Jane E g Lipson

List of Publications by Year in Descending Order

44 papers	1,212 citations	23 h-index	34 g-index
46 ext. papers	1,344 ext. citations	4.6 avg, IF	5.33 L-index

#	Paper	IF	Citations
44	Experimental and Modeling Comparison of the Dynamics of Capped and Freestanding Poly(2-chlorostyrene) Films.. *ACS Macro Letters*, **2022**, 11, 91-95	6.6	0
43	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	3.6	2
42	Dynamics across a Free Surface Reflect Interplay between Density and Cooperative Length: Application to Polystyrene. *Macromolecules*, **2021**, 54, 4136-4144	5.5	3
41	A Simple New Way To Account for Free Volume in Glassy Dynamics: Model-Free Estimation of the Close-Packed Volume from Data. *Journal of Physical Chemistry B*, **2021**, 125, 4221-4231	3.4	5
40	The influence of additives on polymer matrix mobility and the glass transition. *Soft Matter*, **2021**, 17, 376-387	3.6	3
39	Substrate Roughness Speeds Up Segmental Dynamics of Thin Polymer Films. *Physical Review Letters*, **2020**, 124, 027802	7.4	26
38	Thermodynamics of Model P□MSAN/dPMMA Blend: A Combined Study by SANS, Ellipsometry, and Locally Correlated Lattice (LCL) Theory. *Macromolecules*, **2020**, 53, 7084-7095	5.5	2
37	To Understand Film Dynamics Look to the Bulk. *Physical Review Letters*, **2020**, 125, 058002	7.4	14
36	Different metrics for connecting mobility and glassiness in thin films. *Soft Matter*, **2019**, 15, 1651-1657	3.6	4
35	The cooperative free volume rate model for segmental dynamics: Application to glass-forming liquids and connections with the density scaling approach. *European Physical Journal E*, **2019**, 42, 100	1.5	12
34	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	1.7	3
33	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	6.6	25
32	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	5.5	13
31	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	5.5	25
30	How Free Volume Does Influence the Dynamics of Glass Forming Liquids. *ACS Macro Letters*, **2017**, 6, 529-534	6.6	30
29	Explaining the T,V-dependent dynamics of glass forming liquids: The cooperative free volume model tested against new simulation results. *Journal of Chemical Physics*, **2017**, 147, 184503	3.9	25
28	Simulating Local Tg Reporting Layers in Glassy Thin Films. *Macromolecules*, **2016**, 49, 1822-1833	5.5	20

27	Polymer Free Volume and Its Connection to the Glass Transition. *Macromolecules*, **2016**, 49, 3987-4007	5.5	224
26	Effect of Interfaces on the Glass Transition of Supported and Freestanding Polymer Thin Films. *Macromolecules*, **2015**, 48, 4132-4141	5.5	70
25	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	6.6	31
24	Enhanced diffusion and mobile fronts in a simple lattice model of glass-forming liquids. *Soft Matter*, **2015**, 11, 7792-801	3.6	8
23	Connecting Theory and Experiment To Understand Miscibility in Polymer and Small Molecule Mixtures. *Journal of Chemical & Engineering Data*, **2014**, 59, 3289-3300	2.8	20
22	Polymer Miscibility in Supercritical Carbon Dioxide: Free Volume as a Driving Force. *Macromolecules* , **2014**, 47, 5643-5654	5.5	13
21	Free Volume, Cohesive Energy Density, and Internal Pressure as Predictors of Polymer Miscibility. *Macromolecules*, **2014**, 47, 3959-3968	5.5	35
20	Lattice model of mobility at interfaces: free surfaces, substrates, and bilayers. *Soft Matter*, **2013**, 9, 9403	3.6	49
19	Lattice model of dynamic heterogeneity and kinetic arrest in glass-forming liquids. *Soft Matter*, **2013**, 9, 3173	3.6	33
18	Origins of Unusual Phase Behavior in Polymer/Ionic Liquid Solutions. *Macromolecules*, **2013**, 46, 5714-5723	5.5	24
17	Ball-of-Yarn Conformation of a Linear Gradient Copolymer in a Homopolymer Melt. *Macromolecules* , **2012**, 45, 7607-7620	5.5	5
16	How Pure Components Control Polymer Blend Miscibility. *Macromolecules*, **2012**, 45, 8861-8871	5.5	30
15	New Correlations in Polymer Blend Miscibility. *Macromolecules*, **2012**, 45, 1076-1084	5.5	34
14	Thermodynamic treatment of polymer thin-film glasses. *Physical Review E*, **2011**, 84, 041801	2.4	31
13	Local and Average Glass Transitions in Polymer Thin Films. *Macromolecules*, **2010**, 43, 9874-9880	5.5	57
12	Delayed Glassification Model for Free-Surface Suppression of Tg in Polymer Glasses. *Macromolecules*, **2010**, 43, 9865-9873	5.5	37
11	Effect of Deuterium Substitution on the Physical Properties of Polymer Melts and Blends. *Macromolecules*, **2010**, 43, 4287-4293	5.5	39
10	Self-Assembly of Lamellar Microphases in Linear Gradient Copolymer Melts. *Macromolecules*, **2010**, 43, 10612-10620	5.5	27

9	A simple approach to polymer mixture miscibility. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2010**, 368, 1009-25	3	62
8	Fluid mixtures: contrasts of theoretical and simulation approaches, and comparison with experimental alkane properties. *Journal of Chemical Physics*, **2009**, 131, 074110	3.9	9
7	Chain fluids: contrasts of theoretical and simulation approaches, and comparison with experimental alkane properties. *Journal of Chemical Physics*, **2009**, 131, 074109	3.9	12
6	Square-well mixtures: a study of their coexistence using theory and simulation. *Molecular Physics*, **2007**, 105, 1983-1997	1.7	6
5	Multiple glass transitions and local composition effects on polymer solvent mixtures. *Journal of Polymer Science, Part B: Polymer Physics*, **2006**, 44, 3528-3545	2.6	33
4	Modeling the Segmental Relaxation Time Distribution of Miscible Polymer Blends: Polyisoprene/Poly(vinylethylene). *Macromolecules*, **2005**, 38, 4919-4928	5.5	50
3	New Routes to the Characterization and Prediction of Polymer Blend Properties. *Macromolecules*, **2004**, 37, 9219-9230	5.5	12
2	Correlations between the Effects of Pressure and Molecular Weight on Polymer Blend Miscibility. *Macromolecules*, **2003**, 36, 2977-2984	5.5	20
1	Studies on fluids and their mixtures using the Born-Green-Yvon integral equation technique. *Macromolecular Theory and Simulations*, **1998**, 7, 263-282	1.5	27