Richard A Register

List of Publications by Year in descending order

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233 papers

14,005 citations

23567 58 h-index 25787 108 g-index

236 all docs

236 docs citations

times ranked

236

8141 citing authors

#	Article	IF	CITATIONS
1	Block Copolymer Lithography: Periodic Arrays of 1011 Holes in 1 Square Centimeter. Science, 1997, 276, 1401-1404.	12.6	1,814
2	Modes of Crystallization in Block Copolymer Microdomains: Â Breakout, Templated, and Confined. Macromolecules, 2002, 35, 2365-2374.	4.8	426
3	Mechanisms of Ordering in Striped Patterns. , 2000, 290, 1558-1560.		338
4	Polymer Crystallization in 25-nm Spheres. Physical Review Letters, 2000, 84, 4120-4123.	7.8	331
5	Polymer Crystallization Confined in One, Two, or Three Dimensions. Macromolecules, 2001, 34, 8968-8977.	4.8	318
6	Macroscopic Orientation of Block Copolymer Cylinders in Single-Layer Films by Shearing. Advanced Materials, 2004, 16, 1736-1740.	21.0	317
7	Using Surface Active Random Copolymers To Control the Domain Orientation in Diblock Copolymer Thin Films. Macromolecules, 1998, 31, 7641-7650.	4.8	300
8	Flexible Piezoelectric PMN–PT Nanowire-Based Nanocomposite and Device. Nano Letters, 2013, 13, 2393-2398.	9.1	290
9	Dense arrays of ordered GaAs nanostructures by selective area growth on substrates patterned by block copolymer lithography. Applied Physics Letters, 2000, 76, 1689-1691.	3.3	255
10	Efficient organic electroluminescent devices using single-layer doped polymer thin films with bipolar carrier transport abilities. IEEE Transactions on Electron Devices, 1997, 44, 1269-1281.	3.0	188
11	Morphology of semicrystalline block copolymers of ethylene-(ethylene-alt-propylene). Macromolecules, 1993, 26, 4640-4645.	4.8	187
12	Nanolithographic templates from diblock copolymer thin films. Applied Physics Letters, 1996, 68, 2586-2588.	3.3	186
13	Crystallization of Asymmetric Diblock Copolymers from Microphase-Separated Melts. Macromolecules, 1997, 30, 4551-4558.	4.8	180
14	Dynamics of pattern coarsening in a two-dimensional smectic system. Physical Review E, 2002, 66, 011706.	2.1	180
15	Large area dense nanoscale patterning of arbitrary surfaces. Applied Physics Letters, 2001, 79, 257-259.	3.3	169
16	Chain Orientation in Block Copolymers Exhibiting Cylindrically Confined Crystallization. Macromolecules, 1998, 31, 4891-4898.	4.8	166
17	Dynamics of Structure Formation in Crystallizable Block Copolymers. Macromolecules, 1995, 28, 1422-1428.	4.8	163
18	Low-Shear Melt Rheology of Partially-Neutralized Ethyleneâ^'Methacrylic Acid Ionomers. Macromolecules, 1996, 29, 598-604.	4.8	152

#	Article	IF	CITATIONS
19	Well-Ordered Microdomain Structures in Polydisperse Poly(styrene)â^'Poly(acrylic acid) Diblock Copolymers from Controlled Radical Polymerization. Macromolecules, 2002, 35, 6645-6649.	4.8	149
20	Observation of a reversible thermotropic order-order transition in a diblock copolymer. Macromolecules, 1994, 27, 490-501.	4.8	147
21	Shear-Induced Alignment in Thin Films of Spherical Nanodomains. Advanced Materials, 2005, 17, 1878-1881.	21.0	146
22	Lithography with a mask of block copolymer microstructures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 544.	1.6	132
23	Crystallization of a Weakly Segregated Polyolefin Diblock Copolymer. Macromolecules, 1995, 28, 4932-4938.	4.8	126
24	Pattern coarsening in a 2D hexagonal system. Europhysics Letters, 2004, 67, 800-806.	2.0	126
25	Dynamics of Structure Formation and Crystallization in Asymmetric Diblock Copolymers. Macromolecules, 1997, 30, 8338-8343.	4.8	120
26	Reducing Substrate Pinning of Block Copolymer Microdomains with a Buffer Layer of Polymer Brushes. Macromolecules, 2000, 33, 857-865.	4.8	116
27	Controlling Order in Block Copolymer Thin Films for Nanopatterning Applications. Annual Review of Chemical and Biomolecular Engineering, 2010, 1, 277-297.	6.8	115
28	Anomalous small-angle x-ray scattering from a sulfonated polystyrene ionomer. Macromolecules, 1988, 21, 1698-1703.	4.8	113
29	Effect of carbazole–oxadiazole excited-state complexes on the efficiency of dye-doped light-emitting diodes. Journal of Applied Physics, 2002, 91, 6717.	2.5	113
30	Mixed Lamellar Films:Â Evolution, Commensurability Effects, and Preferential Defect Formation. Macromolecules, 2000, 33, 80-88.	4.8	110
31	Rheology and the Microphase Separation Transition in Styrene-Isoprene Block Copolymers. Macromolecules, 1994, 27, 6026-6032.	4.8	107
32	Ordering mechanisms in two-dimensional sphere-forming block copolymers. Physical Review E, 2005, 71, 061803.	2.1	107
33	Phase Behavior of Styreneâ^'Isoprene Diblock Copolymers in Strongly Selective Solvents. Macromolecules, 2002, 35, 841-849.	4.8	103
34	Depth Profiling Block Copolymer Microdomains. Macromolecules, 1998, 31, 2185-2189.	4.8	100
35	Ordering Dynamics of Compositionally Asymmetric Styreneâ°'lsoprene Block Copolymers. Macromolecules, 1996, 29, 2929-2938.	4.8	99
36	Electroluminescent properties of self-assembled polymer thin films. Advanced Materials, 1995, 7, 395-398.	21.0	94

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37	Strainâ€induced crystallization and mechanical properties of functionalized graphene sheetâ€filled natural rubber. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 718-723.	2.1	94
38	Hydrogenated Ring-Opened Polynorbornene:Â A Highly Crystalline Atactic Polymer. Macromolecules, 2005, 38, 1216-1222.	4.8	93
39	Rheology and Structure of Molten, Olefin Multiblock Copolymers. Macromolecules, 2010, 43, 6789-6799.	4.8	91
40	Multifunctional elastomer nanocomposites with functionalized graphene single sheets. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 910-916.	2.1	88
41	Integrated threeâ€color organic lightâ€emitting devices. Applied Physics Letters, 1996, 69, 3117-3119.	3.3	86
42	Ion Hopping in Ethyleneâ [^] 'Methacrylic Acid Ionomer Melts As Probed by Rheometry and Cation Diffusion Measurements. Macromolecules, 2002, 35, 2358-2364.	4.8	84
43	Melt and Solid-State Structures of Polydisperse Polyolefin Multiblock Copolymers. Macromolecules, 2012, 45, 5773-5781.	4.8	82
44	High-Pressure Effects on the Orderâ^'Disorder Transition in Block Copolymer Melts. Macromolecules, 1996, 29, 1473-1481.	4.8	81
45	Layer by layer imaging of diblock copolymer films with a scanning electron microscope. Polymer, 1998, 39, 2733-2744.	3.8	81
46	Polyethylene Crystal Orientation Induced by Block Copolymer Cylinders. Macromolecules, 2000, 33, 8361-8366.	4.8	80
47	Statistical Copolymers with Side-Chain Hole and Electron Transport Groups for Single-Layer Electroluminescent Device Applications. Chemistry of Materials, 2000, 12, 2542-2549.	6.7	80
48	Influence of Chain Stiffness on Thermal and Mechanical Properties of Polymer Thin Films. Macromolecules, 2011, 44, 9040-9045.	4.8	77
49	Synthesis of Narrow-Distribution "Perfect―Polyethylene and Its Block Copolymers by Polymerization of Cyclopentene. Macromolecules, 2000, 33, 9215-9221.	4.8	75
50	Aluminum nanowire polarizing grids: Fabrication and analysis. Applied Physics Letters, 2006, 88, 211114.	3.3	71
51	Poly(pâ€phenylene vinylene)/tris(8â€hydroxy) quinoline aluminum heterostructure light emitting diode. Applied Physics Letters, 1995, 66, 653-655.	3.3	70
52	Biosynthesis and characterization of hydroxybutyrate-hydroxycaproate copolymers. International Journal of Biological Macromolecules, 1995, 17, 86-92.	7.5	68
53	Large-Area Nanosquare Arrays from Shear-Aligned Block Copolymer Thin Films. Nano Letters, 2014, 14, 5698-5705.	9.1	68
54	Carboxylate-containing chain-extended polyurethanes. Journal of Polymer Science, Part B: Polymer Physics, 1991, 29, 581-588.	2.1	67

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55	Phase behavior and viscoelastic properties of entangled block copolymer gels. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 2183-2197.	2.1	67
56	Miscible blends of zinc-neutralized sulfonated polystyrene and poly(2,6-dimethyl 1,4-phenylene oxide). Journal of Polymer Science, Part B: Polymer Physics, 1992, 30, 569-575.	2.1	65
57	Rapid Production of Internally Structured Colloids by Flash Nanoprecipitation of Block Copolymer Blends. ACS Nano, 2018, 12, 4660-4668.	14.6	65
58	Morphological Origin of the Multistep Relaxation Behavior in Semicrystalline Ethylene/Methacrylic Acid Ionomers. Macromolecules, 2006, 39, 1079-1086.	4.8	64
59	Alignment of perpendicular lamellae in block copolymer thin films by shearing. Soft Matter, 2012, 8, 5358.	2.7	63
60	Steady-Shear Rheology of Block Copolymer Melts and Concentrated Solutions:Â Disordering Stress in Body-Centered-Cubic Systems. Macromolecules, 2002, 35, 2707-2713.	4.8	61
61	Morphologies of strongly segregated polystyrene-poly(dimethylsiloxane) diblock copolymers. Polymer, 1995, 36, 1569-1575.	3.8	59
62	Orientation of triblock copolymers in planar extension. Polymer Engineering and Science, 1996, 36, 1414-1424.	3.1	59
63	Synthesis and characterization of sulphonated polyurethane ionomers based on toluene diisocyanate. Polymer, 1989, 30, 1204-1212.	3.8	57
64	Enhanced Order of Block Copolymer Cylinders in Singleâ€Layer Films Using a Sweeping Solidification Front. Advanced Materials, 2007, 19, 2687-2690.	21.0	56
65	Metalâ€Containing Block Copolymer Thin Films Yield Wire Grid Polarizers with High Aspect Ratio. Advanced Materials, 2014, 26, 791-795.	21.0	56
66	Scaling of Domain Spacing in Concentrated Solutions of Block Copolymers in Selective Solvents. Macromolecules, 2002, 35, 4044-4049.	4.8	54
67	Thin crystal melting produces the low-temperature endotherm in ethylene/methacrylic acid ionomers. Polymer, 2005, 46, 5118-5124.	3.8	54
68	Orientational Order in Sphere-Forming Block Copolymer Thin Films Aligned under Shear. Macromolecules, 2007, 40, 7299-7305.	4.8	54
69	Crystallization in Ordered Polydisperse Polyolefin Diblock Copolymers. Macromolecules, 2010, 43, 4761-4770.	4.8	54
70	Shear alignment of sphere-morphology block copolymer thin films with viscous fluid flow. Physical Review E, 2006, 74, 040801.	2.1	53
71	Direct observation of ionic aggregates in sulphonated polystyrene ionomers. Polymer, 1989, 30, 1227-1233.	3.8	52
72	Shear-induced sphere-to-cylinder transition in diblock copolymer thin films. Soft Matter, 2009, 5, 1687.	2.7	51

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73	Mechanical Properties of Star Block Polymer Thermoplastic Elastomers with Glassy and Crystalline End Blocks. Macromolecules, 2016, 49, 9521-9530.	4.8	51
74	Anomalous small-angle x-ray scattering from nickel-neutralized ionomers. 2. Semicrystalline polymer matrixes. Macromolecules, 1990, 23, 318-323.	4.8	50
75	A Highly Regular Hexagonally Perforated Lamellar Structure in a Quiescent Diblock Copolymer. Macromolecules, 2005, 38, 4947-4949.	4.8	50
76	Crystallization and Ionic Associations in Semicrystalline Ionomers. Macromolecules, 1998, 31, 1432-1435.	4.8	49
77	Anomalous Attractive Interactions in Polypropylene Blends. Macromolecules, 1997, 30, 3036-3041.	4.8	48
78	Hydroxyhexafluoroisopropylnorbornene Block and Random Copolymers via Vinyl Addition Polymerization and Their Application as Biobutanol Pervaporation Membranes. Chemistry of Materials, 2015, 27, 6791-6801.	6.7	47
79	MDI-based polyurethane ionomers. 1. New small-angle x-ray scattering model. Macromolecules, 1988, 21, 998-1004.	4.8	46
80	The Role of Excess Acid Groups in the Dynamics of Ethyleneâ^Methacrylic Acid Ionomer Melts. Macromolecules, 2002, 35, 6284-6290.	4.8	46
81	Equilibrium Control of Crystal Thickness and Melting Point through Block Copolymerization. Macromolecules, 2004, 37, 7278-7284.	4.8	46
82	Crystallization Within Block Copolymer Mesophases. , 0, , 213-243.		46
83	Photophysical Properties, Self-Assembled Thin Films, and Light-Emitting Diodes of Poly(p-pyridylvinylene)s and Poly(p-pyridinium vinylene)s. Chemistry of Materials, 1995, 7, 2190-2198.	6.7	45
84	Thermodynamics of Mixing for Statistical Copolymers of Ethylene and \hat{l}_{\pm} -Olefins. Macromolecules, 1998, 31, 7886-7894.	4.8	45
85	Crystallineâ^'Crystalline Diblock Copolymers of Linear Polyethylene and Hydrogenated Polynorbornene. Macromolecules, 2008, 41, 6773-6779.	4.8	45
86	Interaction Strengths in Styreneâ^'Diene Block Copolymers and Their Hydrogenated Derivatives. Macromolecules, 1998, 31, 201-204.	4.8	44
87	Steady-Shear Rheology of Block Copolymer Melts:Â Zero-Shear Viscosity and Shear Disordering in Body-Centered-Cubic Systems. Macromolecules, 2002, 35, 2700-2706.	4.8	44
88	Living Vinyl Addition Polymerization of Substituted Norbornenes by a <i>t</i> -Bu _{9.4 (i>-Bu_{9.4) 4, 327-330.}}	4.8	44
89	Mechanisms for current-induced conductivity changes in a conducting polymer. Applied Physics Letters, 2006, 89, 142109.	3.3	43
90	High-Pressure Effects on the Disordered Phase of Block Copolymer Melts. Macromolecules, 1995, 28, 7148-7156.	4.8	42

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91	Shear alignment and realignment of sphere-forming and cylinder-forming block-copolymer thin films. Physical Review E, 2010, 81, 011503.	2.1	42
92	Anomalous small-angle x-ray scattering from nickel-neutralized ionomers. 1. Amorphous polymer matrixes. Macromolecules, 1990, 23, 310-317.	4.8	41
93	Micromechanical interpretation of the modulus of ethylene–(meth)acrylic acid copolymers. Polymer, 2005, 46, 8838-8845.	3.8	41
94	Imaging Block Copolymer Crystallization in Real Time with the Atomic Force Microscope. Macromolecules, 2006, 39, 703-710.	4.8	41
95	Self-Cleaning Resins. Journal of the American Chemical Society, 2007, 129, 5756-5759.	13.7	41
96	Small-angle X-ray scattering from sulphonated polyurethane ionomers based on toluene diisocyanate. Polymer, 1989, 30, 1213-1220.	3.8	40
97	Solid-State Structure and Crystallization in Double-Crystalline Diblock Copolymers of Linear Polyethylene and Hydrogenated Polynorbornene. Macromolecules, 2011, 44, 8835-8844.	4.8	40
98	Creating Controlled Thickness Gradients in Polymer Thin Films via Flowcoating. Langmuir, 2014, 30, 5637-5644.	3.5	40
99	MDI-based polyurethane ionomers. 2. Structure-property relationships. Macromolecules, 1988, 21, 1005-1008.	4.8	39
100	Structure-property relationships in elastomeric carboxy-telechelic polyisoprene ionomers neutralized with divalent cations. Macromolecules, 1988, 21, 1009-1015.	4.8	39
101	Synthesis and Properties of Well-Defined Elastomeric Poly(alkylnorbornene)s and Their Hydrogenated Derivatives. Macromolecules, 2005, 38, 10320-10322.	4.8	39
102	Steady-shear rheology of block copolymer melts and concentrated solutions: Defect-mediated flow at low stresses in body-centered-cubic systems. Journal of Rheology, 2002, 46, 863.	2.6	38
103	Cylinder Orientation and Shear Alignment in Thin Films of Polystyrene–Poly(<i>n</i> -hexyl) Tj ETQq1 1 0.78433	14 rgBT /O 4.8	verlock 10 1
104	Block copolymer molecular weight determination via gel permeation chromatography: Choosing a combining rule. Journal of Applied Polymer Science, 2001, 82, 2056-2069.	2.6	36
105	Well-Defined Diblock Copolymers via Termination of Living ROMP with Anionically Polymerized Macromolecular Aldehydes. Macromolecules, 2002, 35, 1985-1987.	4.8	36
106	Thermoplastic Elastomers with Composite Crystallineâ^'Glassy Hard Domains and Single-Phase Melts. Macromolecules, 2010, 43, 4954-4960.	4.8	36
107	Direct Measurement of the Local Glass Transition in Self-Assembled Copolymers with Nanometer Resolution. ACS Central Science, 2018, 4, 504-511.	11.3	35
108	X-ray absorption spectroscopy studies of zinc-neutralized ethylene-methacrylic acid ionomers. Polymer, 1999, 40, 283-288.	3.8	34

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109	Dynamics of a Thermoreversible Transition between Cylindrical and Hexagonally Perforated Lamellar Mesophases. Macromolecules, 2005, 38, 7098-7104.	4.8	34
110	Synthesis and Melt Dynamics of Model Sulfonated Ionomers. Macromolecules, 2003, 36, 1170-1177.	4.8	33
111	Thin Films of Homopolymers and Cylinder-Forming Diblock Copolymers under Shear. ACS Nano, 2014, 8, 8015-8026.	14.6	33
112	Influence of Semicrystalline Homopolymer Addition on the Morphology of Semicrystalline Diblock Copolymers. Macromolecules, 1997, 30, 494-502.	4.8	32
113	Synthesis and Phase Behavior of Block-Random Copolymers of Styrene and Hydrogenated Isoprene. Macromolecules, 2011, 44, 4313-4319.	4.8	32
114	Simulations of shear-induced morphological transitions in block copolymers. Soft Matter, 2013, 9, 9960.	2.7	32
115	Defect formation and coarsening in hexagonal 2D curved crystals. Soft Matter, 2015, 11, 898-907.	2.7	32
116	Synthesis of Narrow-Distribution, High-Molecular-Weight ROMP Polycyclopentene via Suppression of Acyclic Metathesis Side Reactions. ACS Macro Letters, 2017, 6, 112-116.	4.8	32
117	Nanodispersed cobalt particles in a thermolysed poly(acrylonitrile) matrix. Journal of Materials Chemistry, 1995, 5, 1197.	6.7	31
118	Characterization of the Microdomain Structure in Polystyreneâ^'Polyisoprene Block Copolymers by 1H Spin Diffusion and Small-Angle X-ray Scattering Methods. Macromolecules, 1998, 31, 3282-3291.	4.8	31
119	Direct imaging of polyethylene crystallites within block copolymer microdomains. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2564-2570.	2.1	31
120	Coupling between mean curvature and textures in block copolymer thin films deposited on curved substrates. Soft Matter, 2013, 9, 9385.	2.7	30
121	Thermoplastic Elastomers via Combined Crystallization and Vitrification from Homogeneous Melts. Macromolecules, 2016, 49, 269-279.	4.8	30
122	Effect of thermal treatment on cation local structure in manganese-neutralized sulfonated polystyrene ionomers. Macromolecules, 1989, 22, 2224-2229.	4.8	29
123	Phase Behavior of Styreneâ^'lsoprene Diblock Derivatives with Varying Conformational Asymmetry. Macromolecules, 2000, 33, 3461-3466.	4.8	29
124	Synthesis of narrow-distribution polycyclopentene using a ruthenium ring-opening metathesis initiator. Polymer, 2008, 49, 877-882.	3.8	29
125	Crystallization of Defect-Free Polyethylene within Block Copolymer Mesophases. Macromolecules, 2010, 43, 393-401.	4.8	28
126	Vinyl Addition Copolymers of Norbornylnorbornene and Hydroxyhexafluoroisopropylnorbornene for Efficient Recovery of <i>n</i> -Butanol from Dilute Aqueous Solution via Pervaporation. Macromolecules, 2018, 51, 3702-3710.	4.8	28

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127	Acyclic metathesis during ring-opening metathesis polymerization of cyclopentene. Polymer, 2004, 45, 6479-6485.	3.8	27
128	Influence of Interfacial Constraints on the Morphology of Asymmetric Crystalline-Amorphous Diblock Copolymer Films. Macromolecules, 2005, 38, 7745-7753.	4.8	27
129	Ethylene/(meth)acrylic acid ionomers plasticized and reinforced by metal soaps. Polymer, 2006, 47, 2874-2883.	3.8	27
130	Block Copolymers Synthesized by ROMP-to-Anionic Polymerization Transformation. Macromolecules, 2008, 41, 5283-5288.	4.8	27
131	Silicon nanowire grid polarizer for very deep ultraviolet fabricated from a shear-aligned diblock copolymer template. Optics Letters, 2007, 32, 3125.	3.3	26
132	Continuity through dispersity. Nature, 2012, 483, 167-168.	27.8	26
133	Crystallization dynamics on curved surfaces. Physical Review E, 2013, 88, 012306.	2.1	26
134	<i>Endo/Exo</i> Reactivity Ratios in Living Vinyl Addition Polymerization of Substituted Norbornenes. Macromolecular Chemistry and Physics, 2018, 219, 1800059.	2.2	26
135	Viscoelastic Properties of Entangled Star Polymer Melts:Â Comparison of Theory and Experiment. Macromolecules, 2002, 35, 169-177.	4.8	25
136	Extensibility and Recovery in a Crystallineâ^'Rubberyâ^'Crystalline Triblock Copolymer. Macromolecules, 2009, 42, 6665-6670.	4.8	25
137	Efficient emission from a europium complex containing dendron-substituted diketone ligands. Thin Solid Films, 2002, 416, 212-217.	1.8	24
138	Progression of Alignment in Thin Films of Cylinder-Forming Block Copolymers upon Shearing. Macromolecules, 2015, 48, 5339-5347.	4.8	24
139	Oriented ?-isotactic polypropylene crystallized at atmospheric pressure. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 2821-2827.	2.1	23
140	Microphase separation in blockâ€random copolymers of styrene, 4â€acetoxystyrene, and 4â€hydroxystyrene. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 2106-2113.	2.1	23
141	Silicon nanowire polarizers for far ultraviolet (sub-200 nm) applications: Modeling and fabrication. Journal of Applied Physics, 2010, 107, 084305.	2.5	23
142	Sphere-to-Cylinder Transitions in Thin Films of Diblock Copolymers under Shear: The Role of Wetting Layers. Macromolecules, 2012, 45, 4406-4415.	4.8	23
143	Morphology of lightly carboxylated polystyrene ionomers. Macromolecules, 1993, 26, 2791-2795.	4.8	22
144	Writing mesoscale patterns in block copolymer thin films through channel flow of a nonsolvent fluid. Applied Physics Letters, 2007, 90, 163105.	3.3	22

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145	Orientational order in cylinder-forming block copolymer thin films. Physical Review E, 2012, 86, 021507.	2.1	22
146	Effect of ionic aggregation on ionomer chain dimensions. 1. Telechelic polystyrenes. Macromolecules, 1990, 23, 2978-2983.	4.8	21
147	Miscibility of polystyrene-based ionomers with poly(2,6-dimethyl-1,4-phenylene oxide). Macromolecules, 1993, 26, 2796-2801.	4.8	21
148	The crystal–crystal transition in hydrogenated ringâ€opened polynorbornenes: Tacticity, crystal thickening, and alignment. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 68-79.	2.1	21
149	Self-Assembly of Cylinder-Forming Diblock Copolymer Thin Films. Macromolecules, 2013, 46, 6651-6658.	4.8	21
150	Shear-Aligned Block Copolymer Monolayers as Seeds To Control the Orientational Order in Cylinder-Forming Block Copolymer Thin Films. Macromolecules, 2016, 49, 7588-7596.	4.8	21
151	Effects of matrix polarity and ambient aging on the morphology of sulfonated polyurethane ionomers. Polymer Bulletin, 1989, 22, 565-571.	3.3	20
152	On the straight and narrow. Nature, 2003, 424, 378-379.	27.8	20
153	Plastic deformation of ethylene/methacrylic acid copolymers and ionomers. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 1588-1598.	2.1	20
154	C60 fullerene inclusions in low-molecular-weight polystyrene–poly(dimethylsiloxane) diblock copolymers. Polymer, 2009, 50, 4199-4204.	3.8	20
155	Shear-induced alignment of lamellae in thin films of diblock copolymers. Soft Matter, 2012, 8, 7803.	2.7	20
156	Strategies for the Synthesis of Well-Defined Star Polymers by Anionic Polymerization with Chlorosilane Coupling and Preservation of the Star Architecture during Catalytic Hydrogenation. Macromolecules, 2016, 49, 2063-2070.	4.8	20
157	Tapered Multiblock Star Copolymers: Synthesis, Selective Hydrogenation, and Properties. Macromolecules, 2020, 53, 4422-4434.	4.8	20
158	Rate-dependence of yielding in ethylene–methacrylic acid copolymers. Polymer, 2008, 49, 992-998.	3.8	18
159	Regular Mixing Thermodynamics of Hydrogenated Styrene–Isoprene Block–Random Copolymers. Macromolecules, 2013, 46, 3084-3091.	4.8	18
160	Sequential Domain Realignment Driven by Conformational Asymmetry in Block Copolymer Thin Films. Macromolecules, 2014, 47, 1193-1198.	4.8	18
161	Measurement of Thermodynamic Interactions in Ternary Polymer Blends by Small-Angle Neutron Scattering. Macromolecules, 1997, 30, 3363-3368.	4.8	17
162	Yielding in ethylene/methacrylic acid ionomers. Polymer, 2009, 50, 585-590.	3.8	17

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163	Effect of ionic aggregation on ionomer chain dimensions. 2. Sulfonated polyurethanes. Macromolecules, 1990, 23, 3023-3026.	4.8	16
164	Probing interdomain mixing effects via specific interactions: a model system approach. Macromolecules, 1993, 26, 2802-2809.	4.8	16
165	Mixing Thermodynamics of Ternary Block–Random Copolymers Containing a Polyethylene Block. Macromolecules, 2013, 46, 2760-2766.	4.8	16
166	Lower Critical Ordering Transition of an All-Hydrocarbon Polynorbornene Diblock Copolymer. ACS Macro Letters, 2017, 6, 808-812.	4.8	16
167	Morphology and Structure–Property Relationships in Random Ionomers: Two Foundational Articles from <i>Macromolecules</i>). Macromolecules, 2020, 53, 1523-1526.	4.8	16
168	Architecture-Induced Microphase Separation in Nonfrustrated A–B–C Triblock Copolymers. Macromolecules, 2013, 46, 3486-3496.	4.8	15
169	Curvature as a Guiding Field for Patterns in Thin Block Copolymer Films. Physical Review Letters, 2018, 121, 087801.	7.8	15
170	Tear anisotropy in films blown from polyethylenes of different macromolecular architectures. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 413-420.	2.1	14
171	Poly(phenylnorbornene) from Ringâ€Opening Metathesis and Its Hydrogenated Derivatives. Macromolecular Chemistry and Physics, 2012, 213, 2027-2033.	2.2	14
172	Crystallization-induced phase separation in mixtures of model linear and short-chain branched polyethylenes. Journal of Macromolecular Science - Physics, 1996, 35, 23-36.	1.0	13
173	Matched Random Ionomers:Â Carboxylate vs Sulfonate. Macromolecules, 2004, 37, 10205-10207.	4.8	13
174	Correction for piezoelectric creep in scanning probe microscopy images using polynomial mapping. Scanning, 2003, 25, 25-33.	1.5	13
175	Large-area, ordered hexagonal arrays of nanoscale holes or dots from block copolymer templates. Applied Physics Letters, 2007, 91, 143110.	3.3	13
176	Wrinkles and splay conspire to give positive disclinations negative curvature. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12639-12644.	7.1	13
177	Orientation Control and Crystallization in a Soft Confined Phase Separated Block Copolymer. Macromolecules, 2017, 50, 987-996.	4.8	13
178	Large, Reversible, and Coherent Domain Spacing Dilation Driven by Crystallization under Soft Lamellar Confinement. Macromolecules, 2017, 50, 8106-8116.	4.8	13
179	Flexural properties of fiber-reinforced polypropylene composites with and without a transcrystalline layer. Polymers for Advanced Technologies, 1999, 10, 655-668.	3.2	12
180	Nitroxideâ€mediated radical polymerization of <i>N</i> â€ethylâ€2â€vinylcarbazole. Polymers for Advanced Technologies, 2008, 19, 556-559.	3.2	12

#	Article	IF	CITATIONS
181	Poly(phenylethylnorbornene)s and their Hydrogenated Derivatives. Macromolecular Rapid Communications, 2008, 29, 713-718.	3.9	12
182	Mixed-morphology and mixed-orientation block copolymer bilayers. RSC Advances, 2014, 4, 38412-38417.	3.6	12
183	Log-Rolling Block Copolymer Cylinders. Macromolecules, 2017, 50, 3607-3616.	4.8	12
184	Role of Chain Connectivity across an Interface on the Dynamics of a Nanostructured Block Copolymer. Physical Review Letters, 2018, 121, 247801.	7.8	12
185	Melt rheology. , 1997, , 208-260.		12
186	Origin of directional tear in blown films of ethylene/methacrylic acid copolymers and ionomers. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 97-106.	2.1	11
187	Melt Miscibility in Diblock Copolymers Containing Polyethylene and Substituted Hydrogenated Polynorbornenes. Macromolecules, 2017, 50, 5830-5838.	4.8	11
188	Tuning Morphology and Melting Temperature in Polyethylene Films by MAPLE. Macromolecules, 2018, 51, 512-519.	4.8	11
189	Estimating the segregation strength of microphaseâ€separated diblock copolymers from the interfacial width. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 932-940.	2.1	11
190	Morphology and cation local structure in a blend of copper-neutralized carboxy-terminated polybutadiene and poly(styrene-co-4-vinylpyridine). Journal of Polymer Science, Part B: Polymer Physics, 1989, 27, 1911-1925.	2.1	10
191	cis/trans Gradients in living ring-opening metathesis polymerization. Polymer, 2010, 51, 4121-4126.	3.8	10
192	Phase Behavior of Magnesium Stearate Blended with Polyethylene Ionomers. Industrial & Engineering Chemistry Research, 2010, 49, 11906-11913.	3.7	10
193	Effect of Nonuniform Deuterium Labeling on Small-Angle Neutron Scattering Results for Polymer Blends. Macromolecules, 1995, 28, 8862-8864.	4.8	9
194	Painting with block copolymers. Nature Nanotechnology, 2013, 8, 618-619.	31.5	9
195	Counit Inclusion in Hydrogenated Polynorbornene Copolymer Crystals. Macromolecules, 2013, 46, 9288-9295.	4.8	9
196	Evolution of Polymer Colloid Structure During Precipitation and Phase Separation. Jacs Au, 2021, 1, 936-944.	7.9	9
197	A replaceable, low thermal mass hot stage for scanning probe microscopy. Review of Scientific Instruments, 2003, 74, 1390-1392.	1.3	8
198	Polystyrene-poly(2-ethylhexylmethacrylate) block copolymers: Synthesis, bulk phase behavior, and thin film structure. Polymer, 2014, 55, 2059-2067.	3.8	8

#	Article	IF	CITATIONS
199	Ringâ€Opening Metathesis Copolymerization of Cyclopentene Above and Below Its Equilibrium Monomer Concentration. Macromolecular Chemistry and Physics, 2018, 219, 1800030.	2.2	8
200	Investigation of Diblock Copolymer thin film Morphology for Nanolithography. Materials Research Society Symposia Proceedings, 1996, 461, 179.	0.1	7
201	Thin Films of Block Copolymerâ^'Homopolymer Blends with a Continuously Tunable Density of Spherical Microdomains. Macromolecules, 2010, 43, 6946-6949.	4.8	7
202	Lateral Dye Distribution With Ink-Jet Dye Doping of Polymer Organic Light Emitting Diodes. Materials Research Society Symposia Proceedings, 2000, 624, 211.	0.1	6
203	Incorporation of Styrene into a Model Polyolefin for Enhanced Compatibility with Polyisoprene. Macromolecules, 2020, 53, 9142-9151.	4.8	6
204	Characterizing domain mixing effects in hydrogen bond-compatibilized polymer blends. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 2105-2114.	2.1	5
205	Doped Organic Light-Emitting Diodes Based on Random Copolymers Containing Both Hole and Electron Transport Groups. Materials Research Society Symposia Proceedings, 1999, 558, 433.	0.1	5
206	Shear-Aligned Block Copolymer Thin Films as Nanofabrication Templates. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2007, 20, 493-498.	0.3	5
207	Tuning the phase behavior of semicrystalline hydrogenated polynorbornene via epimerization. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1188-1195.	2.1	5
208	Circumventing Macroscopic Phase Separation in Immiscible Polymer Mixtures by Bottom-up Deposition. Macromolecules, 2020, 53, 5740-5746.	4.8	5
209	Blends of Polyisoprene with Model Styrene–Olefin Copolymers: Mixing Energetics in Blends versus Block Copolymers. Macromolecules, 2021, 54, 3999-4009.	4.8	5
210	Minimum Molecular Weight and Tie Molecule Content for Ductility in Polyethylenes of Varying Crystallinity. Macromolecules, 2022, 55, 3249-3258.	4.8	5
211	Lithography with a Pattern of Block Copolymer Microdomains as a Positive or Negative Resist. ACS Symposium Series, 1998, , 2-11.	0.5	4
212	Elevation of the glass transition temperature in flexible-chain semicrystalline polymers. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1198-1204.	2.1	4
213	Yield Stress Enhancement in Polyethylene–Glassy Diblock Copolymers. Macromolecules, 2017, 50, 9666-9673.	4.8	4
214	X-Ray Analysis of Ionomers. ACS Symposium Series, 1989, , 420-438.	0.5	3
215	Nanodispersed metal and metal oxide particles in polymeric matrices from polyacrylonitrile precursors. Macromolecular Symposia, 1996, 106, 73-86.	0.7	3
216	Lateral Dye Distribution With Ink-Jet Dye Doping of Polymer Organic Light Emitting Diodes. Materials Research Society Symposia Proceedings, 2000, 625, 123.	0.1	3

#	Article	IF	CITATIONS
217	Rapid method to measure diffusion of paramagnetic species: Mn2+ in poly(ethylene-co-methacrylic) Tj ETQq1 1 C	.784314 r 2.6	ggT /Overloc
218	Combinatorial Mapping of Substrate Step Edge Effects on Diblock Copolymer Thin Film Morphology and Orientation. Macromolecular Rapid Communications, 2010, 31, 1003-1009.	3.9	3
219	A "Layered Look―for Spherical Nanoparticles in Semicrystalline Polymers. ACS Central Science, 2017, 3, 689-691.	11.3	3
220	Pattern formation mechanisms in sphere-forming diblock copolymer thin films. Papers in Physics, 0, 10, 100001.	0.2	3
221	Epitaxially crystallized polyethylene exhibiting <scp>nearâ€equilibrium</scp> melting temperatures*. Polymer Engineering and Science, 2022, 62, 841-847.	3.1	2
222	Modeling intercomponent mixing effects in rubber-modified glassy polymers. Journal of Applied Polymer Science, 1995, 57, 105-112.	2.6	1
223	Aluminum nanowire polarizing grids: fabrication and analysis. , 2007, , .		1
224	Coatings with thermally switchable surface energy produced from poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Physics, 2016, 54, 135-140.	Tf 50 467 2.1	Td (oxide)â€ 1
225	Regularity of Deuteration in Linear Polyethylene Prepared by Saturation of Polycyclopentene over Homogeneous Catalysts. Macromolecules, 0, , .	4.8	1
226	Controlling thermomechanical behavior of semicrystalline hydrogenated polynorbornene through the cisâ \in to trans â \in cyclopentylene ratio. Journal of Polymer Science, 0, , .	3.8	1
227	17 Chemical Engineers in Polymer Science: The Need for an Interdisciplinary Approach. Advances in Chemical Engineering, 1991, , 347-358.	0.9	0
228	In memoriam. Bryce Maxwell. 1919-2001. Polymer Engineering and Science, 2002, 42, 663-664.	3.1	0
229	Nano-arrays of optically addressable rare-earth-doped semiconductor quantum dots for quantum computing. , 2004, 5362, 43.		0
230	Domain Orientation in Thin Films of Block Copolymers. , 2013, , 1-9.		0
231	Single-End-Functionalized Polycyclopentene via Ring-Opening Metathesis Polymerization with Concurrent Chain Transfer. Macromolecules, 2019, 52, 8079-8087.	4.8	0
232	Applications of Block Copolymers in Thin Films: Nanopatterning. , 2013, , 1-8.		0
233	Blends of lightly sulfonated polystyrene ionomers with poly (xylenyl ether). , 1994, , 207-210.		0