Sindee L Simon

List of Publications by Year in descending order

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66343 82547 5,981 136 42 72 citations h-index g-index papers 141 141 141 4176 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	The melting behavior of aluminum nanoparticles. Thermochimica Acta, 2007, 463, 32-40.	2.7	339
2	Volume and enthalpy recovery of polystyrene. Polymer, 2001, 42, 2555-2567.	3.8	231
3	Using 20-million-year-old amber to test the super-Arrhenius behaviour of glass-forming systems. Nature Communications, 2013, 4, 1783.	12.8	216
4	The glass transition temperature versus the fictive temperature. Journal of Non-Crystalline Solids, 2007, 353, 2603-2612.	3.1	215
5	Cure kinetics of a thermosetting liquid dicyanate ester monomer/high-Tg polycyanurate material. Journal of Applied Polymer Science, 1993, 47, 461-485.	2.6	210
6	Modeling the evolution of the dynamic mechanical properties of a commercial epoxy during cure after gelation. Journal of Applied Polymer Science, 2000, 76, 495-508.	2.6	174
7	Effect of Cation Symmetry on the Morphology and Physicochemical Properties of Imidazolium Ionic Liquids. Journal of Physical Chemistry B, 2011, 115, 6572-6584.	2.6	169
8	Temperature-modulated differential scanning calorimetry: theory and application. Thermochimica Acta, 2001, 374, 55-71.	2.7	144
9	Dependence of size and size distribution on reactivity of aluminum nanoparticles in reactions with oxygen and MoO3. Thermochimica Acta, 2006, 444, 117-127.	2.7	133
10	<i>>50th Anniversary Perspective</i> : Challenges in the Dynamics and Kinetics of Glass-Forming Polymers. Macromolecules, 2017, 50, 6333-6361.	4.8	132
11	Calorimetric Glass Transition of Single Polystyrene Ultrathin Films. Macromolecules, 2013, 46, 562-570.	4.8	127
12	Structural relaxation of stacked ultrathin polystyrene films. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2741-2753.	2.1	126
13	Calorimetric glass transition temperature and absolute heat capacity of polystyrene ultrathin films. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3518-3527.	2.1	108
14	Physical aging of a polyetherimide: Volume recovery and its comparison to creep and enthalpy measurements. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 929-936.	2.1	105
15	Enthalpy recovery of a glass-forming liquid constrained in a nanoporous matrix: Negative pressure effects. European Physical Journal E, 2002, 8, 209-216.	1.6	92
16	Reaction kinetics and TTT cure diagrams for off-stoichiometric ratios of a high-Tg epoxy/amine system. Journal of Applied Polymer Science, 1992, 46, 1245-1270.	2.6	90
17	Enthalpy Recovery of Polystyrene: Does a Long-Term Aging Plateau Exist?. Macromolecules, 2013, 46, 5815-5821.	4.8	89
18	Enthalpy recovery, creep and creep–recovery measurements during physical aging of amorphous selenium. Journal of Non-Crystalline Solids, 2003, 324, 242-255.	3.1	86

#	Article	IF	Citations
19	Effect of Alkyl Chain Branching on Physicochemical Properties of Imidazolium-Based Ionic Liquids. Journal of Chemical & Data, 2016, 61, 1078-1091.	1.9	84
20	Physical aging of a polyetherimide: Creep and DSC measurements. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 2457-2468.	2.1	79
21	Low-korganosilicate films prepared by tetravinyltetramethylcyclotetrasiloxane. Journal of Applied Physics, 2002, 92, 1033-1038.	2.5	69
22	Thermosetting cure diagrams: Calculation and application. Journal of Applied Polymer Science, 1994, 53, 709-727.	2.6	66
23	Chain length dependence of the thermodynamic properties of linear and cyclic alkanes and polymers. Journal of Chemical Physics, 2005, 122, 084907.	3.0	66
24	Curing of Bisphenol M Dicyanate Ester under Nanoscale Constraint. Macromolecules, 2008, 41, 1310-1317.	4.8	66
25	Confinement effects on the glass transition of hydrogen bonded liquids. Journal of Chemical Physics, 2007, 127, 194501.	3.0	62
26	Enthalpy Recovery of Poly(ether imide):  Experiment and Model Calculations Incorporating Thermal Gradients. Macromolecules, 1997, 30, 4056-4063.	4.8	61
27	Thermophysical Properties of Imidazolium-Based Ionic Liquids: The Effect of Aliphatic versus Aromatic Functionality. Journal of Chemical & Engineering Data, 2014, 59, 2717-2724.	1.9	61
28	Structural recovery of a single polystyrene thin film using nanocalorimetry to extend the aging time and temperature range. Thermochimica Acta, 2015, 603, 135-141.	2.7	60
29	Glass transition temperature of thin polycarbonate films measured by flash differential scanning calorimetry. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 1462-1468.	2.1	59
30	Surface Chemistry Effects on the Reactivity and Properties of Nanoconfined Bisphenol M Dicyanate Ester in Controlled Pore Glass. Macromolecules, 2009, 42, 3573-3579.	4.8	57
31	Characterization of the molecular structure of amorphous selenium using recoverable creep compliance measurements. Journal of Non-Crystalline Solids, 2002, 307-310, 790-801.	3.1	56
32	Trimerization of Monocyanate Ester in Nanopores. Journal of Physical Chemistry B, 2010, 114, 7727-7734.	2.6	55
33	Interpretation of the dynamic heat capacity observed in glass-forming liquids. Journal of Chemical Physics, 1997, 107, 8678-8685.	3.0	54
34	Signatures of Structural Recovery in Polystyrene by Nanocalorimetry. Macromolecules, 2016, 49, 2365-2374.	4.8	53
35	Effects of entanglement concentration on Tg and local segmental motions. European Physical Journal E, 2002, 8, 201-207.	1.6	49
36	Origin of the divergence of the timescales for volume and enthalpy recovery. Polymer, 2007, 48, 1464-1470.	3.8	49

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37	Methyl methacrylate polymerization in nanoporous confinement. Polymer, 2011, 52, 4093-4098.	3.8	48
38	Measurement of the limiting fictive temperature over five decades of cooling and heating rates. Thermochimica Acta, 2015, 603, 123-127.	2.7	48
39	Modeling volume relaxation of amorphous polymers: Modification of the equation for the relaxation time in the KAHR model. Polymer, 2012, 53, 3613-3620.	3.8	46
40	Enthalpy recovery of polymeric glasses: Is the theoretical limiting liquid line reached? Polymer, 2006, 47, 4781-4788.	3.8	45
41	The glass transition: its measurement and underlying physics. Handbook of Thermal Analysis and Calorimetry, 2002, , 49-109.	1.6	44
42	A Viscoelastic Model for Predicting Isotropic Residual Stresses in Thermosetting Materials: Effects of Processing Parameters. Journal of Composite Materials, 2001, 35, 826-848.	2.4	43
43	On the viscoelastic Poisson's ratio in amorphous polymers. Journal of Rheology, 2010, 54, 1009-1022.	2.6	43
44	Equilibrium heat capacity of the glass-forming poly($\hat{l}\pm$ -methyl styrene) far below the Kauzmann temperature: The case of the missing glass transition. Journal of Chemical Physics, 2003, 119, 3590-3593.	3.0	42
45	Cure-induced and thermal stresses in a constrained epoxy resin. Composites Part A: Applied Science and Manufacturing, 2006, 37, 585-591.	7.6	42
46	Structural relaxation in the glass: Evidence for a path dependence of the relaxation time. Journal of Non-Crystalline Solids, 2006, 352, 4763-4768.	3.1	42
47	Structural recovery of a single polystyrene thin film using Flash DSC at low aging temperatures. Polymer, 2016, 96, 182-187.	3.8	41
48	The kinetics of the glass transition and physical aging in germanium selenide glasses. Journal of Non-Crystalline Solids, 2013, 368, 63-70.	3.1	38
49	Rheology of Imidazolium-Based Ionic Liquids with Aromatic Functionality. Journal of Physical Chemistry B, 2015, 119, 11953-11959.	2.6	37
50	Quantitative analysis of errors in TMDSC in the glass transition region. Thermochimica Acta, 2000, 348, 77-89.	2.7	36
51	Effect of structure on enthalpy relaxation of polycarbonate: Experiments and modeling. Polymer, 2008, 49, 3554-3560.	3.8	36
52	Fragility of ionic liquids measured by Flash differential scanning calorimetry. Thermochimica Acta, 2017, 654, 121-129.	2.7	36
53	The effects of structural recovery and thermal lag in temperature-modulated DSC measurements. Thermochimica Acta, 1997, 307, 1-10.	2.7	35
54	The glass transition in athermal poly(αâ€methyl styrene)/oligomer blends. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 418-430.	2.1	34

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55	Modeling methyl methacrylate free radical polymerization in nanoporous confinement. Polymer, 2011, 52, 1539-1545.	3.8	34
56	Trimerization Reaction Kinetics and <i>T</i> _g Depression of Polycyanurate under Nanoconfinement. Macromolecules, 2015, 48, 4692-4701.	4.8	33
57	Conversion–temperature–property diagram for a liquid dicyanate ester/high-Tg polycyanurate thermosetting system. Journal of Applied Polymer Science, 1994, 51, 1741-1752.	2.6	32
58	Volume recovery of polystyrene: evolution of the characteristic relaxation time. Journal of Non-Crystalline Solids, 2002, 307-310, 470-480.	3.1	32
59	Analysis of the development of isotropic residual stresses in a bismaleimide/spiro orthocarbonate thermosetting resin for composite materials. Journal of Applied Polymer Science, 2003, 88, 227-244.	2.6	31
60	Viscoelastic properties and residual stresses in polyhedral oligomeric silsesquioxaneâ€reinforced epoxy matrices. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2719-2732.	2.1	31
61	Bulk and shear rheology of a symmetric threeâ€arm star polystyrene. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1233-1244.	2.1	31
62	Complete Set of Enthalpy Recovery Data Using Flash DSC: Experiment and Modeling. Macromolecules, 2018, 51, 1549-1558.	4.8	31
63	An Ultrastable Polymeric Glass: Amorphous Fluoropolymer with Extreme Fictive Temperature Reduction by Vacuum Pyrolysis. Macromolecules, 2017, 50, 4562-4574.	4.8	30
64	Tg and reactivity at the nanoscale. Thermochimica Acta, 2009, 492, 45-50.	2.7	29
65	Modeling methyl methacrylate free radical polymerization: Reaction in hydrophobic nanopores. Polymer, 2012, 53, 3261-3268.	3.8	29
66	Investigation on hexamethyldisilazane vapor treatment of plasma-damaged nanoporous organosilicate films. Applied Surface Science, 2006, 252, 6323-6331.	6.1	28
67	Effects of freeze-drying on the glass temperature of cyclic polystyrenes. Polymer, 2003, 44, 8025-8032.	3.8	27
68	The Ï,-effective paradox: new measurements towards a resolution. Polymer, 2005, 46, 733-739.	3.8	27
69	The effect of nanoconfinement on methyl methacrylate polymerization: Tg, molecular weight, and tacticity. Polymer, 2014, 55, 4959-4965.	3.8	27
70	Supercritical carbon dioxide extraction of porogens for the preparation of ultralow-dielectric-constant films. Applied Physics Letters, 2003, 82, 4328-4330.	3.3	26
71	Pressure relaxation of polystyrene and its comparison to the shear response. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 3375-3385.	2.1	26
72	Modeling methyl methacrylate free radical polymerization: Reaction in hydrophilic nanopores. Polymer, 2012, 53, 3238-3244.	3.8	26

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73	Polystyrene freeze-dried from dilute solution: Tg depression and residual solvent effects. Polymer, 2006, 47, 3520-3527.	3.8	25
74	Consequence of Excess Configurational Entropy on Fragility: The Case of a Polymer-Oligomer Blend. Physical Review Letters, 2009, 103, 185702.	7.8	25
75	Formulation of Spray-Dried Phenytoin Loaded Poly ($\hat{l}\mu$ -Caprolactone) Microcarrier Intended for Brain Delivery to Treat Epilepsy. Journal of Pharmaceutical Sciences, 2007, 96, 1018-1030.	3.3	24
76	Experimental evidence against the existence of an ideal glass transition. Journal of Non-Crystalline Solids, 2009, 355, 672-675.	3.1	24
77	Bulk and shear rheology of silica/polystyrene nanocomposite: Reinforcement and dynamics. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 621-632.	2.1	24
78	Kinetic Study of Trimerization of Monocyanate Ester in Nanopores. Journal of Physical Chemistry B, 2011, 115, 925-932.	2.6	23
79	Thermodynamic scaling of polymer dynamics versus T – Tg scaling. Journal of Chemical Physics, 2011, 135, 074901.	3.0	23
80	Enthalpy recovery of ultrathin polystyrene film using Flash DSC. Polymer, 2018, 143, 40-45.	3.8	23
81	Linear Rheology of a Series of Second-Generation Dendronized Wedge Polymers. Macromolecules, 2019, 52, 2063-2074.	4.8	23
82	The glass transition and enthalpy recovery of a single polystyrene ultrathin film using Flash DSC. Journal of Chemical Physics, 2017, 146, 203329.	3.0	22
83	Viscoelastic Shear Response and Network Structure in Polycyanurates. Macromolecules, 2007, 40, 2246-2256.	4.8	21
84	Melting behavior of n -alkanes in anodic aluminum oxide (AAO) nanopores using Flash differential scanning calorimetry. Thermochimica Acta, 2018, 663, 157-164.	2.7	21
85	Thermal and Rheological Analysis of Polystyrene-Grafted Silica Nanocomposites. Macromolecules, 2020, 53, 2123-2135.	4.8	21
86	A new pressurizable dilatometer for measuring the time-dependent bulk modulus and pressure-volume-temperature properties of polymeric materials. Review of Scientific Instruments, 2009, 80, 053903.	1.3	20
87	Thermodynamic analysis of pure and impurity doped pentaerythritol tetranitrate crystals grown at room temperature. Journal of Thermal Analysis and Calorimetry, 2007, 89, 475-478.	3.6	18
88	Effect of crosslink density on the pressure relaxation response of polycyanurate networks. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 2477-2486.	2.1	17
89	Isoconversion analysis of the glass transition. Thermochimica Acta, 2008, 468, 87-93.	2.7	16
90	The viscoelastic behavior of polymer/oligomer blends. Polymer, 2010, 51, 4899-4906.	3.8	16

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91	Synthesis of polymers in nanoreactors: A tool for manipulating polymer properties. Polymer, 2020, 211, 123112.	3.8	16
92	Measurement of Thermal Conductivity using TMDSC: Solution to the Heat Flow Problem. Journal of Reinforced Plastics and Composites, 1999, 18, 559-571.	3.1	15
93	Supercritical CO2extraction of porogen phase: An alternative route to nanoporous dielectrics. Journal of Materials Research, 2004, 19, 3224-3233.	2.6	15
94	Crystallization and Vitrification of a Cyanurate Trimer in Nanopores. Journal of Physical Chemistry B, 2012, 116, 7754-7761.	2.6	15
95	Physical aging by periodic creep and interrupted creep experiments. Journal of Chemical Physics, 1999, 111, 2235-2241.	3.0	14
96	Supercritical carbon dioxide extraction to produce low-k plasma enhanced chemical vapor deposited dielectric films. Applied Physics Letters, 2002, 81, 4407-4409.	3.3	14
97	Pressureâ€volumeâ€temperature and glass transition behavior of silica/polystyrene nanocomposite. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1131-1138.	2.1	14
98	Equilibrium free-radical polymerization of methyl methacrylate under nanoconfinement. Polymer, 2015, 66, 173-178.	3.8	14
99	Viscoelastic properties of amorphous boron trioxide. Journal of Non-Crystalline Solids, 2001, 289, 9-16.	3.1	13
100	Pressure–volume–temperature behavior of two polycyanurate networks. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 2509-2517.	2.1	13
101	The glass transition of trinitrotoluene (TNT) by flash DSC. Thermochimica Acta, 2015, 620, 36-39.	2.7	12
102	Relation between mobility factor and diffusion factor for thermoset cure. Thermochimica Acta, 2005, 437, 179-189.	2.7	11
103	Kinetic study of alkyl methacrylate polymerization in nanoporous confinement over a broad temperature range. Polymer, 2020, 205, 122868.	3.8	11
104	A Viscoelastic Model for Predicting Isotropic Residual Stresses in Thermosetting Materials: Effects of Processing Parameters. Journal of Composite Materials, 2001, 35, 826-848.	2.4	10
105	Dynamic and isothermal thermogravimetric analysis of a polycyanurate thermosetting system. Polymer Engineering and Science, 1998, 38, 566-572.	3.1	9
106	Modeling structural recovery in glasses: An analysis of the peak-shift method. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 2027-2036.	2.1	9
107	Time Dependent Volume and Enthalpy Responses in Polymers. , 2000, , 18-46.		9
108	Improving the thermal stability of a polymer through liquid carbon dioxide extraction of a metal compound. Polymer Degradation and Stability, 1999, 63, 85-88.	5.8	8

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109	Modeling Ring/Chain Equilibrium in Nanoconfined Sulfur. Journal of Physical Chemistry B, 2013, 117, 3911-3916.	2.6	8
110	Determination of the nonlinearity and activation energy parameters in the TNM model of structural recovery. Journal of Thermal Analysis and Calorimetry, 2018, 131, 317-324.	3.6	8
111	Instrumented sphere method for measuring thermal pressure in fluids and isotropic stresses and reaction kinetics in thermosetting resins. Review of Scientific Instruments, 2004, 75, 3327-3334.	1.3	7
112	Synthesis and Characterization of Well-Defined, Tadpole-Shaped Polystyrene with a Single Atom Junction Point. Macromolecules, 2018, 51, 9509-9518.	4.8	7
113	Acceleration of decomposition of CL-20 explosive under nanoconfinement. Journal of Thermal Analysis and Calorimetry, 2020, 140, 2649-2655.	3.6	7
114	Post treatments of plasma-enhanced chemical vapor deposited hydrogenated amorphous silicon carbide for low dielectric constant films. Thin Solid Films, 2006, 497, 109-114.	1.8	6
115	Thermal pressure coefficient of a polyhedral oligomeric silsesquioxane (POSS)â€reinforced epoxy resin. Journal of Applied Polymer Science, 2010, 116, 142-146.	2.6	6
116	The reaction kinetics of cyclopentadiene dimerization using differential scanning calorimetry: Experiments and modelling. Thermochimica Acta, 2014, 589, 241-246.	2.7	6
117	The Glass Transition and Structural Recovery Using Flash DSC. , 2016, , 433-459.		6
118	Instrumented thick-walled tube method for measuring thermal pressure in fluids and isotropic stresses in thermosetting resins. Review of Scientific Instruments, 2005, 76, 063904.	1.3	5
119	Friction and Wear of Pd-Rich Amorphous Alloy (Pd43Cu27Ni10P20) with Ionic Liquid (IL) as Lubricant at High Temperatures. Metals, 2019, 9, 1180.	2.3	5
120	Kinetic Study of Curing Bisphenol A Dicyanate Ester with Ionic Liquid Additive. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1315-1324.	2.1	5
121	A model-free analysis of configurational properties to reduce the temperature- and pressure-dependent segmental relaxation times of polymers. Journal of Chemical Physics, 2020, 152, 044901.	3.0	4
122	Decomposition of HMX in solid and liquid states under nanoconfinement. Thermochimica Acta, 2020, 686, 178542.	2.7	4
123	Prediction of the Synergistic Glass Transition Temperature of Coamorphous Molecular Glasses Using Activity Coefficient Models. Molecular Pharmaceutics, 2021, 18, 3439-3451.	4.6	4
124	Mobility of Pressure-Densified and Pressure-Expanded Polystyrene Glasses: Dilatometry and a Test of KAHR Model. Macromolecules, 2021, 54, 8352-8364.	4.8	4
125	Structural recovery and physical aging of polymeric glasses. , 2016, , 23-54.		4
126	Thermogravimetric analysis of a polycyanurate thermosetting material. Journal of Theoretical Biology, 1997, 49, 311-315.	1.7	3

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127	Modeling nanoporosity development in polymer films for low-k applications. Polymer Engineering and Science, 2005, 45, 640-651.	3.1	3
128	<scp>Compositionâ€dependent</scp> glass transition temperature in mixtures: Evaluation of configurational entropy models*. Polymer Engineering and Science, 2022, 62, 2435-2445.	3.1	3
129	Influence of diameter on the degradation profile of multiwall carbon nanotubes. Journal of Thermal Analysis and Calorimetry, 2019, 138, 1351-1362.	3.6	2
130	Physical aging of a polyetherimide: Volume recovery and its comparison to creep and enthalpy measurements., 1997, 35, 929.		1
131	Modeling DSC Annealing Peaks for Polyetherimide: Incorporation of Temperature Gradients. Materials Research Society Symposia Proceedings, 1996, 455, 177.	0.1	0
132	Carbon-Dioxide-Based Microsortation of Postconsumer Polyolefins and its Effect on Polyolefin Properties. Polymer-Plastics Technology and Engineering, 1999, 38, 433-444.	1.9	0
133	Fitting Differential Scanning Calorimetry Heating Curves for Polyetherimide Using a Model of Structural Recovery. ACS Symposium Series, 1999, , 188-198.	0.5	0
134	Heterogeneous reaction kinetics of epoxide-functionalized regenerated cellulose membrane and aliphatic amine. Thermochimica Acta, 2012, 543, 18-23.	2.7	0
135	Dynamics of Confined Glass-Forming Liquids Near Equilibrium Conditions. Soft and Biological Matter, 2015, , 245-263.	0.3	0
136	Program Improvements Resulting From Completion Of One Abet 2000 Assessment Cycle. , 0, , .		0