Ronald P White

List of Publications by Year
in descending order

28 papers	967 citations	471509 17 h-index	501196 28 g-index
28 all docs	28 docs citations	28 times ranked	1073 citing authors

#	Article	IF	Citations
1	Polymer Free Volume and Its Connection to the Glass Transition. Macromolecules, 2016, 49, 3987-4007.	4.8	331
2	Effect of Interfaces on the Glass Transition of Supported and Freestanding Polymer Thin Films. Macromolecules, 2015, 48, 4132-4141.	4.8	73
3	How Free Volume Does Influence the Dynamics of Glass Forming Liquids. ACS Macro Letters, 2017, 6, 529-534.	4.8	42
4	Effect of Deuterium Substitution on the Physical Properties of Polymer Melts and Blends. Macromolecules, 2010, 43, 4287-4293.	4.8	40
5	New Correlations in Polymer Blend Miscibility. Macromolecules, 2012, 45, 1076-1084.	4.8	39
6	Free Volume, Cohesive Energy Density, and Internal Pressure as Predictors of Polymer Miscibility. Macromolecules, 2014, 47, 3959-3968.	4.8	38
7	Free Volume in the Melt and How It Correlates with Experimental Glass Transition Temperatures: Results for a Large Set of Polymers. ACS Macro Letters, 2015, 4, 588-592.	4.8	38
8	Explaining the <i>T</i>,<i>V</i>-dependent dynamics of glass forming liquids: The cooperative free volume model tested against new simulation results. Journal of Chemical Physics, 2017, 147, 184503.	3.0	36
9	How Pure Components Control Polymer Blend Miscibility. Macromolecules, 2012, 45, 8861-8871.	4.8	33
10	Substrate Roughness Speeds Up Segmental Dynamics of Thin Polymer Films. Physical Review Letters, 2020, 124, 027802.	7.8	33
11	Thermodynamic treatment of polymer thin-film glasses. Physical Review E, 2011, 84, 041801.	2.1	32
12	Connecting Pressure-Dependent Dynamics to Dynamics under Confinement: The Cooperative Free Volume Model Applied to Poly(4-chlorostyrene) Bulk and Thin Films. Macromolecules, 2018, 51, 7924-7941.	4.8	32
13	Experimental Test of the Cooperative Free Volume Rate Model under 1D Confinement: The Interplay of Free Volume, Temperature, and Polymer Film Thickness in Driving Segmental Mobility. ACS Macro Letters, 2019, 8, 41-45.	4.8	31
14	Origins of Unusual Phase Behavior in Polymer/Ionic Liquid Solutions. Macromolecules, 2013, 46, 5714-5723.	4.8	29
15	Connecting Theory and Experiment To Understand Miscibility in Polymer and Small Molecule Mixtures. Journal of Chemical & Engineering Data, 2014, 59, 3289-3300.	1.9	22
16	To Understand Film Dynamics Look to the Bulk. Physical Review Letters, 2020, 125, 058002.	7.8	22
17	The cooperative free volume rate model for segmental dynamics: Application to glass-forming liquids and connections with the density scaling approachâ‹†. European Physical Journal E, 2019, 42, 100.	1.6	19
18	Pressure-Dependent Dynamics of Polymer Melts from Arrhenius to Non-Arrhenius: The Cooperative Free Volume Rate Equation Tested against Simulation Data. Macromolecules, 2018, 51, 4896-4909.	4.8	17

#	Article	IF	Citations
19	Chain fluids: Contrasts of theoretical and simulation approaches, and comparison with experimental alkane properties. Journal of Chemical Physics, 2009, 131, 074109.	3.0	12
20	Fluid mixtures: Contrasts of theoretical and simulation approaches, and comparison with experimental alkane properties. Journal of Chemical Physics, 2009, 131, 074110.	3.0	9
21	Dynamics across a Free Surface Reflect Interplay between Density and Cooperative Length: Application to Polystyrene. Macromolecules, 2021, 54, 4136-4144.	4.8	8
22	Square-well mixtures: a study of their coexistence using theory and simulation. Molecular Physics, 2007, 105, 1983-1997.	1.7	7
23	A Simple New Way To Account for Free Volume in Glassy Dynamics: Model-Free Estimation of the Close-Packed Volume from PVT Data. Journal of Physical Chemistry B, 2021, 125, 4221-4231.	2.6	7
24	Thermodynamics of Model PÎ±MSAN/dPMMA Blend: A Combined Study by SANS, Ellipsometry, and Locally Correlated Lattice (LCL) Theory. Macromolecules, 2020, 53, 7084-7095.	4.8	5
25	The dynamics of freestanding films: predictions for poly(2-chlorostyrene) based on bulk pressure dependence and thoughtful sample averaging. Soft Matter, 2021, 17, 9755-9764.	2.7	4
26	A continuum integral equation approach for fluid mixtures of flexible hard-sphere chain molecules. Molecular Physics, 2008, 106, 729-744.	1.7	3
27	COOPERATIVE FREE VOLUME RATE MODEL APPLIED TO THE PRESSURE-DEPENDENT SEGMENTAL DYNAMICS OF NATURAL RUBBER AND POLYUREA. Rubber Chemistry and Technology, 2019, 92, 612-624.	1.2	3
28	Experimental and Modeling Comparison of the Dynamics of Capped and Freestanding Poly(2-chlorostyrene) Films. ACS Macro Letters, 2022, 11, 91-95.	4.8	2