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List of Publications by Year
in descending order

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132 papers	3,075 citations	159358 30 h-index	214527 47 g-index
134 all docs	134 docs citations	134 times ranked	3407 citing authors

#	Article	IF	Citations
1	Supervised learning for accurate mesoscale simulations of suspension flow in wall-bounded geometries. Physics of Fluids, 2022, 34, .	1.6	0
2	Extensionâ€dominated improved dispersive mixing in singleâ€screw extrusion. Part 2: Comparative analysis with twinâ€screw extruder. Journal of Applied Polymer Science, 2021, 138, 49765.	1.3	14
3	Controlling particle penetration and depletion at the wall using Dissipative Particle Dynamics. Computer Physics Communications, 2021, 258, 107618.	3.0	8
4	Extensionâ€dominated improved dispersive mixing in singleâ€screw extrusion. Part 1: Computational and experimental validation. Journal of Applied Polymer Science, 2021, 138, 49716.	1.3	9
5	Morphology optimization of poly(ethylene terephthalate)/polyamide blends compatibilized via extension-dominated twin-screw extrusion. Journal of Polymer Engineering, 2021, 41, 218-225.	0.6	3
6	Improving dispersive mixing in compatibilized polystyrene/polyamide-6 blends via extension-dominated reactive single-screw extrusion. Journal of Polymer Engineering, 2021, 41, 397-403.	0.6	3
7	Shear Flow and Relaxation Behaviors of Entangled Viscoelastic Nanorod-Stabilized Immiscible Polymer Blends. Macromolecules, 2021, 54, 4198-4210.	2.2	3
8	Dense nanolipid fluid dispersions comprising ibuprofen: Single step extrusion process and drug properties. International Journal of Pharmaceutics, 2021, 598, 120289.	2.6	3
9	On-line ATR-MIR for real-time quantification of chemistry kinetics along the barrel in extrusion-based processes. Polymer Testing, 2021, 103, 107350.	2.3	4
10	Microlayer and nanolayer tubing and piping via layer multiplication coextrusion. I. Validation. Journal of Applied Polymer Science, 2020, 137, 48683.	1.3	4
11	Microlayer and nanolayer tubing and piping via layer multiplication coextrusion. II. Rheologically mismatched systems. Journal of Applied Polymer Science, 2020, 137, 48684.	1.3	4
12	Improving the flame retardancy of polypropylene foam with piperazine pyrophosphate via multilayering coextrusion of film/foam composites. Journal of Applied Polymer Science, 2020, 137, 48552.	1.3	19
13	Effects of structure and processing on the surface roughness of extruded co-continuous poly(ethylene) oxide/ethylene-vinyl acetate blends. Journal of Polymer Engineering, 2020, 40, 763-770.	0.6	6
14	Concentration and Solvent Effects on Structural, Dynamical, and Rheological Properties of Asphaltene Suspensions. Energy & Fuels, 2020, 34, 1071-1081.	2.5	12
15	One-step extrusion of concentrated lidocaine lipid nanocarrier (LNC) dispersions. International Journal of Pharmaceutics, 2020, 589, 119817.	2.6	7
16	Comparative computational analysis of dispersive mixing in extensionâ€dominated mixers for singleâ€screw extruders. Polymer Engineering and Science, 2020, 60, 2390-2402.	1.5	6
17	Thermoâ€rheological analysis of various chain extended recycled poly(ethylene terephthalate). Polymer Engineering and Science, 2020, 60, 2511-2516.	1.5	11
18	Integrated Computational and Experimental Design of Ductile, Abrasion-Resistant Thermoplastic Polyurethane/Graphene Oxide Nanocomposites. ACS Applied Nano Materials, 2020, 3, 9694-9705.	2.4	7

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19	Crystallization kinetics, structure, and rheological behavior of poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 747 Td (te 2841-2851.	1.5	13
20	Modified clustering algorithm for molecular simulation. Molecular Simulation, 2020, 46, 1453-1466.	0.9	5
21	Structure-Rheology-Property relationships in double-percolated Polypropylene/Poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 108306.	3.8	25
22	Slip and momentum transfer mechanisms mediated by Janus rods at polymer interfaces. Soft Matter, 2020, 16, 6662-6672.	1.2	7
23	Phase Control of Polyamide 6 via Extensionâ€Dominated Polymer Blend Reactive Extrusion. Polymer Engineering and Science, 2020, 60, 1019-1028.	1.5	6
24	Simple and immediate quantitative evaluation of dispersive mixing. Polymer Testing, 2020, 88, 106587.	2.3	3
25	Dynamic Interfacial Trapping of Janus Nanorod Aggregates. Langmuir, 2020, 36, 4184-4193.	1.6	8
26	Influence of trisilanol isooctyl POSS content on the structure, morphology and rheological properties of thermoplastic polyurethane (TPU). Journal of Polymer Engineering, 2020, 40, 727-735.	0.6	1
27	Carbon nanofiber reinforced Co-continuous HDPE/PMMA composites: Exploring the role of viscosity ratio on filler distribution and electrical/thermal properties. Composites Science and Technology, 2019, 184, 107859.	3.8	28
28	A New Extensional Mixing Element for Improved Dispersive Mixing in Twinâ€Screw Extrusion, Part 2: Experimental Validation for Immiscible Polymer Blends. Advances in Polymer Technology, 2018, 37, 167-175.	0.8	20
29	Morphological, thermo-mechanical, and thermal conductivity properties of halloysite nanotube-filled polypropylene nanocomposite foam. Journal of Cellular Plastics, 2018, 54, 217-233.	1.2	8
30	Enhanced Thermal Property and Flame Retardancy via Intramolecular 5-Membered Ring Hydrogen Bond-Forming Amide Functional Benzoxazine Resins. Macromolecules, 2018, 51, 9982-9991.	2.2	57
31	Property/Morphology Relationships in SEBS-Compatibilized HDPE/Poly(phenylene ether) Blends. Macromolecules, 2018, 51, 6513-6523.	2.2	19
32	A generalized frictional and hydrodynamic model of the dynamics and structure of dense colloidal suspensions. Journal of Rheology, 2018, 62, 905-918.	1.3	46
33	Injectable liquid polymers extend the delivery of corticosteroids for the treatment of osteoarthritis. Journal of Controlled Release, 2018, 284, 112-121.	4.8	23
34	A New Extensional Mixing Element for Improved Dispersive Mixing in Twinâ€Screw Extrusion, Part 1: Design and Computational Validation. Advances in Polymer Technology, 2017, 36, 455-465.	0.8	21
35	Rheological and thermal behavior of PLA modified by chemical crosslinking in the presence of ethoxylated bisphenol A dimethacrylates. Polymers for Advanced Technologies, 2017, 28, 102-112.	1.6	27
36	Structural fingerprints of yielding mechanisms in attractive colloidal gels. Soft Matter, 2017, 13, 458-473.	1.2	54

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37	Milling solid proteins to enhance activity after melt-encapsulation. International Journal of Pharmaceutics, 2017, 533, 254-265.	2.6	11
38	Biodegradable Viral Nanoparticle/Polymer Implants Prepared via Melt-Processing. ACS Nano, 2017, 11, 8777-8789.	7.3	47
39	Biomimetic Reversible Heat-Stiffening Polymer Nanocomposites. ACS Central Science, 2017, 3, 886-894.	5.3	58
40	Effect of Softâ€toâ€Hard Segment Ratio on Viscoelastic Behavior of Model Thermoplastic Polyurethanes during Phase Transitions. Macromolecular Materials and Engineering, 2016, 301, 953-963.	1.7	12
41	A nonlinear shear and elongation rheological study of interfacial failure in compatible bilayer systems. Journal of Rheology, 2016, 60, 1-23.	1.3	27
42	Conformational Transitions of Polymer Brushes for Reversibly Switching Graphene Transistors. Macromolecules, 2016, 49, 7434-7441.	2.2	18
43	Reactive Extrusion Strategies to Fabricate Magnetiteâ€“Polyethylene Nanocomposites with Enhanced Mechanical and Magnetic Hyperthermia Properties. Macromolecular Materials and Engineering, 2016, 301, 1525-1536.	1.7	9
44	DNA as a flame retardant additive for low-density polyethylene. Polymer, 2016, 97, 504-514.	1.8	46
45	Graphene Oxideâ€“Poly(ethylene glycol) methyl ether methacrylate Nanocomposite Hydrogels. Macromolecular Chemistry and Physics, 2016, 217, 101-107.	1.1	12
46	A Small-Scale Experimental Extrusion Set-Up for Exploring Relationships Between Process-Induced Structures and Characteristics of Multiphase Polymer Systems. Macromolecular Materials and Engineering, 2015, 300, 1278-1289.	1.7	7
47	Optimization of melt blending process of nylon 6â€<scp>POSS</scp>: Improving mechanical properties of spun fibers. Polymer Engineering and Science, 2015, 55, 1580-1588.	1.5	7
48	Multilayer coextrusion of rubber compounds. Polymer Engineering and Science, 2015, 55, 1520-1527.	1.5	6
49	Microconfinement effect on gas barrier and mechanical properties of multilayer rigid/soft thermoplastic polyurethane films. Journal of Applied Polymer Science, 2015, 132, .	1.3	6
50	PEGylation to Improve Protein Stability During Melt Processing. Macromolecular Bioscience, 2015, 15, 1332-1337.	2.1	25
51	Generalized mapping of multi-body dissipative particle dynamics onto fluid compressibility and the Flory-Huggins theory. Journal of Chemical Physics, 2015, 142, 164902.	1.2	31
52	Viscosity contrast effects on the structure â€“ Property relationship of multilayer soft film/foams. Polymer, 2015, 69, 110-122.	1.8	26
53	Copolymers based on telechelic benzoxazine with a reactive main-chain and anhydride: monomer and polymer synthesis, and thermal and mechanical properties of carbon fiber composites. RSC Advances, 2015, 5, 16785-16791.	1.7	18
54	Viscosity measurement techniques in Dissipative Particle Dynamics. Computer Physics Communications, 2015, 196, 149-160.	3.0	64

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55	Polymer-mediated nanorod self-assembly predicted by dissipative particle dynamics simulations. Soft Matter, 2015, 11, 6881-6892.	1.2	35
56	The effect of strain-hardening on the morphology and mechanical and dielectric properties of multi-layered PP foam/PP film. Polymer, 2015, 70, 173-182.	1.8	30
57	Experimental considerations on the step shear strain in polymer melts: sources of error and windows of confidence. Rheologica Acta, 2015, 54, 121-138.	1.1	9
58	Gaussian-inspired auxiliary non-equilibrium thermostat (GIANT) for Dissipative Particle Dynamics simulations. Computer Physics Communications, 2015, 197, 27-34.	3.0	13
59	Microstructure and rheology of soft to rigid shear-thickening colloidal suspensions. Journal of Rheology, 2015, 59, 1377-1395.	1.3	68
60	Rheological behavior and structure development in thermoplastic polyurethanes under uniaxial extensional flow. Journal of Non-Newtonian Fluid Mechanics, 2015, 222, 96-103.	1.0	12
61	A study on fiber sedimentation velocity in epoxy/steel fiber composites used for hybrid injection molds. Journal of Composite Materials, 2014, 48, 3347-3353.	1.2	1
62	Improved interfacial surface generator for the co-extrusion of micro- and nanolayered polymers. Polymer Engineering and Science, 2014, 54, 636-645.	1.5	15
63	The influence of thermo-mechanical history on structure development of elastomeric and amorphous glass thermoplastic polyurethanes. Polymer Engineering and Science, 2014, 54, 1383-1393.	1.5	10
64	A thermo-rheological study on the structure property relationships inÂthe reinforcement of nylon 6â€“POSS blends. Polymer, 2014, 55, 860-870.	1.8	13
65	Vinyl ester/clay based nanocomposites: a complementary study of vinyl ester polymerization by hyphenated rheo-Fourier transform infrared and separate rheology/Fourier transform infrared measurements. Polymer International, 2014, 63, 521-528.	1.6	5
66	In-line particle size assessment of polymer suspensions during processing. Polymer Testing, 2014, 37, 68-77.	2.3	10
67	Assessing the practical utility of the hole-pressure method for the in-line rheological characterization of polymer melts. Rheologica Acta, 2013, 52, 661-672.	1.1	18
68	Controlling the Rate of Water-Induced Switching in Mechanically Dynamic Cellulose Nanocrystal Composites. Macromolecules, 2013, 46, 8203-8212.	2.2	38
69	Bridging the gap between microstructure and macroscopic behavior of monodisperse and bimodal colloidal suspensions. Soft Matter, 2013, 9, 1506-1515.	1.2	36
70	Multilayered confinement of iPP/TPOSS and nylon 6/APOSS blends. Polymer, 2013, 54, 6992-7003.	1.8	7
71	Interplay between rheological and structural evolution of benzoxazine resins during polymerization. Polymer, 2013, 54, 1880-1886.	1.8	23
72	Distortion of Interfaces in a Multilayer Polymer Co-extrusion Feedblock. International Polymer Processing, 2013, 28, 274-280.	0.3	5

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73	The Lowe-Andersen thermostat as an alternative to the dissipative particle dynamics in the mesoscopic simulation of entangled polymers. Journal of Chemical Physics, 2013, 138, 174903.	1.2	21
74	Polymeric Nanoparticles to Control the Differentiation of Neural Stem Cells in the Subventricular Zone of the Brain. ACS Nano, 2012, 6, 10463-10474.	7.3	85
75	Interfacial rheology of coextruded elastomeric and amorphous glass thermoplastic polyurethanes. Rheologica Acta, 2012, 51, 947-957.	1.1	12
76	Mechanistic Pathways for the Polymerization of Methylol-Functional Benzoxazine Monomers. Macromolecules, 2012, 45, 8119-8125.	2.2	97
77	VEGF-Functionalized Dextran Has Longer Intracellular Bioactivity than VEGF in Endothelial Cells. Biomacromolecules, 2012, 13, 2906-2916.	2.6	7
78	Effect of Guar Gum on the Physicochemical, Thermal, Rheological and Textural Properties of Green Edam Cheese. Food and Bioprocess Technology, 2011, 4, 1414-1421.	2.6	37
79	Rheological characterization of Î²-carrageenan/galactomannan and xanthan/galactomannan gels: Comparison of galactomannans from non-traditional sources with conventional galactomannans. Carbohydrate Polymers, 2011, 83, 392-399.	5.1	69
80	Stokesian dynamics simulation of the role of hydrodynamic interactions on the behavior of a single particle suspending in a Newtonian fluid. Part 1. 1D flexible and rigid fibers. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 457-468.	1.0	10
81	Stokesian Dynamics simulation of the role of hydrodynamic interactions on the behavior of a single particle suspending in a Newtonian fluid. Part 2. 2D flexible and rigid rings. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 469-477.	1.0	0
82	Linear and non-linear dynamics of entangled linear polymer melts by modified tunable coarse-grained level Dissipative Particle Dynamics. Journal of Chemical Physics, 2011, 135, 044904.	1.2	30
83	Characterization of dextrinâ€based hydrogels: Rheology, biocompatibility, and degradation. Journal of Biomedical Materials Research - Part A, 2010, 93A, 389-399.	2.1	12
84	Thermo-rheological behavior of model proteinâ€“polysaccharide mixtures. Rheologica Acta, 2010, 49, 401-410.	1.1	14
85	Characterization of galactomannans extracted from seeds of Gleditsia triacanthos and Sophora japonica through shear and extensional rheology: Comparison with guar gum and locust bean gum. Food Hydrocolloids, 2010, 24, 184-192.	5.6	139
86	Direct fibre simulation of carbon nanofibres suspensions in a Newtonian fluid under simple shear. Journal of Colloid and Interface Science, 2010, 347, 183-191.	5.0	10
87	High strain rate rheological characterization of low viscosity fluids. Polymer Testing, 2010, 29, 419-424.	2.3	8
88	Analysis of rheological properties of fibre suspensions in a Newtonian fluid by direct fibre simulation. Part1: Rigid fibre suspensions. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 1055-1063.	1.0	26
89	Analysis of rheological properties of fibre suspensions in a Newtonian fluid by direct fibre simulation. Part 2: Flexible fibre suspensions. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 1064-1071.	1.0	16
90	Analysis of rheological properties of fiber suspensions in a Newtonian fluid by direct fiber simulation. Part 3: Behavior in uniaxial extensional flows. Journal of Non-Newtonian Fluid Mechanics, 2010, 165, 1682-1687.	1.0	10

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91	Rheomechanical and morphological study of compatibilized PP/EVOH blends. Rheologica Acta, 2009, 48, 993-1004.	1.1	18
92	Ocular injectable formulation assessment for oxidized dextran-based hydrogels. Acta Biomaterialia, 2009, 5, 1948-1955.	4.1	42
93	Thermo-rheological behaviour of polymer melts in microinjection moulding. Journal of Micromechanics and Microengineering, 2009, 19, 105012.	1.5	19
94	Friction factors of power-law fluids in chevron-type plate heat exchangers. Journal of Food Engineering, 2008, 89, 441-447.	2.7	25
95	A rheological study of the ageing of emulsion and microsuspensionâ€based PVC plastisols. Journal of Applied Polymer Science, 2008, 109, 664-673.	1.3	11
96	On-line rotational rheometry for extrusion and compounding operations. Journal of Non-Newtonian Fluid Mechanics, 2008, 148, 88-96.	1.0	30
97	Simplified numerical simulation to obtain heat transfer correlations for stirred yoghurt in a plate heat exchanger. Food and Bioproducts Processing, 2008, 86, 296-303.	1.8	9
98	Direct Numerical Simulation of Carbon Nanofiber Composites in Simple Shear Flow. AIP Conference Proceedings, 2008, , .	0.3	1
99	Influence of processing conditions on the morphological and mechanical properties of compatibilized PP/LCP blends. Journal of Applied Polymer Science, 2007, 105, 1521-1532.	1.3	5
100	Laminar flow in chevron-type plate heat exchangers: CFD analysis of tortuosity, shape factor and friction factor. Chemical Engineering and Processing: Process Intensification, 2007, 46, 825-833.	1.8	55
101	Phase separation, rheology and microstructure of pea proteinâ€“kappa-carrageenan mixtures. Food Hydrocolloids, 2007, 21, 92-99.	5.6	48
102	Rheological behavior of compatibilized and non-compatibilized PA6/EPM blends. Rheologica Acta, 2007, 46, 1091-1097.	1.1	37
103	Extensional flow behaviour of natural fibre-filled dough and its relationship with structure and properties. Journal of Non-Newtonian Fluid Mechanics, 2006, 137, 72-80.	1.0	40
104	Thermal behaviour of stirred yoghurt during cooling in plate heat exchangers. Journal of Food Engineering, 2006, 76, 433-439.	2.7	22
105	Transient shear and elongational behavior of blends of PET with a LCP. Rheologica Acta, 2006, 45, 268-280.	1.1	6
106	Uniaxial extensional flow behavior of immiscible and compatibilized polypropylene/liquid crystalline polymer blends. Rheologica Acta, 2006, 45, 281-289.	1.1	5
107	Evolution of the morphological and rheological properties along the extruder length for compatibilized blends of a commercial liquid-crystalline polymer and polypropylene. Journal of Applied Polymer Science, 2006, 99, 347-359.	1.3	26
108	Transient Rheological Behaviour of PA6/EPM/EPM-g-MA Blends. Materials Science Forum, 2006, 514-516, 853-857.	0.3	2

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109	Time dependent effects on the rupture of molten linear polymers in extension. Journal of Non-Newtonian Fluid Mechanics, 2005, 126, 93-103.	1.0	15
110	Synthesis and characterization of new injectable and degradable dextran-based hydrogels. Polymer, 2005, 46, 9604-9614.	1.8	209
111	Influence of type of compatibilizer on the rheological and mechanical behavior of LCP/TP blends under different stationary and nonstationary shear conditions. Journal of Applied Polymer Science, 2005, 98, 694-703.	1.3	8
112	Relationships between hydrodynamics and rheology of flocculating yeast suspensions in a high-cell-density airlift bioreactor. Biotechnology and Bioengineering, 2005, 89, 393-399.	1.7	27
113	Simulation of stirred yoghurt processing in plate heat exchangers. Journal of Food Engineering, 2005, 69, 281-290.	2.7	43
114	Influence of long-chain branching on the rheological behavior of polyethylene in shear and extensional flow. Polymer Engineering and Science, 2005, 45, 984-997.	1.5	17
115	PP/LCP Blends: Influence of the LCP Content on the Mechanical, Rheological and Morphological Properties. Materials Science Forum, 2004, 455-456, 476-479.	0.3	6
116	Online monitoring techniques for studying evolution of physical, rheological and chemical effects along the extruder. Plastics, Rubber and Composites, 2004, 33, 55-61.	0.9	32
117	Evolution of morphological and rheological properties along the extruder length for blends of a commercial liquid crystalline polymer and polypropylene. Polymer, 2004, 45, 2367-2380.	1.8	42
118	Evolution of peroxide-induced thermomechanical degradation of polypropylene along the extruder. Journal of Applied Polymer Science, 2004, 91, 2711-2720.	1.3	43
119	Stress relaxation after a step strain in uniaxial extension of polyisobutylene and polyethylene. Rheologica Acta, 2003, 42, 345-354.	1.1	7
120	Unusual extensional behavior of a polystyrene/HIPS blend. Rheologica Acta, 2003, 42, 483-490.	1.1	8
121	Heat transfer and rheology of stirred yoghurt during cooling in plate heat exchangers. Journal of Food Engineering, 2003, 57, 179-187.	2.7	40
122	Evolution of Chemistry, Morphology and Rheology of Various Polymer Systems along a Twinâ€Screw Extruder. Canadian Journal of Chemical Engineering, 2002, 80, 1065-1074.	0.9	21
123	Evaluation by means of stress relaxation (after a step strain) experiments of the viscoelastic behavior of polymer melts in uniaxial extension. Rheologica Acta, 2002, 41, 257-264.	1.1	20
124	Sources of error and other difficulties in extensional rheometry revisited: commenting and complementing a recent paper by T. Schweizer. Rheologica Acta, 2002, 41, 154-161.	1.1	28
125	Numerical and Analytical Methods in Non-Newtonian Fluid Mechanics. Applied Rheology, 2001, 11, 287-287.	3.5	0
126	Rheological behavior of (short) carbon fiber/thermoplastic composites. Part I: The influence of fiber type, processing conditions and level of incorporation. Polymer Composites, 2000, 21, 960-969.	2.3	67

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127	Rheological behavior of (short) carbon fiber/thermoplastic composites. Part II: The influence of matrix type. Polymer Composites, 2000, 21, 970-977.	2.3	31
128	Measuring uniaxial extensional viscosity using a modified rotational rheometer. Journal of Non-Newtonian Fluid Mechanics, 1999, 80, 183-197.	1.0	46
129	Theoretical modelling of fluid S1: a comparative study of constitutive models in sample and complex flows. Journal of Non-Newtonian Fluid Mechanics, 1999, 85, 107-125.	1.0	14
130	Rheological monitoring of structure evolution and development in stirred yoghurt. Journal of Food Engineering, 1999, 42, 183-190.	2.7	48
131	Influence of elongational properties on the contraction flow of polyisobutylene in a mixed solvent. Rheologica Acta, 1999, 38, 160-171.	1.1	16
132	The rheometry of solutions of polyisobutylene in a mixed solvent. Journal of Non-Newtonian Fluid Mechanics, 1994, 52, 137-152.	1.0	11