John M Torkelson

List of Publications by Year
in descending order

208 papers	13,862 citations	20036 63 h-index	28425 109 g-index
211 all docs	211 docs citations	211 times ranked	10882 citing authors

#	Article	IF	Citations
1	Functional enzymeâ€"polymer complexes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119509119.	3.3	13
2	Development of rigid amorphous fraction in coldâ€crystallized syndiotactic polystyrene films confined near the nanoscale: Novel analysis via ellipsometry. Journal of Polymer Science, 2022, 60, 1631-1642.	2.0	3
3	Reprocessable and Recyclable Chain-Growth Polymer Networks Based on Dynamic Hindered Urea Bonds. ACS Macro Letters, 2022, 11, 568-574.	2.3	39
4	Reprocessable polyhydroxyurethane networks reinforced with reactive polyhedral oligomeric silsesquioxanes (POSS) and exhibiting excellent elevated temperature creep resistance. Polymer, 2022, 252, 124971.	1.8	25
5	Arresting Elevated-Temperature Creep and Achieving Full Cross-Link Density Recovery in Reprocessable Polymer Networks and Network Composites via Nitroxide-Mediated Dynamic Chemistry. Macromolecules, 2021, 54, 1452-1464.	2.2	64
6	Identification of Known and Novel Monomers for Poly(hydroxyurethanes) from Biobased Materials. Industrial & Engineering Chemistry Research, 2021, 60, 6814-6825.	1.8	9
7	Lateral diffusion of single poly(ethylene oxide) chains on the surfaces of glassy and molten polymer films. Journal of Chemical Physics, 2021, 154, 164902.	1.2	1
8	Heterogeneous Charged Complexes of Random Copolymers for the Segregation of Organic Molecules. ACS Central Science, 2021, 7, 882-891.	5.3	5
9	Photocurable bioresorbable adhesives as functional interfaces between flexible bioelectronic devices and soft biological tissues. Nature Materials, 2021, 20, 1559-1570.	13.3	114
10	Rigid amorphous fraction and crystallinity in cold-crystallized syndiotactic polystyrene: Characterization by differential scanning calorimetry. Polymer, 2021, 230, 124044.	1.8	8
11	Reprocessable covalent adaptable networks with excellent elevated-temperature creep resistance: facilitation by dynamic, dissociative bis(hindered amino) disulfide bonds. Polymer Chemistry, 2021, 12, 2760-2771.	1.9	51
12	Determining order-to-disorder transitions in block copolymer thin films using a self-referencing fluorescent probe. Molecular Systems Design and Engineering, 2020, 5, 330-338.	1.7	6
13	Recyclable Polymethacrylate Networks Containing Dynamic Dialkylamino Disulfide Linkages and Exhibiting Full Property Recovery. Macromolecules, 2020, 53, 8367-8373.	2.2	33
14	Molecular Weight Dependence of the Glass Transition Temperature (<i>T</i>_g)-Confinement Effect in Well-Dispersed Poly(2-vinyl pyridine)â€"Silica Nanocomposites: Comparison of Interfacial Layer <i>T</i>_g and Matrix <i>T</i>_g. Macromolecules, 2020, 53, 8725-8736.	2.2	23
15	Impact of bottlebrush chain architecture on <i>T</i>_gâ€confinement and <scp>fragilityâ€confinement</scp> effects enabled by thermoâ€cleavable bottlebrush polymers synthesized by radical coupling and atom transfer radical polymerization. Journal of Polymer Science, 2020, 58, 2887-2905.	2.0	7
16	Covalent Adaptive Networks for Enhanced Adhesion: Exploiting Disulfide Dynamic Chemistry and Annealing during Application. ACS Applied Polymer Materials, 2020, 2, 4658-4665.	2.0	41
17	Dynamic Covalent Polyurethane Networks with Excellent Property and Cross-Link Density Recovery after Recycling and Potential for Monomer Recovery. ACS Applied Polymer Materials, 2020, 2, 2093-2101.	2.0	45
18	Recyclable polymer networks containing hydroxyurethane dynamic cross-links: Tuning morphology, cross-link density, and associated properties with chain extenders. Polymer, 2019, 178, 121604.	1.8	37

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19	Engineering Surface Hydrophilicity via Polymer Chain-End Segregation in Coatings Formed by Photopolymerization. ACS Applied Polymer Materials, 2019, 1, 3095-3102.	2.0	6
20	Reprocessable Polymer Networks via Thiourethane Dynamic Chemistry: Recovery of Cross-link Density after Recycling and Proof-of-Principle Solvolysis Leading to Monomer Recovery. Macromolecules, 2019, 52, 8207-8216.	2.2	135
21	Reprocessable Polymer Networks Designed with Hydroxyurethane Dynamic Crossâ€links: Effect of Backbone Structure on Network Morphology, Phase Segregation, and Property Recovery. Macromolecular Chemistry and Physics, 2019, 220, 1900083.	1.1	36
22	Isolating the effect of polymer-grafted nanoparticle interactions with matrix polymer from dispersion on composite property enhancement: The example of polypropylene/halloysite nanocomposites. Polymer, 2019, 176, 38-50.	1.8	24
23	Biobased Reprocessable Polyhydroxyurethane Networks: Full Recovery of Crosslink Density with Three Concurrent Dynamic Chemistries. ACS Sustainable Chemistry and Engineering, 2019, 7, 10025-10034.	3.2	126
24	Reprocessable Polyhydroxyurethane Network Composites: Effect of Filler Surface Functionality on Cross-link Density Recovery and Stress Relaxation. ACS Applied Materials & Interfaces, 2019, 11, 2398-2407.	4.0	103
25	Segmented Thermoplastic Polymers Synthesized by Thiolâ€"Ene Click Chemistry: Examples of Thiolâ€"Norbornene and Thiolâ€"Maleimide Click Reactions. Macromolecules, 2018, 51, 3620-3631.	2.2	31
26	Tenfold increase in the photostability of an azobenzene guest in vapor-deposited glass mixtures. Journal of Chemical Physics, 2018, 149, 204503.	1.2	16
27	Remarkable glass transition breadths up to 120â€¯K exhibited by block-gradient copolymers and by gradient copolymers plasticized by oligomer. Polymer, 2018, 151, 145-153.	1.8	7
28	Vitrimers Designed Both To Strongly Suppress Creep and To Recover Original Cross-Link Density after Reprocessing: Quantitative Theory and Experiments. Macromolecules, 2018, 51, 5537-5546.	2.2	218
29	Suppression of the Fragility-Confinement Effect via Low Molecular Weight Cyclic or Ring Polymer Topology. Macromolecules, 2017, 50, 1147-1154.	2.2	33
30	Tuning nanophase separation behavior in segmented polyhydroxyurethane via judicious choice of soft segment. Polymer, 2017, 110, 218-227.	1.8	48
31	Tuning the properties of segmented polyhydroxyurethanes via chain extender structure. Journal of Applied Polymer Science, 2017, 134, 44942.	1.3	30
32	Polystyrene-Grafted Silica Nanoparticles: Investigating the Molecular Weight Dependence of Glass Transition and Fragility Behavior. Macromolecules, 2017, 50, 1589-1598.	2.2	51
33	Combined Effects of Carbonate and Soft-Segment Molecular Structures on the Nanophase Separation and Properties of Segmented Polyhydroxyurethane. Macromolecules, 2017, 50, 3193-3203.	2.2	47
34	T g -confinement effects in strongly miscible blends of poly(2,6-dimethyl-1,4-phenylene oxide) and polystyrene: Roles of bulk fragility and chain segregation. Polymer, 2017, 118, 85-96.	1.8	14
35	Molecular weight dependence of the intrinsic size effect on <i>T</i>g in AAO template-supported polymer nanorods: A DSC study. Journal of Chemical Physics, 2017, 146, 203323.	1.2	19
36	Non-Isocyanate Polyurethane Thermoplastic Elastomer: Amide-Based Chain Extender Yields Enhanced Nanophase Separation and Properties in Polyhydroxyurethane. Macromolecules, 2017, 50, 4425-4434.	2.2	80

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37	Enhancement of Surface Wettability by Incorporating Polar Initiator Fragments at Chain Ends of Low-Molecular-Weight Polymers. ACS Applied Materials & Interfaces, 2017, 9, 12176-12181.	4.0	8
38	Bulk physical aging behavior of cross-linked polystyrene compared to its linear precursor: Effects of cross-linking and aging temperature. Polymer, 2017, 115, 197-203.	1.8	11
39	Reprocessable polyhydroxyurethane networks exhibiting full property recovery and concurrent associative and dissociative dynamic chemistry via transcarbamoylation and reversible cyclic carbonate aminolysis. Polymer Chemistry, 2017, 8, 6349-6355.	1.9	159
40	Functionalization of hydroxyl groups in segmented polyhydroxyurethane eliminates nanophase separation. Journal of Polymer Science Part A, 2017, 55, 3347-3351.	2.5	18
41	Enhanced glass transition temperature of low molecular weight poly(methyl methacrylate) by initiator fragments located at chain ends. Polymer, 2017, 122, 194-199.	1.8	9
42	Stiffness Gradients in Glassy Polymer Model Nanocomposites: Comparisons of Quantitative Characterization by Fluorescence Spectroscopy and Atomic Force Microscopy. Macromolecules, 2017, 50, 5447-5458.	2.2	30
43	A Combined Computational and Experimental Study of Copolymerization Propagation Kinetics for 1â€Ethylcyclopentyl methacrylate and Methyl methacrylate. Macromolecular Theory and Simulations, 2016, 25, 263-273.	0.6	4
44	Enhanced <i>T</i>_g-Confinement Effect in Cross-Linked Polystyrene Compared to Its Linear Precursor: Roles of Fragility and Chain Architecture. Macromolecules, 2016, 49, 5092-5103.	2.2	39
45	Phase-Separated Thiolâ€"Epoxyâ€"Acrylate Hybrid Polymer Networks with Controlled Cross-Link Density Synthesized by Simultaneous Thiolâ€"Acrylate and Thiolâ€"Epoxy Click Reactions. Macromolecules, 2016, 49, 4115-4123.	2.2	53
46	Tuning the Tg-confinement effect in thin polymer films via minute levels of residual surfactant which â€œcapâ€•the free surface. Polymer, 2016, 87, 226-235.	1.8	16
47	Hybrid thiol-acrylate-epoxy polymer networks: Comparison of one-pot synthesis with sequential reactions and shape memory properties. Polymer, 2016, 96, 198-204.	1.8	16
48	Stiffness of thin, supported polystyrene films: Free-surface, substrate, and confinement effects characterized via self-referencing fluorescence. Polymer, 2016, 99, 417-426.	1.8	32
49	Novel thermoplastic polyhydroxyurethane elastomers as effective damping materials over broad temperature ranges. European Polymer Journal, 2016, 84, 770-783.	2.6	88
50	Recyclable Crosslinked Polymer Networks via Oneâ€Step Controlled Radical Polymerization. Advanced Materials, 2016, 28, 6746-6750.	11.1	99
51	Poly(methyl methacrylate) nanotubes in AAO templates: Designing nanotube thickness and characterizing the T-confinement effect by DSC. Polymer, 2016, 82, 327-336.	1.8	26
52	Nonisocyanate Thermoplastic Polyhydroxyurethane Elastomers via Cyclic Carbonate Aminolysis: Critical Role of Hydroxyl Groups in Controlling Nanophase Separation. ACS Macro Letters, 2016, 5, 424-429.	2.3	87
53	Fragility-Confinement Effects: Apparent Universality as a Function of Scaled Thickness in Films of Freely Deposited, Linear Polymer and Its Absence in Densely Grafted Brushes. Macromolecules, 2016, 49, 1331-1343.	2.2	44
54	Dramatic Tunability of the Glass Transition Temperature and Fragility of Low Molecular Weight Polystyrene by Initiator Fragments Located at Chain Ends. Macromolecules, 2016, 49, 2387-2398.	2.2	36

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55	Major Impact of Cyclic Chain Topology on the <i>T</i>_g-Confinement Effect of Supported Thin Films of Polystyrene. Macromolecules, 2016, 49, 257-268.	2.2	67
56	Polyurethane/polyhydroxyurethane hybrid polymers and their applications as adhesive bonding agents. International Journal of Adhesion and Adhesives, 2016, 64, 1-8.	1.4	46
57	Green polypropylene/waste paper composites with superior modulus and crystallization behavior: Optimizing specific energy in solid-state shear pulverization for filler size reduction and dispersion. Composites Part A: Applied Science and Manufacturing, 2016, 83, 47-55.	3.8	30
58	Direct Use of Natural Antioxidant-rich Agro-wastes as Thermal Stabilizer for Polymer: Processing and Recycling. ACS Sustainable Chemistry and Engineering, 2016, 4, 881-889.	3.2	62
59	A Combined Computational and Experimental Study of Copolymerization Propagation Kinetics for 1-Ethylcyclopentyl methacrylate and Methyl methacrylate. Macromolecular Theory and Simulations, 2016, 25, 263-273.	0.6	0
60	Dispersion and Property Enhancements in Polyolefin/Soy Flour Biocomposites Prepared via Melt Extrusion Followed by Solidâ€State Shear Pulverization. Macromolecular Materials and Engineering, 2015, 300, 772-784.	1.7	16
61	Importance of superior dispersion versus filler surface modification inÂproducing robust polymer nanocomposites: The example of polypropylene/nanosilica hybrids. Polymer, 2015, 68, 147-157.	1.8	67
62	Role of neighboring domains in determining the magnitude and direction of Tg-confinement effects in binary, immiscible polymer systems. Polymer, 2015, 80, 180-187.	1.8	34
63	Novel synthesis of branched polypropylene via solid-state shear pulverization. Polymer, 2015, 60, 77-87.	1.8	21
64	Sustainable Green Hybrids of Polyolefins and Lignin Yield Major Improvements in Mechanical Properties When Prepared via Solid-State Shear Pulverization. ACS Sustainable Chemistry and Engineering, 2015, 3, 959-968.	3.2	37
65	Substantial spatial heterogeneity and tunability of glass transition temperature observed with dense polymer brushes prepared by ARGET ATRP. Polymer, 2015, 64, 183-192.	1.8	42
66	Tg and Tg breadth of poly(2,6-dimethyl-1,4-phenylene oxide)/polystyrene miscible polymer blends characterized by differential scanning calorimetry, ellipsometry, and fluorescence spectroscopy. Polymer, 2015, 65, 233-242.	1.8	27
67	Influence of initiator fragments as chain ends on the Tg-confinement effect and dewetting of thin films of ultralow molecular weight polymer. Polymer, 2015, 65, 105-114.	1.8	18
68	Effects of process method and quiescent coarsening on dispersed-phase size distribution in polymer blends: comparison of solid-state shear pulverization with intensive batch melt mixing. Polymer Bulletin, 2015, 72, 693-711.	1.7	9
69	Cooperative Catalysis of Cyclic Carbonate Ring Opening: Application Towards Nonâ€Isocyanate Polyurethane Materials. European Journal of Organic Chemistry, 2015, 2015, 2791-2795.	1.2	52
70	Comparison of polyolefin biocomposites prepared with waste cardboard, microcrystalline cellulose, and cellulose nanocrystals via solid-state shear pulverization. Polymer, 2015, 75, 78-87.	1.8	45
71	Kinetics of multifunctional thiol-epoxy click reactions studied by differential scanning calorimetry: Effects of catalysis and functionality. Polymer, 2015, 81, 70-78.	1.8	50
72	Residual stress relaxation and stiffness in spin-coated polymer films: Characterization by ellipsometry and fluorescence. Polymer, 2015, 76, 113-122.	1.8	43

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73	Cellulose nanocrystal/polyolefin biocomposites prepared by solid-state shear pulverization: Superior dispersion leading to synergistic property enhancements. Polymer, 2015, 56, 464-475.	1.8	88
74	Methacrylate-based polymer films useful in lithographic applications exhibit different glass transition temperature-confinement effects at high and low molecular weight. Polymer, 2014, 55, 1249-1258.	1.8	45
75	Well-mixed blends of HDPE and ultrahigh molecular weight polyethylene with major improvements in impact strength achieved via solid-state shear pulverization. Polymer, 2014, 55, 4948-4958.	1.8	64
76	Green composites of polypropylene and eggshell: Effective biofiller size reduction and dispersion by single-step processing with solid-state shear pulverization. Composites Science and Technology, 2014, 102, 152-160.	3.8	66
77	Maleic anhydride functionalization of polypropylene with suppressed molecular weight reduction via solid-state shear pulverization. Polymer, 2013, 54, 4143-4154.	1.8	42
78	Fragility is a Key Parameter in Determining the Magnitude of <i>T</i>_g-Confinement Effects in Polymer Films. Macromolecules, 2013, 46, 6091-6103.	2.2	127
79	Ester Functionalization of Polypropylene via Controlled Decomposition of Benzoyl Peroxide during Solid-State Shear Pulverization. Macromolecules, 2013, 46, 7834-7844.	2.2	23
80	Simultaneous Determination of Critical Micelle Temperature and Micelle Core Glass Transition Temperature of Block Copolymerâ€"Solvent Systems via Pyrene-Label Fluorescence. Macromolecules, 2013, 46, 4131-4140.	2.2	18
81	Novel, synergistic composites of polypropylene and rice husk ash: Sustainable resource hybrids prepared by solid-state shear pulverization. Polymer Composites, 2013, 34, 1211-1221.	2.3	34
82	Modulus, Confinement, and Temperature Effects on Surface Capillary Wave Dynamics in Bilayer Polymer Films Near the Glass Transition. Physical Review Letters, 2012, 109, 038302.	2.9	45
83	Major Roles of Blend Partner Fragility and Dye Placement on Component Glass Transition Temperatures: Fluorescence Study of Near-Infinitely Dilute Species in Binary Blends. Macromolecules, 2012, 45, 8319-8327.	2.2	24
84	Determining multiple component glass transition temperatures in miscible polymer blends: Comparison of fluorescence spectroscopy and differential scanning calorimetry. Polymer, 2012, 53, 6118-6124.	1.8	24
85	Imaging of phase segregation in gradient copolymers: Island and hole surface topography. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 189-197.	2.4	20
86	Processingâ€structureâ€property relationships in solidâ€state shear pulverization: Parametric study of specific energy. Polymer Engineering and Science, 2012, 52, 1555-1564.	1.5	39
87	Effect of Gradient Sequencing on Copolymer Orderâ€"Disorder Transitions: Phase Behavior of Styrene/<i>n</i>-Butyl Acrylate Block and Gradient Copolymers. Macromolecules, 2011, 44, 6220-6226.	2.2	39
88	Glass Transition Temperature of a Component near Infinite Dilution in Binary Polymer Blends: Determination via Fluorescence Spectroscopy. Macromolecules, 2011, 44, 6645-6648.	2.2	27
89	Distribution of Glass Transition Temperatures in Free-Standing, Nanoconfined Polystyrene Films: A Test of de Gennesâ€™ Sliding Motion Mechanism. Macromolecules, 2011, 44, 4546-4553.	2.2	106
90	Crumpled Graphene Nanosheets as Highly Effective Barrier Property Enhancers. Advanced Materials, 2010, 22, 4759-4763.	11.1	420

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91	Polypropylene-graphite nanocomposites made by solid-state shear pulverization: Effects of significantly exfoliated, unmodified graphite content on physical, mechanical and electrical properties. Polymer, 2010, 51, 5525-5531.	1.8	91
92	Behavior of Gradient Copolymers at Liquid/Liquid Interfaces. Langmuir, 2010, 26, 3261-3267.	1.6	31
93	Dielectric Relaxation Spectroscopy of Gradient Copolymers and Block Copolymers: Comparison of Breadths in Relaxation Time for Systems with Increasing Interphase. Macromolecules, 2010, 43, 5740-5748.	2.2	31
94	Suppression of the <i>T</i>_g-Nanoconfinement Effect in Thin Poly(vinyl acetate) Films by Sorbed Water. Macromolecules, 2010, 43, 5158-5161.	2.2	54
95	Preparation and characterization of multiwalled carbon nanotube dispersions in polypropylene: Melt mixing versus solidâ€state shear pulverization. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 1426-1436.	2.4	41
96	Streamlined ellipsometry procedure for characterizing physical aging rates of thin polymer films. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 2509-2519.	2.4	52
97	Glass Transition Breadths and Composition Profiles of Weakly, Moderately, and Strongly Segregating Gradient Copolymers: Experimental Results and Calculations from Self-Consistent Mean-Field Theory. Macromolecules, 2009, 42, 7863-7876.	2.2	93
98	Gradient copolymers with broad glass transition temperature regions: Design of purely interphase compositions for damping applications. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 48-58.	2.4	120
99	Effect of nanoscale confinement on the glass transition temperature of freeâ€standing polymer films: Novel, selfâ€referencing fluorescence method. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2754-2764.	2.4	93
100	Critical micelle concentrations of block and gradient copolymers in homopolymer: Effects of sequence distribution, composition, and molecular weight. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2672-2682.	2.4	37
101	Cellular structures of carbon nanotubes in a polymer matrix improve properties relative to composites with dispersed nanotubes. Polymer, 2008, 49, 1332-1337.	1.8	92
102	Compatibilized polymer blends with nanoscale or sub-micron dispersed phases achieved by hydrogen-bonding effects: Block copolymer vs blocky gradient copolymer addition. Polymer, 2008, 49, 2686-2697.	1.8	48
103	Microphase Separation and Shear Alignment of Gradient Copolymers: Melt Rheology and Small-Angle X-Ray Scattering Analysis. Macromolecules, 2008, 41, 5818-5829.	2.2	74
104	Polymerâˆ’Graphite Nanocomposites:â€‰ Effective Dispersion and Major Property Enhancement via Solid-State Shear Pulverization. Macromolecules, 2008, 41, 1905-1908.	2.2	273
105	Dispersion and Major Property Enhancements in Polymer/Multiwall Carbon Nanotube Nanocomposites via Solid-State Shear Pulverization Followed by Melt Mixing. Macromolecules, 2008, 41, 5974-5977.	2.2	128
106	Glass transition and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î±</mml:mi></mml:mrow></mml:math>-relaxation dynamics of thin films of labeled polystyrene. Physical Review E, 2007, 75, 061806.	0.8	100
107	Eliminating the Enhanced Mobility at the Free Surface of Polystyrene:Â Fluorescence Studies of the Glass Transition Temperature in Thin Bilayer Films of Immiscible Polymers. Macromolecules, 2007, 40, 2568-2574.	2.2	201
108	Evidence for the molecular-scale origin of the suppression of physical ageing in confined polymer: fluorescence and dielectric spectroscopy studies of polymerâ€"silica nanocomposites. Journal of Physics Condensed Matter, 2007, 19, 205120.	0.7	74

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109	Selectively Probing the Glass Transition Temperature in Multilayer Polymer Films:Â Equivalence of Block Copolymers and Multilayer Films of Different Homopolymers. Macromolecules, 2007, 40, 3328-3336.	2.2	105
110	Comparison of Critical Micelle Concentrations of Gradient Copolymer and Block Copolymer in Homopolymer:â€‰ Novel Characterization by Intrinsic Fluorescence. Macromolecules, 2007, 40, 5631-5633.	2.2	57
111	Effect of Spatial Confinement on the Glass-Transition Temperature of Patterned Polymer Nanostructures. Nano Letters, 2007, 7, 713-718.	4.5	73
112	Effects of Nanoscale Confinement and Interfaces on the Glass Transition Temperatures of a Series of Poly(n-methacrylate) Films. Australian Journal of Chemistry, 2007, 60, 765.	0.5	108
113	Polyethylene/starch blends with enhanced oxygen barrier and mechanical properties: Effect of granule morphology damage by solid-state shear pulverization. Polymer, 2007, 48, 1066-1074.	1.8	65
114	Breadth of glass transition temperature in styrene/acrylic acid block, random, and gradient copolymers: Unusual sequence distribution effects. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 2842-2849.	2.4	70
115	Model polymer nanocomposites provide an understanding of confinement effects in real nanocomposites. Nature Materials, 2007, 6, 278-282.	13.3	618
116	Uniquely Broad Glass Transition Temperatures of Gradient Copolymers Relative to Random and Block Copolymers Containing Repulsive Comonomers. Macromolecules, 2006, 39, 6152-6160.	2.2	173
117	Polymer-nanoparticle interfacial interactions in polymer nanocomposites: Confinement effects on glass transition temperature and suppression of physical aging. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 2935-2943.	2.4	368
118	Synthesis and application of styrene/4-hydroxystyrene gradient copolymers made by controlled radical polymerization: Compatibilization of immiscible polymer blends via hydrogen-bonding effects. Polymer, 2006, 47, 5799-5809.	1.8	77
119	Achievement of quasi-nanostructured polymer blends by solid-state shear pulverization and compatibilization by gradient copolymer addition. Polymer, 2006, 47, 6773-6781.	1.8	85
120	Confinement, composition, and spin-coating effects on the glass transition and stress relaxation of thin films of polystyrene and styrene-containing random copolymers: Sensing by intrinsic fluorescence. Polymer, 2006, 47, 7747-7759.	1.8	98
121	Styrene/4-hydroxystyrene random, block and gradient copolymers modified with an organic dye: Synthesis by controlled radical polymerization and characterization of electrorheological properties. Polymer, 2006, 47, 3287-3291.	1.8	31
122	Binary mixture pyrolysis of polypropylene and polystyrene: A modeling and experimental study. Journal of Analytical and Applied Pyrolysis, 2005, 73, 342-354.	2.6	41
123	Compatibilizing effects of block copolymer mixed with immiscible polymer blends by solid-state shear pulverization: stabilizing the dispersed phase to static coarsening. Polymer, 2005, 46, 4753-4761.	1.8	33
124	Porod scattering study of coarsening in immiscible polymer blends. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3413-3420.	2.4	14
125	Impacts of Polystyrene Molecular Weight and Modification to the Repeat Unit Structure on the Glass Transitionâ˘'Nanoconfinement Effect and the Cooperativity Length Scale. Macromolecules, 2005, 38, 1767-1778.	2.2	292
126	Structural Relaxation of Polymer Glasses at Surfaces, Interfaces, and In Between. Science, 2005, 309, 456-459.	6.0	659

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127	Polymer Blend Compatibilization by Gradient Copolymer Addition during Melt Processing:Â Stabilization of Dispersed Phase to Static Coarsening. Macromolecules, 2005, 38, 1037-1040.	2.2	111
128	Physical Aging of Ultrathin Polymer Films above and below the Bulk Glass Transition Temperature:â€‰ Effects of Attractive vs Neutral Polymerâˆ'Substrate Interactions Measured by Fluorescence. Macromolecules, 2005, 38, 654-657.	2.2	117
129	Dramatic Reduction of the Effect of Nanoconfinement on the Glass Transition of Polymer Films via Addition of Small-Molecule Diluent. Physical Review Letters, 2004, 92, 095702.	2.9	130
130	In situ monitoring of sorption and drying of polymer films and coatings: self-referencing, nearly temperature-independent fluorescence sensors. Polymer, 2004, 45, 2623-2632.	1.8	25
131	Crystallization and Enthalpy Relaxation of Physically Associating, End-Linked Polymer Networks: Telechelic Pyrene-Labeled Polydimethylsiloxane. Polymer Bulletin, 2004, 51, 411-418.	1.7	16
132	Large melting point depression of 2-3-nm length-scale nanocrystals formed by the self-assembly of an associative polymer: Telechelic, pyrene-labeled poly(dimethylsiloxane). Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 3470-3475.	2.4	17
133	Monohydroxy-hydrazone-functionalized thermally crosslinked polymers for nonlinear optics. Journal of Applied Polymer Science, 2004, 92, 770-781.	1.3	2
134	Differences in enthalpy recovery of gradient and random copolymers of similar overall composition: styrene/4-methylstyrene copolymers made by nitroxide-mediated controlled radical polymerization. Polymer, 2004, 45, 4777-4786.	1.8	35
135	Synthesis and Glass Transition Behavior of High Molecular Weight Styrene/4-Acetoxystyene and Styrene/4-Hydroxystyrene Gradient Copolymers Made via Nitroxide-Mediated Controlled Radical Polymerization. Macromolecules, 2004, 37, 5586-5595.	2.2	86
136	Synthesis and Functionalization of ROMP-Based Gradient Copolymers of 5-Substituted Norbornenes. Macromolecules, 2004, 37, 5504-5512.	2.2	59
137	Self-referencing fluorescence sensor for monitoring conversion of nonisothermal polymerization and nanoscale mixing of resin components. Polymer, 2003, 44, 423-432.	1.8	26
138	Interpolymer radical coupling reactions during sonication of polymer solutions. Polymer, 2003, 44, 2823-2828.	1.8	30
139	The distribution of glass-transition temperatures in nanoscopically confined glass formers. Nature Materials, 2003, 2, 695-700.	13.3	1,072
140	Sub-micron dispersed-phase particle size in polymer blends: overcoming the Taylor limit via solid-state shear pulverization. Polymer, 2003, 44, 199-206.	1.8	46
141	Limitations in the Synthesis of High Molecular Weight Polymers via Nitroxide-Mediated Controlled Radical Polymerization:â€‰ Modeling Studies. Macromolecules, 2003, 36, 7812-7823.	2.2	44
142	Limitations in the Synthesis of High Molecular Weight Polymers via Nitroxide-Mediated Controlled Radical Polymerization:Â Experimental Studies. Macromolecules, 2003, 36, 5792-5797.	2.2	26
143	In Situ Block Copolymer Formation during Solid-State Shear Pulverization: An Explanation for Blend Compatibilization via Interpolymer Radical Reactions. Macromolecules, 2002, 35, 9716-9722.	2.2	43
144	Stabilization of Dispersed Phase to Static Coarsening:Â Polymer Blend Compatibilization via Solid-State Shear Pulverization. Macromolecules, 2002, 35, 8672-8675.	2.2	73

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