RenÃ© Fulchiron

List of Publications by Year
in descending order

92 papers	2,138 citations	331538 21 h-index	254106 43 g-index
92 all docs	92 docs citations	92 times ranked	2062 citing authors

#	Article	IF	Citations
1	Recyclability of Opaque PET from High Speed Melt Spinning: Determination of the Structures and Properties of Filaments. Polymers, 2022, 14, 2235.	2.0	3
2	Water Sorption and Mechanical Properties of Cellulosic Derivative Fibers. Polymers, 2022, 14, 2836.	2.0	8
3	Enhancing the Yield Stress in Liquid Polydimethylsiloxane to Allow Its 3D Printing: Hydrogels as Removable Fillers. Macromolecular Materials and Engineering, 2021, 306, 2000553.	1.7	0
4	A novel approach to the study of extensional flow-induced crystallization. Polymer Testing, 2021, 96, 107060.	2.3	3
5	Determination of viscosity average molar masses of polyethylene in a wide range using rheological measurements with a harmless solvent. International Journal of Polymer Analysis and Characterization, 2021, 26, 630-640.	0.9	2
6	Electrical conductivity under shear flow of molten polyethylene filled with carbon nanotubes: Experimental and modeling. Polymer Engineering and Science, 2021, 61, 1129-1138.	1.5	3
7	Impact of Polymer Binders on the Structure of Highly Filled Zirconia Feedstocks. Polymers, 2020, 12, 2247.	2.0	3
8	An Emulsion Approach to Resolve the Paradox of 3D Printing of Very Soft Silicones. Advanced Materials Technologies, 2020, 5, 1901080.	3.0	10
9	A quantitative approach to assess high temperature flow properties of a PA 12 powder for laser sintering. Additive Manufacturing, 2020, 33, 101143.	1.7	12
10	Damage Mechanisms in Medium-Voltage Insulating Polymers under Hemispherical-Plane Electrodes. , 2020, , .		0
11	Rheology and crystallization behavior of polypropylene and highâ€density polyethylene in the presence of a low molar mass polyethylene. Polymer Crystallization, 2019, 2, e10078.	0.5	3
12	Polyamide-6 structuration induced by a chemical reaction with a polyether triamine in the molten state. Polymer, 2019, 172, 339-354.	1.8	9
13	Silicone rheological behavior modification for 3D printing: Evaluation of yield stress impact on printed object properties. Additive Manufacturing, 2019, 28, 50-57.	1.7	30
14	Effect of a postâ€annealing process on microstructure and mechanical properties of highâ€density polyethylene/silica nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 535-546.	2.4	5
15	Condensed Mode Cooling for Ethylene Polymerization: Part Vâ€"Reduction of the Crystallization Rate of HDPE in the Presence of Induced Condensing Agents. Macromolecular Chemistry and Physics, 2019, 220, 1800563.	1.1	8
16	Combined roles of precipitated silica and porosity on electrical properties of battery separators. Materials Chemistry and Physics, 2019, 223, 479-485.	2.0	5
17	High Impact Polystyrene/CNT nanocomposites: Application of volume segregation strategy and behavior under extensional deformation. Polymer, 2018, 157, 156-165.	1.8	9
18	A model for the electrical conductivity variation of molten polymer filled with carbon nanotubes under extensional deformation. Composites Science and Technology, 2018, 168, 111-117.	3.8	4

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19	Synergistic effects of shear flow and nucleating agents on the crystallization mechanisms of Poly (Lactic Acid). Journal of Polymer Research, 2017, 24, 1.	1.2	13
20	Rheology of polypropylene filled with short-glass fibers: From low to concentrated filled composites. European Polymer Journal, 2017, 93, 167-181.	2.6	18
21	Rheology and applications of highly filled polymers: A review of current understanding. Progress in Polymer Science, 2017, 66, 22-53.	11.8	287
22	Zirconia based feedstocks: Influence of particle surface modification on the rheological properties. Ceramics International, 2017, 43, 16950-16956.	2.3	13
23	Morphological and rheological properties of zirconia filled polyethylene. Polymer, 2017, 132, 174-179.	1.8	11
24	An original combined method for electrical conductivity measurement of polymer composites under extensional deformation. Journal of Rheology, 2017, 61, 845-857.	1.3	5
25	Linear and non-linear nature of the flow of polypropylene filled with ferrite particles: from low to concentrated composites. Rheologica Acta, 2017, 56, 635-648.	1.1	5
26	Structuring of non-Brownian ferrite particles in molten polypropylene: Viscoelastic analysis. Journal of Rheology, 2016, 60, 1245-1255.	1.3	6
27	Effect of the naphthenic oil and precipitated silica on the crystallization of ultrahigh-molecular-weight polyethylene. Polymer, 2016, 97, 63-68.	1.8	15
28	Hyper-Viscoelastic Behavior of Healthy Abdominal Aorta. Irbm, 2016, 37, 158-164.	3.7	16
29	Identifying Hyper-Viscoelastic Model Parameters from an Inflation-Extension Test and Ultrasound Images. Experimental Mechanics, 2015, 55, 1353-1366.	1.1	5
30	Polypropylene/layered double hydroxide nanocomposites: Synergistic effect of designed filler modification and compatibilizing agent on the morphology, thermal, and mechanical properties. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 782-794.	2.4	14
31	Migration of additive molecules in a polymer filament obtained by melt spinning: Influence of the fiber processing steps. AIP Conference Proceedings, 2015, , .	0.3	3
32	Chitosan solutions as injectable systems for dermal filler applications: Rheological characterization and biological evidence. , 2015, 2015, 2596-9.		6
33	A simple method for tuning the glass transition process in inorganic phosphate glasses. Scientific Reports, 2015, 5, 8369.	1.6	18
34	Chemical modification routes of synthetic talc: Influence on its nucleating power and on its dispersion state. Applied Clay Science, 2015, 109-110, 107-118.	2.6	30
35	Influence of montmorillonite and film processing conditions on the morphology of polyamide 6: Effect on ethanol and toluene barrier properties. Journal of Membrane Science, 2014, 450, 487-498.	4.1	14
36	Erasure of the processing effects in polyamide 6 based cast films by the introduction of montmorillonite: Effect on water and oxygen transport properties. Journal of Membrane Science, 2014, 456, 11-20.	4.1	10

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37	A thermomechanical modeling approach of the structural changes in semi-crystalline polymers under elongational strain. Journal of Materials Science, 2014, 49, 433-440.	1.7	4
38	Evolution of Poly(propylene) Morphology in the Rubbery State under Uniaxial Strain. Macromolecular Materials and Engineering, 2014, 299, 165-177.	1.7	8
39	Crystallization kinetics of poly-(lactic acid) with and without talc: Optical microscopy and calorimetric analysis. AIP Conference Proceedings, 2014, , .	0.3	14
40	Controlled shear-induced molecular orientation and crystallization in polypropylene/talc microcomposites â€“ Effects of the talc nature. Polymer, 2013, 54, 2764-2775.	1.8	31
41	Elongational behavior of amorphous polymers in the vicinity and above the glass transition temperature. Polymer Testing, 2013, 32, 691-700.	2.3	5
42	Influence of film processing conditions on the morphology of polyamide 6: Consequences on water and ethanol sorption properties. Journal of Membrane Science, 2012, 415-416, 670-680.	4.1	31
43	Relaxation of loose agglomerates of magnesium hydroxide in a polymer melt. Polymer, 2012, 53, 5560-5567.	1.8	12
44	Internal Reorganization of Agglomerates as an Explanation of Energy Dissipation at Very Low Strain for Heterogeneous Polymer Systems. Macromolecular Theory and Simulations, 2012, 21, 113-119.	0.6	18
45	Toward forced assembly of in situ lowâ€density polyethylene composites reinforced with lowâ€<i>T</i>_g phosphate glass fibers: Effects of matrix crystallization and shear deformation. Polymer Engineering and Science, 2012, 52, 2090-2098.	1.5	2
46	In situ generation of high aspect ratio silica particles in polypropylene. Journal of Sol-Gel Science and Technology, 2012, 63, 85-94.	1.1	3
47	Analysis of the influence of polymer viscosity on the dispersion of magnesium hydroxide in a polyolefin matrix. Rheologica Acta, 2012, 51, 235-247.	1.1	10
48	Effect of an organo-modified montmorillonite on PLA crystallization and gas barrier properties. Applied Clay Science, 2011, 53, 58-65.	2.6	160
49	Squeeze flow induced crystallization monitoring in polymers. Polymer Testing, 2011, 30, 760-764.	2.3	4
50	Composition effects of thermoplastic segmented polyurethanes on their nanostructuring kinetics with or without preshear. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 801-811.	2.4	12
51	Aggregation of Carbon Nanotubes in Semidilute Suspension. Macromolecules, 2010, 43, 1467-1472.	2.2	36
52	On the use of the model proposed by Leonov for the explanation of a secondary plateau of the loss modulus in heterogeneous polymerâ€“filler systems with agglomerates. Rheologica Acta, 2010, 49, 513-527.	1.1	28
53	Shearâ€induced structuring kinetics in thermoplastic segmented polyurethanes monitored by rheological tools. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 190-201.	2.4	12
54	Rheology of physically evolving suspensions. Rheologica Acta, 2009, 48, 135-149.	1.1	6

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55	Viscoelasticity and mechanical properties of reactive PVC plastisols. Polymer Engineering and Science, 2009, 49, 1089-1098.	1.5	6
56	Viscoelasticity of Brownian Carbon Nanotubes in PDMS Semidilute Regime. Macromolecules, 2009, 42, 1433-1438.	2.2	53
57	Influence of Î±â€ZrP fillers and process conditions on the morphology and the gas barrier properties of filled polyamide 6 films. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1734-1746.	2.4	13
58	Shear induced crystallization of poly(m-xylylene adipamide) with and without nucleating additives. Polymer, 2007, 48, 3273-3285.	1.8	35
59	Effect of nucleating additives on crystallization of poly(m-xylylene adipamide). Polymer Engineering and Science, 2007, 47, 365-373.	1.5	12
60	Static and shear induced crystallization of glass fiber reinforced poly(<i>m</i>â€xylylene adipamide) with nucleating additives. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 2982-2992.	2.4	9
61	Rheology and gelation kinetics of PVC plastisols. Rheologica Acta, 2007, 46, 825-838.	1.1	29
62	Effect of molecular architecture on quiescent and shear-induced crystallization of polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1597-1607.	2.4	30
63	Influence of Morphology on PTC in Conducting Polypropylene-Silver Composites. Macromolecular Symposia, 2006, 233, 246-253.	0.4	21
64	Correlation between structural features and mechanical properties of boron nitride fibres derived from alkylaminoborazines. Journal of the European Ceramic Society, 2005, 25, 157-162.	2.8	5
65	Study and modeling of heat transfer during the solidification of semi-crystalline polymers. International Journal of Heat and Mass Transfer, 2005, 48, 5417-5430.	2.5	78
66	Dielectric studies of hyperbranched aromatic polyamide and polyamide-6,6 blends. Journal of Applied Polymer Science, 2005, 97, 1522-1537.	1.3	20
67	Phase Morphology and Solidification under Shear in Immiscible Polymer Blends. , 2005, , 237-271.		0
68	Simultaneous dielectric and dynamic mechanical measurements on PVDF in the molten state: Study of the linear/nonlinear viscoelastic transition. Journal of Rheology, 2003, 47, 631-642.	1.3	4
69	?In-situ? monitoring of the non-isothermal crystallization of polymers by dielectric spectroscopy. Polymer Engineering and Science, 2002, 42, 1159-1170.	1.5	13
70	In-line monitoring of the injection molding process by dielectric spectroscopy. Polymer Engineering and Science, 2002, 42, 1171-1180.	1.5	11
71	Influence of shear on polypropylene crystallization: morphology development and kinetics. Polymer, 2002, 43, 6931-6942.	1.8	230
72	Morphology development in immiscible polymer blends during crystallization of the dispersed phase under shear flow. Polymer, 2002, 43, 3311-3321.	1.8	33

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73	Dielectric studies of PVDF crystallization. Application to in-situ monitoring in injection molding. IEEE Transactions on Dielectrics and Electrical Insulation, 2001, 8, 911-916.	1.8	1
74	Converging flow analysis, entrance pressure drops, and vortex sizes: Measurements and calculated values. Polymer Engineering and Science, 2001, 41, 2095-2107.	1.5	11
75	Effect of the pressure on the crystallization behavior of polyamide 66. Journal of Applied Polymer Science, 2001, 80, 1021-1029.	1.3	13
76	ANALYSIS OF THE PRESSURE EFFECT ON THE CRYSTALLIZATION KINETICS OF POLYPROPYLENE: DILATOMETRIC MEASUREMENTS AND THERMAL GRADIENT MODELING. Journal of Macromolecular Science - Physics, 2001, 40, 297-314.	0.4	44
77	Structure and dynamics of melt poly(É›-caprolactone) from inverse rheological calculation. Macromolecular Chemistry and Physics, 2000, 201, 479-490.	1.1	9
78	Nature of contact between polymer and mold in injection molding. Part I: Influence of a non-perfect thermal contact. Polymer Engineering and Science, 2000, 40, 1682-1691.	1.5	84
79	Nature of contact between polymer and mold in injection molding. Part II: Influence of mold deflection on pressure history and shrinkage. Polymer Engineering and Science, 2000, 40, 1692-1700.	1.5	32
80	The crystallization kinetics of polyamide 66 in non-isothermal and isothermal conditions: Effect of nucleating agent and pressure. Polymer Engineering and Science, 2000, 40, 2058-2071.	1.5	18
81	The kinetics of Î± and Î² transcrystallization in fibre-reinforced polypropylene. Polymer, 2000, 41, 7843-7854.	1.8	86
82	Modelling Surface Properties of Linear Amorphous Polymers. Materials Research Society Symposia Proceedings, 2000, 629, 1.	0.1	1
83	Crystallization of Isotactic Polypropylene under High Pressure (Î³ Phase). Macromolecules, 2000, 33, 4138-4145.	2.2	116
84	Crystallization from the melt at high supercooling in finely dispersed polymer blends: DSC and rheological analysis. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 2573-2585.	2.4	15
85	Extrudate swell and isothermal melt spinning analysis of linear low density polyethylene using the Wagner constitutive equation. Journal of Non-Newtonian Fluid Mechanics, 1997, 69, 113-136.	1.0	13
86	Correlations between relaxation time spectrum and melt spinning behavior of polypropylene. 1: Calculation of the relaxation spectrum as a log-normal distribution and influence of the molecular parameters. Polymer Engineering and Science, 1995, 35, 513-517.	1.5	15
87	Correlations between relaxation time spectrum and melt spinning behavior of polypropylene. II: Melt spinning simulation from relaxation time spectrum. Polymer Engineering and Science, 1995, 35, 518-527.	1.5	10
88	Effects of the crystallinity on the Î² relaxation of poly(ethylene terephthalate). Acta Polymerica, 1993, 44, 313-315.	1.3	6
89	Determination of the elongational behavior of polypropylene melts from transient shear experiments using Wagner's model. Journal of Non-Newtonian Fluid Mechanics, 1993, 48, 49-61.	1.0	16
90	Application of the rubber elasticity theory to the co-crosslinking of ethylene vinyl acetate and ethylene methyl acrylate copolymers by transesterification. Polymer, 1993, 34, 1975-1978.	1.8	7

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91	Deconvolution of polymer melt stress relaxation by the PadÃ©â€“Laplace method. Journal of Rheology, 1993, 37, 17-34.	1.3	37
92	Structure Development of Biodegradable Polymers: Crystallization of PLA. Key Engineering Materials, 0, 554-557, 1628-1633.	0.4	0