

# Gregory C Rutledge

## List of Publications by Citations

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186  
ext. papers

14,146  
ext. citations

7.1  
avg, IF

6.7  
L-index

#	Paper	IF	Citations
175	Designing superoleophobic surfaces. <i>Science</i> , <b>2007</b> , 318, 1618-22	33.3	2287
174	Controlling the fiber diameter during electrospinning. <i>Physical Review Letters</i> , <b>2003</b> , 90, 144502	7.4	691
173	Electrospinning Bombyx mori silk with poly(ethylene oxide). <i>Biomacromolecules</i> , <b>2002</b> , 3, 1233-9	6.9	623
172	Superhydrophobic Fabrics Produced by Electrospinning and Chemical Vapor Deposition. <i>Macromolecules</i> , <b>2005</b> , 38, 9742-9748	5.5	619
171	Formation of fibers by electrospinning. <i>Advanced Drug Delivery Reviews</i> , <b>2007</b> , 59, 1384-91	18.5	480
170	Electrospun poly(styrene-block-dimethylsiloxane) block copolymer fibers exhibiting superhydrophobicity. <i>Langmuir</i> , <b>2005</b> , 21, 5549-54	4	431
169	Effect of fiber diameter, pore size and seeding method on growth of human dermal fibroblasts in electrospun poly(epsilon-caprolactone) fibrous mats. <i>Biomaterials</i> , <b>2010</b> , 31, 491-504	15.6	333
168	The role of elasticity in the formation of electrospun fibers. <i>Polymer</i> , <b>2006</b> , 47, 4789-4797	3.9	312
167	Mechanical Properties of Electrospun Silk Fibers. <i>Macromolecules</i> , <b>2004</b> , 37, 6856-6864	5.5	263
166	Spraying asymmetry into functional membranes layer-by-layer. <i>Nature Materials</i> , <b>2009</b> , 8, 512-8	27	254
165	Morphology of Porous and Wrinkled Fibers of Polystyrene Electrospun from Dimethylformamide. <i>Macromolecules</i> , <b>2009</b> , 42, 2102-2114	5.5	211
164	Molecular response of a glassy polymer to active deformation. <i>Polymer</i> , <b>2004</b> , 45, 1391-1399	3.9	154
163	Electrospun polymer nanofibers with internal periodic structure obtained by microphase separation of cylindrically confined block copolymers. <i>Nano Letters</i> , <b>2006</b> , 6, 2969-72	11.5	153
162	Molecular dynamics simulation of orientation and crystallization of polyethylene during uniaxial extension. <i>Polymer</i> , <b>2003</b> , 44, 1771-1779	3.9	145
161	Molecular Dynamics Simulation of Homogeneous Crystal Nucleation in Polyethylene. <i>Macromolecules</i> , <b>2013</b> , 46, 4723-4733	5.5	141
160	Highly Reactive Multilayer-Assembled TiO <sub>2</sub> Coating on Electrospun Polymer Nanofibers. <i>Advanced Materials</i> , <b>2009</b> , 21, 1252-1256	24	137
159	Growth of metal-organic frameworks on polymer surfaces. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 15687-91	16.4	133

158	A Review of Recent Results on Superhydrophobic Materials Based on Micro- and Nanofibers. <i>Journal of Adhesion Science and Technology</i> , <b>2008</b> , 22, 1799-1817	2	132
157	Spray-Layer-by-Layer Carbon Nanotube/Electrospun Fiber Electrodes for Flexible Chemiresistive Sensor Applications. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 492-502	15.6	129
156	Electrospun Polyaniline Fibers as Highly Sensitive Room Temperature Chemiresistive Sensors for Ammonia and Nitrogen Dioxide Gases. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4005-4014	15.6	127
155	Coaxial electrospinning of WO <sub>3</sub> nanotubes functionalized with bio-inspired Pd catalysts and their superior hydrogen sensing performance. <i>Nanoscale</i> , <b>2016</b> , 8, 9159-66	7.7	120
154	Free surface electrospinning from a wire electrode. <i>Chemical Engineering Journal</i> , <b>2012</b> , 183, 492-503	14.7	120
153	Electrospun cellulose acetate fibers containing chlorhexidine as a bactericide. <i>Polymer</i> , <b>2008</b> , 49, 1266-1275	3.5	115
152	Enhanced mobility accompanies the active deformation of a glassy amorphous polymer. <i>Physical Review Letters</i> , <b>2002</b> , 89, 175505	7.4	114
151	Desalination by Membrane Distillation using Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 8225-32	9.5	113
150	Production of Submicron Diameter Silk Fibers under Benign Processing Conditions by Two-Fluid Electrospinning. <i>Macromolecules</i> , <b>2006</b> , 39, 1102-1107	5.5	111
149	Electrical Conductivity of Electrospun Polyaniline and Polyaniline-Blend Fibers and Mats. <i>Macromolecules</i> , <b>2012</b> , 45, 4238-4246	5.5	110
148	Highly porous electrospun polyvinylidene fluoride (PVDF)-based carbon fiber. <i>Carbon</i> , <b>2011</b> , 49, 3395-3403	10.4	108
147	Mechanical properties of individual electrospun PA 6(3)T fibers and their variation with fiber diameter. <i>Polymer</i> , <b>2011</b> , 52, 2295-2301	3.9	107
146	Plastic Deformation of Semicrystalline Polyethylene by Molecular Simulation. <i>Macromolecules</i> , <b>2011</b> , 44, 3096-3108	5.5	105
145	Electrospun polyurethane fibers for absorption of volatile organic compounds from air. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 3902-9	9.5	103
144	Characterization of polyethylene crystallization from an oriented melt by molecular dynamics simulation. <i>Journal of Chemical Physics</i> , <b>2004</b> , 121, 2823-32	3.9	99
143	Simulation of the temperature dependence of mechanical properties of polyethylene. <i>The Journal of Physical Chemistry</i> , <b>1994</b> , 98, 1222-1231		93
142	Elastic-plastic behavior of non-woven fibrous mats. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2012</b> , 60, 295-318	5	89
141	On the size and shape of self-assembled micelles. <i>Journal of Chemical Physics</i> , <b>1997</b> , 107, 10777-10781	3.9	86

140	Nanocarbon-based electrochemical systems for sensing, electrocatalysis, and energy storage. <i>Nano Today</i> , <b>2014</b> , 9, 405-432	17.9	81
139	Mechanical and Structural Characterization of Semicrystalline Polyethylene under Tensile Deformation by Molecular Dynamics Simulations. <i>Macromolecules</i> , <b>2015</b> , 48, 4228-4239	5.5	80
138	Wrinkled surface topographies of electrospun polymer fibers. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 151916	3.4	79
137	50th Anniversary Perspective: Advanced Polymer Fibers: High Performance and Ultrafine. <i>Macromolecules</i> , <b>2017</b> , 50, 5627-5642	5.5	76
136	On the importance of fiber curvature to the elastic moduli of electrospun nonwoven fiber meshes. <i>Polymer</i> , <b>2011</b> , 52, 6126-6133	3.9	75
135	Continuous concentric lamellar block copolymer nanofibers with long range order. <i>Nano Letters</i> , <b>2009</b> , 9, 1678-83	11.5	75
134	Temperature-Dependent Elasticity of a Semicrystalline Interphase Composed of Freely Rotating Chains. <i>Macromolecules</i> , <b>2003</b> , 36, 7358-7365	5.5	75
133	Plastic Deformation of Semicrystalline Polyethylene under Extension, Compression, and Shear Using Molecular Dynamics Simulation. <i>Macromolecules</i> , <b>2014</b> , 47, 2515-2528	5.5	73
132	Electrospun carbon nanofiber webs with controlled density of states for sensor applications. <i>Advanced Materials</i> , <b>2013</b> , 25, 1309-14	24	70
131	Modular functionalization of carbon nanotubes and fullerenes. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 8446-54	16.4	70
130	Molecular simulation of crystal nucleation in n-octane melts. <i>Journal of Chemical Physics</i> , <b>2009</b> , 131, 134902	9.9	69
129	Aerosol filtration using electrospun cellulose acetate fibers. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 204-213	4.7	68
128	Multifunctional Electrospun Fabrics via Layer-by-Layer Electrostatic Assembly for Chemical and Biological Protection. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 1429-1436	9.6	68
127	A novel algorithm for creating coarse-grained, density dependent implicit solvent models. <i>Journal of Chemical Physics</i> , <b>2008</b> , 128, 154115	3.9	67
126	Molecular simulation of the intercrystalline phase of chain molecules. <i>Journal of Chemical Physics</i> , <b>1998</b> , 109, 6523-6526	3.9	66
125	Separation of oil-in-water emulsions using electrospun fiber membranes and modeling of the fouling mechanism. <i>Journal of Membrane Science</i> , <b>2015</b> , 486, 229-238	9.6	63
124	Molecular simulation of bundle-like crystal nucleation from n-eicosane melts. <i>Journal of Chemical Physics</i> , <b>2011</b> , 135, 024903	3.9	62
123	WO <sub>3</sub> Nanofiber-Based Biomarker Detectors Enabled by Protein-Encapsulated Catalyst Self-Assembled on Polystyrene Colloid Templates. <i>Small</i> , <b>2016</b> , 12, 911-20	11	62

122	Gyroid-Forming Diblock Copolymers Confined in Cylindrical Geometry: A Case of Extreme Makeover for Domain Morphology. <i>Macromolecules</i> , <b>2010</b> , 43, 3061-3071	5.5	59
121	Temperature-Dependent Thermal and Elastic Properties of the Interlamellar Phase of Semicrystalline Polyethylene by Molecular Simulation. <i>Macromolecules</i> , <b>2006</b> , 39, 439-447	5.5	58
120	Ultra-wide-range electrochemical sensing using continuous electrospun carbon nanofibers with high densities of states. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 3394-405	9.5	57
119	Molecular Dynamics Simulation of Size-Dependent Structural and Thermal Properties of Polymer Nanofibers. <i>Macromolecules</i> , <b>2007</b> , 40, 8483-8489	5.5	55
118	Structure and Dynamics of Blends of Polyhedral Oligomeric Silsesquioxanes and Polyethylene by Atomistic Simulation. <i>Macromolecules</i> , <b>2005</b> , 38, 6700-6709	5.5	55
117	Electrochemically Nanostructured Polyvinylferrocene/Polypyrrole Hybrids with Synergy for Energy Storage. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 4803-4813	15.6	54
116	Production of core/shell fibers by electrospinning from a free surface. <i>Chemical Engineering Science</i> , <b>2013</b> , 104, 250-259	4.4	51
115	Spray Layer-by-Layer Electrospun Composite Proton Exchange Membranes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3087-3095	15.6	50
114	Enhanced Photocatalytic Activity using Layer-by-Layer Electrospun Constructs for Water Remediation. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 2424-2429	15.6	49
113	Durable, self-healing, superhydrophobic fabrics from fluorine-free, waterborne, polydopamine/alkyl silane coatings. <i>RSC Advances</i> , <b>2017</b> , 7, 33986-33993	3.7	48
112	Molecular simulation of flow-enhanced nucleation in n-eicosane melts under steady shear and uniaxial extension. <i>Journal of Chemical Physics</i> , <b>2016</b> , 145, 244903	3.9	48
111	Polyacrylonitrile-based electrospun carbon paper for electrode applications. <i>Journal of Applied Polymer Science</i> , <b>2012</b> , 124, 3861-3870	2.9	47
110	Chemical protection fabrics via surface oxidation of electrospun polyacrylonitrile fiber mats. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 2432		47
109	Multiresolution analysis in statistical mechanics. I. Using wavelets to calculate thermodynamic properties. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 4414-4423	3.9	47
108	Catalytic hydrolysis of p-nitrophenyl acetate by electrospun polyacrylamidoxime nanofibers. <i>Polymer</i> , <b>2007</b> , 48, 4675-4682	3.9	44
107	Deformation mechanisms of thermoplastic elastomers: Stress-strain behavior and constitutive modeling. <i>Polymer</i> , <b>2017</b> , 128, 87-99	3.9	42
106	Ultrafine high performance polyethylene fibers. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 3049-3063	4.3	42
105	Evaluating the transferability of coarse-grained, density-dependent implicit solvent models to mixtures and chains. <i>Journal of Chemical Physics</i> , <b>2009</b> , 130, 034904	3.9	41

104	Separation of oil-in-water emulsions stabilized by different types of surfactants using electrospun fiber membranes. <i>Journal of Membrane Science</i> , <b>2018</b> , 563, 247-258	9.6	41
103	Multiresolution analysis in statistical mechanics. II. The wavelet transform as a basis for Monte Carlo simulations on lattices. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 4424-4431	3.9	40
102	Molecular Dynamics Simulation of the Effects of Layer Thickness and Chain Tilt on Tensile Deformation Mechanisms of Semicrystalline Polyethylene. <i>Macromolecules</i> , <b>2017</b> , 50, 1700-1712	5.5	39
101	Polyvinylferrocene for noncovalent dispersion and redox-controlled precipitation of carbon nanotubes in nonaqueous media. <i>Langmuir</i> , <b>2013</b> , 29, 9626-34	4	39
100	Free surface electrospinning of aqueous polymer solutions from a wire electrode. <i>Chemical Engineering Journal</i> , <b>2016</b> , 289, 203-211	14.7	34
99	Plastic Deformation of Semicrystalline Polyethylene by X-ray Scattering: Comparison with Atomistic Simulations. <i>Macromolecules</i> , <b>2013</b> , 46, 5279-5289	5.5	34
98	Slit-surface electrospinning: a novel process developed for high-throughput fabrication of core-sheath fibers. <i>PLoS ONE</i> , <b>2015</b> , 10, e0125407	3.7	33
97	Molecular Dynamics Simulation of Thermomechanical Properties of Montmorillonite Crystal. II. Hydrated Montmorillonite Crystal. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 17056-17062	3.8	33
96	A model of crystal polarization in $\beta$ -poly(vinylidene fluoride). <i>Journal of Chemical Physics</i> , <b>1995</b> , 103, 10347-10353	3.9	33
95	Mechanical Properties of Glassy Polyethylene Nanofibers via Molecular Dynamics Simulations. <i>Macromolecules</i> , <b>2009</b> , 42, 4887-4895	5.5	32
94	Mechanical and transport properties of layer-by-layer electrospun composite proton exchange membranes for fuel cell applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 8155-64	9.5	31
93	Molecular origins of homogeneous crystal nucleation. <i>Annual Review of Chemical and Biomolecular Engineering</i> , <b>2012</b> , 3, 157-82	8.9	31
92	Metallocene/carbon hybrids prepared by a solution process for supercapacitor applications. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 13120	13	30
91	General reptation and scaling of 2d athermal polymers on close-packed lattices. <i>Journal of Chemical Physics</i> , <b>1997</b> , 107, 1269-1278	3.9	30
90	Permeability of electrospun fiber mats under hydraulic flow. <i>Journal of Membrane Science</i> , <b>2014</b> , 451, 111-116	9.6	29
89	Magnet-responsive, superhydrophobic fabrics from waterborne, fluoride-free coatings.. <i>RSC Advances</i> , <b>2018</b> , 8, 717-723	3.7	28
88	Mechanical and tribological properties of electrospun PA 6(3)T fiber mats. <i>Polymer</i> , <b>2012</b> , 53, 3017-3025	3.9	28
87	Polyethylene {201} crystal surface: interface stresses and thermodynamics. <i>Polymer</i> , <b>2006</b> , 47, 5494-5504	3.9	28

86	Electrospun magnetic carbon composite fibers: Synthesis and electromagnetic wave absorption characteristics. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 127, 4288-4295	2.9	26
85	Modeling experimental data in a Monte Carlo simulation. <i>Physical Review E</i> , <b>2001</b> , 63, 021111	2.4	26
84	Predicting polymer nanofiber interactions via molecular simulations. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2010</b> , 2, 1164-72	9.5	25
83	Effect of Short Chain Branching on the Interlamellar Structure of Semicrystalline Polyethylene. <i>Macromolecules</i> , <b>2017</b> , 50, 1206-1214	5.5	24
82	An assessment of models for flow-enhanced nucleation in an n-alkane melt by molecular simulation. <i>Journal of Rheology</i> , <b>2019</b> , 63, 465-475	4.1	24
81	Molecular Simulation of Thermoplastic Polyurethanes under Large Tensile Deformation. <i>Macromolecules</i> , <b>2018</b> , 51, 1850-1864	5.5	24
80	Advances in electrospun carbon fiber-based electrochemical sensing platforms for bioanalytical applications. <i>Analytical and Bioanalytical Chemistry</i> , <b>2016</b> , 408, 1307-26	4.4	24
79	Flow-Induced Crystallization <b>2013</b> , 399-432		24
78	A Method for Studying Conformational Relaxations by Molecular Simulation: Conformational Defects in $\beta$ Phase Poly(vinylidene fluoride). <i>Macromolecules</i> , <b>1996</b> , 29, 5190-5199	5.5	24
77	Electrochemically responsive heterogeneous catalysis for controlling reaction kinetics. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 1348-55	16.4	23
76	Monte Carlo Simulation of Interlamellar Isotactic Polypropylene. <i>Macromolecules</i> , <b>2007</b> , 40, 5187-5195	5.5	23
75	Molecular Dynamics Simulation of Surface Nucleation during Growth of an Alkane Crystal. <i>Macromolecules</i> , <b>2016</b> , 49, 3619-3629	5.5	21
74	Atomistic Simulation of the Structure and Mechanics of a Semicrystalline Polyether. <i>Macromolecules</i> , <b>2016</b> , 49, 5714-5726	5.5	20
73	Temperature Dependence of Structural and Mechanical Properties of Isotactic Polypropylene. <i>Macromolecules</i> , <b>1995</b> , 28, 1115-1120	5.5	20
72	Heterogeneous Nucleation of an n-Alkane on Tetrahedrally Coordinated Crystals. <i>Journal of Physical Chemistry B</i> , <b>2017</b> , 121, 904-911	3.4	19
71	Energetically efficient electrochemically tunable affinity separation using multicomponent polymeric nanostructures for water treatment. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2954-2963	35.4	19
70	Compressibility of electrospun fiber mats. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 7827-7836	4.3	19
69	Atomistic Simulation of a Thermoplastic Polyurethane and Micromechanical Modeling. <i>Macromolecules</i> , <b>2017</b> , 50, 7399-7409	5.5	19



68	Engineering the Mechanics of Heterogeneous Soft Crystals. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 6938-6949	15.6	18
67	All-atomic and coarse-grained molecular dynamics investigation of deformation in semi-crystalline lamellar polyethylene. <i>Polymer</i> , <b>2018</b> , 153, 305-316	3.9	18
66	Micromechanical characterization of the interphase layer in semi-crystalline polyethylene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2013</b> , 51, 1228-1243	2.6	18
65	Implications of the volume dependent convergence of anharmonic free energy methods. <i>Journal of Chemical Physics</i> , <b>1994</b> , 101, 9961-9965	3.9	18
64	Direct Three-Dimensional Visualization of Membrane Fouling by Confocal Laser Scanning Microscopy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 17001-17008	9.5	17
63	Asymmetric growth in micelles containing oil. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 9673-9680	3.9	17
62	Three-dimensional imaging of electrospun fiber mats using confocal laser scanning microscopy and digital image analysis. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 3014-3030	4.3	16
61	Molecular Simulation of Strain Dependence of Vibrational Frequencies for Montmorillonite Clay and Analysis of Strain Transfer in a Polymer/Clay Nanocomposite. <i>Macromolecules</i> , <b>2007</b> , 40, 140-144	5.5	15
60	Remarkably High Heterogeneous Electron Transfer Activity of Carbon-Nanotube-Supported Reduced Graphene Oxide. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 7422-7432	9.6	15
59	Microwave-Assisted Oxidation of Electrospun Turbostratic Carbon Nanofibers for Tailoring Energy Storage Capabilities. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 4574-4585	9.6	14
58	Crystallization in Nano-Confined Polymeric Systems <b>2013</b> , 347-378		14
57	Simulation of the structure and mechanics of crystalline 4,4'-diphenylmethane diisocyanate (MDI) with n-butanediol (BDO) as chain extender. <i>Polymer</i> , <b>2016</b> , 107, 233-239	3.9	12
56	Inverse Monte Carlo procedure for conformation determination of macromolecules. <i>Journal of Computational Chemistry</i> , <b>2003</b> , 24, 876-90	3.5	12
55	Crystal shapes and crystallization in continuum modeling. <i>Physics of Fluids</i> , <b>2005</b> , 17, 014107	4.4	12
54	Analysis of nucleation using mean first-passage time data from molecular dynamics simulation. <i>Journal of Chemical Physics</i> , <b>2016</b> , 144, 134105	3.9	12
53	Heterogeneous nucleation of an n-alkane on graphene-like materials. <i>European Polymer Journal</i> , <b>2018</b> , 104, 64-71	5.2	12
52	Flow-induced inhomogeneity and enhanced nucleation in a long alkane melt. <i>Polymer</i> , <b>2020</b> , 200, 122605	9.9	11
51	Atomistic Modeling of Plastic Deformation in Semicrystalline Polyethylene: Role of Interphase Topology, Entanglements, and Chain Dynamics. <i>Macromolecules</i> , <b>2020</b> , 53, 4605-4617	5.5	11



50	Functionalization of Electrospun Membranes with Polyelectrolytes for Separation of Oil-In-Water Emulsions. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1901285	4.6	11
49	Semi-Grand Canonical Monte Carlo (SGMC) Simulations to Interpret Experimental Data on Processed Polymer Melts and Glasses. <i>Macromolecules</i> , <b>2007</b> , 40, 4691-4702	5.5	11
48	Crossover behavior in crystal growth rate from n-alkane to polyethylene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2005</b> , 43, 2468-2473	2.6	11
47	IMPLICATIONS OF METASTABILITY FOR THE CRYSTAL/AMORPHOUS INTERFACE FROM MOLECULAR SIMULATION. <i>Journal of Macromolecular Science - Physics</i> , <b>2002</b> , 41, 909-922	1.4	11
46	Crystallization of Polymer Blends <b>2013</b> , 287-326		10
45	Simulation of mechanical properties of oriented glassy polystyrene. <i>Polymer</i> , <b>2007</b> , 48, 7211-7220	3.9	10
44	Vibrational Analysis of Semicrystalline Polyethylene Using Molecular Dynamics Simulation. <i>Macromolecules</i> , <b>2017</b> , 50, 6690-6701	5.5	9
43	Electrospun polyimide fiber membranes for separation of oil-in-water emulsions. <i>Separation and Purification Technology</i> , <b>2021</b> , 270, 118825	8.3	9
42	Enhanced Redox Transformation Efficiency in Unconjugated Electroactive Polymer/Carbon Nanotube Hybrids. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 543-548	9.6	8
41	Overall Crystallization Kinetics <b>2013</b> , 215-236		8
40	Molecular Simulation of Thermoplastic Polyurethanes under Large Compressive Deformation. <i>Macromolecules</i> , <b>2018</b> , 51, 9306-9316	5.5	8
39	Crystal Structures of Polymers <b>2013</b> , 31-72		7
38	Melting <b>2013</b> , 265-286		7
37	Crystallization in Copolymers <b>2013</b> , 327-346		7
36	A slip-link model for rheology of entangled polymer melts with crystallization. <i>Journal of Rheology</i> , <b>2020</b> , 64, 213-222	4.1	7
35	Atomistic Simulation of Polymer Melt Crystallization by Molecular Dynamics <b>2007</b> , 457-480		7
34	Thermoregulated gas transport through electrospun nanofiber membranes. <i>Chemical Engineering Science</i> , <b>2015</b> , 123, 557-563	4.4	6
33	Crystallization in Processing Conditions <b>2013</b> , 433-462		6

32	Polymer Nucleation <b>2013</b> , 125-164		6
31	Crystallization in Polymer Composites and Nanocomposites <b>2013</b> , 379-398		6
30	Epitaxial Crystallization of Polymers: Means and Issues <b>2013</b> , 237-264		6
29	Bottom-up design toward dynamically robust polyurethane elastomers. <i>Polymer</i> , <b>2021</b> , 218, 123518	3.9	6
28	Computer Modeling of Polymer Crystallization <b>2013</b> , 197-214		5
27	Hyperelastic characterization of the interlamellar domain and interphase layer in semicrystalline polyethylene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2013</b> , 51, 1692-1704	2.6	5
26	Simulation of the Structure and Properties of the Polyethylene Crystal Surface. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 10689-10695		5
25	Monte Carlo simulations of a liquid crystal copolymer in the solid state. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>1998</b> , 36, 727-741	2.6	4
24	Kinetic Model for Layer-by-Layer Crystal Growth in Chain Molecules. <i>Macromolecules</i> , <b>2016</b> , 49, 3956-3964	3.5	4
23	Chemical separation in a binary liquid aerosol by filtration using electrospun membranes. <i>Chemical Engineering Journal</i> , <b>2020</b> , 382, 122924	14.7	4
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