Andrzej GaÅ‚Äski

List of Publications by Year
in descending order

125 papers	6,651 citations	61857 43 h-index	64668 79 g-index
129 all docs	129 docs citations	129 times ranked	5195 citing authors

#	Article	IF	Citations
1	Strength and toughness of crystalline polymer systems. Progress in Polymer Science, 2003, 28, 1643-1699.	11.8	484
2	Recent developments in nanocellulose-based biodegradable polymers, thermoplastic polymers, and porous nanocomposites. Progress in Polymer Science, 2018, 87, 197-227.	11.8	350
3	Polylactide/montmorillonite nanocomposites and microcomposites prepared by melt blending: Structure and some physical properties. Journal of Applied Polymer Science, 2002, 86, 1497-1506.	1.3	348
4	Confined Crystallization of Polyethylene Oxide in Nanolayer Assemblies. Science, 2009, 323, 757-760.	6.0	334
5	Plasticization of semicrystalline poly(l-lactide) with poly(propylene glycol). Polymer, 2006, 47, 7178-7188.	1.8	260
6	Plastic Deformation of Crystalline Polymers:Â The Role of Cavitation and Crystal Plasticity. Macromolecules, 2005, 38, 9688-9697.	2.2	254
7	Cavitation during deformation of semicrystalline polymers. Progress in Polymer Science, 2014, 39, 921-958.	11.8	254
8	Preparation and properties of compatibilized LDPE/organo-modified montmorillonite nanocomposites. European Polymer Journal, 2005, 41, 1115-1122.	2.6	238
9	Cavitation during Tensile Deformation of Polypropylene. Macromolecules, 2008, 41, 2839-2851.	2.2	185
10	Thermal stability of nanoclay polypropylene composites by simultaneous DSC and TGA. Composites Science and Technology, 2007, 67, 3442-3447.	3.8	151
11	Structure and Properties of Homogeneous Copolymers of Propylene and 1-Hexene. Macromolecules, 2005, 38, 1232-1243.	2.2	137
12	Critical assessment of overall crystallization kinetics theories and predictions. Progress in Polymer Science, 2006, 31, 549-575.	11.8	127
13	Plasticity of Semicrystalline Polymers. Macromolecular Symposia, 2010, 294, 67-90.	0.4	104
14	Tough blends of poly(lactide) and amorphous poly([R,S]-3-hydroxy butyrate) â€“ morphology and properties. European Polymer Journal, 2013, 49, 3630-3641.	2.6	102
15	Crystallization of Polyethylene from Melt with Lowered Chain Entanglements. Macromolecules, 2000, 33, 916-932.	2.2	100
16	Compatibilization and properties of poly(ethylene terephthalate)/polyethylene blends based on recycled materials. Macromolecular Chemistry and Physics, 2002, 203, 1473-1485.	1.1	98
17	Crystalline and supermolecular structure of polylactide in relation to the crystallization method. Journal of Applied Polymer Science, 2002, 86, 1386-1395.	1.3	97
18	Plastic deformation of polyethylene crystals as a function of crystal thickness and compression rate. Polymer, 2005, 46, 8926-8936.	1.8	94

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19	Structure of polypropylene crystallized in confined nanolayers. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 3380-3396.	2.4	93
20	Plastic deformation behavior of Î²-phase isotactic polypropylene in plane-strain compression at room temperature. Polymer, 2006, 47, 8562-8574.	1.8	93
21	Spherulite nucleation in isotactic polypropylene based nanocomposites with montmorillonite under shear. Polymer, 2004, 45, 4877-4892.	1.8	87
22	Plastic yielding of semicrystalline polymers affected by amorphous phase. International Journal of Plasticity, 2013, 41, 14-29.	4.1	86
23	Cavitation and morphological changes in polypropylene deformed at elevated temperatures. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1271-1280.	2.4	83
24	Initiation of Cavitation of Polypropylene during Tensile Drawing. Macromolecules, 2011, 44, 20-28.	2.2	80
25	Characterization of scrap poly(ethylene terephthalate). European Polymer Journal, 2000, 36, 1875-1884.	2.6	73
26	A Structure of Copolymers of Propene and Hexene Isomorphous to Isotactic Poly(1-butene) Form I. Macromolecules, 2006, 39, 5777-5781.	2.2	72
27	Plastic Deformation of the Î³ Phase in Isotactic Polypropylene in Plane-Strain Compression. Macromolecules, 2006, 39, 4811-4819.	2.2	71
28	PBAT green composites: Effects of kraft lignin particles on the morphological, thermal, crystalline, macro and micromechanical properties. Polymer, 2020, 203, 122748.	1.8	70
29	Changes in the morphology and orientation of bulk spherulitic polypropylene due to plane-strain compression. Polymer, 2000, 41, 2271-2288.	1.8	69
30	Low density polyethyleneâ€“montmorillonite nanocomposites for film blowing. European Polymer Journal, 2008, 44, 270-286.	2.6	68
31	Cavitation during tensile drawing of annealed high density polyethylene. Polymer, 2010, 51, 5771-5779.	1.8	67
32	Controlling Cavitation of Semicrystalline Polymers during Tensile Drawing. Macromolecules, 2011, 44, 7273-7287.	2.2	67
33	Recycling of postconsumer poly(ethylene terephthalate) and high-density polyethylene by compatibilized blending. Journal of Applied Polymer Science, 2002, 86, 1473-1485.	1.3	64
34	Crystal phase and crystallinity of polyamide 6/functionalized polyolefin blends. Polymer, 2000, 41, 4923-4932.	1.8	63
35	Orientation of PVDF Î± and Î³ crystals in nanolayered films. Colloid and Polymer Science, 2015, 293, 1289-1297.	1.0	61
36	Polylactide compositions. The influence of ageing on the structure, thermal and viscoelastic properties of PLA/calcium sulfate composites. Polymer Degradation and Stability, 2008, 93, 925-931.	2.7	55

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37	Phase structure and viscoelastic properties of compatibilized blends of PET and HDPE recyclates. Journal of Applied Polymer Science, 2001, 82, 1423-1436.	1.3	53
38	Rate mechanisms of plasticity in semi-crystalline polyethylene. Polymer, 2005, 46, 11798-11805.	1.8	52
39	Formation and transformation of smectic polypropylene nanodroplets. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1795-1803.	2.4	52
40	Crystalline Lamellae Fragmentation during Drawing of Polypropylene. Macromolecules, 2015, 48, 5310-5322.	2.2	47
41	Plastic Deformation of Amorphous Poly(l/dl-lactide):Â Structure Evolution and Physical Properties. Biomacromolecules, 2007, 8, 1836-1843.	2.6	46
42	Shear-induced crystallization of isotactic polypropylene based nanocomposites with montmorillonite. European Polymer Journal, 2009, 45, 88-101.	2.6	46
43	Reactive mixing of PET and PET/PP blends with glycidyl methacrylate-modified styrene-b-(ethylene-co-olefin) block copolymers. Journal of Applied Polymer Science, 2005, 98, 2201-2211.	1.3	44
44	Structure and properties of isotactic polypropylene oriented by rolling with side constraints. Journal of Applied Polymer Science, 2002, 86, 1413-1425.	1.3	42
45	Reactive compatibilization and properties of recycled poly(ethylene terephthalate)/polyethylene blends. Polymer Bulletin, 2002, 48, 67-74.	1.7	39
46	Polylactide compositions. II. Correlation between morphology and main properties of PLA/calcium sulfate composites. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 2770-2780.	2.4	39
47	All-polymer nanocomposites with nanofibrillar inclusions generated in situ during compounding. Polymer, 2013, 54, 4617-4628.	1.8	39
48	Morphology of undeformed and deformed polyethylene lamellar crystals. Polymer, 2010, 51, 5780-5787.	1.8	37
49	Morphology of nylon 6 spherulites in bulk. Die Makromolekulare Chemie, 1987, 188, 1195-1204.	1.1	35
50	Cavitation during Drawing of Crystalline Polymers. Macromolecular Symposia, 2010, 298, 1-9.	0.4	35
51	The crystallization of polypropylene with reduced density of entanglements. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 748-756.	2.4	35
52	Recycling of PET and Polyolefin Based Packaging Materials by Reactive Blending. Polymer-Plastics Technology and Engineering, 2004, 43, 1711-1722.	1.9	34
53	Morphology studies of multilayered HDPE/PS systems. Journal of Applied Polymer Science, 2006, 99, 597-612.	1.3	34
54	Orientation of polyoxymethylene by rolling with side constraints. Polymer, 2008, 49, 303-316.	1.8	33

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55	Investigation of Processability of Chain-Extended Polylactides During Melt Processing - Compounding Conditions and Polymer Molecular Structure. Macromolecular Materials and Engineering, 2014, 299, 307-318.	1.7	33
56	Thermovision studies of plastic deformation and cavitation in polypropylene. Mechanics of Materials, 2013, 67, 104-118.	1.7	32
57	Structure and characterization of random aliphaticâ€“aromatic copolyester. European Polymer Journal, 2014, 55, 86-97.	2.6	31
58	Physical state of the amorphous phase of polypropylene-influence on free volume and cavitation phenomenon. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 531-543.	2.4	28
59	Morphology and Plastic Yielding of Ultrahigh Molecular Weight Polyethylene. Macromolecules, 2020, 53, 6063-6077.	2.2	28
60	Strain hardening of molten thermoplastic polymers reinforced with poly(tetrafluoroethylene) nanofibers. Journal of Rheology, 2014, 58, 589-605.	1.3	27
61	The Modulus of the Amorphous Phase of Semicrystalline Polymers. Macromolecules, 2021, 54, 9113-9123.	2.2	27
62	Transformation of polyethylene crystals by high-pressure annealing. Journal of Applied Polymer Science, 2002, 86, 1337-1350.	1.3	26
63	Effect of poly(tetrafluoroethylene) nanofibers on foaming behavior of linear and branched polypropylenes. European Polymer Journal, 2017, 88, 171-182.	2.6	26
64	Cavitation phenomenon and mechanical properties of partially disentangled polypropylene. Polymer, 2018, 151, 15-26.	1.8	25
65	Cavitation and cavity-free deformation of filled crystalline polymer systems. Macromolecular Symposia, 2003, 194, 47-62.	0.4	24
66	Influence of thermal history on the nonisothermal crystallization of poly(L-lactide). Journal of Applied Polymer Science, 2007, 105, 282-290.	1.3	24
67	Thermoplastic elastomers reinforced with poly(tetrafluoroethylene) nanofibers. European Polymer Journal, 2016, 80, 58-69.	2.6	22
68	Determination of stresses around beads in stressed epoxy resin by photoelasticity. Journal of Applied Polymer Science, 2002, 86, 1436-1444.	1.3	21
69	Ductility of polylactide composites reinforced with poly(butylene succinate) nanofibers. Composites Part A: Applied Science and Manufacturing, 2016, 90, 218-224.	3.8	21
70	In situ generation of sustainable PLA-based nanocomposites by shear induced crystallization of nanofibrillar inclusions. RSC Advances, 2019, 9, 30370-30380.	1.7	20
71	Ternary blends of high-density polyethylene-polystyrene-poly(ethylene/butylene-b-styrene) copolymers: Properties and orientation behavior in plane-strain compression. Journal of Applied Polymer Science, 2000, 76, 1746-1761.	1.3	19
72	Impactâ€modified polylactideâ€“calcium sulfate composites: Structure and properties. Journal of Applied Polymer Science, 2012, 125, 4302-4315.	1.3	18

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73	Classification of aliphatic-butylene terephthalate copolyesters in relation to aliphatic/aromatic ratio. Polymer, 2017, 113, 119-134.	1.8	18
74	Growth sites in space and time. The Journal of Physical Chemistry, 1985, 89, 4700-4703.	2.9	17
75	Rolling of polymeric materials with side constraints. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 317, 21-27.	2.6	17
76	Deformation of high-density polyethylene produced by rolling with side constraints. II. Mechanical properties of oriented bars. Journal of Applied Polymer Science, 2002, 86, 1405-1412.	1.3	17
77	Oriented films from recycled poly(ethylene terephthalate)/recycled high-density polyethylene compatibilized blends. Journal of Applied Polymer Science, 2002, 86, 1486-1496.	1.3	17
78	Deformation of disentangled polypropylene crystalline grains into nanofibers. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1983-1994.	2.4	17
79	High Pressure Crystallization of HDPE Droplets. Macromolecules, 2008, 41, 8086-8094.	2.2	16
80	Study on the process of preparation of polypropylene nanocomposite with montmorillonite. Polimery, 2006, 51, 374-381.	0.4	15
81	Morphological alteration and strength of polyamide 6 subjected to high planeâ€“strain compression. Polymer, 2006, 47, 3171-3185.	1.8	14
82	Deformation of the ultraâ€high molecular weight polyethylene melt in the planeâ€strain compression. Journal of Applied Polymer Science, 2012, 125, 4155-4168.	1.3	14
83	Nanofibrillar green composites of polylactide/polyamide produced in situ due to shear induced crystallization. Composites Communications, 2020, 22, 100512.	3.3	13
84	Modification of amorphous phase of semicrystalline polymers. Polimery, 2012, 57, 433-440.	0.4	13
85	Nanofibrillar Green Composites of Polylactide/Polyhydroxyalkanoate Produced in Situ Due to Shear Induced Crystallization. Polymers, 2019, 11, 1811.	2.0	12
86	Photoelastic studies of residual stresses around fillers embedded in an epoxy matrix. Macromolecular Symposia, 2001, 169, 197-210.	0.4	11
87	High-strength uniaxially drawn tapes from scrap recycled poly(ethylene terephthalate). Journal of Applied Polymer Science, 2002, 86, 1426-1435.	1.3	11
88	Nucleation and crystallization of random aliphatic-butylene terephtalate copolyester. European Polymer Journal, 2015, 71, 289-303.	2.6	11
89	Crystallization kinetics of polymer fibrous nanocomposites. European Polymer Journal, 2016, 83, 181-201.	2.6	11
90	Modeling of polymer crystallization in plates, pipes, and rods during cooling. Journal of Applied Polymer Science, 2002, 86, 1363-1372.	1.3	10

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91	Plasticization of Polylactide after Solidification: An Effectiveness and Utilization for Correct Interpretation of Thermal Properties. Polymers, 2020, 12, 561.	2.0	10
92	Microstructural Evolution of Poly(Îµ-Caprolactone), Its Immiscible Blend, and In Situ Generated Nanocomposites. Polymers, 2020, 12, 2587.	2.0	9
93	Cavitation during tensile drawing of semicrystalline polymers. Polimery, 2011, 56, 627-636.	0.4	9
94	Texture and morphology of biaxially stretched poly(ethylene naphthalene-2,6-dicarboxylate). Journal of Applied Polymer Science, 2003, 89, 2224-2232.	1.3	8
95	Structure and molecular dynamics of multilayered polycarbonate/polystyrene films. Journal of Applied Polymer Science, 2012, 125, 4267-4274.	1.3	8
96	Cavitation in high density polyethylene/Al2O3 nanocomposites. Composites Science and Technology, 2020, 199, 108323.	3.8	8
97	Gauche-trans transitions in amorphous polymers under annealing: Lattice model and polarized light scattering. Physical Review E, 2009, 79, 041801.	0.8	7
98	Melt processing, mechanical, and fatigue crack propagation properties of reactively compatibilized blends of polyamide 6 and acrylonitrileâ€“butadieneâ€“styrene copolymer. Journal of Applied Polymer Science, 2012, 124, 740-754.	1.3	7
99	Toughening of syndiotactic polypropylene with chalk. Journal of Applied Polymer Science, 2016, 133, .	1.3	7
100	Formation of polypropylene nanofibers by solid state deformation during blending with molten polyethylene. Polimery, 2015, 61, 664-666.	0.4	7
101	Influence of the liberation of heat of fusion on the temperature near the crystallization front in polymers. Polymer, 1992, 33, 3985-3989.	1.8	6
102	Thermodynamics of inelastic deformation of amorphous and crystalline phases in linear polyethylene. Polymer Science - Series A, 2011, 53, 775-786.	0.4	6
103	Inhibited crystallization of polyhydroxybutyrate by blending with aliphatic-aromatic copolyester. European Polymer Journal, 2018, 103, 133-144.	2.6	6
104	Nanocomposites of polypropylene and polyethylene with montmorillonite type clays. Polimery, 2004, 49, 240-247.	0.4	6
105	Design of hybrid PLA/PBS/POM composite based on In-Situ formation of interpenetrating fiber networks. Composites Part A: Applied Science and Manufacturing, 2021, 151, 106667.	3.8	6
106	Residual stresses in epoxy systems by 3-D photoelastic method. Polymer Engineering and Science, 1996, 36, 2727-2735.	1.5	5
107	Crystallization of Polypropylene. , 2019, , 185-242.		5
108	Cavitation in strained polyethylene/nanographene nanocomposites. Polymer, 2021, 232, 124158.	1.8	5

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109	Influence of compatibilizer type, polypropylene molecular weigth and blending sequence on montmorillonite exfoliation in nanocomposites. Polimery, 2004, 49, 52-55.	0.4	5
110	Photoelastic method of three-dimensional stress determination around axisymmetric inclusions. Polymer Engineering and Science, 1996, 36, 2736-2749.	1.5	4
111	Compatibilization, processing and properties of post-consumer PET/polyolefin blends. Polimery, 2002, 47, 491-499.	0.4	4
112	Morphology and texture development of uniaxially stretched poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td (naphthalene-2	1.3	3
113	Structure, processing and performance of ultra-high molecular weight polyethylene (IUPAC Technical) Tj ETQq1 1 0.784314 rgBT /Over 1485-1501.	0.9	3
114	Dynamic mechanical properties of crystalline polymer blends. The influence of interface and orientation. E-Polymers, 2002, 2, .	1.3	2
115	New Possibilities in the Description of Overall Crystallization of Polymers. Journal of Macromolecular Science - Physics, 2003, 42, 773-792.	0.4	2
116	Plasticity of semicrystalline polyethylenes viewed through the prism of thermodynamics. Journal of Applied Polymer Science, 2012, 125, 4169-4176.	1.3	2
117	Investigation on the Melt Processing of Biodegradable Aliphatic-Aromatic Polyester into Fibrous Products. Fibres and Textiles in Eastern Europe, 2016, 24, 58-64.	0.2	2
118	Ductility of polylactide composites reinforced with polyhydroxyalkanoates nanofibers. AIP Conference Proceedings, 2018, , .	0.3	1
119	Plastic deformation of polymer blends with crystallizable components. Macromolecular Symposia, 1994, 78, 187-201.	0.4	0
120	<title>Plastic deformation of the amorphous component in semicrystalline polymers</title>. , 1997, , .		0
121	Orientation of polyoxymethylene by plane strain compression and rolling with side constraints. Plastics, Rubber and Composites, 2009, 38, 10-12.	0.9	0
122	The influence of chemical composition of aliphatic-aromatic copolyesters on their properties. , 2014, , .		0
123	Rubber toughened polyester cellulose nanocomposites. AIP Conference Proceedings, 2018, , .	0.3	0
124	Structure, processing and performance of ultra-high molecular weight polyethylene (IUPAC Technical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.9	0
125	Structure, processing and performance of ultra-high molecular weight polyethylene (IUPAC Technical) Tj ETQq1 1 0.784314 rgBT /Over	0.9	0