

Xia Liao

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

98
papers

1,865
citations

28
h-index

38
g-index

100
ext. papers

2,365
ext. citations

4.2
avg, IF

5.23
L-index

#	Paper	IF	Citations
98	Light-weight and flexible silicone rubber/MWCNTs/Fe ₃ O ₄ nanocomposite foams for efficient electromagnetic interference shielding and microwave absorption. <i>Composites Science and Technology</i> , 2019 , 181, 107670	8.6	98
97	Flexible thermoplastic polyurethane/reduced graphene oxide composite foams for electromagnetic interference shielding with high absorption characteristic. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019 , 123, 310-319	8.4	72
96	Facile and Green Method To Structure Ultralow-Threshold and Lightweight Polystyrene/MWCNT Composites with Segregated Conductive Networks for Efficient Electromagnetic Interference Shielding. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 9904-9915	8.3	64
95	Carbon dioxide-induced crystallization in poly(L-lactic acid) and its effect on foam morphologies. <i>Polymer International</i> , 2010 , 59, 1709-1718	3.3	63
94	Polymer/CO ₂ systems exhibiting retrograde behavior and formation of nanofoams. <i>Polymer International</i> , 2007 , 56, 67-73	3.3	57
93	Gradient structure design of lightweight and flexible silicone rubber nanocomposite foam for efficient electromagnetic interference shielding. <i>Chemical Engineering Journal</i> , 2020 , 390, 124589	14.7	53
92	Effect of Unexpected CO ₂ Phase Transition on the High-Pressure Differential Scanning Calorimetry Performance of Various Polymers. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 1810-1818	8.3	52
91	Layered open pore poly(L-lactic acid) nanomorphology. <i>Biomacromolecules</i> , 2006 , 7, 2937-41	6.9	51
90	Control of the cell structure of microcellular silicone rubber/nanographite foam for enhanced mechanical performance. <i>Materials and Design</i> , 2017 , 133, 288-298	8.1	47
89	Unique interfacial and confined porous morphology of PLA/PS blends in supercritical carbon dioxide. <i>RSC Advances</i> , 2014 , 4, 45109-45117	3.7	45
88	Crystals in Situ Induced by Supercritical CO ₂ as Bubble Nucleation Sites on Spherulitic PLLA Foam Structure Controlling. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 11111-11124	3.9	44
87	Frequency-selective and tunable electromagnetic shielding effectiveness via the sandwich structure of silicone rubber/graphene composite. <i>Composites Science and Technology</i> , 2019 , 184, 107847	8.6	42
86	The effects of viscoelastic properties on the cellular morphology of silicone rubber foams generated by supercritical carbon dioxide. <i>RSC Advances</i> , 2015 , 5, 106981-106988	3.7	42
85	The sorption behaviors in PLLA-CO ₂ system and its effect on foam morphology. <i>Journal of Polymer Research</i> , 2012 , 19, 1	2.7	40
84	Introduction of a long-chain branching structure by ultraviolet-induced reactive extrusion to improve cell morphology and processing properties of polylactide foam. <i>RSC Advances</i> , 2017 , 7, 6266-6277	3.7	35
83	An Ultraviolet-Induced Reactive Extrusion To Control Chain Scission and Long-Chain Branching Reactions of Polylactide. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 597-605	3.9	34
82	Carbon nanotube-reinforced silicone rubber nanocomposites and the foaming behavior in supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2018 , 141, 78-87	4.2	33

81	Solvent Free Generation of Open and Skinless Foam in Poly(l-lactic acid)/Poly(d,l-lactic acid) Blends Using Carbon Dioxide. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 6722-6730	3.9	33
80	Fabrication of lightweight and flexible silicon rubber foams with ultra-efficient electromagnetic interference shielding and adjustable low reflectivity. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 147-157	7.1	32
79	Preparation of alumina-coated graphite for thermally conductive and electrically insulating epoxy composites. <i>RSC Advances</i> , 2015 , 5, 55170-55178	3.7	30
78	A two-step process for the preparation of thermoplastic polyurethane/graphene aerogel composite foams with multi-stage networks for electromagnetic shielding. <i>Composites Communications</i> , 2020 , 21, 100416	6.7	30
77	Preparation and properties of epoxy/BN highly thermal conductive composites reinforced with SiC whisker. <i>Polymer Composites</i> , 2016 , 37, 2611-2621	3	29
76	Synthesis and characterization of a novel charring agent and its application in intumescent flame retardant polypropylene system. <i>Journal of Applied Polymer Science</i> , 2012 , 123, 1636-1644	2.9	29
75	Preparation of Porous Biodegradable Polymer and Its Nanocomposites by Supercritical CO ₂ Foaming for Tissue Engineering. <i>Journal of Nanomaterials</i> , 2012 , 2012, 1-12	3.2	29
74	A novel route to the generation of porous scaffold based on the phase morphology control of co-continuous poly(ϵ -caprolactone)/polylactide blend in supercritical CO ₂ . <i>Polymer</i> , 2017 , 118, 163-172	3.9	28
73	Mechanical-Microstructure Relationship and Cellular Failure Mechanism of Silicone Rubber Foam by the Cell Microstructure Designed in Supercritical CO ₂ . <i>Journal of Physical Chemistry C</i> , 2019 , 123, 26947-26956	2.8	28
72	Structural changes and crystallization kinetics of polylactide under CO ₂ investigated using high-pressure Fourier transform infrared spectroscopy. <i>Polymer International</i> , 2015 , 64, 1762-1769	3.3	28
71	Strategy to Enhance Conductivity of Polystyrene/Graphene Composite Foams via Supercritical Carbon Dioxide Foaming Process. <i>Journal of Supercritical Fluids</i> , 2018 , 142, 52-63	4.2	28
70	Crystallization and morphological transition of poly(L-lactide)/poly(ϵ -caprolactone) diblock copolymers with different block length ratios. <i>RSC Advances</i> , 2017 , 7, 22515-22523	3.7	27
69	Preparation of nanocellular foams from polycarbonate/poly(lactic acid) blend by using supercritical carbon dioxide. <i>Journal of Polymer Research</i> , 2013 , 20, 1	2.7	27
68	Microcellular nanocomposites based on millable polyurethane and nano-silica by two-step curing and solid-state supercritical CO ₂ foaming: Preparation, high-pressure viscoelasticity and mechanical properties. <i>Journal of Supercritical Fluids</i> , 2017 , 130, 198-209	4.2	27
67	Influence of Surface-functionalized Graphene Oxide on the Cell Morphology of Poly(methyl methacrylate) Composite. <i>Journal of Materials Science and Technology</i> , 2015 , 31, 463-466	9.1	26
66	Preparation and toughening performance investigation of epoxy resins containing carbon nanotubes modified with hyperbranched polyester. <i>Polymer Bulletin</i> , 2018 , 75, 1013-1026	2.4	26
65	Heterogeneous silicon rubber composite foam with gradient porous structure for highly absorbed ultra-efficient electromagnetic interference shielding. <i>Composites Science and Technology</i> , 2021 , 206, 108663	8.6	25
64	Facile Fabrication of Lightweight Shape Memory Thermoplastic Polyurethane/Polylactide Foams by Supercritical Carbon Dioxide Foaming. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 7611-7623	2.9	24

63	Creating orientated cellular structure in thermoplastic polyurethane through strong interfacial shear interaction and supercritical carbon dioxide foaming for largely improving the foam compression performance. <i>Journal of Supercritical Fluids</i> , 2019 , 153, 104577	4.2	19
62	A promising strategy for efficient electromagnetic interference shielding by designing a porous double-percolated structure in MWCNT/polymer-based composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020 , 138, 106059	8.4	19
61	Nanocellular and needle-like structures in poly(L-lactic acid) using spherulite templates and supercritical carbon dioxide. <i>RSC Advances</i> , 2015 , 5, 36320-36324	3.7	18
60	Novel electric conductive polylactide/carbon nanotubes foams prepared by supercritical CO ₂ . <i>Progress in Natural Science: Materials International</i> , 2013 , 23, 395-401	3.6	18
59	Unusual hierarchical structures of micro-injection molded isotactic polypropylene in presence of an in situ microfibrillar network and a nucleating agent. <i>RSC Advances</i> , 2015 , 5, 43571-43580	3.7	17
58	Concentric ring-banded spherulites of six-arm star-shaped poly(ϵ -caprolactone) via subcritical CO ₂ . <i>RSC Advances</i> , 2014 , 4, 10144	3.7	17
57	Green Method to Widen the Foaming Processing Window of PLA by Introducing Stereocomplex Crystallites. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 21466-21475	3.9	17
56	Investigation on cure kinetics of epoxy resin containing carbon nanotubes modified with hyper-branched polyester.. <i>RSC Advances</i> , 2018 , 8, 29830-29839	3.7	17
55	Effect of Macromolecular Chain Movement and the Interchain Interaction on Crystalline Nucleation and Spherulite Growth of Polylactic Acid under High-Pressure CO ₂ . <i>Macromolecules</i> , 2020 , 53, 312-322	5.5	16
54	Poly(methyl methacrylate) nanocomposites based on graphene oxide: a comparative investigation of the effects of surface chemistry on properties and foaming behavior. <i>Polymer International</i> , 2016 , 65, 1195-1203	3.3	16
53	Thermoplastic polyurethane/polytetrafluoroethylene composite foams with enhanced mechanical properties and anti-shrinkage capability fabricated with supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2020 , 163, 104861	4.2	15
52	Effects of Process Temperatures on the Flow-Induced Crystallization of Isotactic Polypropylene/Poly(ethylene terephthalate) Blends in Microinjection Molding. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 9467-9477	3.9	13
51	Study on the creep behavior of polypropylene. <i>Polymer Engineering and Science</i> , 2009 , 49, 1375-1382	2.3	13
50	A Green and Structure-Controlled Approach to the Generation of Silicone Rubber Foams by Means of Carbon Dioxide. <i>Frontiers in Forests and Global Change</i> , 2016 , 35, 19-32	1.6	13
49	Effective in situ polyamide 6 microfibrils in isotactic polypropylene under microinjection molding: significant improvement of mechanical performance. <i>Journal of Materials Science</i> , 2016 , 51, 10386-10394	4.3	12
48	Realizing simultaneous toughening and reinforcement in polypropylene blends via solid die-drawing. <i>Polymer</i> , 2019 , 161, 109-121	3.9	12
47	The distinctive nucleation of polystyrene composites with differently shaped carbon-based nanoparticles as nucleating agent in the supercritical CO ₂ foaming process. <i>Polymer International</i> , 2018 , 67, 1488-1501	3.3	12
46	Cellular structure design by controlling rheological property of silicone rubber in supercritical CO ₂ . <i>Journal of Supercritical Fluids</i> , 2020 , 164, 104913	4.2	11

45	Creep-resistant behavior of beta-polypropylene with different crystalline morphologies. <i>RSC Advances</i> , 2016 , 6, 30986-30997	3.7	11
44	Morphology evolution and crystalline structure of controlled-rheology polypropylene in micro-injection molding. <i>Polymers for Advanced Technologies</i> , 2016 , 27, 494-503	3.2	11
43	Effect of in situ poly(ethylene terephthalate) (PET) microfibrils on the morphological structure and crystallization behavior of isotactic polypropylene (iPP) under an intensive shear rate. <i>Polymers for Advanced Technologies</i> , 2015 , 26, 1275-1284	3.2	11
42	Reinforcement of Mechanical Properties of Silicone Rubber Foam by Functionalized Graphene Using Supercritical CO ₂ Foaming Technology. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 22132-22143	3.9	10
41	Effect of nanoparticles on the morphology and properties of PET/PP in situ microfibrillar reinforced composites. <i>Polymer Composites</i> , 2017 , 38, 2718-2726	3	9
40	New understanding of the hierarchical distribution of isotactic polypropylene blends formed by microinjection-molded poly(ethylene terephthalate) and nucleating agent. <i>RSC Advances</i> , 2015 , 5, 61127-61138	3.7	11
39	Effect of confinement on glass dynamics and free volume in immiscible polystyrene/high-density polyethylene blends. <i>Polymer International</i> , 2015 , 64, 892-899	3.3	9
38	Influence of surface modified graphene oxide on the mechanical performance and curing kinetics of epoxy resin. <i>Polymers for Advanced Technologies</i> , 2020 , 31, 1865-1874	3.2	8
37	Investigation of chemi-crystallization and free volume changes of high-density polyethylene weathered in a subtropical humid zone. <i>Polymer International</i> , 2016 , 65, 1474-1481	3.3	8
36	The rheological property and foam morphology of linear polypropylene and long chain branching polypropylene. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2013 , 28, 798-803	1	8
35	Effects of enhanced compatibility by transesterification on the cell morphology of poly(lactic acid)/ polycarbonate blends using supercritical carbon dioxide. <i>Journal of Cellular Plastics</i> , 2015 , 51, 349-372	1.5	8
34	Morphology and crystallization behavior of PCL/SAN blends containing nanosilica with different surface properties. <i>Journal of Applied Polymer Science</i> , 2016 , 133,	2.9	8
33	Role of dicumyl peroxide on the morphology and mechanical performance of polypropylene random copolymer in microinjection molding. <i>Polymers for Advanced Technologies</i> , 2018 , 29, 171-181	3.2	7
32	Microstructure studies of isotactic polypropylene under natural weathering by positron annihilation lifetime spectroscopy. <i>Journal of Polymer Research</i> , 2015 , 22, 1	2.7	7
31	New insight into the flocculation behavior of hydrophilic silica in styrene butadiene rubber composites. <i>RSC Advances</i> , 2015 , 5, 91262-91272	3.7	7
30	Green and High-Expansion PLLA/PDLA Foams with Excellent Thermal Insulation and Enhanced Compressive Properties. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 19244-19251	3.9	7
29	Synergistic effect of multiwalled carbon nanotubes and carbon black on rheological behaviors and electrical conductivity of hybrid polypropylene nanocomposites. <i>Polymer Composites</i> , 2018 , 39, E723-E732	3.2	6
28	Structure evolution and orientation mechanism of isotactic polypropylene during the two-stage solid die drawing process. <i>Journal of Applied Polymer Science</i> , 2018 , 135, 46581	2.9	6

27	Rheological behaviors and electrical conductivity of long-chain branched polypropylene/carbon black composites with different methods. <i>Journal of Polymer Research</i> , 2015 , 22, 1	2.7	5
26	Ring-banded spherulites of six-arm star-shaped poly(ϵ -caprolactone) with different arm length via CO ₂ . <i>Colloid and Polymer Science</i> , 2015 , 293, 2311-2319	2.4	5
25	Flexible TPU/MWCNTs/BN composites for frequency-selective electromagnetic shielding and enhanced thermal conductivity. <i>Composites Communications</i> , 2021 , 28, 100953	6.7	5
24	Nonisothermal and isothermal crystallization behavior of isotactic polypropylene/chemically reduced graphene nanocomposites. <i>Polymer Composites</i> , 2017 , 38, E342-E350	3	4
23	Effect of structure regulation of hyper-branched polyester modified carbon nanotubes on toughening performance of epoxy/carbon nanotube nanocomposites.. <i>RSC Advances</i> , 2019 , 9, 12864-12876	3.7	4
22	The dependence time of melting behavior on rheological aspects of disentangled polymer melt: a route to the heterogeneous melt. <i>Journal of Polymer Research</i> , 2015 , 22, 1	2.7	4
21	Disclosing the crystallization behavior and morphology of poly(ϵ -caprolactone) within poly(ϵ -caprolactone)/poly(L-lactide) blends. <i>Polymer International</i> , 2018 , 67, 566-576	3.3	4
20	Effective enhancement of the creep resistance in isotactic polypropylene by elevated concentrations of DMDBS. <i>RSC Advances</i> , 2016 , 6, 84801-84809	3.7	4
19	Effect of physical and chemical crosslinking structure on fatigue behavior of styrene butadiene elastomer. <i>Journal of Applied Polymer Science</i> , 2014 , 131, n/a-n/a	2.9	4
18	Influences of Hyperbranched Polyester Modification on the Crystallization Kinetics of Isotactic Polypropylene/Graphene Oxide Composites. <i>Polymers</i> , 2019 , 11,	4.5	3
17	Flow-induced β -crystal of iPP in microinjection molding: effects of addition of UHMWPE and the processing parameters. <i>Journal of Polymer Research</i> , 2016 , 23, 1	2.7	3
16	Efficient electrical conductivity and electromagnetic interference shielding performance of double percolated polymer composite foams by phase coarsening in supercritical CO ₂ . <i>Composites Science and Technology</i> , 2021 , 213, 108895	8.6	3
15	Effect of combined fatigue and chemical aging conditions on the mechanical property, structure, and morphology of styrene-butadiene-styrene elastomer. <i>Journal of Elastomers and Plastics</i> , 2015 , 47, 681-696	1.6	2
14	Thermal oxidative and ozone oxidative stabilization effect of hybridized functional graphene oxide in a silica-filled solution styrene butadiene elastomer. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 29423-29434	3.6	3
13	Structure and Properties of Poly(Oxypropylene) Diamine Intercalated Montmorillonite/Epoxy Composites. <i>Journal of Macromolecular Science - Physics</i> , 2019 , 58, 877-889	1.4	2
12	Heat insulating PLA/HNTs foams with enhanced compression performance fabricated by supercritical carbon dioxide. <i>Journal of Supercritical Fluids</i> , 2021 , 177, 105344	4.2	2
11	Influence of Surfactant Functional Groups on Morphology and Rheology of Polypropylene/Organoclay Nanocomposites. <i>Journal of Macromolecular Science - Physics</i> , 2015 , 54, 329-347	1.4	1
10	Confined crystallization morphology of poly(ϵ -caprolactone) block within poly(ϵ -caprolactone) β -poly(L-lactide) copolymers. <i>Polymer International</i> , 2019 , 68, 1992-2003	3.3	1

9	Design of lightweight silicone rubber foam for outstanding deformation recoverability based on supercritical CO ₂ foaming technology. <i>Journal of Materials Science</i> , 2022 , 57, 2292-2304	4.3	1
8	The improved foaming behavior of PLA caused by the enhanced rheology properties and crystallization behavior via synergistic effect of carbon nanotubes and graphene. <i>Journal of Applied Polymer Science</i> , 51874	2.9	1
7	Cellular structure design by controlling the dissolution and diffusion behavior of gases in silicon rubber. <i>Journal of Supercritical Fluids</i> , 2022 , 105610	4.2	1
6	Ultralow Dielectric Constant Polyarylene Ether Nitrile/Polyhedral Oligomeric Silsesquioxanes Foams with High Thermal Stabilities and Excellent Mechanical Properties Prepared by Supercritical CO ₂ . <i>Advanced Engineering Materials</i> , 2100874	3.5	0
5	Effect of Molecular Chain Mobility Induced by High-Pressure CO ₂ on Crystallization Memory Behavior of Poly(D-lactic Acid). <i>Crystal Growth and Design</i> , 2021 , 21, 7116-7127	3.5	0
4	The crystallization morphology and process of stereocomplex crystallites of polylactide under CO ₂ : the effect of H-bonding and chain diffusion. <i>CrystEngComm</i> , 2021 , 23, 8601-8611	3.3	0
3	Mechanism of Microstructural Change of High-Density Polyethylene Under Different Outdoor Climates in China. <i>Journal of Polymers and the Environment</i> , 2020 , 28, 2616-2630	4.5	0
2	Generating porous polymer microspheres with cellular surface via a gas-diffusion confined scCO ₂ foaming technology to endow the super-hydrophobic coating with hierarchical roughness. <i>Chemical Engineering Journal</i> , 2022 , 442, 136192	14.7	0
1	Light Scattering Studies of Multiphase Polymer Systems 2011 , 639-668		