

# eric Dargent

## List of Publications by Year in descending order

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90  
papers

2,262  
citations

172386

29  
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265120

42  
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90  
docs citations

90  
times ranked

2052  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mobile amorphous phase fragility in semi-crystalline polymers: Comparison of PET and PLLA. <i>Polymer</i> , 2007, 48, 1012-1019.	1.8	138
2	Water Barrier Properties in Biaxially Drawn Poly(lactic acid) Films. <i>Journal of Physical Chemistry B</i> , 2012, 116, 4615-4625.	1.2	106
3	Cooperative rearranging region size in semi-crystalline poly(l-lactic acid). <i>Polymer</i> , 2008, 49, 3130-3135.	1.8	73
4	Cooperativity length evolution during crystallization of poly(lactic acid). <i>European Polymer Journal</i> , 2011, 47, 2414-2423.	2.6	70
5	Structural Dependence of the Molecular Mobility in the Amorphous Fractions of Polylactide. <i>Macromolecules</i> , 2014, 47, 5186-5197.	2.2	62
6	Strain-induced crystallization in uniaxially drawn PETG plates. <i>Journal of Applied Polymer Science</i> , 2001, 81, 3405-3412.	1.3	56
7	Three phase model in drawn thermoplastic polyesters: comparison of differential scanning calorimetry and thermally stimulated depolarisation current experiments. <i>Polymer</i> , 2002, 43, 1399-1405.	1.8	55
8	Quantifying Polymer Chain Orientation in Strong and Tough Nanofibers with Low Crystallinity: Toward Next Generation Nanostructured Superfibers. <i>ACS Nano</i> , 2019, 13, 4893-4927.	7.3	55
9	Microstructure and barrier properties of PHBV/organoclays bionanocomposites. <i>Journal of Membrane Science</i> , 2014, 467, 56-66.	4.1	54
10	From a Three-Phase Model to a Continuous Description of Molecular Mobility in Semicrystalline Poly(hydroxybutyrate-co-l-hydroxyvalerate). <i>Macromolecules</i> , 2016, 49, 4850-4861.	2.2	54
11	Cooperative rearranging region size determination by temperature modulated DSC in semi-crystalline poly(l-lactide acid). <i>European Polymer Journal</i> , 2007, 43, 4675-4682.	2.6	53
12	Structure and Barrier Properties of Biodegradable Polyhydroxyalkanoate Films. <i>Journal of Physical Chemistry C</i> , 2014, 118, 6165-6177.	1.5	46
13	Effect of macromolecular orientation on the structural relaxation mechanisms of poly(ethylene Tj ETQq1 1 0.784314 rgBT /Overlock	1.8	44
14	Physical aging in PLA through standard DSC and fast scanning calorimetry investigations. <i>Thermochimica Acta</i> , 2017, 648, 13-22.	1.2	44
15	Study of poly(bisphenol A carbonate) relaxation kinetics at the glass transition temperature. <i>European Polymer Journal</i> , 2007, 43, 249-254.	2.6	43
16	Molecular mobility and physical ageing of plasticized poly(lactide). <i>Polymer Engineering and Science</i> , 2015, 55, 858-865.	1.5	42
17	Combining Flash DSC, DSC and broadband dielectric spectroscopy to determine fragility. <i>Journal of Thermal Analysis and Calorimetry</i> , 2015, 121, 453-461.	2.0	42
18	Probing the chain segment mobility at the interface of semi-crystalline polylactide/clay nanocomposites. <i>European Polymer Journal</i> , 2016, 78, 274-289.	2.6	41

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19	Evidence of Cooperative Rearranging Region size anisotropy for drawn PET. <i>European Polymer Journal</i> , 2008, 44, 3377-3384.	2.6	40
20	Thermal behaviour of drawn semicrystalline poly(ethylene terephthalate) films. <i>Journal of Thermal Analysis</i> , 1994, 41, 1409-1415.	0.7	39
21	Effect of boron nitride as a nucleating agent on the crystallization of bacterial poly(3-hydroxybutyrate). <i>Journal of Applied Polymer Science</i> , 2013, 128, 2586-2594.	1.3	39
22	Glass Transition Temperature and Value of the Relaxation Time at $T_g$ in Vitreous Polymers. <i>Macromolecular Symposia</i> , 2007, 258, 152-161.	0.4	38
23	Evidence of two mobile amorphous phases in semicrystalline polylactide observed from calorimetric investigations. <i>Polymer Engineering and Science</i> , 2014, 54, 1144-1150.	1.5	37
24	Molecular Mobility in Amorphous Biobased Poly(ethylene 2,5-furandicarboxylate) and Poly(ethylene terephthalate). <i>Polymer</i> , 2015, 56, 1000-1008.	2.2	33
25	Fragility index of drawn or annealed poly(ethylene terephthalate) films studied by thermally stimulated depolarisation currents. <i>Polymer</i> , 2003, 44, 3995-4001.	1.8	32
26	New hybrid membranes for fuel cells: Plasma treated IAPONITE based sulfonated polysulfone. <i>Journal of Membrane Science</i> , 2010, 351, 1-10.	4.1	32
27	Structure-property relationship of biodegradable poly(butylene succinate) and poly[(butylene succinate)-co-(butylene adipate)] nanocomposites: influence of the rigid amorphous fraction. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 29918-29934.	1.3	32
28	Molecular dynamics in electrospun amorphous plasticized polylactide fibers. <i>Polymer</i> , 2015, 73, 68-78.	1.8	31
29	Segmental mobility and glass transition of poly(ethylene-vinyl acetate) copolymers: Is there a continuum in the dynamic glass transitions from PVAc to PE?. <i>Polymer</i> , 2015, 76, 213-219.	1.8	31
30	Improvement of barrier properties of bio-based polyester nanocomposite membranes by water-assisted extrusion. <i>Journal of Membrane Science</i> , 2015, 496, 185-198.	4.1	29
31	Physical ageing and molecular mobilities of sulfonated polysulfone for proton exchange membranes. <i>Thermochimica Acta</i> , 2010, 509, 18-23.	1.2	27
32	Dielectric relaxations in polyhydroxyalkanoates/organoclay nanocomposites. <i>European Polymer Journal</i> , 2013, 49, 3434-3444.	2.6	27
33	Crystallization kinetics and molecular mobility of an amorphous active pharmaceutical ingredient: A case study with Biclotymol. <i>International Journal of Pharmaceutics</i> , 2015, 490, 248-257.	2.6	27
34	Poly[(butylene succinate)-co-(butylene adipate)]-Montmorillonite Nanocomposites Prepared by Water-Assisted Extrusion: Role of the Dispersion Level and of the Structure-Microstructure on the Enhanced Barrier Properties. <i>Journal of Physical Chemistry C</i> , 2016, 120, 13234-13248.	1.5	27
35	Amorphous phase dynamics at the glass transition in drawn semi-crystalline polyester. <i>Journal of Thermal Analysis and Calorimetry</i> , 2009, 97, 541-546.	2.0	25
36	Contribution of chain alignment and crystallization in the evolution of cooperativity in drawn polymers. <i>Polymer</i> , 2014, 55, 2882-2889.	1.8	25

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37	Synthesis and Thermal Properties of Bio-Based Copolyesters from the Mixtures of 2,5- and 2,4-Furandicarboxylic Acid with Different Diols. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18505-18516.	3.2	25
38	Transformation of an active pharmaceutical ingredient upon high-energy milling: A process-induced disorder in Biclotymol. <i>International Journal of Pharmaceutics</i> , 2016, 499, 67-73.	2.6	24
39	Dielectric relaxations in drawn semi-crystalline poly(ethylene terephthalate). <i>Journal of Non-Crystalline Solids</i> , 1994, 172-174, 1062-1065.	1.5	23
40	Relationship between Draw Ratio and Strain-Induced Crystallinity in Uniaxially Hot-Drawn PET MXD6 Films. <i>Journal of Plastic Film and Sheeting</i> , 2005, 21, 233-251.	1.3	23
41	Multifunctional hydrolyzed EVA membranes with tunable microstructure and water barrier properties. <i>Journal of Membrane Science</i> , 2015, 480, 93-103.	4.1	23
42	Determination of the equilibrium enthalpy of melting of two-phase semi-crystalline polymers by fast scanning calorimetry. <i>Thermochimica Acta</i> , 2019, 677, 67-78.	1.2	23
43	Molecular mobility of amorphous <i>N</i> -acetyl- $\pm$ -methylbenzylamine and Debye relaxation evidenced by dielectric relaxation spectroscopy and molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 702-717.	1.3	23
44	Influence of crystallinity on the dielectric relaxations of poly(butylene succinate) and poly[(butylene) Tj ETQq0 0 0 rBT /Overlock 10 Tf	2.6	21
45	Crystallization and melting behaviour of poly( <i>m</i> -xylene adipamide). <i>Journal of Thermal Analysis and Calorimetry</i> , 2006, 85, 409-415.	2.0	20
46	Permeation Properties of Poly( <i>m</i> -xylene adipamide) Membranes. <i>Journal of Physical Chemistry B</i> , 2009, 113, 3445-3452.	1.2	20
47	Vitrification of PLA by fast scanning calorimetry: Towards unique glass above critical cooling rate?. <i>Thermochimica Acta</i> , 2017, 658, 47-54.	1.2	20
48	Rigid amorphous fraction versus oriented amorphous fraction in uniaxially drawn polyesters. <i>European Polymer Journal</i> , 2014, 58, 233-244.	2.6	18
49	Molecular Relaxations in Supercooled Liquid and Glassy States of Amorphous Quinidine: Dielectric Spectroscopy and Density Functional Theory Approaches. <i>Journal of Physical Chemistry B</i> , 2016, 120, 7579-7592.	1.2	18
50	Poly(3-hydroxybutyrate-co-4-hydroxybutyrate) based nanocomposites: influence of the microstructure on the barrier properties. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 11313-11323.	1.3	17
51	Cooperativity Scaling and Free Volume in Plasticized Polylactide. <i>Macromolecules</i> , 2019, 52, 6107-6115.	2.2	17
52	Effects of Size and Specific Surface Area of Boron Nitride Particles on the Crystallization of Bacterial Poly(3-hydroxybutyrate-co-3-hydroxyvalerate). <i>Macromolecular Symposia</i> , 2013, 328, 8-19.	0.4	16
53	Layered Poly(ethylene-co-vinyl acetate)/Poly(ethylene-co-vinyl alcohol) Membranes with Enhanced Water Separation Selectivity and Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 6411-6423.	4.0	15
54	Reduced physical aging rates of polylactide in polystyrene/polylactide multilayer films from fast scanning calorimetry. <i>Polymer</i> , 2018, 150, 1-9.	1.8	15

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55	Local and segmental motions of the mobile amorphous fraction in semi-crystalline polylactide crystallized under quiescent and flow-induced conditions. <i>Polymer</i> , 2017, 126, 141-151.	1.8	13
56	Investigation of Drug-Excipient Interactions in Biclodym Amorphous Solid Dispersions. <i>Molecular Pharmaceutics</i> , 2018, 15, 1112-1125.	2.3	13
57	Effect of water molecules on crystallization during uniaxial drawing of poly(ethylene terephthalate) films. <i>Journal of Applied Polymer Science</i> , 2000, 77, 1056-1066.	1.3	12
58	Insights on the Physical State Reached by an Active Pharmaceutical Ingredient upon High-Energy Milling. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5142-5150.	1.2	12
59	Reducing the Gap between the Activation Energy Measured in the Liquid and the Glassy States by Adding a Plasticizer to Polylactide. <i>ACS Omega</i> , 2018, 3, 17092-17099.	1.6	12
60	Characterization of polyethylene terephthalate films drawn in hot water. <i>Polymer Engineering and Science</i> , 2004, 44, 223-230.	1.5	11
61	Barrier properties and microstructure modifications induced by liquid water for a semiaromatic polyamide. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 2604-2616.	2.4	11
62	Average size of cooperative rearranging regions and fragility in a drawn poly(ethylene terephthalate) at the glass transition. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 345-349.	1.5	11
63	Vitrification of two active pharmaceutical ingredients by fast scanning calorimetry: From structural relaxation to nucleation phenomena. <i>International Journal of Pharmaceutics</i> , 2018, 536, 426-433.	2.6	11
64	Crystallization from the Amorphous State of a Pharmaceutical Compound: Impact of Chirality and Chemical Purity. <i>Crystal Growth and Design</i> , 2017, 17, 337-346.	1.4	10
65	Compactness/density assessment of newly-paved highway containing recycled asphalt pavement by means of non-nuclear method. <i>Construction and Building Materials</i> , 2017, 154, 1151-1163.	3.2	10
66	Effect of Random Ethylene Comonomer on Relaxation of Flow-Induced Precursors in Isotactic Polypropylene. <i>Macromolecules</i> , 2017, 50, 6396-6403.	2.2	10
67	Molecular mobility in amorphous biobased copolyesters obtained with 2,5- and 2,4-furandicarboxylate acid. <i>Polymer</i> , 2021, 213, 123225.	1.8	10
68	Rock permittivity characterization and application of electromagnetic mixing models for density/compactness assessment of HMA by means of step-frequency radar. <i>Near Surface Geophysics</i> , 2016, 14, 551-562.	0.6	8
69	Molecular Mobility of an Amorphous Chiral Pharmaceutical Compound: Impact of Chirality and Chemical Purity. <i>Journal of Physical Chemistry B</i> , 2017, 121, 7729-7740.	1.2	8
70	Impact of chirality on the Glass Forming Ability and the crystallization from the amorphous state of 5-ethyl-5-methylhydantoin, a chiral poor glass former. <i>International Journal of Pharmaceutics</i> , 2018, 540, 11-21.	2.6	8
71	Fabrication and characterization of multi-filament copper matrix-polyethylene fibres composite wire. <i>Composites Science and Technology</i> , 2009, 69, 1218-1224.	3.8	7
72	Evidence of cooperativity length anisotropy in drawn polymers. <i>Materials Letters</i> , 2014, 128, 12-14.	1.3	7

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73	Structural and Barrier Properties of Compatibilized PE/PA6 Multinanolayer Films. <i>Membranes</i> , 2021, 11, 75.	1.4	7
74	Title is missing!. <i>Magyar Árvíz Képzelmények</i> , 2002, 68, 5-13.	1.4	6
75	Chirality impact on physical ageing: An original case of a small organic molecule. <i>Materials Letters</i> , 2018, 228, 141-144.	1.3	6
76	Thermal Properties Evolution of PCB FR4 Epoxy Composites for Mechatronic During Very Long Ageing. <i>Macromolecular Symposia</i> , 2012, 315, 143-151.	0.4	5
77	Influence of very long aging on the relaxation behavior of flame-retardant printed circuit board epoxy composites under mechatronic conditions. <i>Journal of Applied Polymer Science</i> , 2013, 130, 786-792.	1.3	5
78	Optimization of experimental conditions for the monitoring of nucleation and growth of racemic Diprophylline from the supercooled melt. <i>Journal of Crystal Growth</i> , 2017, 472, 11-17.	0.7	5
79	Water-Induced Breaking of Interfacial Cohesiveness in a Poly(lactic acid)/Miscanthus Fibers Biocomposite. <i>Polymers</i> , 2021, 13, 2285.	2.0	5
80	Crystallisation and molecular mobilities in liquid and glassy states of a MXD6 polyamide. <i>Composite Interfaces</i> , 2006, 13, 403-413.	1.3	4
81	Temperature dependence of structural relaxation time in drawn polymers: Which is the role of cooperativity?. , 2012, , .		4
82	Correlated and cooperative motions in segmental relaxation: Influence of constitutive unit weight and intermolecular interactions. <i>Physical Review E</i> , 2016, 94, 062502.	0.8	4
83	Relaxation dynamics in plasticized polylactide. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	4
84	Dielectric and calorimetric signatures of chain orientation in strong and tough ultrafine electrospun polyacrylonitrile. <i>Polymer</i> , 2019, 178, 121638.	1.8	4
85	Microstructural modifications in uniaxially hot-drawn polycyclohexylene terephthalate films. <i>Polymer Engineering and Science</i> , 2004, 44, 509-517.	1.5	3
86	Microstructural properties and dielectric relaxations of partially fluorinated copolymers. <i>Polymer</i> , 2018, 157, 50-58.	1.8	2
87	Segmental Relaxation Dynamics in Amorphous Polylactide Exposed to UV Light. <i>Macromolecular Chemistry and Physics</i> , 0, , 2200085.	1.1	2
88	Vibroacoustic Behaviour in Biosourced Composites. <i>Macromolecular Symposia</i> , 2013, 328, 56-63.	0.4	1
89	Water Diffusion Mechanisms in New Bio-Nanocomposites Based on Polyhydroxyalkanoates/Nanoclays. <i>Advanced Materials Research</i> , 2013, 747, 682-685.	0.3	1
90	Parametric study of the compactness assessment of a new road containing recycled asphalt pavement through non-nuclear method. , 2017, , .		0