Ewa Piorkowska

List of Publications by Citations

121 papers	3,801 citations	28 h-index	58 g-index
133 ext. papers	4,161 ext. citations	4.1 avg, IF	5.45 L-index

#	Paper	IF	Citations
121	Crystallization, structure and properties of plasticized poly(l-lactide). *Polymer*, **2005**, 46, 10290-10300	3.9	431
120	Plasticization of poly(L-lactide) with poly(propylene glycol). *Biomacromolecules*, **2006**, 7, 2128-35	6.9	248
119	Functionalization, compatibilization and properties of polypropylene composites with Hemp fibres. *Composites Science and Technology*, **2006**, 66, 2218-2230	8.6	244
118	Plasticization of semicrystalline poly(l-lactide) with poly(propylene glycol). *Polymer*, **2006**, 47, 7178-7188	3.9	232
117	Preparation and properties of compatibilized LDPE/organo-modified montmorillonite nanocomposites. *European Polymer Journal*, **2005**, 41, 1115-1122	5.2	217
116	Composites of poly(L-lactide) with hemp fibers: Morphology and thermal and mechanical properties. *Journal of Applied Polymer Science*, **2007**, 105, 255-268	2.9	172
115	Mechanical and thermal properties of PLA composites with cellulose nanofibers and standard size fibers. *Composites Part A: Applied Science and Manufacturing*, **2011**, 42, 1509-1514	8.4	163
114	Structure and Properties of Homogeneous Copolymers of Propylene and 1-Hexene. *Macromolecules*, **2005**, 38, 1232-1243	5.5	122
113	Critical assessment of overall crystallization kinetics theories and predictions. *Progress in Polymer Science*, **2006**, 31, 549-575	29.6	110
112	Structure of polypropylene crystallized in confined nanolayers. *Journal of Polymer Science, Part B: Polymer Physics*, **2004**, 42, 3380-3396	2.6	84
111	Crystallization of Polyethylene from Melt with Lowered Chain Entanglements. *Macromolecules*, **2000**, 33, 916-932	5.5	84
110	Crystallization of isotactic polypropylene in a temperature gradient. *Colloid and Polymer Science*, **2001**, 279, 939-946	2.4	68
109	A Structure of Copolymers of Propene and Hexene Isomorphous to Isotactic Poly(1-butene) Form I. *Macromolecules*, **2006**, 39, 5777-5781	5.5	67
108	Structure and properties of hybrid PLA nanocomposites with inorganic nanofillers and cellulose fibers. *Composites Part A: Applied Science and Manufacturing*, **2016**, 82, 34-41	8.4	64
107	Mechanical and thermal properties of green polylactide composites with natural fillers. *Macromolecular Bioscience*, **2008**, 8, 1190-200	5.5	61
106	Formation and transformation of smectic polypropylene nanodroplets. *Journal of Polymer Science, Part B: Polymer Physics*, **2006**, 44, 1795-1803	2.6	49
105	Shear-induced crystallization of isotactic polypropylene based nanocomposites with montmorillonite. *European Polymer Journal*, **2009**, 45, 88-101	5.2	41

104	Cavitation during isothermal crystallization of isotactic polypropylene. *Journal of Applied Polymer Science*, **2001**, 79, 2439-2448	2.9	40
103	Size effect of compliant rubbery particles on craze plasticity in polystyrene. *Macromolecules*, **1990**, 23, 3838-3848	5.5	36
102	Biodegradable blends of poly(L-lactide) and starch. *Journal of Applied Polymer Science*, **2007**, 105, 269-277	2.9	35
101	Toughening of polylactide by blending with a novel random aliphatic–aromatic copolyester. *European Polymer Journal*, **2014**, 59, 59-68	5.2	33
100	Modification of cotton fabric with graphene and reduced graphene oxide using sol–gel method. *Cellulose*, **2017**, 24, 4057-4068	5.5	33
99	Acoustic emission during polymer crystallization. *Nature*, **1987**, 325, 40-41	50.4	33
98	Shear-induced nonisothermal crystallization of two grades of PLA. *Polymer Testing*, **2016**, 50, 172-181	4.5	32
97	Melatonin significantly influences seed germination and seedling growth of Bertoni. *PeerJ*, **2018**, 6, e5009	3.1	32
96	PLA/β-CD-based fibres loaded with quercetin as potential antibacterial dressing materials. *Colloids and Surfaces B: Biointerfaces*, **2020**, 190, 110949	6	31
95	Morphology studies of multilayered HDPE/PS systems. *Journal of Applied Polymer Science*, **2006**, 99, 597-612	2.6	30
94	Localized volume deficiencies as an effect of spherulite growth. I. The two-dimensional case. *Journal of Polymer Science, Polymer Physics Edition*, **1983**, 21, 1299-1312		30
93	All-polymer nanocomposites with nanofibrillar inclusions generated in situ during compounding. *Polymer*, **2013**, 54, 4617-4628	3.9	28
92	Izod impact strength of polystyrene-based blends containing low molecular weight polybutadiene. *Polymer*, **1993**, 34, 4435-4444	3.9	28
91	The influence of matrix crystallinity, filler grain size and modification on properties of PLA/calcium carbonate composites. *Polymer Testing*, **2017**, 62, 203-209	4.5	27
90	Nucleation of crystallization in isotactic polypropylene and polyoxymethylene with poly(tetrafluoroethylene) particles. *European Polymer Journal*, **2010**, 46, 1436-1445	5.2	26
89	Acoustic emission during crystallization of polymers. *Journal of Polymer Science, Part B: Polymer Physics*, **1990**, 28, 1171-1186	2.6	26
88	Structure and characterization of random aliphatic–aromatic copolyester. *European Polymer Journal* , **2014**, 55, 86-97	5.2	25
87	Localized volume deficiencies as an effect of spherulite growth. II. The three-dimensional case. *Journal of Polymer Science, Polymer Physics Edition*, **1983**, 21, 1313-1322		25

86	Flow-Induced Crystallization **2013**, 399-432		24
85	Relations between morphology and micromechanical properties of alpha, beta and gamma phases of iPP. *Polymer Testing*, **2018**, 67, 522-532	4.5	23
84	Influence of thermal history on the nonisothermal crystallization of poly(L-lactide). *Journal of Applied Polymer Science*, **2007**, 105, 282-290	2.9	23
83	Statistical description of spherulite patterns. *Journal of Polymer Science, Polymer Physics Edition*, **1985**, 23, 1723-1748		23
82	Novel blends of polylactide with ethylene glycol derivatives of POSS. *Colloid and Polymer Science*, **2015**, 293, 23-33	2.4	22
81	Tough crystalline blends of polylactide with block copolymers of ethylene glycol and propylene glycol. *Polymer Testing*, **2015**, 46, 79-87	4.5	22
80	Modeling of crystallization kinetics in fiber reinforced composites. *Macromolecular Symposia*, **2001**, 169, 143-148	0.8	20
79	Tough and transparent blends of polylactide with block copolymers of ethylene glycol and propylene glycol. *Polymer Testing*, **2015**, 41, 209-218	4.5	19
78	Plasticization of polylactide with block copolymers of ethylene glycol and propylene glycol. *Journal of Applied Polymer Science*, **2012**, 125, 4292-4301	2.9	19
77	Effect of negative pressure on melting behavior of spherulites in thin films of several crystalline polymers. *Journal of Applied Polymer Science*, **1999**, 74, 1380-1385	2.9	19
76	Strain hardening of molten thermoplastic polymers reinforced with poly(tetrafluoroethylene) nanofibers. *Journal of Rheology*, **2014**, 58, 589-605	4.1	18
75	Crystallization of isotactic polypropylene and high-density polyethylene under negative pressure resulting from uncompensated volume change. *Journal of Polymer Science, Part B: Polymer Physics*, **1993**, 31, 1285-1291	2.6	18
74	High Pressure Crystallization of HDPE Droplets. *Macromolecules*, **2008**, 41, 8086-8094	5.5	16
73	Spherulitic structure development during crystallization in confined space II. Effect of spherulite nucleation at borders. *Journal of Applied Polymer Science*, **2005**, 97, 2319-2329	2.9	16
72	Nonisothermal Crystallization of Polymers. 1. The Background of the Mathematical Description of Spherulitic Pattern Formation. *The Journal of Physical Chemistry*, **1995**, 99, 14007-14015		16
71	Nonisothermal shear-induced crystallization of polypropylene-based composite materials with montmorillonite. *European Polymer Journal*, **2013**, 49, 2109-2119	5.2	15
70	Nucleation of isotactic polypropylene crystallization by gold nanoparticles. *Journal of Polymer Science, Part B: Polymer Physics*, **2010**, 48, 469-478	2.6	15
69	Nonisothermal crystallization of polymers in samples of finite dimensions. *Colloid and Polymer Science*, **1997**, 275, 1046-1059	2.4	15

68	Modeling of polymer crystallization in a temperature gradient. *Journal of Applied Polymer Science*, **2002**, 86, 1351-1362	2.9	15
67	Nucleation of crystallization of isotactic polypropylene in the gamma form under high pressure in nonisothermal conditions. *European Polymer Journal*, **2016**, 85, 564-574	5.2	14
66	Polylactide composites with waste cotton fibers: Thermal and mechanical properties. *Polymer Composites*, **2014**, 35, 747-751	3	14
65	Method of determining the kinetics of spherulite primary nucleation from the truncation of spherulites. *Polymer Bulletin*, **1979**, 1, 275-279	2.4	14
64	Modification of dual-component fibrous materials with carbon nanotubes and methyltrichlorosilane. *Materials and Design*, **2019**, 162, 219-228	8.1	14
63	Nonisothermal Crystallization of Polymers. 2. The Mathematical Description of Spherulitic Pattern Formation. *The Journal of Physical Chemistry*, **1995**, 99, 14016-14023		13
62	Influence of sample thickness and surface nucieation on i-PP crystallization kinetics in DSC measurements. *Polimery*, **2003**, 48, 790-799	3.4	13
61	The effect of halloysite nanotubes and N,N'- ethylenebis (stearamide) on the properties of polylactide nanocomposites with amorphous matrix. *Polymer Testing*, **2017**, 61, 35-45	4.5	12
60	Influence of solid particles on cavitation in poly(methylene oxide) during crystallization. *Journal of Applied Polymer Science*, **2007**, 105, 1053-1062	2.9	12
59	Nonisothermal Crystallization of Polymers. 3. The Mathematical Description of the Final Spherulitic Pattern. *The Journal of Physical Chemistry*, **1995**, 99, 14024-14031		12
58	Statistical approach to the description of spherulite patterns. Two-and three-dimensional cases. *Colloid and Polymer Science*, **1983**, 261, 1-8	2.4	12
57	Mechanisms of plastic deformation in biodegradable polylactide/poly(1,4-cis-isoprene) blends. *Journal of Applied Polymer Science*, **2011**, 124, n/a-n/a	2.9	11
56	Electrically conductive composite textiles modified with graphene using sol-gel method. *Journal of Alloys and Compounds*, **2019**, 784, 22-28	5.7	11
55	Electrically conductive and hydrophobic rGO-containing organosilicon coating of cotton fabric. *Progress in Organic Coatings*, **2019**, 137, 105312	4.8	10
54	Nucleation and crystallization of random aliphatic-butylene terephtalate copolyester. *European Polymer Journal*, **2015**, 71, 289-303	5.2	10
53	The role of nucleating agents in high-pressure-induced gamma crystallization in isotactic polypropylene. *Colloid and Polymer Science*, **2015**, 293, 665-675	2.4	10
52	Modeling of polymer crystallization in plates, pipes, and rods during cooling. *Journal of Applied Polymer Science*, **2002**, 86, 1363-1372	2.9	10
51	Method of determining the kinetics of spherulite primary nucleation from the spherulite shapes in bulk samples. *Polymer Bulletin*, **1980**, 2, 1-6	2.4	10

50	Conductive cotton fabric through thermal reduction of graphene oxide enhanced by commercial antioxidants used in the plastics industry. *Cellulose*, **2019**, 26, 2191-2199	5.5	10
49	The effect of halloysite nanotubes and N,N?-ethylenebis (stearamide) on morphology and properties of polylactide nanocomposites with crystalline matrix. *Polymer Testing*, **2017**, 64, 83-91	4.5	9
48	Conductive and superhydrophobic cotton fabric through pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate) assisted thermal reduction of graphene oxide and modification with methyltrichlorosilane. *Cellulose*, **2018**, 25, 5377-5388	5.5	9
47	Crystallization, structure and properties of polylactide/ladder poly(silsesquioxane) blends. *Polymer*, **2020**, 201, 122563	3.9	8
46	Nucleation of Polypropylene Crystallization with Gold Nanoparticles. Part 2: Relation between Particle Morphology and Nucleation Activity. *Journal of Macromolecular Science - Physics*, **2016**, 55, 393-410	1.4	8
45	On the structure and nucleation mechanism in nucleated isotactic polypropylene crystallized under high pressure. *Polymer*, **2018**, 151, 179-186	3.9	8
44	Overall Crystallization Kinetics **2013**, 215-236		8
43	High-pressure crystallization of isotactic polypropylene droplets. *Colloid and Polymer Science*, **2012**, 290, 1599-1607	2.4	8
42	Thermal effects due to polymer crystallization. *Journal of Applied Polymer Science*, **1997**, 66, 1015-1028	2.9	8
41	Shear-induced non-isothermal crystallization of poly(butylene adipate-co-terephthalate). *Polymer Testing*, **2020**, 85, 106420	4.5	7
40	Novel Tough Crystalline Blends of Polylactide with Ethylene Glycol Derivative of POSS. *Journal of Polymers and the Environment*, **2018**, 26, 145-151	4.5	7
39	Toughening of syndiotactic polypropylene with chalk. *Journal of Applied Polymer Science*, **2016**, 133,	2.9	7
38	Melting **2013**, 265-286		7
37	Polypropylene Nanocomposites Preparation and Properties. *Solid State Phenomena*, **2003**, 94, 335-338	0.4	7
36	Heat conduction anisotropy of drawn high density polyethylene samples. *Colloid and Polymer Science*, **1982**, 260, 735-741	2.4	7
35	The influence of crystallization conditions on the macromolecular structure and strength of polypropylene. *Thermochimica Acta*, **2019**, 677, 131-138	2.9	6
34	Crystallization in Processing Conditions **2013**, 433-462		6
33	Crystallization in Polymer Composites and Nanocomposites **2013**, 379-398		6

32	Influence of the liberation of heat of fusion on the temperature near the crystallization front in polymers. *Polymer*, **1992**, 33, 3985-3989	3.9	6
31	Nanocomposites of polypropylene and polyethylene with montmorillonite type clays. *Polimery*, **2004**, 49, 240-247	3.4	6
30	Crystallization kinetics of polymer fibrous nanocomposites. *European Polymer Journal*, **2016**, 83, 181-201	5.2	6
29	Stiff Biodegradable Polylactide Composites with Ultrafine Cellulose Filler. *Journal of Polymers and the Environment*, **2017**, 25, 74-80	4.5	5
28	Spherulitic structure development during crystallization in a finite volume. *Journal of Applied Polymer Science*, **2002**, 86, 1373-1385	2.9	5
27	Measurements of thermal conductivity of materials using a transient technique. I. Theoretical background. *Journal of Applied Physics*, **1986**, 60, 485-492	2.5	5
26	Influence of compatibilizer type, polypropylene molecular weigth and blending sequence on montmorillonite exfoliation in nanocomposites. *Polimery*, **2004**, 49, 52-55	3.4	5
25	Structure, thermal and mechanical properties of polypropylene composites with nano- and micro-diamonds. *Polimery*, **2015**, 60, 331-336	3.4	5
24	Overview of Biobased Polymers. *Advances in Polymer Science*, **2019**, 1-35	1.3	5
23	Crystallization of star-shaped and linear poly(l-lactide)s. *European Polymer Journal*, **2018**, 105, 126-134	5.2	5
22	Nucleation of Polypropylene with Gold Nanoparticles. Part 1: Introduction of Sandwich Method for Evaluation of Very Weak Nucleation Activity. *Journal of Macromolecular Science - Physics*, **2010**, 49, 392-404	1.4	4
21	Multifunctional polylactide nonwovens with 3D network of multiwall carbon nanotubes. *Applied Surface Science*, **2020**, 527, 146898	6.7	3
20	Nucleated crystallization of isotactic polypropylene in multilayered sandwich nanocomposites with gold particles. *Journal of Applied Polymer Science*, **2012**, 125, 4338-4346	2.9	3
19	Morphology of iPP spherulites crystallized in a temperature gradient. *Journal of Applied Polymer Science*, **2002**, 86, 1318-1328	2.9	3
18	Methods of measurements of thermal conductivity coefficient of polymers. Part I. Indirect methods. *Polimery*, **1985**, 30, 181-184	3.4	3
17	Structure, processing and performance of ultra-high molecular weight polyethylene (IUPAC Technical Report). Part 1: characterizing molecular weight. *Pure and Applied Chemistry*, **2020**, 92, 1469-1483	2.1	3
16	Crystallization of Polymers in a Temperature Gradient. *International Journal of Forming Processes*, **2004**, 7, 195-208		3
15	New Possibilities in the Description of Overall Crystallization of Polymers. *Journal of Macromolecular Science - Physics*, **2003**, 42, 773-792	1.4	2

14	Measurements of thermal conductivity of materials using a transient technique. II. Description of the apparatus. *Journal of Applied Physics*, **1986**, 60, 493-498	2.5	2
13	Spherulite nucleation density from thin sections of bulk samples. *Polimery*, **2004**, 49, 698-705	3.4	2
12	Modification of physical properties of polylactide. *Polimery*, **2005**, 50, 562-569	3.4	2
11	Plasticization of polylactide. *Polimery*, **2009**, 54, 083-090	3.4	2
10	Modification of Polylactide Nonwovens with Carbon Nanotubes and Ladder Poly(silsesquioxane). *Molecules*, **2021**, 26,	4.8	2
9	High-Pressure Crystallization of iPP Nucleated with 1,3:2,4-bis(3,4-dimethylbenzylidene)sorbitol. *Polymers*, **2021**, 13,	4.5	2
8	Antibacterial Electroconductive Composite Coating of Cotton Fabric.. *Materials*, **2022**, 15,	3.5	1
7	Structure, processing and performance of ultra-high molecular weight polyethylene (IUPAC Technical Report). Part 2: crystallinity and supra molecular structure. *Pure and Applied Chemistry*, **2020**, 92, 1485-1501	2.1	1
6	Significant modification of the surface morphology of polylactide (PLA) and PLA-halloysite nanocomposites in the presence of N,N□ethylenebis(stearamide) upon thermal treatment. *EXPRESS Polymer Letters*, **2020**, 14, 1155-1168	3.4	1
5	Supramolecular interactions involving fluoroaryl groups in hybrid blends of polylactide and ladder polysilsesquioxanes. *Polymer Testing*, **2021**, 94, 107033	4.5	1
4	Antibacterial electroconductive rGO modified cotton fabric. *Polymers for Advanced Technologies*, **2021**, 32, 3975-3981	3.2	0
3	Collagen precipitation on tendon collagen fibrils. *Acta Polymerica*, **1981**, 32, 486-488		
2	Structure, processing and performance of ultra-high molecular weight polyethylene (IUPAC Technical Report). Part 3: deformation, wear and fracture. *Pure and Applied Chemistry*, **2020**, 92, 1503-1519	2.1	
1	Structure, processing and performance of ultra-high molecular weight polyethylene (IUPAC Technical Report). Part 4: sporadic fatigue crack propagation. *Pure and Applied Chemistry*, **2020**, 92, 1521-1536	2.1	