engineering and Science</i> , 2007 , 47, 667-674	2.3	10
106	Automatic quadrilateral mesh generation and quality improvement techniques for an improved combination method. <i>Computational Geosciences</i> , 2015 , 19, 371-388	2.7	9
105	Foaming Mechanism of Polypropylene in Gas-Assisted Microcellular Injection Molding. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 4710-4720	3.9	9
104	Optimization of porthole extrusion dies with the developed algorithm based on finite volume method. <i>International Journal of Advanced Manufacturing Technology</i> , 2016 , 85, 1901-1913	3.2	9
103	Effect of inter-annealing between two stages of extrusion on the microstructure and mechanical property for spray deposited AlCuLi alloy 2195. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 3891-3907	5.5	9
102	Study on effects of short glass fiber reinforcement on the mechanical and thermal properties of PC/ABS composites. <i>Journal of Applied Polymer Science</i> , 2014 , 131, n/a-n/a	2.9	9
101	The cell forming process of microcellular injection-molded parts. <i>Journal of Applied Polymer Science</i> , 2014 , 131, n/a-n/a	2.9	9
100	Study on solid bonding behavior of AZ31 Mg alloy during porthole die extrusion process. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 93, 2791-2799	3.2	9
99	Thermal response of an electric heating rapid heat cycle molding mold and its effect on surface appearance and tensile strength of the molded part. <i>Journal of Applied Polymer Science</i> , 2012 , 128, n/a-n/a	2.9	9

98	Numerical study of nonisothermal polymer extrusion flow with a differential viscoelastic model. <i>Polymer Engineering and Science</i> , 2008 , 48, 316-328	2.3	9
97	Three-Dimensional Nonisothermal Simulation of Multi-Layer Extrusion Processes of Polymer Melts. <i>Polymer-Plastics Technology and Engineering</i> , 2006 , 45, 1257-1262		9
96	Effects of heat treatment on the microstructure, texture and mechanical property anisotropy of extruded 2196 Al-Cu-Li alloy. <i>Journal of Alloys and Compounds</i> , 2021 , 862, 158102	5.7	9
95	Microcellular PLA/PMMA foam fabricated by CO ₂ foaming with outstanding shape-memory performance. <i>Journal of CO₂ Utilization</i> , 2021 , 49, 101553	7.6	9
94	Green fabrication method of layered and open-cell polylactide foams for oil-sorption via pre-crystallization and supercritical CO ₂ -induced melting. <i>Journal of Supercritical Fluids</i> , 2020 , 162, 104854	4.2	8
93	Morphology Evolution and Elimination Mechanism of Bubble Marks on Surface of Microcellular Injection-Molded Parts with Dynamic Mold Temperature Control. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 1089-1101	3.9	8
92	The effect of high temperature annealing process on crystallization process of polypropylene, mechanical properties, and surface quality of plastic parts. <i>Journal of Applied Polymer Science</i> , 2015 , 132, n/a-n/a	2.9	8
91	Study on Forming Limit Diagrams of AZ31B Alloy Sheet at Different Temperatures. <i>Materials and Manufacturing Processes</i> , 2013 , 28, 306-311	4.1	8
90	Investigation of the vibration characteristics of radial tires using experimental and numerical techniques. <i>Journal of Reinforced Plastics and Composites</i> , 2011 , 30, 2035-2050	2.9	8
89	Polypropylene/talc foams with high weight-reduction and improved surface quality fabricated by mold-opening microcellular injection molding. <i>Journal of Materials Research and Technology</i> , 2021 , 12, 74-86	5.5	8
88	Effect of preparation methods on electrical and electromagnetic interference shielding properties of PMMA/MWCNT nanocomposites. <i>Polymer Composites</i> , 2019 , 40, E1786-E1800	3	8
87	Super High-Expansion Poly(Lactic Acid) Foams with Excellent Oil-Adsorption and Thermal-Insulation Properties Fabricated by Supercritical CO ₂ Foaming. <i>Advanced Sustainable Systems</i> , 2021 , 5, 2000295	5.9	8
86	Preform optimization and microstructure analysis on hot precision forging process of a half axle flange. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 95, 2157-2167	3.2	8
85	Investigation on phosphorus halogen-free flame-retardancy systems in short glass fiber-reinforced PC/ABS composites under rapid thermal cycle molding process condition. <i>Polymer Composites</i> , 2015 , 36, 1653-1663	3	7
84	Structural optimization and finite element analysis of poly-L-lactide acid coronary stent with improved radial strength and acute recoil rate. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2020 , 108, 2754-2764	3.5	7
83	Suppressing shrinkage/warpage of PBT injection molded parts with fillers. <i>Polymer Composites</i> , 2018 , 39, 2377-2384	3	7
82	Investigation of the influence of pressurized CO on the crystal growth of poly(L-lactic acid) by using an in situ high-pressure optical system. <i>Soft Matter</i> , 2019 , 15, 5714-5727	3.6	7
81	Modeling and simulation of polymer melts flow in the extrusion process of plastic profile with metal insert. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 67, 629-646	3.2	7

80	Effects of mold cavity temperature on surface quality and mechanical properties of nanoparticle-filled polymer in rapid heat cycle molding. <i>Journal of Applied Polymer Science</i> , 2015 , 132, n/a-n/a	2.9	7
79	Geometry-adaptive generation algorithm and boundary match method for initial hexahedral element mesh. <i>Engineering With Computers</i> , 2008 , 24, 321-339	4.5	7
78	Abnormal grain growth of 2196 Al-Cu-Li alloy weld seams during extrusion and heat treatment. <i>Journal of Alloys and Compounds</i> , 2021 , 867, 159043	5.7	7
77	Investigation on the growth of snowflake-shaped Poly(L-Lactic acid) crystal by in-situ high-pressure microscope. <i>Polymer</i> , 2019 , 177, 25-34	3.9	6
76	Microstructure and Mechanical Properties of the As-Cast and As-Homogenized Mg-Zn-Sn-Mn-Ca Alloy Fabricated by Semicontinuous Casting. <i>Materials</i> , 2018 , 11,	3.5	6
75	Prediction for the mechanical property of short fiber-reinforced polymer composites through process modeling method. <i>Journal of Thermoplastic Composite Materials</i> , 2019 , 32, 1525-1546	1.9	6
74	Influence of die geometric structure on flow balance in complex hollow plastic profile extrusion. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 91, 1275-1287	3.2	5
73	Mechanical and Thermal Properties of ABS/PMMA/Potassium Titanate Whisker Composites. <i>Polymer-Plastics Technology and Engineering</i> , 2017 , 56, 382-390		5
72	Engineering applications of 2D and 3D finite element mesh generation in hydrogeology and water resources. <i>Computational Geosciences</i> , 2017 , 21, 733-758	2.7	5
71	Numerical Simulation of Moldable Silicone Rubber Vulcanization Process Based on Thermal Coupling Analysis. <i>Polymer-Plastics Technology and Engineering</i> , 2003 , 42, 883-898		5
70	Mechanical joining behavior of CuBe dissimilar metallic foils in laser shock clinching. <i>International Journal of Advanced Manufacturing Technology</i> , 2020 , 110, 1001-1014	3.2	5
69	Effect of extrusion parameters on microstructure, texture and mechanical property anisotropy of spray deposited 2195 AlCu alloy profile. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 818, 141406	5.3	5
68	Material flow analysis and extrusion die modifications for an irregular and multitooth aluminum alloy radiator. <i>International Journal of Advanced Manufacturing Technology</i> , 2016 , 85, 1927-1935	3.2	5
67	Springback behavior and a new chord modulus model of copper alloy during severe plastic compressive deformation. <i>Journal of Materials Processing Technology</i> , 2021 , 290, 116974	5.3	5
66	Nanocellular TPU composite foams achieved by stretch-assisted microcellular foaming with low-pressure gaseous CO ₂ as blowing agent. <i>Journal of CO₂ Utilization</i> , 2021 , 53, 101708	7.6	5
65	Adaptive hexahedral mesh generation and quality optimization for solid models with thin features using a grid-based method. <i>Engineering With Computers</i> , 2016 , 32, 61-84	4.5	4
64	Study on reducing sink mark depth of a microcellular injection molded part with many reinforcing ribs. <i>Journal of Cellular Plastics</i> , 2016 , 52, 479-502	1.5	4
63	A comparative study on hot deformation and solid-state bonding behavior of aluminum alloys for the integration of solid-state joining and forming processes. <i>International Journal of Advanced Manufacturing Technology</i> , 2019 , 104, 3849-3866	3.2	4

62	Research on rigid/visco-plastic element-free Galerkin method and key simulation techniques for three-dimensional bulk metal forming processes. <i>International Journal of Advanced Manufacturing Technology</i> , 2011 , 53, 485-503	3.2	4
61	Numerical investigation of die geometry effect on LDPE annular extrudate swell. <i>Journal of Applied Polymer Science</i> , 2010 , 117, NA-NA	2.9	4
60	Numerical simulation of three-dimensional polymer extrusion flow with differential viscoelastic model. <i>Polymers for Advanced Technologies</i> , 2007 , 18, 1004-1014	3.2	4
59	Investigation of the Gel Effect in Reactive Extrusion Processes for Free Radical Polymerization. <i>Macromolecular Reaction Engineering</i> , 2007 , 1, 321-330	1.5	4
58	Effects of Pre-stretching and Aging Treatments on Microstructure, Mechanical Properties, and Corrosion Behavior of Spray-Formed Al-Li Alloy 2195. <i>Journal of Materials Engineering and Performance</i> , 2020 , 29, 6960-6973	1.6	4
57	Influence of process parameters on forming quality of Cu-Fe joints by laser shock hole-clinching. <i>International Journal of Advanced Manufacturing Technology</i> , 2020 , 110, 887-898	3.2	4
56	Structural evolution of uniaxial tensile-deformed injection molded poly(e-caprolactone)/hydroxyapatite composites. <i>Polymer Composites</i> , 2017 , 38, 1771-1782	3	3
55	A method to improve dimensional accuracy and mechanical properties of injection molded polypropylene parts. <i>Journal of Polymer Engineering</i> , 2017 , 37, 323-334	1.4	3
54	Investigation on microstructure and mechanical properties of Al _{0.50} Zn _{0.35} Mg _{0.36} Cu alloy fabricated by hot extrusion process. <i>Journal of Materials Research</i> , 2019 , 34, 3151-3162	2.5	3
53	Modeling and Simulation of the Crystallization Behavior of Polymer Melts in the Hollow-Profile Extrusion Process Using the Coexistence Model of Spherulite and Shish-Kebab. <i>Macromolecular Theory and Simulations</i> , 2013 , 22, 36-51	1.5	3
52	Analysis of chemical calorific effect during reactive extrusion processes for free radical polymerization. <i>Polymer International</i> , 2007 , 56, 1553-1557	3.3	3
51	Super-elastic and structure-tunable poly(ether-block-amide) foams achieved by microcellular foaming. <i>Journal of CO₂ Utilization</i> , 2022 , 55, 101807	7.6	3
50	Design and multi-objective optimization of the bumper beams prepared in long glass fiber-reinforced polypropylene. <i>Polymer Composites</i> , 2021 , 42, 2933	3	3
49	Lightweight and strong glass fiber reinforced polypropylene composite foams achieved by mold-opening microcellular injection molding. <i>Journal of Materials Research and Technology</i> , 2021 , 14, 2920-2931	5.5	3
48	Numerical and experimental investigations on polymer melt flow phenomenon in a vario-thermal mold cavity. <i>Journal of Applied Polymer Science</i> , 2017 , 134, 45193	2.9	2
47	Investigation of the Rheological Behaviors of Polymeric Materials in the Film Casting Process through Multiscale Modeling and Simulation Method. <i>Macromolecular Theory and Simulations</i> , 2019 , 28, 1900001	1.5	2
46	Modeling and simulation of morphology variation during the solidification of polymer melts with amorphous and semi-crystalline phases. <i>Polymers for Advanced Technologies</i> , 2014 , 25, 1471-1483	3.2	2
45	Numerical simulation of bubble growth in a limited amount of liquid. <i>Journal of Applied Polymer Science</i> , 2009 , 116, NA-NA	2.9	2

44	Research on key technologies of FEM simulation of temperature field in the process of quenching. <i>Frontiers of Materials Science in China</i> , 2007 , 1, 359-365		2
43	Ultra-ductile and strong in-situ fibrillated PLA/PTFE nanocomposites with outstanding heat resistance derived by CO2 treatment. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022 , 155, 106849	8.4	2
42	Hot Extrusion Processing of AlLi Alloy Profiles and Related Issues: A Review. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2020 , 33,	2.5	2
41	Lightweight, strong, flame-retardant PVDF/PMMA microcellular foams for thermal insulation fabricated by supercritical CO2 foaming. <i>Composites Part B: Engineering</i> , 2022 , 230, 109554	10	2
40	An Investigation on the Anisotropic Plastic Behavior and Forming Limits of an Al-Mg-Li Alloy Sheet. <i>Journal of Materials Engineering and Performance</i> , 2021 , 30, 8224	1.6	2
39	Automatic triangular and triangular-prism mesh generation for overland and subsurface water flow simulations. <i>Physics of Fluids</i> , 2020 , 32, 056602	4.4	1
38	Investigation on the influence of fold conformation on PLLA lamellar splaying by film crystallization in supercritical CO2. <i>CrystEngComm</i> , 2020 , 22, 1459-1472	3.3	1
37	Poly(l-lactic acid) Crystallization in Pressurized CO2: An In Situ Microscopic Study and a New Model for Secondary Nucleation in Supercritical CO2. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 9021-9034	3.8	1
36	Finite element simulation of three-dimensional viscoelastic flow at high Weissenberg number based on the log-conformation formulation. <i>Mechanics of Time-Dependent Materials</i> , 2019 , 23, 477-495	1.2	1
35	Optimization of roll forming process for high-strength V channel steels. <i>International Journal of Advanced Manufacturing Technology</i> , 2019 , 105, 2469-2480	3.2	1
34	Optimization approach for processing design in the extrusion process of plastic profile with metal insert. <i>E-Polymers</i> , 2012 , 12,	2.7	1
33	Constitutive relationships of hot stamping boron steel B1500HS 2013 ,		1
32	Three-dimensional simulation of planar contraction viscoelastic flow by penalty finite element method. <i>International Journal for Numerical Methods in Fluids</i> , 2009 , 63, n/a-n/a	1.9	1
31	Microstructure optimization design methods of the forging process and applications. <i>Frontiers of Materials Science in China</i> , 2007 , 1, 121-129		1
30	Ultra-elastic and super-insulating biomass PEBA nanoporous foams achieved by combining in-situ fibrillation with microcellular foaming. <i>Journal of CO2 Utilization</i> , 2022 , 57, 101891	7.6	1
29	Poly(ether-block-amide) membrane with deformability and adjustable surface hydrophilicity for water purification. <i>Polymer Engineering and Science</i> , 2021 , 61, 2137-2146	2.3	1
28	Research on cellular morphology and mechanical properties of microcellular injection molded BCPP and its blends. <i>International Journal of Advanced Manufacturing Technology</i> , 2021 , 116, 2223-2241	3.2	1
27	Calculation method of spatial configuration of tube billet in roll forming process of a high strength steel drive shaft tube. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 97, 3339-3358	3.2	1

26	Nonlinear anelastic behavior and unloading-reloading constitutive models of severe plastic compressive deformation. <i>Journal of Materials Processing Technology</i> , 2021 , 294, 117128	5.3	1
25	Control of the structure and composition of nitrogen-doped carbon nanofoams derived from CO ₂ foamed polyacrylonitrile as anodes for high-performance potassium-ion batteries. <i>Electrochimica Acta</i> , 2021 , 388, 138630	6.7	1
24	Supercritical CO ₂ foaming strategy to fabricate nitrogen/oxygen co-doped bi-continuous nanoporous carbon scaffold for high-performance potassium-ion storage. <i>Journal of Power Sources</i> , 2021 , 507, 230275	8.9	1
23	Cracking behavior and prediction criterion of spray-deposited 2195 Al ₃ alloy extrusion profile. <i>International Journal of Advanced Manufacturing Technology</i> ,1	3.2	1
22	Experimental Study and Optimization on Solution and Artificial Aging of Cold-Rolled 2024 Al Alloy Sheet. <i>Journal of Materials Engineering and Performance</i> ,1	1.6	0
21	Precipitation Behavior and Strengthening Mechanism of Extruded 2196 Al-Cu-Li Alloy Plate during Multi-Step Age-Hardening Treatment. <i>Journal of Materials Engineering and Performance</i> ,1	1.6	0
20	Ultra-light, super-insulating, and strong polystyrene/carbon nanofiber nanocomposite foams fabricated by microcellular foaming. <i>European Polymer Journal</i> , 2022 , 173, 111261	5.2	0
19	Miscible polymethyl methacrylate/polylactide blend with enhanced foaming behavior and foam mechanical properties. <i>Journal of CO₂ Utilization</i> , 2022 , 61, 102065	7.6	0
18	Numerical investigation of three-dimensional fiber suspension flow by using finite volume method. <i>Polymer Bulletin</i> , 2017 , 74, 4393-4414	2.4	
17	Effects of dynamic mold temperature control on melt pressure, cellular structure, and mechanical properties of microcellular injection-molded parts: An experimental study. <i>Frontiers in Forests and Global Change</i> , 2019 , 38, 111-130	1.6	
16	An automated approach to quadrilateral mesh generation with complex geometric feature constraints. <i>Engineering With Computers</i> , 2015 , 31, 325-345	4.5	
15	The effects of forming parameters on conical ring rolling process. <i>Scientific World Journal, The</i> , 2014 , 2014, 235656	2.2	
14	Finite element simulation of three-dimensional viscoelastic planar contraction flow with multi-mode FENE-P constitutive model. <i>Polymer Bulletin</i> , 2014 , 71, 3131-3150	2.4	
13	Grid-based hexahedral element meshing algorithms for solid models with concave curved boundary lines. <i>Engineering With Computers</i> , 2014 , 30, 57-78	4.5	
12	Study on Deflection Performance of Radial Tire by Finite Element Method. <i>Noise and Vibration Worldwide</i> , 2011 , 42, 30-35	0.8	
11	Three-dimensional numerical analysis and experimental investigation of grain refinement in multi-pass equal channel angular pressing for round-workpieces. <i>Frontiers of Materials Science in China</i> , 2007 , 1, 187-196		
10	Crystallization and Mechanical Properties of Glass Fiber Reinforced Polypropylene Composites Molded by Rapid Heat Cycle Molding. <i>Fibers and Polymers</i> , 2020 , 21, 2915-2926	2	
9	Optimization of Heat Treatment Parameters of Boron Steel B1500HS Using Response Surface Methodology. <i>Materials Performance and Characterization</i> , 2012 , 1, 104359	0.5	

8	Classification and variation of fracture modes in laser shock hole-clinching. <i>International Journal of Advanced Manufacturing Technology</i> , 2021 , 114, 3005-3020	3.2
7	Strong breathable membrane with excellent self-cleaning, wave-transparent, and heat dissipation performances. <i>Journal of Applied Polymer Science</i> , 2021 , 138, 51338	2.9
6	Anisotropic springback models of FCC metal material under severe plastic compressive deformation. <i>International Journal of Mechanical Sciences</i> , 2021 , 202-203, 106513	5.5
5	An automatic quadrilateral mesh generation algorithm applied to 2-D overland flow simulations. <i>Computational Geosciences</i> , 2018 , 22, 1283-1303	2.7
4	Relationship between pulsed laser energy and fracture mode in multiple-pulse laser shock bulging process. <i>International Journal of Advanced Manufacturing Technology</i> , 2021 , 117, 621	3.2
3	Assessment of critical parameters on joint forming quality in laser shock hole-clinching based on finite element analysis. <i>International Journal of Advanced Manufacturing Technology</i> , 1	3.2
2	3D hybrid mesh generation with an improved vertical stretch algorithm for geometric models with pinch-out features. <i>Computational Geosciences</i> , 2021 , 25, 575-599	2.7
1	Effects of TiB ₂ particle and local aspect ratio on microstructure and mechanical properties of an I-shaped TiB ₂ /6061Al composite profile. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 846, 143284	5.3