# Liangbin Li

#### List of Publications by Citations

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| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 247 | Multiple steps and critical behaviors of the binding of calcium to alginate. <i>Journal of Physical Chemistry B</i> , <b>2007</b> , 111, 2456-62   | 3.4  | 274       |
| 246 | Reexamining the egg-box model in calcium-alginate gels with X-ray diffraction. <i>Biomacromolecules</i> , <b>2007</b> , 8, 464-8   | 6.9  | 268       |
| 245 | Unusual Tuning of Mechanical Properties of Isotactic Polypropylene Using Counteraction of Shear Flow and ENucleating Agent on Form Nucleation. <i>Macromolecules</i> , <b>2009</b> , 42, 4343-4348                 | 5.5  | 183       |
| 244 | Multiscale and Multistep Ordering of Flow-Induced Nucleation of Polymers. <i>Chemical Reviews</i> , <b>2018</b> , 118, 1840-1886   | 68.1 | 153       |
| 243 | In-situ formation of biodegradable hydrogels by stereocomplexation of PEG-(PLLA)8 and PEG-(PDLA)8 star block copolymers. <i>Biomacromolecules</i> , <b>2006</b> , 7, 2790-5  | 6.9  | 147       |
| 242 | Flow-Induced Crystallization of Polymers: Molecular and Thermodynamic Considerations. <i>Macromolecules</i> , <b>2016</b> , 49, 1505-1517  | 5.5  | 137       |
| 241 | Ultrastiff and Tough Supramolecular Hydrogels with a Dense and Robust Hydrogen Bond Network. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 1430-1440   | 9.6  | 126       |
| 240 | Formation of Interlinked Shish-Kebabs in Injection-Molded Polyethylene under the Coexistence of Lightly Cross-Linked Chain Network and Oscillation Shear Flow. <i>Macromolecules</i> , <b>2012</b> , 45, 6600-6610 | 5.5  | 113       |
| 239 | Stretch-Induced Crystal <b>©</b> rystal Transition of Polybutene-1: An in Situ Synchrotron Radiation Wide-Angle X-ray Scattering Study. <i>Macromolecules</i> , <b>2012</b> , 45, 2764-2772                        | 5.5  | 109       |
| 238 | Origin of Carbon Nanotubes Induced Poly(l-Lactide) Crystallization: Surface Induced Conformational Order. <i>Macromolecules</i> , <b>2009</b> , 42, 3215-3218  | 5.5  | 103       |
| 237 | Suppression of Skintore Structure in Injection-Molded Polymer Parts by in Situ Incorporation of a Microfibrillar Network. <i>Macromolecules</i> , <b>2006</b> , 39, 6771-6775                                      | 5.5  | 103       |
| 236 | Critical Strain for Shish-Kebab Formation. <i>Macromolecules</i> , <b>2010</b> , 43, 602-605   | 5.5  | 100       |
| 235 | Robust Anisotropic Cellulose Hydrogels Fabricated via Strong Self-aggregation Forces for Cardiomyocytes Unidirectional Growth. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 5175-5183                         | 9.6  | 94        |
| 234 | Shear-Induced Conformational Ordering in the Melt of Isotactic Polypropylene. <i>Macromolecules</i> , <b>2007</b> , 40, 4740-4743  | 5.5  | 91        |
| 233 | Investigation of the Hydrolysis of Perovskite Organometallic Halide CH3NH3PbI3 in Humidity Environment. <i>Scientific Reports</i> , <b>2016</b> , 6, 21976   | 4.9  | 90        |
| 232 | The Tough Journey of Polymer Crystallization: Battling with Chain Flexibility and Connectivity. <i>Macromolecules</i> , <b>2019</b> , 52, 3575-3591  | 5.5  | 88        |
| 231 | Negatively Charged Nanosheets Significantly Enhance the Energy-Storage Capability of Polymer-Based Nanocomposites. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907227  | 24   | 87        |

# (2015-2016)

| 230 | Molybdenum sulfide/graphene-carbon nanotube nanocomposite material for electrocatalytic applications in hydrogen evolution reactions. <i>Nano Research</i> , <b>2016</b> , 9, 837-848  | 10  | 79 |
|-----|--|-----|----|
| 229 | Direct Formation of Isotactic Poly(1-butene) Form I Crystal from Memorized Ordered Melt. <i>Macromolecules</i> , <b>2013</b> , 46, 7399-7405   | 5.5 | 78 |
| 228 | Shear-Induced Nucleation and Growth of Long Helices in Supercooled Isotactic Polypropylene. <i>Macromolecules</i> , <b>2009</b> , 42, 4751-4757  | 5.5 | 72 |
| 227 | Self-Acceleration of Nucleation and Formation of Shish in Extension-Induced Crystallization with Strain Beyond Fracture. <i>Macromolecules</i> , <b>2012</b> , 45, 5477-5486   | 5.5 | 66 |
| 226 | Crystal Structure and Morphology of Poly(l-lactide-b-d-lactide) Diblock Copolymers. <i>Macromolecules</i> , <b>2004</b> , 37, 8641-8646  | 5.5 | 66 |
| 225 | Correlation between Flow-Induced Nucleation Morphologies and Strain in Polyethylene: From Uncorrelated Oriented Point-Nuclei, Scaffold-Network, and Microshish to Shish. <i>Macromolecules</i> , <b>2013</b> , 46, 3435-3443   | 5.5 | 65 |
| 224 | Shear-induced conformational ordering, relaxation, and crystallization of isotactic polypropylene. <i>Journal of Physical Chemistry B</i> , <b>2008</b> , 112, 12256-62  | 3.4 | 65 |
| 223 | Flow-induced mesophases in crystallizable polymers. Advances in Polymer Science, 2005, 75-120  | 1.3 | 65 |
| 222 | Deformation Drives Alignment of Nanofibers in Framework for Inducing Anisotropic Cellulose Hydrogels with High Toughness. <i>ACS Applied Materials &amp; Description of Materials &amp; Descripti</i> | 9.5 | 65 |
| 221 | Extension-Induced Nucleation under Near-Equilibrium Conditions: The Mechanism on the Transition from Point Nucleus to Shish. <i>Macromolecules</i> , <b>2014</b> , 47, 6813-6823   | 5.5 | 61 |
| 220 | Associative and segregative phase separations of gelatin/kappa-carrageenan aqueous mixtures. <i>Langmuir</i> , <b>2006</b> , 22, 9532-7  | 4   | 60 |
| 219 | Shear-Induced Crystallization of Poly(butylene terephthalate): A Real-Time Small-Angle X-ray Scattering Study. <i>Macromolecules</i> , <b>2004</b> , 37, 5646-5652   | 5.5 | 56 |
| 218 | Structural Evolution of Hard-Elastic Isotactic Polypropylene Film during Uniaxial Tensile Deformation: The Effect of Temperature. <i>Macromolecules</i> , <b>2018</b> , 51, 2690-2705  | 5.5 | 55 |
| 217 | A semi-quantitative deformation model for pore formation in isotactic polypropylene microporous membrane. <i>Polymer</i> , <b>2015</b> , 80, 214-227   | 3.9 | 54 |
| 216 | Microphase Separation and Crystallization in an Asymmetric Diblock Copolymer: Coupling and Competition. <i>Macromolecules</i> , <b>2003</b> , 36, 529-532  | 5.5 | 54 |
| 215 | Influence of the memory effect of a mesomorphic isotactic polypropylene melt on crystallization behavior. <i>Soft Matter</i> , <b>2013</b> , 9, 8579   | 3.6 | 53 |
| 214 | Deformation-Induced Phase Transitions of Polyamide 12 at Different Temperatures: An in Situ Wide-Angle X-ray Scattering Study. <i>Macromolecules</i> , <b>2010</b> , 43, 2406-2412   | 5.5 | 53 |
| 213 | Mixed-phase Pd <b>P</b> t bimetallic alloy on graphene oxide with high activity for electrocatalytic applications. <i>Journal of Power Sources</i> , <b>2015</b> , 282, 520-528  | 8.9 | 50 |

| 212 | Extension Flow Induced Crystallization of Poly(ethylene oxide). <i>Macromolecules</i> , <b>2011</b> , 44, 7704-7712   | 5.5   | 50 |
|-----|---|-------|----|
| 211 | Deformation-induced crystal@rystal transition of polybutene-1: an in situ FTIR imaging study.  Journal of Materials Science, 2013, 48, 4925-4933  | 4.3   | 49 |
| 210 | Nonequilibrium Nature of Flow-Induced Nucleation in Isotactic Polypropylene. <i>Macromolecules</i> , <b>2015</b> , 48, 694-699  | 5.5   | 49 |
| 209 | Conformational Ordering in Growing Spherulites of Isotactic Polypropylene. <i>Macromolecules</i> , <b>2010</b> , 43, 9859-9864  | 5.5   | 49 |
| 208 | Inducing Crystallization of Polymer through Stretched Network. <i>Macromolecules</i> , <b>2009</b> , 42, 1428-1432  | 5.5   | 48 |
| 207 | Shear-induced smectic ordering in the melt of isotactic polypropylene. <i>Physical Review Letters</i> , <b>2004</b> , 92, 075506  | 7.4   | 48 |
| 206 | Kinetic Process of Shish Formation: From Stretched Network to Stabilized Nuclei. <i>Macromolecules</i> , <b>2015</b> , 48, 5276-5285  | 5.5   | 46 |
| 205 | The non-equilibrium phase diagrams of flow-induced crystallization and melting of polyethylene. <i>Scientific Reports</i> , <b>2016</b> , 6, 32968  | 4.9   | 45 |
| 204 | Accelerating crystaldrystal transition in poly(1-butene) with two-step crystallization: An in-situ microscopic infrared imaging and microbeam X-ray diffraction study. <i>Polymer</i> , <b>2013</b> , 54, 3408-3416 | 3.9   | 45 |
| 203 | In situ poly(ethylene terephthalate) microfibers- and shear-induced non-isothermal crystallization of isotactic polypropylene by on-line small angle X-ray scattering. <i>Polymer</i> , <b>2005</b> , 46, 5358-5367 | 3.9   | 45 |
| 202 | Deformation mechanism of iPP under uniaxial stretching over a wide temperature range: An in-situ synchrotron radiation SAXS/WAXS study. <i>Polymer</i> , <b>2017</b> , 118, 12-21                                   | 3.9   | 44 |
| 201 | Deformation of Ultrahigh Molecular Weight Polyethylene Precursor Fiber: Crystal Slip with or without Melting. <i>Macromolecules</i> , <b>2017</b> , 50, 6385-6395   | 5.5   | 42 |
| 200 | Extensional rheometer for in situ x-ray scattering study on flow-induced crystallization of polymer. <i>Review of Scientific Instruments</i> , <b>2011</b> , 82, 045104   | 1.7   | 41 |
| 199 | Shear-induced smectic ordering and crystallisation of isotactic polypropylene. <i>Faraday Discussions</i> , <b>2005</b> , 128, 299-319  | 3.6   | 40 |
| 198 | Mixing Assisted Direct Formation of Isotactic Poly(1-butene) Form I? Crystals from Blend Melt of Isotactic Poly(1-butene)/Polypropylene. <i>Macromolecules</i> , <b>2016</b> , 49, 1761-1769                        | 5.5   | 39 |
| 197 | Ultrasensitive and Stable Au Dimer-Based Colorimetric Sensors Using the Dynamically Tunable Gap-Dependent Plasmonic Coupling Optical Properties. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 17073     | 925.6 | 38 |
| 196 | Memory chromic polyurethane with tetraphenylethylene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2014</b> , 52, 104-110  | 2.6   | 38 |
| 195 | Flow-Induced Precursors of Isotactic Polypropylene: An in Situ Time and Space Resolved Study with Synchrotron Radiation Scanning X-ray Microdiffraction. <i>Macromolecules</i> , <b>2014</b> , 47, 4408-4416        | 5.5   | 37 |

| 194 | Multimorphological Crystallization of Shish-Kebab Structures in Isotactic Polypropylene: Quantitative Modeling of Parent Daughter Crystallization Kinetics. <i>Macromolecules</i> , <b>2014</b> , 47, 5152-5162                | 2 <sup>5.5</sup> | 36 |
|-----|--|------------------|----|
| 193 | Crystallization of oriented isotactic polypropylene (iPP) in the presence of in situ poly(ethylene terephthalate) (PET) microfibrils. <i>Polymer</i> , <b>2008</b> , 49, 4271-4278   | 3.9              | 36 |
| 192 | Extension-Induced Crystallization of Poly(ethylene oxide) Bidisperse Blends: An Entanglement Network Perspective. <i>Macromolecules</i> , <b>2014</b> , 47, 677-686  | 5.5              | 35 |
| 191 | Drying and Rehydration of Calcium Alginate Gels. <i>Food Biophysics</i> , <b>2008</b> , 3, 361-369   | 3.2              | 35 |
| 190 | Origin of various lamellar orientations in high-density polyethylene/isotactic polypropylene blends achieved via dynamic packing injection molding: bulk crystallization vs. epitaxy. <i>Polymer</i> , <b>2005</b> , 46, 819-8 | 328              | 35 |
| 189 | Unveiling Reinforcement and Toughening Mechanism of Filler Network in Natural Rubber with Synchrotron Radiation X-ray Nano-Computed Tomography. <i>Macromolecules</i> , <b>2015</b> , 48, 7923-7928                            | 5.5              | 33 |
| 188 | Biaxial stretch-induced crystallization of poly(ethylene terephthalate) above glass transition temperature: The necessary of chain mobility. <i>Polymer</i> , <b>2016</b> , 101, 15-23   | 3.9              | 33 |
| 187 | Critical stress for drawing-induced Erystalhesophase transition in isotactic polypropylene. <i>Polymer</i> , <b>2009</b> , 50, 2706-2715   | 3.9              | 33 |
| 186 | Window of Pressure and Flow To Produce Ecrystals in Isotactic Polypropylene Mixed with ENucleating Agent. <i>Macromolecules</i> , <b>2017</b> , 50, 4807-4816  | 5.5              | 32 |
| 185 | Identifying the phase behavior of biodegradable poly(hexamethylene succinate-co-hexamethylene adipate) copolymers with FTIR. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 2695-704                              | 3.4              | 32 |
| 184 | Anisotropic ionic conductivities in lyotropic supramolecular liquid crystals. <i>Chemical Communications</i> , <b>2009</b> , 7560-2  | 5.8              | 32 |
| 183 | Shear-induced epitaxial crystallization in injection-molded bars of high-density polyethylene/isotactic polypropylene blends. <i>Polymer</i> , <b>2007</b> , 48, 4529-4536   | 3.9              | 32 |
| 182 | Transient Phase-Induced Nucleation in Ionic Liquid Crystals and Size-Frustrated Thickening. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 250-257  | 9.6              | 32 |
| 181 | Flow and Pressure Jointly Induced Ultrahigh Melting Temperature Spherulites with Oriented Thick Lamellae in Isotactic Polypropylene. <i>Macromolecules</i> , <b>2015</b> , 48, 5834-5844                                       | 5.5              | 31 |
| 180 | Conformational Ordering on the Growth Front of Isotactic Polypropylene Spherulite. <i>Macromolecules</i> , <b>2012</b> , 45, 8674-8680   | 5.5              | 31 |
| 179 | Morphology of a highly asymmetric double crystallizable poly(epsilon-caprolactone-b-ethylene oxide) block copolymer. <i>Journal of Chemical Physics</i> , <b>2007</b> , 126, 024904  | 3.9              | 31 |
| 178 | Extensional Flow-Induced Dynamic Phase Transitions in Isotactic Polypropylene. <i>Macromolecular Rapid Communications</i> , <b>2016</b> , 37, 1441-5   | 4.8              | 31 |
| 177 | Coupling of Multiscale Orderings during Flow-Induced Crystallization of Isotactic Polypropylene.  Macromolecules, 2017, 50, 1991-1997  | 5.5              | 30 |

| 176 | Investigation on the recovery performance of olefin block copolymer/hexadecane form stable phase change materials with shape memory properties. <i>Solar Energy Materials and Solar Cells</i> , <b>2015</b> , 132, 632-639                                       | 6.4  | 30 |
|-----|--|------|----|
| 175 | Visualizing the Toughening Mechanism of Nanofiller with 3D X-ray Nano-CT: Stress-Induced Phase Separation of Silica Nanofiller and Silicone Polymer Double Networks. <i>Macromolecules</i> , <b>2017</b> , 50, 7249-   | 7257 | 30 |
| 174 | Phase transition of [C(n)-mim][PF6] under high pressure up to 1.0 GPa. <i>Journal of Chemical Physics</i> , <b>2009</b> , 130, 184503  | 3.9  | 30 |
| 173 | A facile interfacial reaction route to prepare magnetic hollow spheres with tunable shell thickness. <i>Langmuir</i> , <b>2008</b> , 24, 6624-9  | 4    | 30 |
| 172 | Chain Deformation on the Formation of Shish Nuclei under Extension Flow: An in Situ SANS and SAXS Study. <i>Macromolecules</i> , <b>2016</b> , 49, 9080-9088   | 5.5  | 29 |
| 171 | Strain and temperature dependence of deformation mechanism of lamellar stacks in HDPE and its guidance on microporous membrane preparation. <i>Polymer</i> , <b>2016</b> , 105, 264-275  | 3.9  | 29 |
| 170 | Studying deformation behavior of a single spherulite with in-situ infrared microspectroscopic imaging. <i>Polymer</i> , <b>2012</b> , 53, 640-647  | 3.9  | 28 |
| 169 | Shear inhomogeneity in poly(ethylene oxide) melts. <i>Journal of Rheology</i> , <b>2011</b> , 55, 939-949  | 4.1  | 27 |
| 168 | From Molecular Entanglement Network to Crystal-Cross-Linked Network and Crystal Scaffold during Film Blowing of Polyethylene: An in Situ Synchrotron Radiation Small- and Wide-Angle X-ray Scattering Study. <i>Macromolecules</i> , <b>2018</b> , 51, 4350-4362 | 5.5  | 27 |
| 167 | Structural and morphological transitions in extension-induced crystallization of poly(1-butene) melt. <i>Soft Matter</i> , <b>2017</b> , 13, 3639-3648   | 3.6  | 26 |
| 166 | Synthesis at the nanoscale of ZnO into poly(methyl methacrylate) and its characterization. <i>Applied Physics A: Materials Science and Processing</i> , <b>2014</b> , 117, 1085-1093   | 2.6  | 26 |
| 165 | Stretch-Induced Crystallization through Single Molecular Force Generating Mechanism.  Macromolecules, <b>2011</b> , 44, 5878-5882  | 5.5  | 26 |
| 164 | CTAB-mediated synthesis and characterization of ZnO/Ag coreBhell nanocomposites. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 612, 306-314   | 5.7  | 25 |
| 163 | A simple constrained uniaxial tensile apparatus for in situ investigation of film stretching processing. <i>Review of Scientific Instruments</i> , <b>2013</b> , 84, 115104  | 1.7  | 25 |
| 162 | Stress-induced microphase separation of interlamellar amorphous phase in hard-elastic isotactic polypropylene film. <i>Polymer</i> , <b>2018</b> , 148, 79-92  | 3.9  | 24 |
| 161 | A hybrid adaptive finite element phase-field method for quasi-static and dynamic brittle fracture. <i>International Journal for Numerical Methods in Engineering</i> , <b>2019</b> , 120, 1108-1125  | 2.4  | 24 |
| 160 | Spatial distribution of crystal orientation in neck propagation: An in-situ microscopic infrared imaging study on polyethylene. <i>Polymer</i> , <b>2013</b> , 54, 972-979   | 3.9  | 24 |
| 159 | Unexpected shear dependence of pressure-induced Erystals in isotactic polypropylene. <i>Polymer Chemistry</i> , <b>2015</b> , 6, 4588-4596   | 4.9  | 23 |

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| 158 | Spatial distribution of gamma-crystals in metallocene-made isotactic polypropylene crystallized under combined thermal and flow fields. <i>Journal of Physical Chemistry B</i> , <b>2010</b> , 114, 6806-16  | 3.4           | 23 |  |
|-----|--|---------------|----|--|
| 157 | Inducing New Crystal Structures through Random Copolymerization of Biodegradable Aliphatic Polyester. <i>Macromolecules</i> , <b>2008</b> , 41, 3162-3168  | 5.5           | 23 |  |
| 156 | Toughening mystery of natural rubber deciphered by double network incorporating hierarchical structures. <i>Scientific Reports</i> , <b>2014</b> , 4, 7502   | 4.9           | 21 |  |
| 155 | Stretch-induced structural evolution of poly (vinyl alcohol) film in water at different temperatures: An in-situ synchrotron radiation small- and wide-angle X-ray scattering study. <i>Polymer</i> , <b>2018</b> , 142, 233-2   | .4 <b>3</b> 9 | 21 |  |
| 154 | Lyotropic supramolecular helical columnar phases formed by C3-symmetric and unsymmetric rigid molecules. <i>Chemistry - A European Journal</i> , <b>2013</b> , 19, 685-90  | 4.8           | 21 |  |
| 153 | Deformation-Induced Linear Chain ${f R}$ ing Transition and Crystallization of Living Polymer Sulfur. <i>Macromolecules</i> , <b>2007</b> , 40, 9475-9481  | 5.5           | 21 |  |
| 152 | Local structure order assisted two-step crystal nucleation in polyethylene. <i>Physical Review Materials</i> , <b>2017</b> , 1,  | 3.2           | 21 |  |
| 151 | Understanding structure-mechanics relationship of high density polyethylene based on stress induced lattice distortion. <i>Polymer</i> , <b>2019</b> , 160, 170-180  | 3.9           | 21 |  |
| 150 | Frustrating Strain-Induced Crystallization of Natural Rubber with Biaxial Stretch. <i>ACS Applied Materials &amp; Acs Applied &amp; Acs Ap</i> | 9.5           | 20 |  |
| 149 | Stretch-induced complexation reaction between poly(vinyl alcohol) and iodine: an in situ synchrotron radiation small- and wide-angle X-ray scattering study. <i>Soft Matter</i> , <b>2018</b> , 14, 2535-2546  | 3.6           | 19 |  |
| 148 | Fabrication of polyethylene nanofibrous membranes by biaxial stretching. <i>Materials Today Communications</i> , <b>2018</b> , 17, 24-30   | 2.5           | 19 |  |
| 147 | Deformation-induced phase transitions of polyamide 12 in its elastomer segmented copolymers. <i>Polymer</i> , <b>2010</b> , 51, 5604-5611  | 3.9           | 19 |  |
| 146 | Simultaneously Toughening and Stiffening Elastomers with Octuple Hydrogen Bonding. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008523  | 24            | 19 |  |
| 145 | Surface enhanced Raman scattering properties of dynamically tunable nanogaps between Au nanoparticles self-assembled on hydrogel microspheres controlled by pH. <i>Journal of Colloid and Interface Science</i> , <b>2017</b> , 505, 467-475   | 9.3           | 18 |  |
| 144 | From the Volume-Filling Effect to the Stress-Bearing Network: The Reinforcement Mechanisms of Carbon Black Filler in Natural Rubber. <i>Macromolecular Materials and Engineering</i> , <b>2016</b> , 301, 1390-1401  | 3.9           | 18 |  |
| 143 | Residual strain and electrical resistivity dependence of molybdenum films on DC plasma magnetron sputtering conditions. <i>Materials Science in Semiconductor Processing</i> , <b>2014</b> , 27, 343-351   | 4.3           | 18 |  |
| 142 | Rehydration of dried alginate gel beads: Effect of the presence of gelatin and gum arabic. <i>Carbohydrate Polymers</i> , <b>2011</b> , 86, 1145-1150  | 10.3          | 18 |  |
| 141 | Growth of Large Polymer Extended-Chain Single Crystals in a Poly(ethylene terephthalate)/Bisphenol A Polycarbonate Blend under High Pressure. <i>Macromolecular Rapid Communications</i> , <b>2005</b> , 26, 1478-1482   | 4.8           | 18 |  |

| 140 | In situ characterization of strain-induced crystallization of natural rubber by synchrotron radiation wide-angle X-ray diffraction: construction of a crystal network at low temperatures. <i>Soft Matter</i> , <b>2019</b> , 15, 734-743 | 3.6           | 17 |
|-----|---|---------------|----|
| 139 | A novel apparatus combining polymer extrusion processing and x-ray scattering. <i>Polymer Testing</i> , <b>2014</b> , 33, 40-47   | 4.5           | 17 |
| 138 | Supramolecular polymers self-assembled from trans-bis(pyridine) dichloropalladium(II) and platinum(II) complexes. <i>Chemistry - A European Journal</i> , <b>2014</b> , 20, 2812-8  | 4.8           | 17 |
| 137 | Morphology of high-pressure crystallized poly(ethylene 2,6-naphthalate). <i>Polymer</i> , <b>2001</b> , 42, 8867-8872   | 3.9           | 17 |
| 136 | The effect of water absorption on stretch-induced crystallization of poly(ethylene terephthalate): An in-situ synchrotron radiation wide angle X-ray scattering study. <i>Polymer</i> , <b>2019</b> , 162, 91-99                          | 3.9           | 17 |
| 135 | Deformation mechanism of hard elastic polyethylene film during uniaxial stretching: Effect of stretching speed. <i>Polymer</i> , <b>2019</b> , 178, 121579  | 3.9           | 16 |
| 134 | Synthesis of recyclable, chemically cross-linked, high toughness, high conductivity ion gels by sequential triblock copolymer self-assembly and disulfide bond cross-linking. <i>RSC Advances</i> , <b>2015</b> , 5, 22638-22646          | 3.7           | 16 |
| 133 | Investigation on phase transition from flow-induced oriented form II to I in isotactic polybutene-1 with in-situ microbeam X-ray diffraction technique. <i>Polymer</i> , <b>2019</b> , 179, 121719  | 3.9           | 16 |
| 132 | Lamellar Ordering and Crystallization in a Symmetric Block Copolymer. <i>Journal of Macromolecular Science - Physics</i> , <b>2004</b> , 43, 59-70  | 1.4           | 16 |
| 131 | Stretch-Induced CoilHelix Transition in Isotactic Polypropylene: A Molecular Dynamics Simulation. <i>Macromolecules</i> , <b>2018</b> , 51, 3994-4002   | 5.5           | 16 |
| 130 | Coupling between intra- and inter-chain orderings in flow-induced crystallization of polyethylene: A non-equilibrium molecular dynamics simulation study. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 014901                  | 3.9           | 15 |
| 129 | The thermodynamic properties of flow-induced precursor of polyethylene. <i>Science China Chemistry</i> , <b>2015</b> , 58, 1570-1578  | 7.9           | 15 |
| 128 | Constrained and free uniaxial stretching induced crystallization of polyethylene film: A comparative study. <i>Polymer Testing</i> , <b>2014</b> , 36, 110-118  | 4.5           | 15 |
| 127 | Stress memory materials and their fundamental platform. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 503  | - <u>5</u> ∄1 | 15 |
| 126 | Inducing uniform single-crystal like orientation in natural rubber with constrained uniaxial stretch. <i>Soft Matter</i> , <b>2015</b> , 11, 5044-52  | 3.6           | 15 |
| 125 | Metallogels self-assembled from linear rod-like platinum complexes: influence of the linkage. <i>Chemistry - A European Journal</i> , <b>2015</b> , 21, 4213-7  | 4.8           | 15 |
| 124 | Lyotropic Rod¶oil Poly(amide-block-aramid) Alternating Block Copolymers: Phase Behavior and Structure. <i>Macromolecules</i> , <b>2006</b> , 39, 4411-4417  | 5.5           | 15 |
| 123 | Flow-induced density fluctuation assisted nucleation in polyethylene. <i>Journal of Chemical Physics</i> , <b>2018</b> , 149, 224901  | 3.9           | 15 |

### (2018-2019)

| 122 | Synergistic and Competitive Effects of Temperature and Flow on Crystallization of Polyethylene during Film Blowing. <i>ACS Applied Polymer Materials</i> , <b>2019</b> , 1, 1590-1603   | 4.3  | 14 |  |
|-----|---|------|----|--|
| 121 | Recent advances in post-stretching processing of polymer films with in situ synchrotron radiation X-ray scattering. <i>Soft Matter</i> , <b>2020</b> , 16, 3599-3612  | 3.6  | 14 |  |
| 120 | A novel way to monitor the sequential destruction of parent-daughter crystals in isotactic polypropylene under uniaxial tension. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 3016-3024                                      | 4.3  | 14 |  |
| 119 | Highly ordered, ultra long nanofibrils via the hierarchical self-assembly of ionic aromatic oligoamides. <i>Soft Matter</i> , <b>2013</b> , 9, 4642   | 3.6  | 14 |  |
| 118 | The effect of bound rubber on vulcanization kinetics in silica filled silicone rubber. <i>RSC Advances</i> , <b>2016</b> , 6, 101470-101476   | 3.7  | 13 |  |
| 117 | Imaging the strain induced carbon black filler network structure breakage with nano X-ray tomography. <i>RSC Advances</i> , <b>2014</b> , 4, 54500-54505  | 3.7  | 13 |  |
| 116 | Strong Memory Effect of Metastable Form Trans-1,4-Polyisoprene above Equilibrium Melting Temperature. <i>Macromolecular Chemistry and Physics</i> , <b>2017</b> , 218, 1700235  | 2.6  | 13 |  |
| 115 | Strain-induced crystallization of natural rubber with high strain rates. <i>Journal of Polymer Science, Part B: Polymer Physics,</i> <b>2012</b> , 50, 1630-1637  | 2.6  | 13 |  |
| 114 | A novel carboxylated polyacrylonitrile nanofibrous membrane with high adsorption capacity for fluoride removal from water. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 411, 125113  | 12.8 | 13 |  |
| 113 | Entropy-Driven Segregation and Its Competition with Crystal Nucleation in the Binary Blends of Stretched and Free Guest Polymers. <i>Journal of Physical Chemistry B</i> , <b>2016</b> , 120, 12988-12992                               | 3.4  | 13 |  |
| 112 | Stretch-Induced Crystallization and Phase Transitions of Poly(dimethylsiloxane) at Low Temperatures: An in Situ Synchrotron Radiation Wide-Angle X-ray Scattering Study. <i>Macromolecules</i> , <b>2018</b> , 51, 8424-8434            | 5.5  | 13 |  |
| 111 | A recyclable disulfide bond chemically cross-linking, high toughness, high conductivity ion gel based on re-shaping and restructuring in the gel state. <i>Polymer Chemistry</i> , <b>2015</b> , 6, 4067-4070                           | 4.9  | 12 |  |
| 110 | Structure evolution of polyethylene-plasticizer film at industrially relevant conditions studied by in-situ X-ray scattering: The role of crystal stress. <i>European Polymer Journal</i> , <b>2018</b> , 101, 358-367                  | 5.2  | 12 |  |
| 109 | Preparation of Highly Oriented Polyethylene Precursor Film with Fibril and Its Influence on Microporous Membrane Formation. <i>Macromolecular Chemistry and Physics</i> , <b>2016</b> , 217, 974-986                                    | 2.6  | 12 |  |
| 108 | In situ study of the annealing process of a polyethylene cast film with a row-nucleated crystalline structure by SAXS. <i>RSC Advances</i> , <b>2015</b> , 5, 27722-27734   | 3.7  | 11 |  |
| 107 | Elucidation of the relationships of structure-process-property for different ethylene/blefin copolymers during film blowing: An in-situ synchrotron radiation X-ray scattering study. <i>Polymer Testing</i> , <b>2020</b> , 85, 106439 | 4.5  | 11 |  |
| 106 | Self-assembled particles of N-phthaloylchitosan-g-polycaprolactone molecular bottle brushes as carriers for controlled release of indometacin. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2010</b> , 21, 557-65    | 4.5  | 11 |  |
| 105 | A few rediscovered and challenging topics in polymer crystals and crystallization. <i>Polymer Crystallization</i> , <b>2018</b> , 1, e10053   | 0.9  | 11 |  |

| 104 | Two-stage drawing process to prepare high-strength and porous ultrahigh-molecular-weight polyethylene fibers: Cold drawing and hot drawing. <i>Journal of Applied Polymer Science</i> , <b>2015</b> , 132, n/a-n,   | /a <sup>2.9</sup> | 10 |
|-----|---|-------------------|----|
| 103 | Stretch-Induced Intermediate Structures and Crystallization of Poly(dimethylsiloxane): The Effect of Filler Content. <i>Macromolecules</i> , <b>2020</b> , 53, 719-730  | 5.5               | 10 |
| 102 | In-situ FTIR imaging on the plastic deformation of iPP thin films. <i>Polymer</i> , <b>2014</b> , 55, 1103-1107   | 3.9               | 10 |
| 101 | Disentanglement decelerating flow-induced nucleation. <i>Polymer</i> , <b>2013</b> , 54, 942-947  | 3.9               | 10 |
| 100 | Mechanical energy and thermal effect controlled micropore nucleation and growth mechanism in oriented high density polyethylene. <i>Polymer</i> , <b>2017</b> , 133, 240-249  | 3.9               | 10 |
| 99  | Surface adsorption-induced conformational ordering and crystallization of polyethylene oxide. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2010</b> , 48, 106-112  | 2.6               | 10 |
| 98  | Multiscale characterization of semicrystalline polymeric materials by synchrotron radiation X-ray and neutron scattering. <i>Polymer Crystallization</i> , <b>2019</b> , 2, 10043   | 0.9               | 10 |
| 97  | Biaxial stretch-induced structural evolution of polyethylene gel films: Crystal melting recrystallization and tilting. <i>Polymer</i> , <b>2019</b> , 164, 59-66  | 3.9               | 10 |
| 96  | Shear-induced precursors in polyethylene: An in-situ synchrotron radiation scanning X-ray microdiffraction study. <i>Polymer</i> , <b>2018</b> , 135, 61-68   | 3.9               | 10 |
| 95  | A real-time WAXS and SAXS study of the structural evolution of LLDPE bubble. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2018</b> , 56, 1404-1412   | 2.6               | 10 |
| 94  | Programming colloidal bonding using DNA strand-displacement circuitry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 5617-5623  | 11.5              | 9  |
| 93  | Structural evolution of hard-elastic polyethylene cast film in temperature-strain space: An in-situ SAXS and WAXS study. <i>Polymer</i> , <b>2019</b> , 184, 121930   | 3.9               | 9  |
| 92  | Preparation of Polyethylene and Ethylene/Methacrylic Acid Copolymer Blend Films with Tunable Surface Properties through Manipulating Processing Parameters during Film Blowing. <i>Polymers</i> , <b>2019</b> , 11,   | 4.5               | 9  |
| 91  | Stabilization Mechanism of Micropore in High-Density Polyethylene: A Comparison between Thermal and Mechanical Pathways. <i>Macromolecular Materials and Engineering</i> , <b>2017</b> , 302, 1700178   | 3.9               | 9  |
| 90  | Extended-chain crystals in high-pressure crystallized poly(ethylene terephthalate)/bisphenol a polycarbonate blends. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2006</b> , 44, 3148-3156   | 2.6               | 9  |
| 89  | Reconstructing the mechanical response of polybutadiene rubber based on micro-structural evolution in strain-temperature space: entropic elasticity and strain-induced crystallization as the bridges. <i>Soft Matter</i> , <b>2020</b> , 16, 447-455             | 3.6               | 9  |
| 88  | An adaptive edge-based smoothed finite element method (ES-FEM) for phase-field modeling of fractures at large deformations. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2020</b> , 372, 113   | 3576              | 9  |
| 87  | Superior lithium battery separator with extraordinary electrochemical performance and thermal stability based on hybrid UHMWPE/SiO2 nanocomposites via the scalable biaxial stretching process. <i>Composites Part B: Engineering</i> , <b>2021</b> , 211, 108658 | 10                | 9  |

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| 86 | Manipulation of Chain Entanglement and Crystal Networks of Biodegradable Poly(butylene adipatebutylene terephthalate) During Film Blowing through the Addition of a Chain Extender: An In Situ Synchrotron Radiation X-ray Scattering Study. <i>Biomacromolecules</i> , <b>2019</b> , 20, 3895-3907 | 6.9              | 8 |
|----|---|------------------|---|
| 85 | Structural origin for the strain rate dependence of mechanical response of fluoroelastomer F2314.<br>Journal of Polymer Science, Part B: Polymer Physics, <b>2019</b> , 57, 607-620   | 2.6              | 8 |
| 84 | Structural Evolution of UHMWPE Fibers during Prestretching Far and Near Melting Temperature: An In Situ Synchrotron Radiation Small- and Wide-Angle X-Ray Scattering Study. <i>Macromolecular Materials and Engineering</i> , <b>2018</b> , 303, 1700493  | 3.9              | 8 |
| 83 | Specific ion effects induced by mono-valent salts in like charged aggregates in water. <i>Soft Matter</i> , <b>2014</b> , 10, 4236-40   | 3.6              | 8 |
| 82 | Confined crystallization in end-linked PEO network under uniaxial extension. <i>Polymer</i> , <b>2013</b> , 54, 7088-7  | 09.3             | 8 |
| 81 | Relaxation propelled long period change in the extension induced crystallization of polyethylene oxide. <i>Soft Matter</i> , <b>2013</b> , 9, 10759   | 3.6              | 8 |
| 80 | A small-angle x-ray scattering system with a vertical layout. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 125110  | 1.7              | 8 |
| 79 | Preparation of size-tunable, highly monodisperse particles by self-assembly of N-phthaloylchitosan-g-polycaprolactone molecular bottle brushes. <i>Materials Letters</i> , <b>2009</b> , 63, 1416-14  | 18 <sup>.3</sup> | 8 |
| 78 | Stereo-open spherulites in high-pressure crystallized poly (ethylene terephthalate). <i>Journal of Crystal Growth</i> , <b>2000</b> , 216, 538-541  | 1.6              | 8 |
| 77 | Stretch-Induced Reverse Brill Transition in Polyamide 46. <i>Macromolecules</i> , <b>2020</b> , 53, 11153-11165   | 5.5              | 8 |
| 76 | Microbuckling: A possible mechanism to trigger nonlinear instability of semicrystalline polymer. <i>Polymer</i> , <b>2018</b> , 154, 48-54  | 3.9              | 8 |
| 75 | Structural origin of fast yielding-strain hardening transition in fluoroelastomer F2314. <i>Polymer</i> , <b>2017</b> , 119, 107-111  | 3.9              | 7 |
| 74 | A Criterion for Flow-Induced Oriented Crystals in Isotactic Polypropylene under Pressure. <i>Macromolecular Rapid Communications</i> , <b>2017</b> , 38, 1700407  | 4.8              | 7 |
| 73 | Hierarchical structure manipulation of UHMWPE/HDPE fibers through in-reactor blending with Cr/V bimetallic catalysts. <i>Composites Science and Technology</i> , <b>2019</b> , 175, 46-54   | 8.6              | 7 |
| 72 | How flow affects crystallization in a heterogeneous polyethylene oxide melt. <i>RSC Advances</i> , <b>2014</b> , 4, 9632  | 3.7              | 7 |
| 71 | One pot synthesis of bimodal UHMWPE/HDPE in-reactor blends with Cr/V bimetallic catalysts. <i>Journal of Polymer Science Part A</i> , <b>2017</b> , 55, 3404-3412   | 2.5              | 7 |
| 70 | Frustrated structures of polycaprolactam and poly(p-benzamide) in their rodfloilflod triblock copolymers. <i>Polymer</i> , <b>2010</b> , 51, 232-239  | 3.9              | 7 |
| 69 | Fibrillar morphology of elastomer-modified polypropylene: Effect of interface adhesion and processing conditions. <i>Journal of Applied Polymer Science</i> , <b>2002</b> , 86, 2085-2092   | 2.9              | 7 |

| 68 | A portable extruder for in situ wide angle x-ray scattering study on multi-dimensional flow field induced crystallization of polymer. <i>Review of Scientific Instruments</i> , <b>2018</b> , 89, 025101   | 1.7 | 6 |
|----|--|-----|---|
| 67 | Decompression-induced disorder to order phase transition in low-melting ionic liquid [OMIM][PF6]. <i>Science Bulletin</i> , <b>2014</b> , 59, 2980-2986  |     | 6 |
| 66 | In Situ microscopic infrared imaging study on deformation-induced spatial orientation and phase transition distributions of PA12. <i>Journal of Applied Polymer Science</i> , <b>2014</b> , 131, n/a-n/a   | 2.9 | 6 |
| 65 | The influence of thermoelastomers on the crystallization behavior of isotactic polypropylene under shear. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2006</b> , 44, 1188-1198   | 2.6 | 6 |
| 64 | Understanding the brittle-ductile transition of glass polymer on mesoscopic scale by in-situ small angle X-ray scattering. <i>Polymer</i> , <b>2020</b> , 209, 122985  | 3.9 | 6 |
| 63 | Stretch-induced structural transition of linear low-density polyethylene during uniaxial stretching under different strain rates. <i>Polymer</i> , <b>2021</b> , 226, 123795   | 3.9 | 6 |
| 62 | In-situ tracking polymer crystallization during film blowing by synchrotron radiation X-ray scattering: The critical role of network. <i>Polymer</i> , <b>2020</b> , 198, 122492   | 3.9 | 5 |
| 61 | Influence of interchain interactions on the tumbling of chains in a polymer melt during shear flow. <i>Journal of Rheology</i> , <b>2020</b> , 64, 941-954   | 4.1 | 5 |
| 60 | Precursor assisted crystallization in cross-linked isotactic polypropylene. <i>Polymer</i> , <b>2019</b> , 180, 121674   | 3.9 | 5 |
| 59 | Extension decelerated crystallization in Erradiated isotactic polypropylene: The role of asymmetric chain relaxation. <i>Polymer</i> , <b>2017</b> , 131, 68-72  | 3.9 | 5 |
| 58 | CdS nanorods assisted thermal oxidation of polythiol segments of PS-b-polythiols to produce core cross-linking micellar clusters. <i>Polymer Chemistry</i> , <b>2014</b> , 5, 7034-7041  | 4.9 | 5 |
| 57 | Multiscale fibers via supramolecular self-assembly of a fully rigid, discotic aromatic aramid molecule. <i>European Polymer Journal</i> , <b>2013</b> , 49, 1682-1687  | 5.2 | 5 |
| 56 | Crystal Morphology of High-Pressure Crystallized Bisphenol-A Polycarbonate. <i>Journal of Macromolecular Science - Physics</i> , <b>2011</b> , 50, 1018-1030   | 1.4 | 5 |
| 55 | Structure of polyamide 6 and poly (p-benzamide) in their rod-coil-rod triblock copolymers investigated with in situ wide angle X-ray diffraction. <i>Polymer</i> , <b>2011</b> , 52, 1197-1205   | 3.9 | 5 |
| 54 | THE HIGH-PRESSURE CRYSTALLIZATION AND ANNEALING BEHAVIORS OF POLYETHYLENE TEREPHTHALATE OLIGOMER. <i>Journal of Macromolecular Science - Physics</i> , <b>2001</b> , 40, 1169-1178   | 1.4 | 5 |
| 53 | A dynamic phase field model with no attenuation of wave speed for rapid fracture instability in hyperelastic materials. <i>International Journal of Solids and Structures</i> , <b>2020</b> , 202, 685-698   | 3.1 | 5 |
| 52 | Influence of material characteristics on the structure and properties of high-density polyethylene microporous membranes. <i>RSC Advances</i> , <b>2016</b> , 6, 62769-62777   | 3.7 | 5 |
| 51 | Stretch-induced structural evolution of dichromatic substance with poly (vinyl alcohol) at different concentrations of boric acid: An in-situ synchrotron radiation small- and wide-angle X-ray scattering study. <i>Polymer</i> , <b>2021</b> , 212, 123297 | 3.9 | 5 |

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| 50 | from the sun and outer space <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119, e2120557119  | 11.5             | 5 |  |
|----|---|------------------|---|--|
| 49 | Filler-induced heterogeneous distribution of stretch-induced crystallization in natural rubber: An in-situ synchrotron-radiation micro-focused scanning X-ray diffraction study. <i>Polymer</i> , <b>2017</b> , 115, 217-2                | 23 <sup>.9</sup> | 4 |  |
| 48 | Stretch-induced structural evolution of poly (vinyl alcohol) at different concentrations of boric acid: An in-situ synchrotron radiation small- and wide- angle X-ray scattering study. <i>Polymer Testing</i> , <b>2019</b> , 77, 105913 | 4.5              | 4 |  |
| 47 | Numerical calculation of free-energy barriers for entangled polymer nucleation. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 224904  | 3.9              | 4 |  |
| 46 | Molecular and thermodynamics descriptions of flow-induced crystallization in semi-crystalline polymers. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 241101   | 2.5              | 4 |  |
| 45 | Opposite counter-ion effects on condensed bundles of highly charged supramolecular nanotubes in water. <i>Soft Matter</i> , <b>2016</b> , 12, 6285-92   | 3.6              | 4 |  |
| 44 | Polymer-Ion Interaction Weakens the Strain-Rate Dependence of Extension-Induced Crystallization for Poly(ethylene oxide). <i>Langmuir</i> , <b>2016</b> , 32, 2117-26   | 4                | 4 |  |
| 43 | Structural evolution of cellulose triacetate film during stretching deformation: An in-situ synchrotron radiation wide-angle X-Ray scattering study. <i>Polymer</i> , <b>2019</b> , 182, 121815   | 3.9              | 4 |  |
| 42 | Counter-ion specificity explored in abnormal expansion of supra-molecular aggregates in aqueous solution of alkaline metal salts. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 114901  | 3.9              | 4 |  |
| 41 | Robust Ordered Bundles of Porous Helical Nanotubes Assembled from Fully Rigid Ionic Benzene-1,3,5-tricarboxamides. <i>Chemistry - A European Journal</i> , <b>2015</b> , 21, 15388-94   | 4.8              | 4 |  |
| 40 | Shear Enhanced Crystallization and Tensile Behaviors of Oscillation Shear Injection Molded Poly(ethylene terephthalate). <i>Journal of Macromolecular Science - Physics</i> , <b>2010</b> , 50, 383-397                                   | 1.4              | 4 |  |
| 39 | The recovery of nano-sized carbon black filler structure and its contribution to stress recovery in rubber nanocomposites. <i>Nanoscale</i> , <b>2020</b> , 12, 24527-24542   | 7.7              | 4 |  |
| 38 | Morphology diagram of PE gel films in wide range temperature-strain space: An in situ SAXS and WAXS study. <i>Journal of Polymer Science, Part B: Polymer Physics,</i> <b>2019</b> , 57, 748-757  | 2.6              | 3 |  |
| 37 | Effect of pressure on the structure and properties of polymeric gel based on polymer PVdF-HFP and ionic liquid [BMIM][BF4]. <i>Colloid and Polymer Science</i> , <b>2015</b> , 293, 925-932   | 2.4              | 3 |  |
| 36 | Modulating the Arrangement of Charged Nanotubes by Ionic Strength in Salty Water. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 1187-91   | 6.4              | 3 |  |
| 35 | The influence of inertia and elastic retraction on flow-induced crystallization of isotactic polypropylene. <i>Journal of Rheology</i> , <b>2013</b> , 57, 1281-1296  | 4.1              | 3 |  |
| 34 | A new three-dimensional (3D) multilayer organic material: synthesis, swelling, exfoliation, and application. <i>Langmuir</i> , <b>2013</b> , 29, 3813-20  | 4                | 3 |  |
| 33 | Stretch-induced structural evolution of pre-oriented isotactic polypropylene films: An in-situ synchrotron radiation SAXS/WAXS study. <i>Polymer</i> , <b>2021</b> , 214, 123234  | 3.9              | 3 |  |

| 32 | Inducing nano-confined crystallization in PLLA and PET by elastic melt stretching. <i>Soft Matter</i> , <b>2021</b> , 17, 1457-1462  | 3.6              | 3   |
|----|--|------------------|-----|
| 31 | Thermally stable and high electrochemical performance ultra-high molecular weight polyethylene/poly(4-methyl-1-pentene) blend film used as Li-ion battery separator. <i>Applied Materials Today</i> , <b>2021</b> , 24, 101136 | 6.6              | 3   |
| 30 | Resonant absorption induced fast melting studied with mid-IR QCLs. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 023108  | 1.7              | 2   |
| 29 | Bifurcation criterion and the origin of limit crack velocity in dynamic brittle fracture. <i>International Journal of Fracture</i> , <b>2020</b> , 224, 117-131  | 2.3              | 2   |
| 28 | Trade-off of mechanical and electrical properties in stretchable P3HT/PDMS blending films driven by interpenetrating double networks formation. <i>AIP Advances</i> , <b>2020</b> , 10, 035020                                 | 1.5              | 2   |
| 27 | Modification of UHMWPE porous fibers by acrylic acid and its adsorption kinetics for Cu2+ removal. <i>Polymer Bulletin</i> , <b>2017</b> , 74, 3855-3870   | 2.4              | 2   |
| 26 | A novel method to prepare polymer-ionic liquid gel under high pressure and its electrochemical properties. <i>Journal of Sol-Gel Science and Technology</i> , <b>2014</b> , 72, 344-350  | 2.3              | 2   |
| 25 | Anomalous thermally expanded polymer networks for flexible perceptual devices. <i>Matter</i> , <b>2021</b> , 4, 183  | 32 <u>11</u> 862 | 2 2 |
| 24 | Strain Rate Dependence of Stretch-Induced Crystallization and Crystal Transition of Poly(dimethylsiloxane). <i>Macromolecules</i> ,  | 5.5              | 2   |
| 23 | Lyotropic meso-phase behavior of supra-molecular nanotubes with helical charge distribution. <i>Soft Matter</i> , <b>2017</b> , 13, 3475-3479  | 3.6              | 1   |
| 22 | Time-resolved orientation detection system with quantum cascade lasers. <i>Review of Scientific Instruments</i> , <b>2018</b> , 89, 073101   | 1.7              | 1   |
| 21 | Collapse Transition-Assisted Crystallization in P3HT Solution. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2019</b> , 57, 1105-1114  | 2.6              | 1   |
| 20 | Stretching and orientation dynamics of linear and comb polymers at shear stress overshoot. <i>Journal of Rheology</i> , <b>2019</b> , 63, 939-946  | 4.1              | 1   |
| 19 | Extended-Chain Crystals of High-Pressure Crystallized Poly(ethyleneterephthalate). <i>Polymer Journal</i> , <b>2001</b> , 33, 690  | 2.7              | 1   |
| 18 | Microstructural Origin of the Double Yield Points of the Metallocene Linear Low-Density Polyethylene (mLLDPE) Precursor Film under Uniaxial Tensile Deformation. <i>Polymers</i> , <b>2020</b> , 13,                           | 4.5              | 1   |
| 17 | Revealing the detailed structure in flow-induced crystallization of semicrystalline polymers. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 25206-25214   | 3.6              | 1   |
| 16 | Influence of thermal history on crystalline morphologies of isotactic polypropylene in its miscible blends with polybutene-1. <i>Journal of Applied Polymer Science</i> , <b>2016</b> , 133, n/a-n/a                           | 2.9              | 1   |
| 15 | Network structure of swollen iodine-doped poly(vinyl alcohol) amorphous domain as characterized by low field NMR. <i>Soft Matter</i> , <b>2021</b> , 17, 8973-8981   | 3.6              | 1   |

#### LIST OF PUBLICATIONS

| 14 | Stretch-Induced Melting and Recrystallization of Polyethylene-Plasticizer Film Studied by In Situ X-Ray Scattering: A Thermodynamic Point of View. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2018</b> , 56, 1521-1528 | 2.6 | 1 |
|----|---|-----|---|
| 13 | REVIEW: Current progresses of small-angle neutron scattering on soft-matters investigation <b>2022</b> , 1000 <sup>2</sup>  | 11  | 1 |
| 12 | Bond Orientation-Assisted Enthalpic Stress in Polymer Glasses: A Simulation Study on Elastic Yielding. <i>Macromolecules</i> , <b>2022</b> , 55, 883-896  | 5.5 | 0 |
| 11 | High performance ultra-high molecular weight polyethylene nanocomposite separators with excellent rate capabilities designed for next-generation lithium-ion batteries. <i>Materials Today Physics</i> , <b>2022</b> , 23, 100626           | 8   | О |
| 10 | The formation of crystal cross-linked network in sequential biaxial stretching of poly(ethylene terephthalate): The essential role of MD pre-stretch. <i>Polymer Testing</i> , <b>2021</b> , 96, 107143                                     | 4.5 | 0 |
| 9  | Counterion-Induced Nanosheet-to-Nanofilament Transition of Lyotropic Bent-Core Liquid Crystals. <i>Langmuir</i> , <b>2018</b> , 34, 13006-13013   | 4   | О |
| 8  | Abnormal brittle-ductile transition for glassy polymers after free and constrained melt stretching: The role of molecular alignment. <i>Polymer</i> , <b>2021</b> , 233, 124199   | 3.9 | 0 |
| 7  | Strain-Rate-Dependent Phase Transition Mechanism in Polybutene-1 during Uniaxial Stretching: From Quasi-Static to Dynamic Loading Conditions. <i>Macromolecules</i> , <b>2022</b> , 55, 2333-2344   | 5.5 | 0 |
| 6  | A simple method for Ce-Nd separation using nano-NaBiO: Application in the isotopic analysis of U, Sr, Pb, Nd, and Hf in uranium ores <i>Talanta</i> , <b>2022</b> , 245, 123443   | 6.2 | 0 |
| 5  | Orientation Birefringence Regulation for the Binary Blend Film of Cellulose Triacetate and Rigid-Rod-Like 5CB Molecules. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 6642-6652  | 4.3 | О |
| 4  | Mixed displacement pressure-phase field framework for finite strain fracture of nearly incompressible hyperelastic materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2022</b> , 394, 114933                      | 5.7 | О |
| 3  | In situ synchrotron X-ray diffraction analysis of deformation behaviour in Ti-Ni-based thin films.  Journal of Synchrotron Radiation, <b>2015</b> , 22, 34-41   | 2.4 |   |
| 2  | A revisit to the flow and pressure jointly induced thick lamellae in isotactic polypropylene: A synchrotron radiation small- and wide-angle X-ray scattering study. <i>Polymer Crystallization</i> , <b>2019</b> , 2, e100                  | 33  |   |
| 1  | Flow-Induced Crystallization of Semicrystalline Polymer1-22   |     |   |