John Dorgan

List of Publications by Year in descending order

62 papers	3,594 citations	126858 33 h-index	133188 59 g-index
62 all docs	62 docs citations	62 times ranked	4428 citing authors

#	Article	IF	Citations
1	Single-Step Method for the Isolation and Surface Functionalization of Cellulosic Nanowhiskers. Biomacromolecules, 2009, 10, 334-341.	2.6	283
2	The bulk modulus and Poisson's ratio of â€œincompressibleâ€•materials. Journal of Sound and Vibration, 2008, 312, 572-575.	2.1	215
3	Bio-composites of kenaf fibers in polylactide: Role of improved interfacial adhesion in the carding process. Composites Science and Technology, 2009, 69, 2573-2579.	3.8	200
4	Melt Rheology of Highl-Content Poly(lactic acid). Macromolecules, 2001, 34, 1384-1390.	2.2	178
5	Polylactides: properties and prospects of an environmentally benign plastic from renewable resources. Macromolecular Symposia, 2001, 175, 55-66.	0.4	174
6	Polylactide/cellulose nanocrystal nanocomposites: Efficient routes for nanofiber modification and effects of nanofiber chemistry on PLA reinforcement. Polymer, 2015, 65, 9-17.	1.8	163
7	cis,cis-Muconic acid: separation and catalysis to bio-adipic acid for nylon-6,6 polymerization. Green Chemistry, 2016, 18, 3397-3413.	4.6	147
8	Gas permeation properties of poly(lactic acid). Journal of Membrane Science, 2001, 190, 243-251.	4.1	145
9	Fundamental solution and single-chain properties of polylactides. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3100-3111.	2.4	130
10	Melt rheology of poly(lactic acid): Consequences of blending chain architectures. Polymer Engineering and Science, 2001, 41, 2172-2184.	1.5	122
11	Gas permeation properties of poly(lactic acid) revisited. Journal of Membrane Science, 2006, 285, 166-172.	4.1	116
12	Supra-Molecular EcoBioNanocomposites Based on Polylactide and Cellulosic Nanowhiskers: Synthesis and Properties. Biomacromolecules, 2012, 13, 2013-2019.	2.6	108
13	Novel Processing to Produce Polymer/Ceramic Nanocomposites by Atomic Layer Deposition. Journal of the American Ceramic Society, 2007, 90, 57-63.	1.9	99
14	Renewable Unsaturated Polyesters from Muconic Acid. ACS Sustainable Chemistry and Engineering, 2016, 4, 6867-6876.	3.2	90
15	Effects of molecular architecture on two-step, melt-spun poly(lactic acid) fibers. Journal of Applied Polymer Science, 2002, 86, 2839-2846.	1.3	83
16	Heavy oils: Their shear story. Geophysics, 2007, 72, E175-E183.	1.4	81
17	Supramolecular morphology of two-step, melt-spun poly(lactic acid) fibers. Journal of Applied Polymer Science, 2002, 86, 2828-2838.	1.3	80
18	Cellulosic Nanowhiskers. Theory and Application of Light Scattering from Polydisperse Spheroids in the Rayleighâ"Gansâ"Debye Regime. Biomacromolecules, 2008, 9, 1255-1263.	2.6	73

#	Article	IF	Citations
19	Infrared Spectroscopic Determination of Lactide Concentration in Polylactide:â€‰ An Improved Methodology. Macromolecules, 2006, 39, 9302-9310.	2.2	64
20	End-attaching copolymer adsorption: kinetics and effects of chain architecture. Macromolecules, 1993, 26, 5321-5330.	2.2	61
21	Elastic Behavior and Platelet Retraction in Low- and High-Density FibrinÂGels. Biophysical Journal, 2015, 108, 173-183.	0.2	61
22	Biorenewable blends of polyamideâ€11 and polylactide. Polymer Engineering and Science, 2014, 54, 1523-1532.	1.5	57
23	Decorating in green: surface esterification of carbon and cellulosic nanoparticles. Green Chemistry, 2009, 11, 680.	4.6	56
24	Gas solubility of carbon dioxide in poly(lactic acid) at high pressures. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1010-1019.	2.4	55
25	Melt Rheology of Dendritically Branched Polystyrenes. Macromolecules, 2003, 36, 380-388.	2.2	54
26	Biomass-derived monomers for performance-differentiated fiber reinforced polymer composites. Green Chemistry, 2017, 19, 2812-2825.	4.6	50
27	Gas solubility of carbon dioxide in poly(lactic acid) at high pressures: Thermal treatment effect. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 616-625.	2.4	42
28	Next-generation biopolymers: Advanced functionality and improved sustainability. MRS Bulletin, 2011, 36, 687-691.	1.7	42
29	Blends of biorenewable polyamide-11 and polyamide-6,10. Polymer, 2013, 54, 6961-6970.	1.8	40
30	Reactive polymer membranes for ethylene/ethane separation. Journal of Membrane Science, 1997, 136, 111-120.	4.1	38
31	Carbon dioxide, ethylene and water vapor sorption in poly(lactic acid). Fluid Phase Equilibria, 2006, 250, 116-124.	1.4	38
32	Static Properties of Homopolymer Melts in Confined Geometries Determined by Monte Carlo Simulation. Macromolecules, 1997, 30, 6348-6352.	2.2	36
33	Surface Morphology of Poly(caprolactone)-b-poly(dimethylsiloxane)-b-poly(caprolactone) Copolymers: Effects on Protein Adsorption. Biomacromolecules, 2001, 2, 526-537.	2.6	35
34	Spinodal decomposition in mixtures containing nematogens. II. Kinetics of spinodal decomposition. Journal of Chemical Physics, 1993, 98, 9094-9106.	1.2	32
35	Kinetics and temperature evolution during the bulk polymerization of methyl methacrylate for vacuum-assisted resin transfer molding. Composites Part A: Applied Science and Manufacturing, 2018, 104, 60-67.	3.8	30
36	Controlled dispersion of carbon nanospheres through surface functionalization. Carbon, 2009, 47, 622-628.	5.4	28

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37	Multicomponent Swelling of Polymer Networks. Macromolecules, 2006, 39, 8193-8202.	2.2	21
38	Correlation of chemical and physical properties of an Alaska heavy oil from the Ugnu formation. Fuel, 2013, 103, 843-849.	3.4	20
39	Integrated Biorefining: Coproduction of Renewable Resol Biopolymer for Aqueous Stream Valorization. ACS Sustainable Chemistry and Engineering, 2017, 5, 6615-6625.	3.2	19
40	Kinetics of Spinodal Decomposition in Liquid Crystalline Polymers:Â Processing Effects on the Phase Separation Morphology. Macromolecules, 1998, 31, 193-200.	2.2	18
41	Adsorption kinetics of end-attaching triblock copolymers. Polymer, 1993, 34, 1554-1557.	1.8	17
42	Molecular Control of the Viscosity of Model Dendritically Branched Polystyrene Solutions:Â From Polymeric to Colloidal Behavior. Macromolecules, 2004, 37, 1016-1022.	2.2	16
43	Supramolecular bionanocomposites, part 2: Effects of carbon nanoparticle surface functionality on polylactide crystallization. Journal of Applied Polymer Science, 2011, 121, 2029-2038.	1.3	16
44	Finding the Missing Physics: Mapping Polydispersity into Lattice-Based Simulations. Macromolecules, 2014, 47, 3185-3191.	2.2	15
45	Supramolecular BioNanocomposites: Grafting of Biobased Polylactide to Carbon Nanoparticle Surfaces. Australian Journal of Chemistry, 2009, 62, 865.	0.5	13
46	Monte Carlo simulation of homopolymer melts in plane Poiseuille flow. Journal of Chemical Physics, 2000, 112, 6073-6083.	1.2	12
47	Supramolecular bionanocomposites 3: Effects of surface functionality on electrical and mechanical percolation. Journal of Applied Polymer Science, 2011, 122, 2563-2572.	1.3	12
48	Molecular Scale Simulation of Homopolymer Wall Slip. Physical Review Letters, 2013, 110, 176001.	2.9	12
49	Spinodal decomposition in mixtures containing nematogens. Liquid Crystals, 1991, 10, 347-355.	0.9	10
50	The shear properties of oil shales. The Leading Edge, 2009, 28, 850-855.	0.4	10
51	Dual-energy X-ray computed tomography for void detection in fiber-reinforced composites. Journal of Composite Materials, 2019, 53, 2349-2359.	1.2	10
52	Parameter Free Prediction of Rheological Properties of Homopolymer Melts by Dynamic Monte Carlo Simulation. Macromolecules, 2012, 45, 8833-8840.	2.2	9
53	Brush Formation in Middle-Adsorbing Triblock Copolymers. Macromolecules, 1995, 28, 3471-3473.	2.2	8
54	Non-equilibrium nanoblends via forced assembly for pervaporation separation of benzene from cyclohexane: UNIFAQ-FV group contribution calculations. Journal of Membrane Science, 2007, 306, 186-195.	4.1	8

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55	Nonequilibrium nanoblend membranes for the pervaporation of benzene/cyclohexane mixtures. Journal of Applied Polymer Science, 2008, 108, 2917-2922.	1.3	8
56	Effects of polydispersity on confined homopolymer melts: A Monte Carlo study. Journal of Chemical Physics, 2014, 141, 214905.	1.2	8
57	Adsorption and thin film formation of diblock and triblock copolymers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1994, 86, 143-153.	2.3	7
58	Modification of cellulose nanocrystals with lactic acid for direct melt blending with PLA. AIP Conference Proceedings, 2015, , .	0.3	6
59	On the meaning of the spinodal in liquid crystalline solutions. Fluid Phase Equilibria, 1995, 109, 157-169.	1.4	5
60	Infusible acrylic thermoplastic resins: Tailoring of chemorheological properties. Journal of Applied Polymer Science, 2019, 136, 48006.	1.3	4
61	Styrene-Free, Partially Biobased Resin System for Thermoplastic Composites. I. Rheological Properties and Preliminary Panel Fabrication. ACS Sustainable Chemistry and Engineering, 2019, 7, 6512-6521.	3.2	3
62	Design of a monochromatic ellipsometer for studies at the solidâ€“liquid interface. Review of Scientific Instruments, 1995, 66, 1121-1127.	0.6	1