

Maria Laura Di Lorenzo

List of Publications by Year in descending order

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110
papers

6,144
citations

81900

39
h-index

69250

77
g-index

114
all docs

114
docs citations

114
times ranked

4424
citing authors

#	ARTICLE	IF	CITATIONS
1	ICTAC Kinetics Committee recommendations for collecting experimental thermal analysis data for kinetic computations. <i>Thermochimica Acta</i> , 2014, 590, 1-23.	2.7	929
2	Non-isothermal crystallization of polymers. <i>Progress in Polymer Science</i> , 1999, 24, 917-950.	24.7	500
3	Crystallization behavior of poly(l-lactic acid). <i>European Polymer Journal</i> , 2005, 41, 569-575.	5.4	263
4	Influence of crystal polymorphism on mechanical and barrier properties of poly(l-lactic acid). <i>European Polymer Journal</i> , 2011, 47, 1073-1080.	5.4	241
5	Mesophases in polyethylene, polypropylene, and poly(1-butene). <i>Polymer</i> , 2010, 51, 4639-4662.	3.8	237
6	Calorimetric analysis of the multiple melting behavior of poly(L-lactic acid). <i>Journal of Applied Polymer Science</i> , 2006, 100, 3145-3151.	2.6	161
7	Spherulite growth rates in binary polymer blends. <i>Progress in Polymer Science</i> , 2003, 28, 663-689.	24.7	160
8	Determination of spherulite growth rates of poly(l-lactic acid) using combined isothermal and non-isothermal procedures. <i>Polymer</i> , 2001, 42, 9441-9446.	3.8	152
9	Enthalpy of melting of α - and β -crystals of poly(l-lactic acid). <i>European Polymer Journal</i> , 2015, 70, 215-220.	5.4	150
10	Melting and crystallization of poly(butylene terephthalate) by temperature-modulated and superfast calorimetry. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2006, 44, 1364-1377.	2.1	123
11	Crystal Nucleation in Glassy Poly(l-lactic acid). <i>Macromolecules</i> , 2013, 46, 6048-6056.	4.8	112
12	Melting of Conformationally Disordered Crystals (β -Phase) of Poly(l-lactic acid). <i>Macromolecular Chemistry and Physics</i> , 2014, 215, 1134-1139.	2.2	106
13	Crystal polymorphism of poly(l-lactic acid) and its influence on thermal properties. <i>Thermochimica Acta</i> , 2011, 522, 110-117.	2.7	103
14	The Role of the Rigid Amorphous Fraction on Cold Crystallization of Poly(3-hydroxybutyrate). <i>Macromolecules</i> , 2012, 45, 5684-5691.	4.8	103
15	Nucleation activity of nanosized CaCO ₃ on crystallization of isotactic polypropylene, in dependence on crystal modification, particle shape, and coating. <i>European Polymer Journal</i> , 2006, 42, 1548-1557.	5.4	101
16	Influence of α - and β -crystal polymorphism on properties of poly(l-lactic acid). <i>Polymer International</i> , 2019, 68, 320-334.	3.1	86
17	The Crystallization and Melting Processes of Poly(L-lactic acid). <i>Macromolecular Symposia</i> , 2006, 234, 176-183.	0.7	84
18	The three-phase structure of isotactic poly(1-butene). <i>Polymer</i> , 2008, 49, 1323-1331.	3.8	81

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19	Effect of Aging the Glass of Isotactic Polybutene-1 on Form II Nucleation and Cold Crystallization. <i>Journal of Physical Chemistry B</i> , 2013, 117, 15196-15203.	2.6	78
20	Kinetics of crystal nucleation of poly(L-lactic acid). <i>Polymer</i> , 2013, 54, 6882-6885.	3.8	77
21	Conformationally disordered crystals and their influence on material properties: The cases of isotactic polypropylene, isotactic poly(1-butene), and poly(l-lactic acid). <i>Journal of Molecular Structure</i> , 2014, 1078, 114-132.	3.6	77
22	Crystal nucleation in random l/d-lactide copolymers. <i>European Polymer Journal</i> , 2016, 75, 474-485.	5.4	68
23	Influence of chain structure on crystal polymorphism of poly(lactic acid). Part 1: effect of optical purity of the monomer. <i>Colloid and Polymer Science</i> , 2014, 292, 399-409.	2.1	66
24	The Low-Temperature Endotherm in Poly(ethylene terephthalate): Partial Melting and Rigid Amorphous Fraction Mobilization. <i>Journal of Physical Chemistry B</i> , 2008, 112, 4233-4241.	2.6	59
25	Poly(butylene succinate)-based composites containing β -cyclodextrin/d-limonene inclusion complex. <i>European Polymer Journal</i> , 2016, 79, 82-96.	5.4	59
26	Influence of modified atmosphere packaging on postharvest quality of cherry tomatoes held at 20 °C. <i>Postharvest Biology and Technology</i> , 2016, 115, 103-112.	6.0	58
27	Nonisothermal Crystallization of Isotactic Polypropylene Blended with Poly(α -pinene). 2. Growth Rates. <i>Macromolecules</i> , 2000, 33, 3828-3832.	4.8	57
28	Coupling between Crystal Melting and Rigid Amorphous Fraction Mobilization in Poly(ethylene terephthalate). <i>Journal of Physical Chemistry B</i> , 2008, 112, 1075-1081.	4.8	56
29	Influence of Crystal Polymorphism on the Three-Phase Structure and on the Thermal Properties of Isotactic Poly(1-butene). <i>Macromolecules</i> , 2009, 42, 9312-9320.	4.8	55
30	Temperature dependence of the rigid amorphous fraction in poly(ethylene terephthalate). <i>European Polymer Journal</i> , 2014, 58, 60-68.	5.4	54
31	Enthalpy-based determination of crystalline, mobile amorphous and rigid amorphous fractions in semicrystalline polymers. <i>Thermochimica Acta</i> , 2007, 462, 15-24.	2.7	53
32	Crystalline, mobile amorphous and rigid amorphous fractions in isotactic polystyrene. <i>European Polymer Journal</i> , 2008, 44, 2659-2667.	5.4	51
33	Crystallization of poly(butylene terephthalate). <i>Polymer Engineering and Science</i> , 2003, 43, 1889-1894.	3.1	49
34	The Role of the Crystallization Temperature on the Nanophase Structure Evolution of Poly[(S)-3-hydroxybutyrate]. <i>Journal of Physical Chemistry B</i> , 2013, 117, 12303-12311.	2.6	49
35	Kinetics of Nucleation and Growth of Crystals of Poly(l-lactic acid). <i>Advances in Polymer Science</i> , 2017, , 235-272.	0.8	46
36	Optical Microscopy to Study Crystal Nucleation in Polymers Using a Fast Scanning Chip Calorimeter for Precise Control of the Nucleation Pathway. <i>Macromolecular Chemistry and Physics</i> , 2018, 219, 1700479.	2.2	45

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37	The melting process and the rigid amorphous fraction of cis-1,4-polybutadiene. <i>Polymer</i> , 2009, 50, 578-584.	3.8	43
38	Calorimetry of nanophase-separated poly(oligoamide-alt-oligoether)s. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 1594-1604.	2.1	40
39	Miscibility and properties of poly(l-lactic acid)/poly(butylene terephthalate) blends. <i>European Polymer Journal</i> , 2013, 49, 3309-3317.	5.4	40
40	The irreversible Form II to Form I transformation in random butene-1/ethylene copolymers. <i>European Polymer Journal</i> , 2015, 67, 264-273.	5.4	40
41	Effect of thermal history on the evolution of crystal and amorphous fractions of poly[(R)-3-hydroxybutyrate] upon storage at ambient temperature. <i>European Polymer Journal</i> , 2013, 49, 510-517.	5.4	38
42	Influence of chain structure on crystal polymorphism of poly(lactic acid). Part 2. Effect of molecular mass on the crystal growth rate and semicrystalline morphology. <i>Colloid and Polymer Science</i> , 2015, 293, 2459-2467.	2.1	37
43	Melting process of poly(butylene terephthalate) analyzed by temperature-modulated differential scanning calorimetry. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2004, 42, 2191-2201.	2.1	36
44	Low-temperature crystallization of poly(butylene succinate). <i>European Polymer Journal</i> , 2017, 94, 384-391.	5.4	36
45	iPP Based Nanocomposites Filled with Calcium Carbonate Nanoparticles: Structure/Properties Relationships. <i>Macromolecular Symposia</i> , 2006, 234, 156-162.	0.7	35
46	Structural Reorganization in Poly(butylene terephthalate) during Fusion. <i>Macromolecules</i> , 2004, 37, 9027-9033.	4.8	34
47	Poly(butylene terephthalate)/poly(ϵ -caprolactone) blends: Miscibility and thermal and mechanical properties. <i>Polymer Engineering and Science</i> , 2007, 47, 323-329.	3.1	34
48	Melting temperature evolution of non-reorganized crystals. Poly(3-hydroxybutyrate). <i>Thermochimica Acta</i> , 2011, 512, 59-66.	2.7	34
49	Stability and Reorganization of β -Crystals in Random l - d -Lactide Copolymers. <i>Macromolecular Chemistry and Physics</i> , 2016, 217, 1534-1538.	2.2	34
50	Physical Aging and Glass Transition of the Rigid Amorphous Fraction in Poly(l-lactic acid). <i>Macromolecules</i> , 2020, 53, 8741-8750.	4.8	34
51	Binary Green Blends of Poly(lactic acid) with Poly(butylene adipate-co-butylene terephthalate) and Poly(butylene succinate-co-butylene adipate) and Their Nanocomposites. <i>Polymers</i> , 2021, 13, 2489.	4.5	33
52	Effect of molar mass on enthalpy relaxation and crystal nucleation of poly(l-lactic acid). <i>European Polymer Journal</i> , 2017, 96, 361-369.	5.4	32
53	Nonisothermal crystallization of isotactic polypropylene blended with poly(α -pinene). I. Bulk crystallization. <i>Journal of Applied Polymer Science</i> , 2001, 82, 358-367.	2.6	30
54	Melting of polymers by non-isothermal, temperature-modulated calorimetry: analysis of various irreversible latent heat contributions to the reversing heat capacity. <i>Thermochimica Acta</i> , 2003, 405, 255-268.	2.7	30

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55	Irregularly shaped DSC exotherms in the analysis of polymer crystallization. <i>Polymer Bulletin</i> , 2006, 57, 713-721.	3.3	30
56	Poly(butylene terephthalate)/poly(ϵ -caprolactone) blends: Influence of PCL molecular mass on PBT melting and crystallization behavior. <i>European Polymer Journal</i> , 2007, 43, 4726-4738.	5.4	30
57	Crystallization-induced formation of rigid amorphous fraction. <i>Polymer Crystallization</i> , 2018, 1, e10023.	0.8	30
58	Isotactic polypropylene modified with sorbitol-based derivative and siloxane-silsesquioxane resin. <i>European Polymer Journal</i> , 2016, 85, 62-71.	5.4	28
59	Effect of molar mass on the T_g -transition in poly(L-lactic acid). <i>Polymer</i> , 2017, 114, 144-148.	3.8	28
60	Crystallization of isotactic polypropylene/natural terpene resins blends. <i>Polymer</i> , 1999, 40, 5119-5128.	3.8	27
61	Tailoring the rigid amorphous fraction of isotactic polybutene-1 by ethylene chain defects. <i>Polymer</i> , 2014, 55, 6132-6139.	3.8	27
62	Rigid amorphous fraction and melting behavior of poly(ethylene terephthalate). <i>Colloid and Polymer Science</i> , 2014, 292, 1365-1374.	2.1	27
63	Crystal Structure of Form III of Syndiotactic Poly(p-methylstyrene). <i>Macromolecules</i> , 1995, 28, 5507-5511.	4.8	26
64	Evolution of crystal and amorphous fractions of poly[(R)-3-hydroxybutyrate] upon storage. <i>Journal of Thermal Analysis and Calorimetry</i> , 2013, 112, 1439-1446.	3.6	26
65	Influence of crosslinker and ionic comonomer concentration on glass transition and demixing/mixing transition of copolymers poly(N-isopropylacrylamide) and poly(sodium acrylate) hydrogels. <i>Colloid and Polymer Science</i> , 2014, 292, 485-492.	2.1	26
66	Peculiar crystallization kinetics of biodegradable poly(lactic acid)/poly(propylene carbonate) blends. <i>Polymer Engineering and Science</i> , 2015, 55, 2698-2705.	3.1	26
67	Reversible and irreversible heat capacity of poly[carbonyl(ethylene-co-propylene)] by temperature-modulated calorimetry. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 1565-1577.	2.1	25
68	Poly(L-Lactic Acid)/Poly(Butylene Succinate) Biobased Biodegradable Blends. <i>Polymer Reviews</i> , 2021, 61, 457-492.	10.9	25
69	Isothermal and non-isothermal crystallization of poly(L-lactic acid)/poly(butylene) blends. <i>Polymer</i> , 2001, 42, 2933-2946.	2.6	24
70	Biodegradable electrospun PLLA fibers containing the mosquito-repellent DEET. <i>European Polymer Journal</i> , 2019, 113, 377-384.	5.4	24
71	Blends of polypropylene with poly(vinyl butyral). <i>Journal of Applied Polymer Science</i> , 2001, 82, 2934-2946.	2.6	23
72	Rigid amorphous fraction and multiple melting behavior in poly(butylene terephthalate) and isotactic polystyrene. <i>Journal of Thermal Analysis and Calorimetry</i> , 2016, 126, 521-530.	3.6	23

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73	Reversible melting in nanophase-separated poly(oligoamide-alt-oligoether)s and its dependence on sequence length, crystal perfection, and molecular mobility. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 2969-2981.	2.1	22
74	Polyamide 11/Poly(butylene succinate) Bio-Based Polymer Blends. <i>Materials</i> , 2019, 12, 2833.	2.9	20
75	Spherulite growth rate and fold surface free energy of the form II mesophase in isotactic polybutene-1 and random butene-1/ethylene copolymers. <i>Colloid and Polymer Science</i> , 2014, 292, 1479-1485.	2.1	19
76	Polypropylene-based composites containing sorbitol-based nucleating agent and siloxane-silsesquioxane resin. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	2.6	17
77	Morphological analysis of poly(butylene terephthalate) spherulites during fusion. <i>Polymer Bulletin</i> , 2004, 53, 53-62.	3.3	14
78	N,N-Diethyl-3-methylbenzamide (DEET): A mosquito repellent as functional plasticizer for poly(L-lactic acid) Tj ETQqO 0 0,rgBT /Overlock 10 TF	2.7	14
79	Poly(L-Lactic Acid)/Pine Wood Bio-Based Composites. <i>Materials</i> , 2020, 13, 3776.	2.9	12
80	Thermal and Thermo-Mechanical Properties of Poly(L-lactic Acid) Biocomposites Containing β -Cyclodextrin/d-Limonene Inclusion Complex. <i>Materials</i> , 2021, 14, 2569.	2.9	12
81	Isothermal and nonisothermal crystallization of HDPE composites containing multilayer carton scraps as filler. <i>Journal of Applied Polymer Science</i> , 2012, 125, 3880-3887.	2.6	11
82	Down shifting in poly(vinyl alcohol) gels doped with terbium complex. <i>Journal of Colloid and Interface Science</i> , 2016, 477, 34-39.	9.4	11
83	Measurement of spherulite growth rates using tailored temperature programs. <i>Thermochimica Acta</i> , 2003, 396, 67-73.	2.7	10
84	Optimization of melting conditions for the analysis of crystallization kinetics of poly(3-hydroxybutyrate). <i>E-Polymers</i> , 2009, 9, .	3.0	9
85	Thermoreversible luminescent organogels doped with Eu(TTA) ₃ phen complex. <i>Journal of Colloid and Interface Science</i> , 2013, 398, 95-102.	9.4	9
86	Temperature dependence of the rigid amorphous fraction of poly(butylene succinate). <i>RSC Advances</i> , 2021, 11, 25731-25737.	3.6	9
87	Nonlinear determination of the equilibrium melting temperature from initial nonreorganized crystals of poly(3-hydroxybutyrate). <i>Polymer Engineering and Science</i> , 2012, 52, 2383-2390.	3.1	8
88	Accelerated crystallization of high molar mass poly(L/D-lactic acid) by blending with low molar mass poly(L-lactic acid). <i>European Polymer Journal</i> , 2018, 100, 172-177.	5.4	8
89	Crystallization of Poly[(R)-3-hydroxybutyrate]. <i>Advances in Polymer Science</i> , 2019, , 119-142.	0.8	8
90	Enhancement of crystallization kinetics of poly(L-lactic acid) by grafting with optically pure branches. <i>Polymer</i> , 2021, 227, 123852.	3.8	7

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91	Self-decelerated crystallization in poly(butylene terephthalate)/poly(ϵ -caprolactone) blends. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 3148-3155.	2.1	6
92	Crystallization kinetics of ϵ -polybutadiene. Journal of Applied Polymer Science, 2010, 116, 1408-1413.	2.6	6
93	Vitrification and devitrification of the rigid amorphous fraction in poly(ethylene terephthalate). E-Polymers, 2009, 9, .	3.0	5
94	Glass transition and aging of the rigid amorphous fraction in polymorphic poly(butene-1). Polymer, 2021, 226, 123830.	3.8	5
95	Interfacial enhancement of polypropylene composites modified with sorbitol derivatives and siloxane-silsesquioxane resin. AIP Conference Proceedings, 2015, , .	0.4	4
96	Melting of β - and α -crystals of poly(lactic acid). AIP Conference Proceedings, 2016, , .	0.4	4
97	Analysis of Polymer Crystallization by Calorimetry. Handbook of Thermal Analysis and Calorimetry, 2018, 6, 253-299.	1.6	4
98	Heterogeneous Bubble Nucleation by Homogeneous Crystal Nuclei in Poly(ϵ -Lactic Acid) Foaming. Macromolecular Chemistry and Physics, 2022, 223, .	2.2	4
99	Transient nucleation in isothermal crystallization of poly(3-hydroxybutyrate). E-Polymers, 2009, 9, .	3.0	3
100	Optical, mechanical, and antimicrobial properties of bio-based composites of poly(L-lactic acid) and α -limonene/ β -cyclodextrin inclusion complex. Journal of Applied Polymer Science, 2022, 139, .	2.6	3
101	Phase Diagrams of Smart Copolymers Poly(N-isopropylacrylamide) and Poly(sodium acrylate). Scientific World Journal, The, 2014, 2014, 1-8.	2.1	2
102	Advances in polymer crystallization. Polymer Crystallization, 2018, 1, e10026.	0.8	2
103	OPTIMIZATION OF MELTING CONDITIONS OF POLY(3-HYDROXYBUTYRATE). AIP Conference Proceedings, 2008, , .	0.4	1
104	Study of rheological and mechanical properties of ternary blends of iPP/LDPE/EPDM. Journal of Polymer Engineering, 2012, 32, .	1.4	1
105	Electrospun fibers of poly(l-lactic acid) containing DEET. AIP Conference Proceedings, 2018, , .	0.4	1
106	Competition between crystallization and vitrification of the rigid amorphous fraction in poly(3-hydroxybutyrate). , 2012, , .		0
107	Random butene-1/ethylene copolymers: Influence of composition on the three-phase structure. , 2014, , .		0
108	The irreversible tetragonal to trigonal transformation in random butene-1/ethylene copolymers. AIP Conference Proceedings, 2015, , .	0.4	0

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109	Biodegradable Poly(Butylene Succinate)-Based Composites for Food Packaging. Springer Water, 2018, , 199-204.	0.3	0
110	Crystallization kinetics of blends of two poly(lactic acid) grades with diverse stereoregularity and molar mass. AIP Conference Proceedings, 2018, , .	0.4	0