Sindee L Simon

List of Publications by Year
in descending order

135 papers	5,981 citations	76031 42 h-index	93651 72 g-index
141 all docs	141 docs citations	141 times ranked	4685 citing authors

#	Article	IF	Citations
1	<scp>Compositionâ€dependent</scp>glass transition temperature in mixtures: Evaluation of configurational entropy models*. Polymer Engineering and Science, 2022, 62, 2435-2445.	1.5	3
2	Prediction of the Synergistic Glass Transition Temperature of Coamorphous Molecular Glasses Using Activity Coefficient Models. Molecular Pharmaceutics, 2021, 18, 3439-3451.	2.3	4
3	Mobility of Pressure-Densified and Pressure-Expanded Polystyrene Glasses: Dilatometry and a Test of KAHR Model. Macromolecules, 2021, 54, 8352-8364.	2.2	4
4	Acceleration of decomposition of CL-20 explosive under nanoconfinement. Journal of Thermal Analysis and Calorimetry, 2020, 140, 2649-2655.	2.0	7
5	Synthesis of polymers in nanoreactors: A tool for manipulating polymer properties. Polymer, 2020, 211, 123112.	1.8	16
6	Kinetic study of alkyl methacrylate polymerization in nanoporous confinement over a broad temperature range. Polymer, 2020, 205, 122868.	1.8	11
7	Thermal and Rheological Analysis of Polystyrene-Grafted Silica Nanocomposites. Macromolecules, 2020, 53, 2123-2135.	2.2	21
8	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.	1.2	4
9	Decomposition of HMX in solid and liquid states under nanoconfinement. Thermochimica Acta, 2020, 686, 178542.	1.2	4
10	Friction and Wear of Pd-Rich Amorphous Alloy (Pd43Cu27Ni10P20) with Ionic Liquid (IL) as Lubricant at High Temperatures. Metals, 2019, 9, 1180.	1.0	5
11	Kinetic Study of Curing Bisphenol A Dicyanate Ester with Ionic Liquid Additive. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1315-1324.	2.4	5
12	Influence of diameter on the degradation profile of multiwall carbon nanotubes. Journal of Thermal Analysis and Calorimetry, 2019, 138, 1351-1362.	2.0	2
13	Linear Rheology of a Series of Second-Generation Dendronized Wedge Polymers. Macromolecules, 2019, 52, 2063-2074.	2.2	23
14	Enthalpy recovery of ultrathin polystyrene film using Flash DSC. Polymer, 2018, 143, 40-45.	1.8	23
15	Melting behavior of n -alkanes in anodic aluminum oxide (AAO) nanopores using Flash differential scanning calorimetry. Thermochimica Acta, 2018, 663, 157-164.	1.2	21
16	Complete Set of Enthalpy Recovery Data Using Flash DSC: Experiment and Modeling. Macromolecules, 2018, 51, 1549-1558.	2.2	31
17	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.	2.0	8
18	Synthesis and Characterization of Well-Defined, Tadpole-Shaped Polystyrene with a Single Atom Junction Point. Macromolecules, 2018, 51, 9509-9518.	2.2	7

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19	Fragility of ionic liquids measured by Flash differential scanning calorimetry. Thermochimica Acta, 2017, 654, 121-129.	1.2	36
20	The glass transition and enthalpy recovery of a single polystyrene ultrathin film using Flash DSC. Journal of Chemical Physics, 2017, 146, 203329.	1.2	22
21	An Ultrastable Polymeric Glass: Amorphous Fluoropolymer with Extreme Fictive Temperature Reduction by Vacuum Pyrolysis. Macromolecules, 2017, 50, 4562-4574.	2.2	30
22	50th Anniversary Perspective: Challenges in the Dynamics and Kinetics of Glass-Forming Polymers. Macromolecules, 2017, 50, 6333-6361.	2.2	132
23	The Glass Transition and Structural Recovery Using Flash DSC. , 2016, , 433-459.		6
24	Structural recovery of a single polystyrene thin film using Flash DSC at low aging temperatures. Polymer, 2016, 96, 182-187.	1.8	41
25	Effect of Alkyl Chain Branching on Physicochemical Properties of Imidazolium-Based Ionic Liquids. Journal of Chemical & Engineering Data, 2016, 61, 1078-1091.	1.0	84
26	Signatures of Structural Recovery in Polystyrene by Nanocalorimetry. Macromolecules, 2016, 49, 2365-2374.	2.2	53
27	Structural recovery and physical aging of polymeric glasses. , 2016, , 23-54.		4
28	Pressureâ€volumeâ€temperature and glass transition behavior of silica/polystyrene nanocomposite. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1131-1138.	2.4	14
29	Measurement of the limiting fictive temperature over five decades of cooling and heating rates. Thermochimica Acta, 2015, 603, 123-127.	1.2	48
30	Bulk and shear rheology of silica/polystyrene nanocomposite: Reinforcement and dynamics. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 621-632.	2.4	24
31	Trimerization Reaction Kinetics and T_g Depression of Polycyanurate under Nanoconfinement. Macromolecules, 2015, 48, 4692-4701.	2.2	33
32	Equilibrium free-radical polymerization of methyl methacrylate under nanoconfinement. Polymer, 2015, 66, 173-178.	1.8	14
33	Structural recovery of a single polystyrene thin film using nanocalorimetry to extend the aging time and temperature range. Thermochimica Acta, 2015, 603, 135-141.	1.2	60
34	The glass transition of trinitrotoluene (TNT) by flash DSC. Thermochimica Acta, 2015, 620, 36-39.	1.2	12
35	Rheology of Imidazolium-Based Ionic Liquids with Aromatic Functionality. Journal of Physical Chemistry B, 2015, 119, 11953-11959.	1.2	37
36	Dynamics of Confined Glass-Forming Liquids Near Equilibrium Conditions. Soft and Biological Matter, 2015, , 245-263.	0.3	0

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37	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.	2.4	59
38	The effect of nanoconfinement on methyl methacrylate polymerization: Tg, molecular weight, and tacticity. Polymer, 2014, 55, 4959-4965.	1.8	27
39	Thermophysical Properties of Imidazolium-Based Ionic Liquids: The Effect of Aliphatic versus Aromatic Functionality. Journal of Chemical & Engineering Data, 2014, 59, 2717-2724.	1.0	61
40	The reaction kinetics of cyclopentadiene dimerization using differential scanning calorimetry: Experiments and modelling. Thermochimica Acta, 2014, 589, 241-246.	1.2	6
41	Enthalpy Recovery of Polystyrene: Does a Long-Term Aging Plateau Exist?. Macromolecules, 2013, 46, 5815-5821.	2.2	89
42	Calorimetric Glass Transition of Single Polystyrene Ultrathin Films. Macromolecules, 2013, 46, 562-570.	2.2	127
43	The kinetics of the glass transition and physical aging in germanium selenide glasses. Journal of Non-Crystalline Solids, 2013, 368, 63-70.	1.5	38
44	Using 20-million-year-old amber to test the super-Arrhenius behaviour of glass-forming systems. Nature Communications, 2013, 4, 1783.	5.8	216
45	Modeling Ring/Chain Equilibrium in Nanoconfined Sulfur. Journal of Physical Chemistry B, 2013, 117, 3911-3916.	1.2	8
46	Modeling methyl methacrylate free radical polymerization: Reaction in hydrophobic nanopores. Polymer, 2012, 53, 3261-3268.	1.8	29
47	Modeling methyl methacrylate free radical polymerization: Reaction in hydrophilic nanopores. Polymer, 2012, 53, 3238-3244.	1.8	26
48	Modeling volume relaxation of amorphous polymers: Modification of the equation for the relaxation time in the KAHR model. Polymer, 2012, 53, 3613-3620.	1.8	46
49	Heterogeneous reaction kinetics of epoxide-functionalized regenerated cellulose membrane and aliphatic amine. Thermochimica Acta, 2012, 543, 18-23.	1.2	0
50	Crystallization and Vitrification of a Cyanurate Trimer in Nanopores. Journal of Physical Chemistry B, 2012, 116, 7754-7761.	1.2	15
51	Bulk and shear rheology of a symmetric threeâ€arm star polystyrene. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1233-1244.	2.4	31
52	Kinetic Study of Trimerization of Monocyanate Ester in Nanopores. Journal of Physical Chemistry B, 2011, 115, 925-932.	1.2	23
53	Effect of Cation Symmetry on the Morphology and Physicochemical Properties of Imidazolium Ionic Liquids. Journal of Physical Chemistry B, 2011, 115, 6572-6584.	1.2	169
54	Thermodynamic scaling of polymer dynamics versus T â€“ Tg scaling. Journal of Chemical Physics, 2011, 135, 074901.	1.2	23

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55	Methyl methacrylate polymerization in nanoporous confinement. Polymer, 2011, 52, 4093-4098.	1.8	48
56	Modeling methyl methacrylate free radical polymerization in nanoporous confinement. Polymer, 2011, 52, 1539-1545.	1.8	34
57	Thermal pressure coefficient of a polyhedral oligomeric silsesquioxane (POSS)â€reinforced epoxy resin. Journal of Applied Polymer Science, 2010, 116, 142-146.	1.3	6
58	The viscoelastic behavior of polymer/oligomer blends. Polymer, 2010, 51, 4899-4906.	1.8	16
59	Pressureâ€“volumeâ€“temperature behavior of two polycyanurate networks. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 2509-2517.	2.4	13
60	On the viscoelastic Poissonâ€™s ratio in amorphous polymers. Journal of Rheology, 2010, 54, 1009-1022.	1.3	43
61	Trimerization of Monocyanate Ester in Nanopores. Journal of Physical Chemistry B, 2010, 114, 7727-7734.	1.2	55
62	Consequence of Excess Configurational Entropy on Fragility: The Case of a Polymer-Oligomer Blend. Physical Review Letters, 2009, 103, 185702.	2.9	25
63	Effect of crosslink density on the pressure relaxation response of polycyanurate networks. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 2477-2486.	2.4	17
64	Tg and reactivity at the nanoscale. Thermochimica Acta, 2009, 492, 45-50.	1.2	29
65	Surface Chemistry Effects on the Reactivity and Properties of Nanoconfined Bisphenol M Dicyanate Ester in Controlled Pore Glass. Macromolecules, 2009, 42, 3573-3579.	2.2	57
66	Experimental evidence against the existence of an ideal glass transition. Journal of Non-Crystalline Solids, 2009, 355, 672-675.	1.5	24
67	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.	0.6	20
68	The glass transition in athermal poly(Î±â€methyl styrene)/oligomer blends. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 418-430.	2.4	34
69	Structural relaxation of stacked ultrathin polystyrene films. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2741-2753.	2.4	126
70	Viscoelastic properties and residual stresses in polyhedral oligomeric silsesquioxaneâ€reinforced epoxy matrices. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2719-2732.	2.4	31
71	Effect of structure on enthalpy relaxation of polycarbonate: Experiments and modeling. Polymer, 2008, 49, 3554-3560.	1.8	36
72	Isoconversion analysis of the glass transition. Thermochimica Acta, 2008, 468, 87-93.	1.2	16

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73	Curing of Bisphenol M Dicyanate Ester under Nanoscale Constraint. Macromolecules, 2008, 41, 1310-1317.	2.2	66
74	The glass transition temperature versus the fictive temperature. Journal of Non-Crystalline Solids, 2007, 353, 2603-2612.	1.5	215
75	Viscoelastic Shear Response and Network Structure in Polycyanurates. Macromolecules, 2007, 40, 2246-2256.	2.2	21
76	Confinement effects on the glass transition of hydrogen bonded liquids. Journal of Chemical Physics, 2007, 127, 194501.	1.2	62
77	Formulation of Spray-Dried Phenytoin Loaded Poly(Îµ-Caprolactone) Microcarrier Intended for Brain Delivery to Treat Epilepsy. Journal of Pharmaceutical Sciences, 2007, 96, 1018-1030.	1.6	24
78	The melting behavior of aluminum nanoparticles. Thermochimica Acta, 2007, 463, 32-40.	1.2	339
79	Origin of the divergence of the timescales for volume and enthalpy recovery. Polymer, 2007, 48, 1464-1470.	1.8	49
80	Pressure relaxation of polystyrene and its comparison to the shear response. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 3375-3385.	2.4	26
81	Thermodynamic analysis of pure and impurity doped pentaerythritol tetranitrate crystals grown at room temperature. Journal of Thermal Analysis and Calorimetry, 2007, 89, 475-478.	2.0	18
82	Cure-induced and thermal stresses in a constrained epoxy resin. Composites Part A: Applied Science and Manufacturing, 2006, 37, 585-591.	3.8	42
83	Structural relaxation in the glass: Evidence for a path dependence of the relaxation time. Journal of Non-Crystalline Solids, 2006, 352, 4763-4768.	1.5	42
84	Calorimetric glass transition temperature and absolute heat capacity of polystyrene ultrathin films. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3518-3527.	2.4	108
85	Investigation on hexamethyldisilazane vapor treatment of plasma-damaged nanoporous organosilicate films. Applied Surface Science, 2006, 252, 6323-6331.	3.1	28
86	Enthalpy recovery of polymeric glasses: Is the theoretical limiting liquid line reached?. Polymer, 2006, 47, 4781-4788.	1.8	45
87	Dependence of size and size distribution on reactivity of aluminum nanoparticles in reactions with oxygen and MoO3. Thermochimica Acta, 2006, 444, 117-127.	1.2	133
88	Post treatments of plasma-enhanced chemical vapor deposited hydrogenated amorphous silicon carbide for low dielectric constant films. Thin Solid Films, 2006, 497, 109-114.	0.8	6
89	Polystyrene freeze-dried from dilute solution: Tg depression and residual solvent effects. Polymer, 2006, 47, 3520-3527.	1.8	25
90	Relation between mobility factor and diffusion factor for thermoset cure. Thermochimica Acta, 2005, 437, 179-189.	1.2	11

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91	The Ï„-effective paradox: new measurements towards a resolution. Polymer, 2005, 46, 733-739.	1.8	27
92	Modeling nanoporosity development in polymer films for low-k applications. Polymer Engineering and Science, 2005, 45, 640-651.	1.5	3
93	Chain length dependence of the thermodynamic properties of linear and cyclic alkanes and polymers. Journal of Chemical Physics, 2005, 122, 084907.	1.2	66
94	Instrumented thick-walled tube method for measuring thermal pressure in fluids and isotropic stresses in thermosetting resins. Review of Scientific Instruments, 2005, 76, 063904.	0.6	5
95	Supercritical CO2extraction of porogen phase: An alternative route to nanoporous dielectrics. Journal of Materials Research, 2004, 19, 3224-3233.	1.2	15
96	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.	0.6	7
97	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.	1.3	31
98	Effects of freeze-drying on the glass temperature of cyclic polystyrenes. Polymer, 2003, 44, 8025-8032.	1.8	27
99	Enthalpy recovery, creep and creepâ€“recovery measurements during physical aging of amorphous selenium. Journal of Non-Crystalline Solids, 2003, 324, 242-255.	1.5	86
100	Equilibrium heat capacity of the glass-forming poly(Î±-methyl styrene) far below the Kauzmann temperature: The case of the missing glass transition. Journal of Chemical Physics, 2003, 119, 3590-3593.	1.2	42
101	Supercritical carbon dioxide extraction of porogens for the preparation of ultralow-dielectric-constant films. Applied Physics Letters, 2003, 82, 4328-4330.	1.5	26
102	Supercritical carbon dioxide extraction to produce low-k plasma enhanced chemical vapor deposited dielectric films. Applied Physics Letters, 2002, 81, 4407-4409.	1.5	14
103	Low-korganosilicate films prepared by tetravinyltetramethylcyclotetrasiloxane. Journal of Applied Physics, 2002, 92, 1033-1038.	1.1	69
104	The glass transition: its measurement and underlying physics. Handbook of Thermal Analysis and Calorimetry, 2002, , 49-109.	1.6	44
105	Volume recovery of polystyrene: evolution of the characteristic relaxation time. Journal of Non-Crystalline Solids, 2002, 307-310, 470-480.	1.5	32
106	Characterization of the molecular structure of amorphous selenium using recoverable creep compliance measurements. Journal of Non-Crystalline Solids, 2002, 307-310, 790-801.	1.5	56
107	Modeling structural recovery in glasses: An analysis of the peak-shift method. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 2027-2036.	2.4	9
108	Enthalpy recovery of a glass-forming liquid constrained in a nanoporous matrix: Negative pressure effects. European Physical Journal E, 2002, 8, 209-216.	0.7	92

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109	Effects of entanglement concentration on Tg and local segmental motions. European Physical Journal E, 2002, 8, 201-207.	0.7	49
110	A Viscoelastic Model for Predicting Isotropic Residual Stresses in Thermosetting Materials: Effects of Processing Parameters. Journal of Composite Materials, 2001, 35, 826-848.	1.2	43
111	Viscoelastic properties of amorphous boron trioxide. Journal of Non-Crystalline Solids, 2001, 289, 9-16.	1.5	13
112	Temperature-modulated differential scanning calorimetry: theory and application. Thermochimica Acta, 2001, 374, 55-71.	1.2	144
113	Volume and enthalpy recovery of polystyrene. Polymer, 2001, 42, 2555-2567.	1.8	231
114	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.	1.3	174
115	Quantitative analysis of errors in TMDSC in the glass transition region. Thermochimica Acta, 2000, 348, 77-89.	1.2	36
116	Time Dependent Volume and Enthalpy Responses in Polymers. , 2000, , 18-46.		9
117	Physical aging by periodic creep and interrupted creep experiments. Journal of Chemical Physics, 1999, 111, 2235-2241.	1.2	14
118	Improving the thermal stability of a polymer through liquid carbon dioxide extraction of a metal compound. Polymer Degradation and Stability, 1999, 63, 85-88.	2.7	8
119	Measurement of Thermal Conductivity using TMDSC: Solution to the Heat Flow Problem. Journal of Reinforced Plastics and Composites, 1999, 18, 559-571.	1.6	15
120	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
121	Fitting Differential Scanning Calorimetry Heating Curves for Polyetherimide Using a Model of Structural Recovery. ACS Symposium Series, 1999, , 188-198.	0.5	0
122	Dynamic and isothermal thermogravimetric analysis of a polycyanurate thermosetting system. Polymer Engineering and Science, 1998, 38, 566-572.	1.5	9
123	Interpretation of the dynamic heat capacity observed in glass-forming liquids. Journal of Chemical Physics, 1997, 107, 8678-8685.	1.2	54
124	Enthalpy Recovery of Poly(ether imide):â€‰ Experiment and Model Calculations Incorporating Thermal Gradients. Macromolecules, 1997, 30, 4056-4063.	2.2	61
125	Thermogravimetric analysis of a polycyanurate thermosetting material. Journal of Theoretical Biology, 1997, 49, 311-315.	0.8	3
126	The effects of structural recovery and thermal lag in temperature-modulated DSC measurements. Thermochimica Acta, 1997, 307, 1-10.	1.2	35

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127	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.	2.4	105
128	Physical aging of a polyetherimide: Volume recovery and its comparison to creep and enthalpy measurements. , 1997, 35, 929.		1
129	Modeling DSC Annealing Peaks for Polyetherimide: Incorporation of Temperature Gradients. Materials Research Society Symposia Proceedings, 1996, 455, 177.	0.1	0
130	Physical aging of a polyetherimide: Creep and DSC measurements. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 2457-2468.	2.4	79
131	Conversionâ€“temperatureâ€“property diagram for a liquid dicyanate ester/high-Tg polycyanurate thermosetting system. Journal of Applied Polymer Science, 1994, 51, 1741-1752.	1.3	32
132	Thermosetting cure diagrams: Calculation and application. Journal of Applied Polymer Science, 1994, 53, 709-727.	1.3	66
133	Cure kinetics of a thermosetting liquid dicyanate ester monomer/high-Tg polycyanurate material. Journal of Applied Polymer Science, 1993, 47, 461-485.	1.3	210
134	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.	1.3	90
135	Program Improvements Resulting From Completion Of One Abet 2000 Assessment Cycle. , 0, , .		0