RenÃ© Androsch

List of Publications by Year
in descending order

135 papers	5,692 citations	53794 45 h-index	88630 70 g-index
139 all docs	139 docs citations	139 times ranked	2193 citing authors

#	Article	IF	Citations
1	Zero-Entropy-Production Melting Temperature of Crystals of Poly(butylene succinate) Formed at High Supercooling of the Melt. Macromolecules, 2022, 55, 965-970.	4.8	6
2	Long-Chain Branched Polypropylene: Effects of Chain Architecture, Melt Structure, Shear Modification, and Solution Treatment on Melt Relaxation Dynamics. Macromolecules, 2022, 55, 2588-2608.	4.8	9
3	Slow-DEET-Release Mosquito-Repellent System Based on Poly(butylene succinate). ACS Omega, 2022, 7, 8377-8384.	3.5	6
4	Bulk Enthalpy of Melting of PolyÂ(<scp>l</scp>â€lactic acid) (PLLA) Determined by Fast Scanning Chip Calorimetry. Macromolecular Rapid Communications, 2022, 43, e2200148.	3.9	16
5	Nucleation and crystallization kinetics of polyamide 12 investigated by fast scanning calorimetry. Journal of Polymer Science, 2022, 60, 842-855.	3.8	10
6	Crystal-nuclei formation during injection-molding of poly (l-lactic acid). Polymer, 2022, 250, 124897.	3.8	7
7	3D-printing of the polymer/insect-repellent system poly(l-lactic acid)/ethyl butylacetylaminopropionate (PLLA/IR3535). International Journal of Pharmaceutics, 2022, 624, 122023.	5.2	4
8	Kinetics of homogeneous crystal nucleation of polyamide 11 near the glass transition temperature. Polymer Crystallization, 2021, 4, .	0.8	3
9	Melt-Spun Poly(D,L-lactic acid) Monofilaments Containing N,N-Diethyl-3-methylbenzamide as Mosquito Repellent. Materials, 2021, 14, 638.	2.9	8
10	Phase behavior of solvent-rich compositions of the polymer/drug system poly(butylene succinate) and N,N-diethyl-3-methylbenzamide (DEET). Colloid and Polymer Science, 2021, 299, 873-881.	2.1	13
11	Mosquitoâ€repellent controlledâ€release formulations for fighting infectious diseases. Malaria Journal, 2021, 20, 165.	2.3	33
12	Shear-induced crystallization of polyamide 11. Rheologica Acta, 2021, 60, 231-240.	2.4	9
13	The Narrow Thickness Distribution of Lamellae of Poly(butylene succinate) Formed at Low Melt Supercooling. Macromolecules, 2021, 54, 3366-3376.	4.8	14
14	Thermal Stability and Nucleation Efficacy of Shear-Induced Pointlike and Shishlike Crystallization Precursors. ACS Macro Letters, 2021, 10, 684-689.	4.8	7
15	Blooming of insecticides from polyethylene mesh and film. Transactions of the Royal Society of South Africa, 2021, 76, 127-136.	1.1	4
16	Solidâ€“liquidâ€“liquid phase envelopes from temperature-scanned refractive index data. Journal of Polymer Engineering, 2021, .	1.4	0
17	Surface Crystal Nucleation and Growth in Poly (Îµ-caprolactone): Atomic Force Microscopy Combined with Fast Scanning Chip Calorimetry. Polymers, 2021, 13, 2008.	4.5	2
18	Insertionâ€Crystallizationâ€Induced Lowâ€Temperature Annealing Peaks in Meltâ€Crystallized Poly(<scp>l</scp>â€Lactic Acid). Macromolecular Chemistry and Physics, 2021, 222, 2100177.	2.2	13

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19	Crystallization-Induced Polymer Scaffold Formation in the Polymer/Drug Delivery System Poly(<scp>l</scp>-lactic acid)/Ethyl Butylacetylaminopropionate (PLLA/IR3535). Biomacromolecules, 2021, 22, 3950-3959.	5.4	11
20	Pressure- and Temperature-Dependent Crystallization Kinetics of Isotactic Polypropylene under Process Relevant Conditions. Crystals, 2021, 11, 1138.	2.2	3
21	On the crystal stabilization during two-step isothermal crystallization of poly(butylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 66	3.8	9
22	Melting Kinetics of Superheated Polymer Crystals Examined by Isothermal and Nonisothermal Fast Scanning Calorimetry. Macromolecules, 2021, 54, 8770-8779.	4.8	10
23	Competition between Liquid-liquid De-mixing, Crystallization, and Glass Transition in Solutions of PLA of Different Stereochemistry and DEET. Chinese Journal of Polymer Science (English Edition), 2020, 38, 174-178.	3.8	10
24	Mosquito repellent thermal stability, permeability and air volatility. Pest Management Science, 2020, 76, 1112-1120.	3.4	18
25	New Insights into Crystallization of Heterophasic Isotactic Polypropylene by Fast Scanning Chip Calorimetry. Polymers, 2020, 12, 1683.	4.5	11
26	The Origin of Annealing Peaks in Semicrystalline Polymers: Enthalpy Recovery or Melting?. Macromolecules, 2020, 53, 8751-8756.	4.8	25
27	Development, characterization and modeling of mosquito repellent release from microporous devices. SPE Polymers, 2020, 1, 90-100.	3.3	8
28	Stability of Crystal Nuclei of Poly (butylene isophthalate) Formed Near the Glass Transition Temperature. Polymers, 2020, 12, 1099.	4.5	22
29	Steady-State Crystal Nucleation Rate of Polyamide 66 by Combining Atomic Force Microscopy and Fast-Scanning Chip Calorimetry. Macromolecules, 2020, 53, 5560-5571.	4.8	18
30	Enthalpy Relaxation, Crystal Nucleation and Crystal Growth of Biobased Poly(butylene Isophthalate). Polymers, 2020, 12, 235.	4.5	17
31	Growth and dissolution of crystal nuclei in poly(l-lactic acid) (PLLA) in Tammann's development method. Polymer, 2020, 196, 122453.	3.8	31
32	Polymorphism and Multiple Melting Behavior of Bio-Based Poly(propylene 2,5-furandicarboxylate). Biomacromolecules, 2020, 21, 2622-2634.	5.4	32
33	Full-composition-range glass transition behavior of the polymer/solvent system poly (lactic acid) / ethyl butylacetylaminopropionate (PLA/IR3535Â®). Polymer, 2020, 209, 123058.	3.8	13
34	Effect of DEET on the crystallinity of bicomponent poly(lactic acid) monofilaments. AIP Conference Proceedings, 2020, , .	0.4	1
35	Enthalpy Relaxation of Polyamide 11 of Different Morphology Far Below the Glass Transition Temperature. Entropy, 2019, 21, 984.	2.2	27
36	Polyamide 11/Poly(butylene succinate) Bio-Based Polymer Blends. Materials, 2019, 12, 2833.	2.9	20

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37	Crystal self-nucleation in polyamide 11. Thermochimica Acta, 2019, 677, 139-143.	2.7	14
38	Thermal Properties of Biobased Polyamide 11. Advances in Polymer Science, 2019, , 143-187.	0.8	10
39	Melt-recrystallization of poly (l-lactic acid) initially containing Î±â€²-crystals. Polymer, 2019, 176, 227-235.	3.8	34
40	Visualization of Polymer Crystallization by In Situ Combination of Atomic Force Microscopy and Fast Scanning Calorimetry. Polymers, 2019, 11, 890.	4.5	16
41	Crystallization of poly(butylene 2,6â€naphthalate) containing diethylene 2,6â€naphthalate constitutional defects. Polymer Crystallization, 2019, 2, e10044.	0.8	1
42	Experimental analysis of lateral thermal inhomogeneity of a specific chip-calorimeter sensor. Thermochimica Acta, 2019, 674, 95-99.	2.7	27
43	Crystallization of poly(<scp>l</scp> â€lactic acid) in solution with the mosquitoâ€repellent N , N â€diethylâ€3â€methylbenzamide. Polymer Crystallization, 2019, 2, e10029.	0.8	8
44	Critical specific work of flow for shearâ€induced formation of crystal nuclei in poly (<scp>l</scp>â€lactic acid). Polymer Crystallization, 2019, 2, e10073.	0.8	11
45	Microporous polyolefin strands as controlled-release devices for mosquito repellents. Chemical Engineering Journal, 2019, 360, 435-444.	12.7	19
46	Biodegradable electrospun PLLA fibers containing the mosquito-repellent DEET. European Polymer Journal, 2019, 113, 377-384.	5.4	24
47	Smectic liquid crystal Schlieren texture in rapidly cooled poly(butylene naphthalate). European Polymer Journal, 2018, 101, 90-95.	5.4	18
48	Optical Microscopy to Study Crystal Nucleation in Polymers Using a Fast Scanning Chip Calorimeter for Precise Control of the Nucleation Pathway. Macromolecular Chemistry and Physics, 2018, 219, 1700479.	2.2	45
49	Phase behavior of the polymer/drug system PLA/DEET: Effect of PLA molar mass on subambient liquid-liquid phase separation. Thermochimica Acta, 2018, 660, 77-81.	2.7	22
50	Sensitivity of Polymer Crystallization to Shear at Low and High Supercooling of the Melt. Macromolecules, 2018, 51, 2785-2795.	4.8	43
51	Relaxation and crystal nucleation in polymer glasses. European Polymer Journal, 2018, 102, 195-208.	5.4	37
52	Crystallization of polyamide 11 during injection molding. Polymer Engineering and Science, 2018, 58, 1053-1061.	3.1	31
53	Flame retarding polyamide 11 with exfoliated vermiculite nanoflakes. Polymer Engineering and Science, 2018, 58, 1746-1755.	3.1	15
54	Cover Image: Nucleationâ€controlled semicrystalline morphology of bulk polymers. Polymer Crystallization, 2018, 1, e10115.	0.8	1

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55	Nucleationâ€controlled semicrystalline morphology of bulk polymers. Polymer Crystallization, 2018, 1, e10036.	0.8	14
56	Crystallization behavior of sheared polyamide 66. AIP Conference Proceedings, 2018, , .	0.4	1
57	Fast Scanning Chip Calorimetry. Handbook of Thermal Analysis and Calorimetry, 2018, , 47-102.	1.6	7
58	Phase behavior of the polymer/drug system PLA/DEET. Polymer, 2017, 126, 116-125.	3.8	27
59	Low-temperature crystallization of poly(butylene succinate). European Polymer Journal, 2017, 94, 384-391.	5.4	36
60	Crystal reorganization of poly (butylene terephthalate). Polymer, 2017, 124, 274-283.	3.8	49
61	The effect of supercooling of the melt on the semicrystalline morphology of PA 66. Thermochimica Acta, 2017, 655, 313-318.	2.7	49
62	Kinetics of Nucleation and Growth of Crystals of Poly(l-lactic acid). Advances in Polymer Science, 2017, , 235-272.	0.8	46
63	Enthalpy relaxation of the glass of poly (l-lactic acid) of different d-isomer content and its effect on mechanical properties. Polymer Bulletin, 2017, 74, 2565-2573.	3.3	22
64	Skin/core crystallinity of injection-molded poly (butylene terephthalate) as revealed by microfocus X-ray diffraction and fast scanning chip calorimetry. Journal of Thermal Analysis and Calorimetry, 2017, 127, 939-946.	3.6	30
65	Stability and Reorganization of Î±â€²â€Crystals in Random <scp>l</scp>/<scp>d</scp>â€Lactide Copolymers. Macromolecular Chemistry and Physics, 2016, 217, 1534-1538.	2.2	34
66	New Insights into Polymer Crystallization by Fast Scanning Chip Calorimetry. , 2016, , 463-535.		28
67	Melting of Î±â€²- and Î±-crystals of poly(lactic acid). AIP Conference Proceedings, 2016, , .	0.4	4
68	Crystallization kinetics of polyamide 11 in the presence of sepiolite and montmorillonite nanofillers. Colloid and Polymer Science, 2016, 294, 1143-1151.	2.1	10
69	Interplay between the Relaxation of the Glass of Random <scp>l</scp>/<scp>d</scp>-Lactide Copolymers and Homogeneous Crystal Nucleation: Evidence for Segregation of Chain Defects. Journal of Physical Chemistry B, 2016, 120, 4522-4528.	2.6	51
70	Two crystal populations with different melting/reorganization kinetics of isothermally crystallized polyamide 6. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 2126-2138.	2.1	47
71	Supercooling-controlled heterogeneous and homogenous crystal nucleation of polyamide 11 and its effect onto the crystal/mesophase polymorphism. Polymer, 2016, 106, 29-34.	3.8	47
72	Insights into polymer crystallization and melting from fast scanning chip calorimetry. Polymer, 2016, 91, 239-263.	3.8	224

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73	Crystal nucleation in random l/d-lactide copolymers. European Polymer Journal, 2016, 75, 474-485.	5.4	68
74	Effect of cooling rate on crystal polymorphism in beta-nucleated isotactic polypropylene as revealed by a combined WAXS/FSC analysis. Polymer, 2016, 90, 67-75.	3.8	42
75	Crystallization of Polyethylene at Large Undercooling. ACS Macro Letters, 2016, 5, 365-370.	4.8	84
76	Crystal Nucleation of Polymers at High Supercooling of the Melt. Advances in Polymer Science, 2015, , 257-288.	0.8	68
77	Experimental Test of Tammannâ€™s Nuclei Development Approach in Crystallization of Macromolecules. Crystal Growth and Design, 2015, 15, 786-798.	3.0	88
78	Enthalpy of melting of Î±â€²- and Î±-crystals of poly(l-lactic acid). European Polymer Journal, 2015, 70, 215-220.	5.4	150
79	Density of heterogeneous and homogeneous crystal nuclei in poly (butylene terephthalate). European Polymer Journal, 2015, 66, 180-189.	5.4	88
80	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. Colloid and Polymer Science, 2015, 293, 2459-2467.	2.1	37
81	Time-resolved micro-indentation hardness measurement to probe the Form II/Form I crystal polymorphism in random copolymers of butene-1 with either ethylene or propylene. Colloid and Polymer Science, 2015, 293, 2451-2458.	2.1	4
82	Application of Tammannâ€™s Two-Stage Crystal Nuclei Development Method for Analysis of the Thermal Stability of Homogeneous Crystal Nuclei of Poly(ethylene terephthalate). Macromolecules, 2015, 48, 8082-8089.	4.8	58
83	Non-isothermal crystal nucleation of poly (l-lactic acid). Polymer, 2015, 81, 151-158.	3.8	103
84	Crystallization kinetics of polyamide 66 at processing-relevant cooling conditions and high supercooling. Thermochimica Acta, 2015, 603, 103-109.	2.7	75
85	Influence of the Form II/Form I crystal polymorphism of random copolymers of butene-1 with ethylene or propylene on the peel behavior of peel films. Polymer Engineering and Science, 2015, 55, 749-1757.	3.1	5
86	Random butene-1/ethylene copolymers: Influence of composition on the three-phase structure. , 2014, , .		0
87	Sequence of enthalpy relaxation, homogeneous crystal nucleation and crystal growth in glassy polyamide 6. European Polymer Journal, 2014, 53, 100-108.	5.4	84
88	Mechanical behavior and optical transparency of polyamide 6 of different morphology formed by variation of the pathway of crystallization. Polymer Bulletin, 2014, 71, 581-593.	3.3	43
89	Melting of Conformationally Disordered Crystals (Î±â€²â€²Phase) of Poly(<scp>l</scp>â€lactic acid). Macromolecular Chemistry and Physics, 2014, 215, 1134-1139.	2.2	106
90	Tailoring the rigid amorphous fraction of isotactic polybutene-1 by ethylene chain defects. Polymer, 2014, 55, 6132-6139.	3.8	27

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91	Effect of an alpha-phase nucleating agent on the crystallization kinetics of a propylene/ethylene random copolymer at largely different supercooling. Journal of Crystal Growth, 2014, 408, 91-96.	1.5	45
92	Spherulite growth rate and fold surface free energy of the form II mesophase in isotactic polybutene-1 and random butene-1/ethylene copolymers. Colloid and Polymer Science, 2014, 292, 1479-1485.	2.1	19
93	Comparative study of the kinetics of non-isothermal melt solidification of random copolymers of butene-1 with either ethylene or propylene. Colloid and Polymer Science, 2014, 292, 1639-1647.	2.1	21
94	Solid-state reorganization, melting and melt-recrystallization of conformationally disordered crystals (Î±â€²-phase) of poly (l-lactic acid). Polymer, 2014, 55, 4932-4941.	3.8	95
95	Conformationally disordered crystals and their influence on material properties: The cases of isotactic polypropylene, isotactic poly(1-butene), and poly(l-lactic acid). Journal of Molecular Structure, 2014, 1078, 114-132.	3.6	77
96	Kinetics of nucleation and crystallization of poly(Îµ-caprolactone) â€“ Multiwalled carbon nanotube composites. European Polymer Journal, 2014, 52, 1-11.	5.4	126
97	Effect of Supercooling on Crystallization of Polyamide 11. Macromolecules, 2013, 46, 828-835.	4.8	124
98	Crystal Nucleation in Glassy Poly(<scp>l</scp>-lactic acid). Macromolecules, 2013, 46, 6048-6056.	4.8	112
99	Kinetics of crystal nucleation of poly(L-lactic acid). Polymer, 2013, 54, 6882-6885.	3.8	77
100	Microfocus wide-angle X-ray scattering of polymers crystallized in a fast scanning chip calorimeter. Thermochimica Acta, 2013, 563, 33-37.	2.7	75
101	Crystallization of isotactic polypropylene containing beta-phase nucleating agent at rapid cooling. European Polymer Journal, 2013, 49, 1057-1065.	5.4	100
102	Crystallization of a polyamide 11/organo-modified montmorillonite nanocomposite at rapid cooling. Colloid and Polymer Science, 2013, 291, 2541-2549.	2.1	19
103	Crystallization of nanocomposites of an isotactic random butene-1/ethylene copolymer and layered double hydroxide. Polymer Bulletin, 2013, 70, 3115-3128.	3.3	2
104	Crystallization of a Polyamide 6/Montmorillonite Nanocomposite at Rapid Cooling. Macromolecular Materials and Engineering, 2013, 298, 938-943.	3.6	26
105	Formation and Reorganization of the Mesophase of Isotactic Polypropylene. Molecular Crystals and Liquid Crystals, 2012, 556, 74-83.	0.9	17
106	Mesophase-Mediated Crystallization of Poly(butylene-2,6-naphthalate): An Example of Ostwaldâ€™s Rule of Stages. ACS Macro Letters, 2012, 1, 1051-1055.	4.8	47
107	Morphology of mesophase and crystals of polyamide 6 prepared in a fast scanning chip calorimeter. Polymer, 2012, 53, 3994-4001.	3.8	83
108	Effect of comonomer partitioning on the kinetics of mesophase formation in random copolymers of propene and higher Î±-olefins. Polymer, 2012, 53, 4429-4437.	3.8	47

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109	Morphology of cold-crystallized polyamide 6. Colloid and Polymer Science, 2012, 290, 971-978.	2.1	64
110	Homogeneous nucleation and mesophase formation in glassy isotactic polypropylene. Polymer, 2012, 53, 277-282.	3.8	83
111	Effect of crystal habit and superstructure on modulus of elasticity of isotactic polypropylene by AFM nanoindentation. Journal of Materials Science, 2012, 47, 3040-3045.	3.7	7
112	Effect of co-unit type in random propylene copolymers on the kinetics of mesophase formation and crystallization. Colloid and Polymer Science, 2012, 290, 465-471.	2.1	53
113	Effect of cooling rate on the crystal/mesophase polymorphism of polyamide 6. Colloid and Polymer Science, 2011, 289, 1073-1079.	2.1	83
114	In situ X-ray analysis of mesophase formation in random copolymers of propylene and 1-butene. Polymer Bulletin, 2011, 67, 497-510.	3.3	24
115	Formation and reorganization of the mesophase of random copolymers of propylene and 1-butene. Polymer, 2011, 52, 1107-1115.	3.8	33
116	Isotropization, perfection and reorganization of the mesophase of isotactic polypropylene. Thermochimica Acta, 2011, 522, 100-109.	2.7	47
117	Tensile properties of random copolymers of propylene with ethylene and 1-butene: effect of crystallinity and crystal habit. Polymer Bulletin, 2010, 65, 623-634.	3.3	43
118	Surface and bulk morphology of cold-crystallized poly(ethylene terephthalate). Colloid and Polymer Science, 2010, 288, 819-825.	2.1	18
119	Effect of the structure at the micrometer and nanometer scales on the light transmission of isotactic polypropylene. Journal of Applied Polymer Science, 2010, 117, 1013-1020.	2.6	53
120	Mesophases in polyethylene, polypropylene, and poly(1-butene). Polymer, 2010, 51, 4639-4662.	3.8	237
121	Structure of blown films of polyethylene/polybuteneâ€‘1 blends. Polymer Engineering and Science, 2010, 50, 249-256.	3.1	22
122	Effect of atomic force microscope tip geometry on the evaluation of the crystal size of semicrystalline polymers. Measurement Science and Technology, 2009, 20, 097003.	2.6	21
123	Effect of structure on light transmission in isotactic polypropylene and random propylene-1-butene copolymers. Polymer Bulletin, 2009, 62, 561-571.	3.3	73
124	Deformation behavior of isotactic polypropylene crystallized via a mesophase. Polymer Bulletin, 2009, 63, 755-771.	3.3	88
125	Mesophase formation in poly(propylene-ran-1-butene) by rapid cooling. Polymer, 2009, 50, 5482-5489.	3.8	45
126	Temperature of Melting of the Mesophase of Isotactic Polypropylene. Macromolecules, 2009, 42, 7275-7278.	4.8	96

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127	Crystal morphology of rapidly cooled isotactic polypropylene: A comparative study by TEM and AFM. Polymer Bulletin, 2008, 60, 791-798.	3.3	63
128	Effect of cooling rate on melt-crystallization of random propylene-ethylene and propylene-1-butene copolymers. Polymer Bulletin, 2008, 61, 643-654.	3.3	47
129	Effect of polymorphism of isotactic polybuteneâ€1 on peel behavior of polyethylene/polybuteneâ€1 peel systems. Journal of Applied Polymer Science, 2008, 107, 3111-3118.	2.6	30
130	Rigid Amorphous Fraction in Isotactic Polypropylene. Macromolecules, 2008, 41, 8095-8102.	4.8	150
131	In Situ Atomic Force Microscopy of the Mesomorphicâ˜Monoclinic Phase Transition in Isotactic Polypropylene. Macromolecules, 2008, 41, 533-535.	4.8	83
132	Direct analysis of annealing of nodular crystals in isotactic polypropylene by atomic force microscopy, and its correlation with calorimetric data. Polymer, 2007, 48, 3504-3511.	3.8	72
133	Morphology, reorganization and stability of mesomorphic nanocrystals in isotactic polypropylene. Polymer, 2006, 47, 8163-8172.	3.8	163
134	Reversible Crystallization and Melting at the Lateral Surface of Isotactic Polypropylene Crystals. Macromolecules, 2001, 34, 5950-5960.	4.8	101
135	A Study of Annealing of Poly(ethylene-co-octene) by Temperature-Modulated and Standard Differential Scanning Calorimetry. Macromolecules, 1999, 32, 7238-7247.	4.8	90