John M Hutchinson

List of Publications by Year
in descending order

72	2,924	201674	168389
papers	citations	27 h-index	53 g-index

72	72	72	2173
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Physical aging of polymers. Progress in Polymer Science, 1995, 20, 703-760.	24.7	852
2	Physical Aging of Polycarbonate: Enthalpy Relaxation, Creep Response, and Yielding Behavior. Macromolecules, 1999, 32, 5046-5061.	4.8	156
3	Thermal cycling of glasses. II. Experimental evaluation of the structure (or nonlinearity) parameter x. Journal of Polymer Science, Part B: Polymer Physics, 1988, 26, 2341-2366.	2.1	114
4	Determination of the glass transition temperature. Journal of Thermal Analysis and Calorimetry, 2009, 98, 579-589.	3.6	81
5	Thermal cycling of glasses. III. Upper peaks. Journal of Polymer Science, Part B: Polymer Physics, 1990, 28, 2127-2163.	2.1	71
6	Enthalpy relaxation in polyvinyl acetate. Thermochimica Acta, 2002, 391, 197-217.	2.7	62
7	Lithium borate glasses: a quantitative study of strength and fragility. Journal of Non-Crystalline Solids, 1994, 172-174, 378-383.	3.1	58
8	Enthalpy relaxation of non-stoichiometric epoxy-amine resins. Polymer, 2001, 42, 7081-7093.	3.8	58
9	Characterising the glass transition and relaxation kinetics by conventional and temperature-modulated differential scanning calorimetry. Thermochimica Acta, 1998, 324, 165-174.	2.7	55
10	Achieving High Thermal Conductivity in Epoxy Composites: Effect of Boron Nitride Particle Size and Matrix-Filler Interface. Polymers, 2019, 11, 1156.	4.5	54
11	Differential scanning calorimetry of polymer glasses: corrections for thermal lag. Polymer, 1988, 29, 152-159.	3.8	53
12	Measurement of the wax appearance temperatures of crude oils by temperature modulated differential scanning calorimetry. Fuel, 2001, 80, 367-371.	6.4	53
13	Application of the Adamâ˜Gibbs Equation to the Non-Equilibrium Glassy State. Macromolecules, 2000, 33, 5252-5262.	4.8	52
14	On the effect of montmorillonite in the curing reaction of epoxy nanocomposites. Journal of Thermal Analysis and Calorimetry, 2007, 87, 113-118.	3.6	51
15	The application of modulated differential scanning calorimetry to the glass transition of polymers. I. A single-parameter theoretical model and its predictions. Thermochimica Acta, 1996, 286, 263-296.	2.7	50
16	Analysis of the cure of epoxy based layered silicate nanocomposites: Reaction kinetics and nanostructure development. Journal of Applied Polymer Science, 2008, 108, 923-938.	2.6	50
17	Studying the Glass Transition by DSC and TMDSC. Journal of Thermal Analysis and Calorimetry, 2003, 72, 619-629.	3.6	45
18	High Pressure Differential Scanning Calorimetry Investigations on the Pressure Dependence of the Melting of Paracetamol Polymorphs I and II. Journal of Pharmaceutical Sciences, 2007, 96, 2784-2794.	3.3	45

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19	TOPEM, a new temperature modulated DSC technique. Journal of Thermal Analysis and Calorimetry, 2007, 87, 119-124.	3.6	45
20	The application of temperature-modulated DSC to the glass transition region. Thermochimica Acta, 2001, 377, 63-84.	2.7	44
21	Temperature modulated differential scanning calorimetry. Part I:. Thermochimica Acta, 1998, 315, 1-9.	2.7	43
22	Intercalation of epoxy resin in organically modified montmorillonite. Journal of Applied Polymer Science, 2006, 102, 3751-3763.	2.6	42
23	An introduction to temperature modulated differential scanning calorimetry (TMDSC): a relatively non-mathematical approach. Thermochimica Acta, 2002, 387, 75-93.	2.7	41
24	Aging of polycarbonate studied by temperature modulated differential scanning calorimetry. Thermochimica Acta, 1999, 335, 27-42.	2.7	36
25	Effect of cooling rate and frequency on the calorimetric measurement of the glass transition. Polymer, 2005, 46, 12181-12189.	3.8	35
26	Structural relaxation in fully cured epoxy resins. Journal of Non-Crystalline Solids, 1994, 172-174, 1017-1022.	3.1	32
27	Interpretation of glass transition phenomena in the light of the strength-fragility concept. Polymer International, 1998, 47, 56-64.	3.1	30
28	Effect of crosslink length on the enthalpy relaxation of fully cured epoxy-diamine resins. , 2000, 38, 456-468.		30
29	Thermal Conductivity and Cure Kinetics of Epoxy-Boron Nitride Compositesâ€"A Review. Materials, 2020, 13, 3634.	2.9	28
30	Physical aging of thermosetting powder coatings. Progress in Organic Coatings, 2006, 55, 35-42.	3.9	26
31	Vitrification during the isothermal cure of thermosets. Journal of Thermal Analysis and Calorimetry, 2008, 91, 687-695.	3.6	26
32	Homopolymerization effects in polymer layered silicate nanocomposites based upon epoxy resin: Implications for exfoliation. Journal of Applied Polymer Science, 2009, 114, 1040-1047.	2.6	24
33	Study of Hyperbranched Poly(ethyleneimine) Polymers of Different Molecular Weight and Their Interaction with Epoxy Resin. Materials, 2018, 11, 410.	2.9	24
34	A New Epoxy-Based Layered Silicate Nanocomposite Using a Hyperbranched Polymer: Study of the Curing Reaction and Nanostructure Development. Materials, 2014, 7, 1830-1849.	2.9	23
35	Isothermal and non-isothermal cure of a tri-functional epoxy resin (TGAP): A stochastic TMDSC study. Thermochimica Acta, 2012, 529, 14-21.	2.7	22
36	Physical aging in polymers: Comparison of two ways of determining narayanaswamy's parameter. Polymer Engineering and Science, 1996, 36, 2978-2985.	3.1	21

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37	Unified Approach to Ion Transport and Structural Relaxation in Amorphous Polymers and Glasses. Journal of Physical Chemistry B, 2008, 112, 859-866.	2.6	21
38	High pressure differential scanning calorimetry: Aspects of calibration. Thermochimica Acta, 2006, 446, 66-72.	2.7	20
39	Structural recovery in silver iodide containing glasses: illustration of the use of the peak-shift method for the evaluation of the Narayanaswamy parameter x. Journal of Non-Crystalline Solids, 1991, 131-133, 483-487.	3.1	19
40	Enthalpy relaxation in polymethyl(?-n-alkyl)acrylates: Effect of length of alkyl chain. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 583-593.	2.1	18
41	Temperature-modulated differential scanning calorimetry. Part II. Determination of activation energies. Polymer International, 1998, 47, 72-75.	3.1	18
42	Vitrification during the Isothermal Cure of Thermosets: Comparison of Theoretical Simulations with Temperatureâ€Modulated DSC and Dielectric Analysis. Macromolecular Chemistry and Physics, 2008, 209, 2003-2011.	2.2	18
43	Influence of the isothermal cure temperature on the nanostructure and thermal properties of an epoxy layered silicate nanocomposite. Polymer Engineering and Science, 2014, 54, 51-58.	3.1	18
44	Molecular Mobility in Hyperbranched Polymers and Their Interaction with an Epoxy Matrix. Materials, 2016, 9, 192.	2.9	17
45	Epoxy-Thiol Systems Filled with Boron Nitride for High Thermal Conductivity Applications. Polymers, 2018, 10, 340.	4.5	17
46	Epoxy composites filled with boron nitride and aluminum nitride for improved thermal conductivity. Polimery, 2017, 62, 560-566.	0.7	14
47	Vitrification and Devitrification during the Nonâ€Isothermal Cure of a Thermoset. Theoretical Model and Comparison with Calorimetric Experiments. Macromolecular Chemistry and Physics, 2010, 211, 57-65.	2.2	13
48	Identification of nanostructural development in epoxy polymer layered silicate nanocomposites from the interpretation of differential scanning calorimetry and dielectric spectroscopy. Thermochimica Acta, 2012, 541, 76-85.	2.7	13
49	Intraâ€•and extraâ€gallery reactions in triâ€functional epoxy polymer layered silicate nanocomposites. Journal of Applied Polymer Science, 2013, 128, 2961-2970.	2.6	13
50	Thermal analysis of polymer layered silicate nanocomposites. Journal of Thermal Analysis and Calorimetry, 2014, 118, 723-729.	3.6	13
51	Elastomeric epoxy nanocomposites: Nanostructure and properties. Composites Science and Technology, 2012, 72, 640-646.	7.8	12
52	Temperature modulated differential scanning calorimetry. Part III. Effect of heat transfer on phase angle in quasi-isothermal ADSC. Thermochimica Acta, 1999, 336, 27-40.	2.7	11
53	Vitrification and devitrification during the non-isothermal cure of a thermoset. Journal of Thermal Analysis and Calorimetry, 2010, 99, 925-929.	3.6	11
54	The appearance of annealing pre-peaks in inorganic glasses: new experimental results and theoretical interpretation. Journal of Non-Crystalline Solids, 1994, 172-174, 584-591.	3.1	10

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55	Physical aging and enthalpy relaxation in polypropylene. Journal of Non-Crystalline Solids, 1994, 172-174, 592-596.	3.1	10
56	The surface modification of boron nitride particles. Journal of Thermal Analysis and Calorimetry, 2021, 143, 151-163.	3.6	10
57	Remarkable Thermal Conductivity of Epoxy Composites Filled with Boron Nitride and Cured under Pressure. Polymers, 2021, 13, 955.	4.5	10
58	Isothermal curing of polymer layered silicate nanocomposites based upon epoxy resin by means of anionic homopolymerisation. Thermochimica Acta, 2013, 574, 98-108.	2.7	9
59	Comparison of the Nanostructure and Mechanical Performance of Highly Exfoliated Epoxy-Clay Nanocomposites Prepared by Three Different Protocols. Materials, 2014, 7, 4196-4223.	2.9	9
60	Highly exfoliated nanostructure in trifunctional epoxy/clay nanocomposites using boron trifluoride as initiator. Journal of Applied Polymer Science, 2014, 131, .	2.6	9
61	Epoxy composites filled with boron nitride: cure kinetics and the effect of particle shape on the thermal conductivity. Journal of Thermal Analysis and Calorimetry, 2020, 142, 595-605.	3.6	9
62	Title is missing!. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 2001, 64, 85-107.	1.4	8
63	On the use of a density gradient column to monitor the physical ageing of polystyrene. Polymer, 1992, 33, 4875-4877.	3.8	7
64	Study of the Molecular Dynamics of Multiarm Star Polymers with a Poly(ethyleneimine) Core and Poly(lactide) Multiarms. Materials, 2017, 10, 127.	2.9	6
65	Structural recovery in glass. Journal of Non-Crystalline Solids, 1989, 108, 225-232.	3.1	5
66	On the application of the Adamâ€“Gibbs equation to the non-equilibrium glassy state. Journal of Non-Crystalline Solids, 2002, 307-310, 412-416.	3.1	5
67	Non-isothermal cure and exfoliation of tri-functional epoxy-clay nanocomposites. EXPRESS Polymer Letters, 2015, 9, 695-708.	2.1	5
68	Densification: A Route towards Enhanced Thermal Conductivity of Epoxy Composites. Polymers, 2021, 13, 286.	4.5	5
69	The application of thermal analysis to the study of epoxyâ€“clay nanocomposites. Journal of Thermal Analysis and Calorimetry, 2016, 125, 617-628.	3.6	4
70	A novel comparative study of different layered silicate clay types on exfoliation process and final nanostructure of trifunctional epoxy nanocomposites. Polymer Testing, 2016, 56, 148-155.	4.8	3
71	Comparative results between three protocols for achieving highly exfoliated epoxy-clay nanocomposites. Polimery, 2014, 59, 636-642.	0.7	2
72	Determination of the Glass Transition by DSC: A Comparison of Conventional and Dynamic Techniques. Hot Topics in Thermal Analysis and Calorimetry, 2012, , 135-146.	0.5	0