Gregory C Rutledge

List of Publications by Year
in descending order

164 papers	15,230 citations	22132 59 h-index	18115 120 g-index
186 all docs	186 docs citations	186 times ranked	15941 citing authors

#	Article	IF	Citations
1	Designing Superoleophobic Surfaces. Science, 2007, 318, 1618-1622.	6.0	2,610
2	Controlling the Fiber Diameter during Electrospinning. Physical Review Letters, 2003, 90, 144502.	2.9	785
3	Superhydrophobic Fabrics Produced by Electrospinning and Chemical Vapor Deposition. Macromolecules, 2005, 38, 9742-9748.	2.2	690
4	ElectrospinningBombyx moriSilk with Poly(ethylene oxide). Biomacromolecules, 2002, 3, 1233-1239.	2.6	679
5	Formation of fibers by electrospinning. Advanced Drug Delivery Reviews, 2007, 59, 1384-1391.	6.6	534
6	Electrospun Poly(Styrene-block-dimethylsiloxane) Block Copolymer Fibers Exhibiting Superhydrophobicity. Langmuir, 2005, 21, 5549-5554.	1.6	471
7	Effect of fiber diameter, pore size and seeding method on growth of human dermal fibroblasts in electrospun poly(É›-caprolactone) fibrous mats. Biomaterials, 2010, 31, 491-504.	5.7	394
8	The role of elasticity in the formation of electrospun fibers. Polymer, 2006, 47, 4789-4797.	1.8	359
9	Mechanical Properties of Electrospun Silk Fibers. Macromolecules, 2004, 37, 6856-6864.	2.2	297
10	Spraying asymmetry into functional membranes layer-by-layer. Nature Materials, 2009, 8, 512-518.	13.3	279
11	Morphology of Porous and Wrinkled Fibers of Polystyrene Electrospun from Dimethylformamide. Macromolecules, 2009, 42, 2102-2114.	2.2	233
12	Molecular Dynamics Simulation of Homogeneous Crystal Nucleation in Polyethylene. Macromolecules, 2013, 46, 4723-4733.	2.2	182
13	Molecular dynamics simulation of orientation and crystallization of polyethylene during uniaxial extension. Polymer, 2003, 44, 1771-1779.	1.8	179
14	Molecular response of a glassy polymer to active deformation. Polymer, 2004, 45, 1391-1399.	1.8	174
15	Electrospun Polyaniline Fibers as Highly Sensitive Room Temperature Chemiresistive Sensors for Ammonia and Nitrogen Dioxide Gases. Advanced Functional Materials, 2014, 24, 4005-4014.	7.8	170
16	Electrospun Polymer Nanofibers with Internal Periodic Structure Obtained by Microphase Separation of Cylindrically Confined Block Copolymers. Nano Letters, 2006, 6, 2969-2972.	4.5	160
17	Sprayâ€Layerâ€byâ€Layer Carbon Nanotube/Electrospun Fiber Electrodes for Flexible Chemiresistive Sensor Applications. Advanced Functional Materials, 2014, 24, 492-502.	7.8	148
18	Highly Reactive Multilayerâ€Assembled TiO₂ Coating on Electrospun Polymer Nanofibers. Advanced Materials, 2009, 21, 1252-1256.	11.1	147

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19	Growth of Metalâ^'Organic Frameworks on Polymer Surfaces. Journal of the American Chemical Society, 2010, 132, 15687-15691.	6.6	147
20	A Review of Recent Results on Superhydrophobic Materials Based on Micro- and Nanofibers. Journal of Adhesion Science and Technology, 2008, 22, 1799-1817.	1.4	140
21	Free surface electrospinning from a wire electrode. Chemical Engineering Journal, 2012, 183, 492-503.	6.6	139
22	Coaxial electrospinning of WO₃nanotubes functionalized with bio-inspired Pd catalysts and their superior hydrogen sensing performance. Nanoscale, 2016, 8, 9159-9166.	2.8	139
23	Electrical Conductivity of Electrospun Polyaniline and Polyaniline-Blend Fibers and Mats. Macromolecules, 2012, 45, 4238-4246.	2.2	137
24	Highly porous electrospun polyvinylidene fluoride (PVDF)-based carbon fiber. Carbon, 2011, 49, 3395-3403.	5.4	130
25	Desalination by Membrane Distillation using Electrospun Polyamide Fiber Membranes with Surface Fluorination by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2015, 7, 8225-8232.	4.0	130
26	Electrospun cellulose acetate fibers containing chlorhexidine as a bactericide. Polymer, 2008, 49, 1266-1275.	1.8	127
27	Mechanical properties of individual electrospun PA 6(3)T fibers and their variation with fiber diameter. Polymer, 2011, 52, 2295-2301.	1.8	122
28	Plastic Deformation of Semicrystalline Polyethylene by Molecular Simulation. Macromolecules, 2011, 44, 3096-3108.	2.2	121
29	Enhanced Mobility Accompanies the Active Deformation of a Glassy Amorphous Polymer. Physical Review Letters, 2002, 89, 175505.	2.9	118
30	Production of Submicron Diameter Silk Fibers under Benign Processing Conditions by Two-Fluid Electrospinning. Macromolecules, 2006, 39, 1102-1107.	2.2	117
31	Electrospun Polyurethane Fibers for Absorption of Volatile Organic Compounds from Air. ACS Applied Materials & Interfaces, 2011, 3, 3902-3909.	4.0	113
32	Characterization of polyethylene crystallization from an oriented melt by molecular dynamics simulation. Journal of Chemical Physics, 2004, 121, 2823.	1.2	112
33	Mechanical and Structural Characterization of Semicrystalline Polyethylene under Tensile Deformation by Molecular Dynamics Simulations. Macromolecules, 2015, 48, 4228-4239.	2.2	111
34	Simulation of the temperature dependence of mechanical properties of polyethylene. The Journal of Physical Chemistry, 1994, 98, 1222-1231.	2.9	107
35	50th Anniversary Perspective: Advanced Polymer Fibers: High Performance and Ultrafine. Macromolecules, 2017, 50, 5627-5642.	2.2	104
36	Temperature-Dependent Elasticity of a Semicrystalline Interphase Composed of Freely Rotating Chains. Macromolecules, 2003, 36, 7358-7365.	2.2	101

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37	Elasticâ€“plastic behavior of non-woven fibrous mats. Journal of the Mechanics and Physics of Solids, 2012, 60, 295-318.	2.3	99
38	Plastic Deformation of Semicrystalline Polyethylene under Extension, Compression, and Shear Using Molecular Dynamics Simulation. Macromolecules, 2014, 47, 2515-2528.	2.2	96
39	Nanocarbon-based electrochemical systems for sensing, electrocatalysis, and energy storage. Nano Today, 2014, 9, 405-432.	6.2	93
40	On the size and shape of self-assembled micelles. Journal of Chemical Physics, 1997, 107, 10777-10781.	1.2	89
41	Molecular simulation of crystal nucleation in n-octane melts. Journal of Chemical Physics, 2009, 131, 134902.	1.2	88
42	Wrinkled surface topographies of electrospun polymer fibers. Applied Physics Letters, 2009, 94, .	1.5	87
43	On the importance of fiber curvature to the elastic moduli of electrospun nonwoven fiber meshes. Polymer, 2011, 52, 6126-6133.	1.8	87
44	Molecular simulation of bundle-like crystal nucleation from n-eicosane melts. Journal of Chemical Physics, 2011, 135, 024903.	1.2	83
45	Aerosol filtration using electrospun cellulose acetate fibers. Journal of Materials Science, 2016, 51, 204-217.	1.7	82
46	Modular Functionalization of Carbon Nanotubes and Fullerenes. Journal of the American Chemical Society, 2009, 131, 8446-8454.	6.6	78
47	Electrospun Carbon Nanofiber Webs with Controlled Density of States for Sensor Applications. Advanced Materials, 2013, 25, 1309-1314.	11.1	78
48	Continuous Concentric Lamellar Block Copolymer Nanofibers with Long Range Order. Nano Letters, 2009, 9, 1678-1683.	4.5	77
49	WO₃ Nanofiber-Based Biomarker Detectors Enabled by Protein-Encapsulated Catalyst Self-Assembled on Polystyrene Colloid Templates. Small, 2016, 12, 911-920.	5.2	76
50	A novel algorithm for creating coarse-grained, density dependent implicit solvent models. Journal of Chemical Physics, 2008, 128, 154115.	1.2	74
51	Molecular simulation of flow-enhanced nucleation in n-eicosane melts under steady shear and uniaxial extension. Journal of Chemical Physics, 2016, 145, 244903.	1.2	74
52	Multifunctional Electrospun Fabrics via Layer-by-Layer Electrostatic Assembly for Chemical and Biological Protection. Chemistry of Materials, 2010, 22, 1429-1436.	3.2	73
53	Molecular simulation of the intercrystalline phase of chain molecules. Journal of Chemical Physics, 1998, 109, 6523-6526.	1.2	72
54	Separation of oil-in-water emulsions using electrospun fiber membranes and modeling of the fouling mechanism. Journal of Membrane Science, 2015, 486, 229-238.	4.1	67

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55	Molecular Dynamics Simulation of Size-Dependent Structural and Thermal Properties of Polymer Nanofibers. Macromolecules, 2007, 40, 8483-8489.	2.2	66
56	Temperature-Dependent Thermal and Elastic Properties of the Interlamellar Phase of Semicrystalline Polyethylene by Molecular Simulation. Macromolecules, 2006, 39, 439-447.	2.2	65
57	Electrochemically Nanostructured Polyvinylferrocene/Polypyrrole Hybrids with Synergy for Energy Storage. Advanced Functional Materials, 2015, 25, 4803-4813.	7.8	64
58	Deformation mechanisms of thermoplastic elastomers: Stress-strain behavior and constitutive modeling. Polymer, 2017, 128, 87-99.	1.8	64
59	Gyroid-Forming Diblock Copolymers Confined in Cylindrical Geometry: A Case of Extreme Makeover for Domain Morphology. Macromolecules, 2010, 43, 3061-3071.	2.2	61
60	Ultra-Wide-Range Electrochemical Sensing Using Continuous Electrospun Carbon Nanofibers with High Densities of States. ACS Applied Materials & Interfaces, 2014, 6, 3394-3405.	4.0	61
61	Spray Layerâ€byâ€Layer Electrospun Composite Proton Exchange Membranes. Advanced Functional Materials, 2013, 23, 3087-3095.	7.8	59
62	Separation of oil-in-water emulsions stabilized by different types of surfactants using electrospun fiber membranes. Journal of Membrane Science, 2018, 563, 247-258.	4.1	59
63	Durable, self-healing, superhydrophobic fabrics from fluorine-free, waterborne, polydopamine/alkyl silane coatings. RSC Advances, 2017, 7, 33986-33993.	1.7	58
64	Ultrafine high performance polyethylene fibers. Journal of Materials Science, 2018, 53, 3049-3063.	1.7	58
65	Production of core/shell fibers by electrospinning from a free surface. Chemical Engineering Science, 2013, 104, 250-259.	1.9	57
66	Molecular Dynamics Simulation of the Effects of Layer Thickness and Chain Tilt on Tensile Deformation Mechanisms of Semicrystalline Polyethylene. Macromolecules, 2017, 50, 1700-1712.	2.2	57
67	Structure and Dynamics of Blends of Polyhedral Oligomeric Silsesquioxanes and Polyethylene by Atomistic Simulation. Macromolecules, 2005, 38, 6700-6709.	2.2	56
68	Enhanced Photocatalytic Activity using Layerâ€byâ€Layer Electrospun Constructs for Water Remediation. Advanced Functional Materials, 2010, 20, 2424-2429.	7.8	54
69	Polyacrylonitrileâ€based electrospun carbon paper for electrode applications. Journal of Applied Polymer Science, 2012, 124, 3861-3870.	1.3	54
70	Chemical protection fabrics via surface oximation of electrospun polyacrylonitrile fiber mats. Journal of Materials Chemistry, 2009, 19, 2432.	6.7	53
71	Multiresolution analysis in statistical mechanics. I. Using wavelets to calculate thermodynamic properties. Journal of Chemical Physics, 2003, 118, 4414-4423.	1.2	52
72	Molecular Simulation of Thermoplastic Polyurethanes under Large Tensile Deformation. Macromolecules, 2018, 51, 1850-1864.	2.2	52

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73	Evaluating the transferability of coarse-grained, density-dependent implicit solvent models to mixtures and chains. Journal of Chemical Physics, 2009, 130, 034904.	1.2	47
74	Catalytic hydrolysis of p-nitrophenyl acetate by electrospun polyacrylamidoxime nanofibers. Polymer, 2007, 48, 4675-4682.	1.8	46
75	Polyvinylferrocene for Noncovalent Dispersion and Redox-Controlled Precipitation of Carbon Nanotubes in Nonaqueous Media. Langmuir, 2013, 29, 9626-9634.	1.6	46
76	Multiresolution analysis in statistical mechanics. II. The wavelet transform as a basis for Monte Carlo simulations on lattices. Journal of Chemical Physics, 2003, 118, 4424-4431.	1.2	45
77	Free surface electrospinning of aqueous polymer solutions from a wire electrode. Chemical Engineering Journal, 2016, 289, 203-211.	6.6	45
78	Molecular Dynamics Simulation of Thermomechanical Properties of Montmorillonite Crystal. II. Hydrated Montmorillonite Crystal. Journal of Physical Chemistry C, 2008, 112, 17056-17062.	1.5	42
79	Effect of Short Chain Branching on the Interlamellar Structure of Semicrystalline Polyethylene. Macromolecules, 2017, 50, 1206-1214.	2.2	41
80	Metallocene/carbon hybrids prepared by a solution process for supercapacitor applications. Journal of Materials Chemistry A, 2013, 1, 13120.	5.2	38
81	Plastic Deformation of Semicrystalline Polyethylene by X-ray Scattering: Comparison with Atomistic Simulations. Macromolecules, 2013, 46, 5279-5289.	2.2	38
82	A model of crystal polarization in Î²â€poly(vinylidene fluoride). Journal of Chemical Physics, 1995, 103, 10347-10355.	1.2	37
83	Mechanical and Transport Properties of Layer-by-Layer Electrospun Composite Proton Exchange Membranes for Fuel Cell Applications. ACS Applied Materials & Interfaces, 2013, 5, 8155-8164.	4.0	37
84	Slit-Surface Electrospinning: A Novel Process Developed for High-Throughput Fabrication of Core-Sheath Fibers. PLoS ONE, 2015, 10, e0125407.	1.1	37
85	Mechanical Properties of Glassy Polyethylene Nanofibers via Molecular Dynamics Simulations. Macromolecules, 2009, 42, 4887-4895.	2.2	36
86	Molecular Origins of Homogeneous Crystal Nucleation. Annual Review of Chemical and Biomolecular Engineering, 2012, 3, 157-182.	3.3	35
87	Permeability of electrospun fiber mats under hydraulic flow. Journal of Membrane Science, 2014, 451, 111-116.	4.1	35
88	All-atomic and coarse-grained molecular dynamics investigation of deformation in semi-crystalline lamellar polyethylene. Polymer, 2018, 153, 305-316.	1.8	35
89	Atomistic Modeling of Plastic Deformation in Semicrystalline Polyethylene: Role of Interphase Topology, Entanglements, and Chain Dynamics. Macromolecules, 2020, 53, 4605-4617.	2.2	35
90	Electrospun magnetic carbon composite fibers: Synthesis and electromagnetic wave absorption characteristics. Journal of Applied Polymer Science, 2013, 127, 4288-4295.	1.3	34

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91	Atomistic Simulation of a Thermoplastic Polyurethane and Micromechanical Modeling. Macromolecules, 2017, 50, 7399-7409.	2.2	34
92	General reptation and scaling of 2d athermal polymers on close-packed lattices. Journal of Chemical Physics, 1997, 107, 1269-1278.	1.2	32
93	Mechanical and tribological properties of electrospun PA 6(3)T fiber mats. Polymer, 2012, 53, 3017-3025.	1.8	32
94	Atomistic Simulation of the Structure and Mechanics of a Semicrystalline Polyether. Macromolecules, 2016, 49, 5714-5726.	2.2	32
95	Electrochemically Responsive Heterogeneous Catalysis for Controlling Reaction Kinetics. Journal of the American Chemical Society, 2015, 137, 1348-1355.	6.6	31
96	Magnet-responsive, superhydrophobic fabrics from waterborne, fluoride-free coatings. RSC Advances, 2018, 8, 717-723.	1.7	31
97	Energetically efficient electrochemically tunable affinity separation using multicomponent polymeric nanostructures for water treatment. Energy and Environmental Science, 2018, 11, 2954-2963.	15.6	31
98	An assessment of models for flow-enhanced nucleation in an n-alkane melt by molecular simulation. Journal of Rheology, 2019, 63, 465-475.	1.3	31
99	Polyethylene {201} crystal surface: interface stresses and thermodynamics. Polymer, 2006, 47, 5494-5504.	1.8	30
100	Predicting Polymer Nanofiber Interactions via Molecular Simulations. ACS Applied Materials & Interfaces, 2010, 2, 1164-1172.	4.0	30
101	Advances in electrospun carbon fiber-based electrochemical sensing platforms for bioanalytical applications. Analytical and Bioanalytical Chemistry, 2016, 408, 1307-1326.	1.9	30
102	Molecular Dynamics Simulation of Surface Nucleation during Growth of an Alkane Crystal. Macromolecules, 2016, 49, 3619-3629.	2.2	29
103	Engineering the Mechanics of Heterogeneous Soft Crystals. Advanced Functional Materials, 2016, 26, 6938-6949.	7.8	29
104	Direct Three-Dimensional Visualization of Membrane Fouling by Confocal Laser Scanning Microscopy. ACS Applied Materials & Interfaces, 2019, 11, 17001-17008.	4.0	29
105	A Method for Studying Conformational Relaxations by Molecular Simulation:Â Conformational Defects in Î±-Phase Poly(vinylidene fluoride). Macromolecules, 1996, 29, 5190-5199.	2.2	28
106	Heterogeneous Nucleation of an n-Alkane on Tetrahedrally Coordinated Crystals. Journal of Physical Chemistry B, 2017, 121, 904-911.	1.2	28
107	Modeling experimental data in a Monte Carlo simulation. Physical Review E, 2001, 63, 021111.	0.8	27
108	Monte Carlo Simulation of Interlamellar Isotactic Polypropylene. Macromolecules, 2007, 40, 5187-5195.	2.2	27

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109	Electrospun polyimide fiber membranes for separation of oil-in-water emulsions. Separation and Purification Technology, 2021, 270, 118825.	3.9	26
110	Molecular Simulation of Thermoplastic Polyurethanes under Large Compressive Deformation. Macromolecules, 2018, 51, 9306-9316.	2.2	25
111	Flow-induced inhomogeneity and enhanced nucleation in a long alkane melt. Polymer, 2020, 200, 122605.	1.8	24
112	Compressibility of electrospun fiber mats. Journal of Materials Science, 2013, 48, 7827-7836.	1.7	23
113	Simulation of the structure and mechanics of crystalline 4,4â€²-diphenylmethane diisocyanate (MDI) with n-butanediol (BDO) as chain extender. Polymer, 2016, 107, 233-239.	1.8	22
114	Micromechanical characterization of the interphase layer in semiâ€crystalline polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1228-1243.	2.4	21
115	Functionalization of Electrospun Membranes with Polyelectrolytes for Separation of Oilâ€inâ€Water Emulsions. Advanced Materials Interfaces, 2019, 6, 1901285.	1.9	21
116	Temperature Dependence of Structural and Mechanical Properties of Isotactic Polypropylene. Macromolecules, 1995, 28, 1115-1120.	2.2	20
117	Asymmetric growth in micelles containing oil. Journal of Chemical Physics, 1999, 110, 9673-9680.	1.2	20
118	Heterogeneous nucleation of an n-alkane on graphene-like materials. European Polymer Journal, 2018, 104, 64-71.	2.6	20
119	Implications of the volume dependent convergence of anharmonic free energy methods. Journal of Chemical Physics, 1994, 101, 9961-9965.	1.2	19
120	Three-dimensional imaging of electrospun fiber mats using confocal laser scanning microscopy and digital image analysis. Journal of Materials Science, 2015, 50, 3014-3030.	1.7	19
121	Analysis of nucleation using mean first-passage time data from molecular dynamics simulation. Journal of Chemical Physics, 2016, 144, 134105.	1.2	19
122	Molecular Simulation of Strain Dependence of Vibrational Frequencies for Montmorillonite Clay and Analysis of Strain Transfer in a Polymerâ^'Clay Nanocomposite. Macromolecules, 2007, 40, 140-144.	2.2	16
123	Remarkably High Heterogeneous Electron Transfer Activity of Carbon-Nanotube-Supported Reduced Graphene Oxide. Chemistry of Materials, 2016, 28, 7422-7432.	3.2	16
124	Microwave-Assisted Oxidation of Electrospun Turbostratic Carbon Nanofibers for Tailoring Energy Storage Capabilities. Chemistry of Materials, 2015, 27, 4574-4585.	3.2	15
125	Bottom-up design toward dynamically robust polyurethane elastomers. Polymer, 2021, 218, 123518.	1.8	15
126	Measuring Flow-Induced Crystallization Kinetics of Polyethylene after Processing. Macromolecules, 2021, 54, 2101-2112.	2.2	14

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127	Electrospun Liquid-Infused Membranes for Emulsified Oil/Water Separation. Langmuir, 2022, 38, 2301-2313.	1.6	14
128	Simulation of mechanical properties of oriented glassy polystyrene. Polymer, 2007, 48, 7211-7220.	1.8	13
129	IMPLICATIONS OF METASTABILITY FOR THE CRYSTAL/AMORPHOUS INTERFACE FROM MOLECULAR SIMULATION. Journal of Macromolecular Science - Physics, 2002, 41, 909-922.	0.4	12
130	Inverse Monte Carlo procedure for conformation determination of macromolecules. Journal of Computational Chemistry, 2003, 24, 876-890.	1.5	12
131	Crystal shapes and crystallization in continuum modeling. Physics of Fluids, 2005, 17, 014107.	1.6	12
132	Semi-Grand Canonical Monte Carlo (SGMC) Simulations to Interpret Experimental Data on Processed Polymer Melts and Glasses. Macromolecules, 2007, 40, 4691-4702.	2.2	12
133	Vibrational Analysis of Semicrystalline Polyethylene Using Molecular Dynamics Simulation. Macromolecules, 2017, 50, 6690-6701.	2.2	12
134	A slip-link model for rheology of entangled polymer melts with crystallization. Journal of Rheology, 2020, 64, 213-222.	1.3	12
135	Crossover behavior in crystal growth rate fromn-alkane to polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2468-2473.	2.4	11
136	Examination of Nanoparticle Filtration by Filtering Facepiece Respirators During the COVID-19 Pandemic. ACS Applied Nano Materials, 2021, 4, 3675-3685.	2.4	10
137	Thermoregulated gas transport through electrospun nanofiber membranes. Chemical Engineering Science, 2015, 123, 557-563.	1.9	9
138	Enhanced Redox Transformation Efficiency in Unconjugated Electroactive Polymer/Carbon Nanotube Hybrids. Chemistry of Materials, 2016, 28, 543-548.	3.2	9
139	Aerosol filtration performance of electrospun membranes comprising polyacrylonitrile and cellulose nanocrystals. Journal of Membrane Science, 2022, 650, 120392.	4.1	9
140	Kinetic Model for Layer-by-Layer Crystal Growth in Chain Molecules. Macromolecules, 2016, 49, 3956-3964.	2.2	8
141	Empirical potential for molecular simulation of graphene nanoplatelets. Journal of Chemical Physics, 2018, 148, 144709.	1.2	8
142	Atomistic Simulation of Polymer Melt Crystallization by Molecular Dynamics. , 2007, , 457-480.		8
143	Chemical separation in a binary liquid aerosol by filtration using electrospun membranes. Chemical Engineering Journal, 2020, 382, 122924.	6.6	7
144	Rheology of crystallizing LLDPE. Journal of Rheology, 2020, 64, 1379-1389.	1.3	7

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145	Bayesian optimization for material discovery processes with noise. Molecular Systems Design and Engineering, 2022, 7, 622-636.	1.7	7
146	Simulation of the Structure and Properties of the Polyethylene Crystal Surface. The Journal of Physical Chemistry, 1996, 100, 10689-10695.	2.9	6
147	Monte Carlo simulations of a liquid crystal copolymer in the solid state. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 727-741.	2.4	6
148	Characterization by Mercury Porosimetry of Nonwoven Fiber Media with Deformation. Journal of Engineered Fibers and Fabrics, 2009, 4, 155892500900400.	0.5	5
149	Structural, mechanical, and tribological properties of electrospun poly(hexamethylene adipamide) fiber mats. Wear, 2013, 305, 58-68.	1.5	5
150	Hyperelastic characterization of the interlamellar domain and interphase layer in semicrystalline polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1692-1704.	2.4	5
151	Shape-Stable Composites of Electrospun Nonwoven Mats and Shear-Thickening Fluids. ACS Applied Materials & Interfaces, 2022, 14, 8373-8383.	4.0	5
152	Conductive, Acid-Doped Polyaniline Electrospun Nanofiber Gas Sensing Substrates Made Using a Facile Dissolution Method. ACS Applied Materials & Interfaces, 2021, 13, 52950-52959.	4.0	4
153	Monte Carlo Simulations of Semicrystalline Polyethylene: Interlamellar Domain and Crystal-Melt Interface. , 2007, , 261-284.		3
154	Tuning the Rateâ€Dependent Stiffness of Materials by Exploiting NÃ©el Relaxation of Magnetic Nanoparticles. Advanced Functional Materials, 2008, 18, 462-469.	7.8	3
155	Wavelet-accelerated Monte Carlo sampling of polymer chains. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 897-910.	2.4	2
156	Estimation of Macromolecular Configurational Properties from Atomistic Simulations of Oligomers under Nonequilibrium Conditions. Macromolecular Theory and Simulations, 2008, 17, 23-31.	0.6	2
157	Spectroscopic analysis in molecular simulations with discretized Wiener-Khinchin theorem for Fourier-Laplace transformation. Physical Review E, 2020, 102, 063302.	0.8	2
158	Metastable wetting model of electrospun mats with wrinkled fibers. Applied Surface Science, 2021, 551, 149147.	3.1	2
159	Competitive Wetting: A New Approach to Prevent Liquid Penetration through Porous Materials with Superior Synergistic Effect. Small, 2021, 17, e2103695.	5.2	2
160	Protein-Encapsulated Catalysts: WO3 Nanofiber-Based Biomarker Detectors Enabled by Protein-Encapsulated Catalyst Self-Assembled on Polystyrene Colloid Templates (Small 7/2016). Small, 2016, 12, 964-964.	5.2	1
161	An Electrostatic Induction Model for Fluoroalkane Polymers. Materials Research Society Symposia Proceedings, 1992, 291, 325.	0.1	0
162	Polymeric materials. Journal of Computer-Aided Materials Design, 1996, 3, 49-55.	0.7	0

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163	Monte Carlo simulation in the semi-grand canonical ensemble as a â€˜thermodynamicâ€™ reverse Monte Carlo technique, with application to a polymer melt. Journal of Physics Condensed Matter, 2007, 19, 335221.	0.7	0
164	Processes and applications of electrostatic fiber formation. Journal of Physics: Conference Series, 2008, 142, 012026.	0.3	0