

Pier Luca Maffettone

List of Publications by Year in descending order

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186
papers

5,294
citations

101384

36
h-index

106150

65
g-index

190
all docs

190
docs citations

190
times ranked

3350
citing authors

#	ARTICLE	IF	CITATIONS
1	A description of the liquid-crystalline phase of rodlike polymers at high shear rates. <i>Macromolecules</i> , 1989, 22, 4076-4082.	2.2	313
2	Equation of change for ellipsoidal drops in viscous flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1998, 78, 227-241.	1.0	293
3	Quantifying dispersion of layered nanocomposites via melt rheology. <i>Journal of Rheology</i> , 2007, 51, 429-450.	1.3	232
4	Single line particle focusing induced by viscoelasticity of the suspending liquid: theory, experiments and simulations to design a micropipe flow-focuser. <i>Lab on A Chip</i> , 2012, 12, 1638.	3.1	182
5	Particle Migration due to Viscoelasticity of the Suspending Liquid and Its Relevance in Microfluidic Devices. <i>Annual Review of Fluid Mechanics</i> , 2017, 49, 341-360.	10.8	181
6	Microrheological Modeling of Flow-Induced Crystallization. <i>Macromolecules</i> , 2001, 34, 5030-5036.	2.2	157
7	Particle dynamics in viscoelastic liquids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2015, 215, 80-104.	1.0	153
8	Particle alignment in a viscoelastic liquid flowing in a square-shaped microchannel. <i>Lab on A Chip</i> , 2013, 13, 4263.	3.1	98
9	Viscoelasticity-induced migration of a rigid sphere in confined shear flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2010, 165, 466-474.	1.0	96
10	Particle motion in square channel flow of a viscoelastic liquid: Migration vs. secondary flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2013, 195, 1-8.	1.0	96
11	Viscoelastic flow-focusing in microchannels: scaling properties of the particle radial distributions. <i>Lab on A Chip</i> , 2013, 13, 2802.	3.1	88
12	Nematic phase of rodlike polymers. I. Prediction of transient behavior at high shear rates. <i>Journal of Rheology</i> , 1990, 34, 1217-1230.	1.3	85
13	Effects of the degree of undercooling on flow induced crystallization in polymer melts. <i>Polymer</i> , 2004, 45, 3249-3256.	1.8	83
14	Full-angle tomographic phase microscopy of flowing quasi-spherical cells. <i>Lab on A Chip</i> , 2018, 18, 126-131.	3.1	83
15	Rotation of a sphere in a viscoelastic liquid subjected to shear flow. Part I: Simulation results. <i>Journal of Rheology</i> , 2008, 52, 1331-1346.	1.3	77
16	Continuum theory for nematic liquid crystals with tensorial order. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2004, 119, 51-59.	1.0	71
17	Microrheology with Optical Tweezers: Measuring the relative viscosity of solutions "at a glance"™. <i>Scientific Reports</i> , 2015, 5, 8831.	1.6	71
18	Perspectives on liquid biopsy for label-free detection of circulating tumor cells through intelligent lab-on-a-chips. <i>View</i> , 2020, 1, 20200034.	2.7	69

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19	Prediction of Chaotic Dynamics in Sheared Liquid Crystalline Polymers. <i>Physical Review Letters</i> , 2001, 86, 3184-3187.	2.9	68
20	Ellipsoidal drop model for single drop dynamics with non-Newtonian fluids. <i>Journal of Rheology</i> , 2004, 48, 83-100.	1.3	68
21	Fourier Transform Rheology of Dilute Immiscible Polymer Blends: A Novel Procedure To Probe Blend Morphology. <i>Macromolecules</i> , 2008, 41, 4492-4500.	2.2	65
22	Rheometry-on-a-chip: measuring the relaxation time of a viscoelastic liquid through particle migration in microchannel flows. <i>Lab on A Chip</i> , 2015, 15, 783-792.	3.1	64
23	Simulations of deformable systems in fluids under shear flow using an arbitrary Lagrangian Eulerian technique. <i>Computers and Fluids</i> , 2014, 90, 88-100.	1.3	58
24	Effect of viscoelasticity on the rotation of a sphere in shear flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2011, 166, 363-372.	1.0	57
25	Effect of fluid rheology on particle migration in a square-shaped microchannel. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 95-104.	1.0	57
26	Magnetophoresis $\hat{\sim}$ meets $\hat{\sim}$ viscoelasticity: deterministic separation of magnetic particles in a modular microfluidic device. <i>Lab on A Chip</i> , 2015, 15, 1912-1922.	3.1	56
27	Simulations of viscoelasticity-induced focusing of particles in pressure-driven micro-slit flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2011, 166, 1396-1405.	1.0	54
28	Drop shape dynamics under shear-flow reversal. <i>Journal of Rheology</i> , 2000, 44, 1385-1399.	1.3	53
29	Nanocomposite UV-cured coatings: Organoclay intercalation by an epoxy resin. <i>Progress in Organic Coatings</i> , 2008, 63, 110-115.	1.9	52
30	Numerical simulations of particle migration in a viscoelastic fluid subjected to shear flow. <i>Computers and Fluids</i> , 2010, 39, 709-721.	1.3	51
31	Rotation of a sphere in a viscoelastic liquid subjected to shear flow. Part II. Experimental results. <i>Journal of Rheology</i> , 2009, 53, 459-480.	1.3	50
32	Rheology and rheological morphology determination in immiscible two-phase polymer model blends. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 93, 153-165.	1.0	44
33	Dynamic characterization of liquid crystalline polymers under flow-aligning shear conditions. <i>Journal of Chemical Physics</i> , 1994, 100, 7736-7743.	1.2	42
34	Rheology of a dilute suspension of rigid spheres in a second order fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007, 147, 1-10.	1.0	41
35	Dynamics, rheology, and applications of elastic deformable particle suspensions: a review. <i>Rheologica Acta</i> , 2019, 58, 109-130.	1.1	41
36	Fluid Viscoelasticity Drives Self-Assembly of Particle Trains in a Straight Microfluidic Channel. <i>Physical Review Applied</i> , 2018, 10, .	1.5	38

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37	Bistability and metastability scenario in the dynamics of an ellipsoidal particle in a sheared viscoelastic fluid. <i>Physical Review E</i> , 2014, 89, 043006.	0.8	36
38	Hydrodynamics and Brownian motions of a spheroid near a rigid wall. <i>Journal of Chemical Physics</i> , 2015, 142, 194901.	1.2	36
39	Numerical simulations of deformable particle lateral migration in tube flow of Newtonian and viscoelastic media. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016, 234, 105-113.	1.0	36
40	Rheology of viscoelastic suspensions of spheres under small and large amplitude oscillatory shear by numerical simulations. <i>Journal of Rheology</i> , 2013, 57, 813-839.	1.3	35
41	Combining Catalytic Combustion and Steam Reforming in a Novel Multifunctional Reactor for On-Board Hydrogen Production from Middle Distillates. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 9422-9430.	1.8	33
42	Rheology of dilute and semidilute noncolloidal hard sphere suspensions. <i>Journal of Rheology</i> , 2008, 52, 1369-1384.	1.3	33
43	Relaxation time of polyelectrolyte solutions: When $\hat{\gamma} > 1/4$ -rheometry steps in charge. <i>Journal of Rheology</i> , 2017, 61, 13-21.	1.3	33
44	Rheology of carbon nanofiber-reinforced polypropylene. <i>Rheologica Acta</i> , 2008, 47, 425-433.	1.1	32
45	Bifurcation analysis of a molecular model for nematic polymers in shear flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1995, 59, 73-91.	1.0	31
46	Symmetry properties and bifurcation analysis of a class of periodically forced chemical reactors. <i>Chemical Engineering Science</i> , 2002, 57, 5065-5082.	1.9	31
47	Numerical simulations of particle migration in a viscoelastic fluid subjected to Poiseuille flow. <i>Computers and Fluids</i> , 2011, 42, 82-91.	1.3	31
48	CFD-DEM simulations of particulate fouling in microchannels. <i>Chemical Engineering Journal</i> , 2019, 358, 91-100.	6.6	31
49	Coupling between kinetics and rheological parameters in the flow-induced crystallization of thermoplastic polymers. <i>Macromolecular Symposia</i> , 2002, 185, 233-241.	0.4	30
50	A closure approximation for nematic liquid crystals based on the canonical distribution subspace theory. <i>Rheologica Acta</i> , 2000, 39, 301-310.	1.1	29
51	Numerical simulation of planar elongational flow of concentrated rigid particle suspensions in a viscoelastic fluid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2008, 150, 65-79.	1.0	29
52	Migration of a sphere in a viscoelastic fluid under planar shear flow: Experiments and numerical predictions. <i>Soft Matter</i> , 2011, 7, 1100-1106.	1.2	29
53	The effect of shear flow on microreactor clogging. <i>Chemical Engineering Journal</i> , 2018, 341, 639-647.	6.6	29
54	Multistability and hysteresis in an industrial ammonia reactor. <i>AIChE Journal</i> , 2000, 46, 824-828.	1.8	28

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55	Effects of confinement on the motion of a single sphere in a sheared viscoelastic liquid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009, 157, 101-107.	1.0	28
56	Metal-Enhanced Fluorescence Immunosensor Based on Plasmonic Arrays of Gold Nanoislands on an Etched Glass Substrate. <i>ACS Applied Nano Materials</i> , 2020, 3, 10470-10478.	2.4	28
57	Newtonian drop in a Newtonian matrix subjected to large amplitude oscillatory shear flows. <i>Rheologica Acta</i> , 2004, 43, 575-583.	1.1	27
58	Simulations of an elastic particle in Newtonian and viscoelastic fluids subjected to confined shear flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2014, 210, 47-55.	1.0	27
59	Numerical simulations on the dynamics of a spheroid in a viscoelastic liquid in a wide-slit microchannel. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2019, 263, 33-41.	1.0	27
60	Complex dynamics and spatio-temporal patterns in a network of three distributed chemical reactors with periodical feed switching. <i>Chaos, Solitons and Fractals</i> , 2006, 28, 682-706.	2.5	26
61	Dynamics of pairs and triplets of particles in a viscoelastic fluid flowing in a cylindrical channel. <i>Computers and Fluids</i> , 2013, 86, 45-55.	1.3	26
62	Numerical simulations of the competition between the effects of inertia and viscoelasticity on particle migration in Poiseuille flow. <i>Computers and Fluids</i> , 2015, 107, 214-223.	1.3	26
63	Quantitative imaging of the complexity in liquid bubbles' evolution reveals the dynamics of film retraction. <i>Light: Science and Applications</i> , 2019, 8, 20.	7.7	26
64	Start-up and retraction dynamics of a Newtonian drop in a viscoelastic matrix under simple shear flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2006, 134, 27-32.	1.0	25
65	Optimizing design and fabrication of microfluidic devices for cell cultures: An effective approach to control cell microenvironment in three dimensions. <i>Biomicrofluidics</i> , 2014, 8, 046503.	1.2	25
66	Analysis of dynamic mechanical response in torsion. <i>Journal of Rheology</i> , 2016, 60, 275-287.	1.3	25
67	A two-dimensional approach to the constitutive equation of nematic polymers. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1991, 38, 273-288.	1.0	24
68	Extensional Flow of a Two-Dimensional Polymer Liquid Crystal. <i>Macromolecules</i> , 1996, 29, 8473-8478.	2.2	24
69	A model of the dynamics of a fluidized bed combustor burning biomass. <i>Combustion and Flame</i> , 2005, 140, 371-384.	2.8	24
70	Migration of a sphere suspended in viscoelastic liquids in Couette flow: experiments and simulations. <i>Rheologica Acta</i> , 2012, 51, 215-234.	1.1	24
71	Migration and chaining of noncolloidal spheres suspended in a sheared viscoelastic medium. Experiments and numerical simulations. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2014, 203, 1-8.	1.0	24
72	Elasticity in Bubble Rupture. <i>Langmuir</i> , 2018, 34, 5646-5654.	1.6	24

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73	Microfluidic formation of crystal-like structures. <i>Lab on A Chip</i> , 2021, 21, 2069-2094.	3.1	24
74	Band formation in HPC solutions by consecutive shears along orthogonal directions. <i>Liquid Crystals</i> , 1989, 4, 385-391.	0.9	23
75	Nonlinear dynamics of a VOC combustion loop reactor. <i>AIChE Journal</i> , 2006, 52, 2812-2822.	1.8	22
76	Bifurcational and dynamical analysis of a continuous biofilm reactor. <i>Journal of Biotechnology</i> , 2008, 135, 295-303.	1.9	21
77	Modelling and simulation of a catalytic autothermal methane reformer with Rh catalyst. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 263-275.	3.8	21
78	Dehydration of plant cells shoves nuclei rotation allowing for 3D phase-contrast tomography. <i>Light: Science and Applications</i> , 2021, 10, 187.	7.7	21
79	The rigid rod model for nematic polymers: Testing closure approximations with bifurcation analysis. <i>Journal of Rheology</i> , 1994, 38, 1559-1570.	1.3	20
80	A numerical method for simulating concentrated rigid particle suspensions in an elongational flow using a fixed grid. <i>Journal of Computational Physics</i> , 2007, 226, 688-711.	1.9	20
81	Microfluidic Lagrangian Trap for Brownian Particles: Three-Dimensional Focusing down to the Nanoscale. <i>Physical Review Applied</i> , 2014, 2, .	1.5	20
82	Multi-graded foams upon time-dependent exposition to blowing agent. <i>Chemical Engineering Journal</i> , 2019, 362, 812-817.	6.6	20
83	Numerical simulations on the dynamics of trains of particles in a viscoelastic fluid flowing in a microchannel. <i>Meccanica</i> , 2020, 55, 317-330.	1.2	19
84	Shear-induced biaxiality in nematic polymers. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 90, 283-297.	1.0	17
85	Finite element formulation of fluctuating hydrodynamics for fluids filled with rigid particles using boundary fitted meshes. <i>Journal of Computational Physics</i> , 2016, 316, 632-651.	1.9	17
86	Modeling Temperature Profiles of a Catalytic Autothermal Methane Reformer with Nickel Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 1804-1815.	1.8	16
87	Full-Field and Quantitative Analysis of a Thin Liquid Film at the Nanoscale by Combining Digital Holography and White Light Interferometry. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1075-1086.	1.5	16
88	Analysis of start-up dynamics of a single drop through an ellipsoidal drop model for non-Newtonian fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2005, 126, 145-151.	1.0	15
89	Effect of the Switch Strategy on the Stability of Reactor Networks. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 6510-6521.	1.8	15
90	A new methodology for the estimation of drop size distributions of dilute polymer blends based on LAOS flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007, 143, 48-58.	1.0	15

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91	Is microrheometry affected by channel deformation?. <i>Biomicrofluidics</i> , 2016, 10, 043501.	1.2	15
92	Numerical investigation of hard-gel microparticle suspension dynamics in microfluidic channels: Aggregation/fragmentation phenomena, and incipient clogging. <i>Chemical Engineering Journal</i> , 2016, 303, 202-216.	6.6	15
93	Flowering in bursting bubbles with viscoelastic interfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	15
94	A microcapillary rheometer for microliter sized polymer characterization. <i>Polymer Testing</i> , 2021, 102, 107332.	2.3	15
95	Experimental Study and Numerical Investigation of the Phenomena Occurring During Long Duration Cold Spray Deposition. <i>International Review on Modelling and Simulations</i> , 2018, 11, 84.	0.2	15
96	Continuous 3D Printing of Hierarchically Structured Microfoamed Objects. <i>Advanced Engineering Materials</i> , 2022, 24, 2101226.	1.6	15
97	The dynamics of two dimensional polymer nematics1Dedicated to the memory of Professor Gianni Astarita1. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1998, 76, 233-247.	1.0	14
98	Non-linear dynamics of a self-igniting reactionâ€“diffusion system. <i>Chemical Engineering Science</i> , 2000, 55, 303-309.	1.9	14
99	Stress Tensor of a Dilute Suspension of Spheres in a Viscoelastic Liquid. <i>Physical Review Letters</i> , 2005, 95, 246001.	2.9	14
100	Dynamics of a Methanol Reformer for Automotive Applications. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 759-768.	1.8	14
101	Assembling and rotating erythrocyte aggregates by acoustofluidic pressure enabling full phase-contrast tomography. <i>Lab on A Chip</i> , 2019, 19, 3123-3132.	3.1	14
102	Design of a microfluidic device for the measurement of the elastic modulus of deformable particles. <i>Soft Matter</i> , 2019, 15, 880-889.	1.2	14
103	Numerical simulations on the dynamics of a particle pair in a viscoelastic fluid in a microchannel: effect of rheology, particle shape, and confinement. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	1.0	14
104	Numerical simulations of the dynamics of a slippery particle in Newtonian and viscoelastic fluids subjected to shear and Poiseuille flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016, 228, 46-54.	1.0	13
105	Numerical simulation of clogging in a microchannel with planar contraction. <i>Physics of Fluids</i> , 2021, 33, .	1.6	13
106	Digital holography as metrology tool at micro-nanoscale for soft matter. <i>Light Advanced Manufacturing</i> , 2022, 3, 151.	2.2	13
107	A constitutive equation for monodomains of nematic polymers. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1992, 45, 339-354.	1.0	12
108	NONLINEAR ANALYSIS OF A NETWORK OF THREE CONTINUOUS STIRRED TANK REACTORS WITH PERIODIC FEED SWITCHING: SYMMETRY AND SYMMETRY-BREAKING. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004, 14, 1325-1341.	0.7	12

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109	Slit devolatilization of polymers. <i>AICHE Journal</i> , 1991, 37, 724-734.	1.8	11
110	Flow of nematic polymers in eccentric cylinder geometry: influence of closure approximations. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 94, 119-134.	1.0	11
111	Quiescent and flow-induced transitional behavior of hydroxypropylcellulose solutions. <i>Journal of Chemical Physics</i> , 2003, 118, 5195-5200.	1.2	11
112	Rheology of a dilute viscoelastic suspension of spheroids in unconfined shear flow. <i>Rheologica Acta</i> , 2015, 54, 915-928.	1.1	11
113	Numerical simulations of a stick-slip spherical particle in Poiseuille flow. <i>Physics of Fluids</i> , 2019, 31, 083603.	1.6	11
114	Extending the High-Throughput Experimentation (HTE) Approach to Catalytic Olefin Polymerizations: From Catalysts to Materials. <i>Macromolecules</i> , 2022, 55, 5017-5026.	2.2	11
115	Short-term ursodeoxycholic acid treatment improves gallbladder bile turnover in gallstone patients: a randomized trial. <i>Neurogastroenterology and Motility</i> , 2005, 17, 680-686.	1.6	10
116	A critical appraisal of the ζ -slip length. <i>Journal of Fluid Mechanics</i> , 2017, 827, 1-15.	1.9	10
117	On the choice of the optimal periodic operation for a continuous fermentation process. <i>Chemical Engineering Progress</i> , 2010, 26, 1580-1589.	1.3	10
118	Decoupled transient schemes for viscoelastic fluid flow with inertia. <i>Computers and Fluids</i> , 2012, 66, 183-193.	1.3	10
119	Modeling and simulation of viscoelastic film retraction. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2017, 249, 26-35.	1.0	10
120	Numerical design of a T-shaped microfluidic device for deformability-based separation of elastic capsules and soft beads. <i>Physical Review E</i> , 2017, 96, 053103.	0.8	10
121	Hindered Brownian diffusion in a square-shaped geometry. <i>Journal of Colloid and Interface Science</i> , 2015, 447, 25-32.	5.0	9
122	Three-dimensional computational fluid dynamics simulation of the hollow-cone spray process: The stability of the conical liquid sheet. <i>Physics of Fluids</i> , 2021, 33, .	1.6	9
123	Single Drop Dynamics under Shearing Flow in Systems with a Viscoelastic Phase. <i>Macromolecular Symposia</i> , 2005, 228, 31-40.	0.4	8
124	Morphology estimation from normal stress measurements for dilute immiscible polymer blends. <i>Rheologica Acta</i> , 2003, 42, 158-165.	1.1	7
125	Separation of particles in non-Newtonian fluids flowing in T-shaped microchannels. <i>Advanced Modeling and Simulation in Engineering Sciences</i> , 2015, 2, .	0.7	7
126	Characteriation of chaotic dynamics in the spontaneous combustion of coal stockpiles. <i>Proceedings of the Combustion Institute</i> , 1996, 26, 1585-1592.	0.3	6

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127	Computational simulations of 3D large-scale time-dependent viscoelastic flows in high performance computing environment. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2011, 166, 1382-1395.	1.0	6
128	The effect of wall slip on the dynamics of a spherical particle in Newtonian and viscoelastic fluids subjected to shear and Poiseuille flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016, 236, 123-131.	1.0	6
129	Numerical simulations of the separation of elastic particles in a T-shaped bifurcation. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016, 233, 75-84.	1.0	6
130	Effect of pH on the viscoelastic properties of pig gastric mucus. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 98, 195-199.	1.5	6
131	Dissolution of concentrated surfactant solutions: from microscopy imaging to rheological measurements through numerical simulations. <i>Soft Matter</i> , 2019, 15, 8352-8360.	1.2	6
132	Axisymmetric bare freestanding films of highly viscous liquids: Preparation and real-time investigation of capillary leveling. <i>Journal of Colloid and Interface Science</i> , 2021, 596, 493-499.	5.0	6
133	DEVOLATILIZATION OF POLYMERS. , 1993, , 419-444.		5
134	Nonlinear Analysis of Substrate-Inhibited Continuous Cultures Operated with Feedback Control on Dissolved Oxygen. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 13422-13431.	1.8	5
135	Numerical simulations of viscoelastic film stretching and retraction. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2019, 266, 118-126.	1.0	5
136	Stability of multislit devolatilization of polymers. <i>AIChE Journal</i> , 1993, 39, 140-148.	1.8	4
137	Nonlinear dynamics of a concentrated system of rigid rods subjected to periodic shear flow. <i>Journal of Rheology</i> , 2003, 47, 129-141.	1.3	4
138	Nonlinear Analysis of Heterogeneous Model for an Industrial Ammonia Reactor. <i>Chemical Product and Process Modeling</i> , 2009, 4, .	0.5	4
139	Temperature wave trains of the loop reactor: The effect of thermal dispersion. <i>Chemical Engineering Science</i> , 2012, 76, 108-119.	1.9	4
140	Numerical simulations of linear viscoelasticity of monodisperse emulsions of Newtonian drops in a Newtonian fluid from dilute to concentrated regime. <i>Rheologica Acta</i> , 2014, 53, 401-416.	1.1	4
141	Granular flow in rotating drums through simulations adopting a continuum constitutive equation. <i>Physics of Fluids</i> , 2020, 32, 093305.	1.6	4
142	Polymer devolatilization: State of the art. <i>Makromolekulare Chemie Macromolecular Symposia</i> , 1993, 68, 1-12.	0.6	3
143	Nonlinear analysis of an industrial ammonia reactor with heterogeneous model. <i>Computer Aided Chemical Engineering</i> , 2001, 9, 225-230.	0.3	2
144	Rheology of a Dilute Suspension of Spheres in a Viscoelastic Fluid Under Large Amplitude Oscillations. <i>Journal of Computational and Theoretical Nanoscience</i> , 2010, 7, 780-786.	0.4	2

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145	iPP Crystallization: Micro and Nano Fillers Effects. , 2010, , .		2
146	Interferometric measurement of film thickness during bubble blowing. , 2017, , .		2
147	3D imaging in microfluidics: new holographic methods and devices. , 2019, , .		2
148	CFD-DEM Modelling: Clogging of Triplet Particles in a Microchannel With a Constriction. , 2021, , .		2
149	An Experimental and Numerical Investigation on Bubble Growth in Polymeric Foams. Entropy, 2022, 24, 183.	1.1	2
150	Effect of wall slip on the viscoelastic particle ordering in a microfluidic channel. Electrophoresis, 2022, 43, 2206-2216.	1.3	2
151	Interactions between flow and superstructure of liquid crystalline polymers. Macromolecular Symposia, 1997, 124, 49-57.	0.4	1
152	A laboratory spiral disk extruder for flow visualization. Polymer Engineering and Science, 2000, 40, 2262-2271.	1.5	1
153	Numerical simulations of dispersive mixing of viscoelastic suspensions in a four-roll mill. Rheologica Acta, 2017, 56, 695-706.	1.1	1
154	Fast and Accurate Thickness Mapping of Liquid Bubbles and Thin Protein Films. , 2018, , .		1
155	Biocompatible micro-needles for smart therapy. , 2021, , .		1
156	POLYMER DEVOLATILIZATION: HOW IMPORTANT IS RHEOLOGY?. , 1992, , 366-368.		1
157	Thin-film drainage study based on holographic 3D particle tracking. , 2018, , .		1
158	Tomographic flow cytometry of circulating human breast adenocarcinoma cells. , 2018, , .		1
159	Recent Advancements and Perspective About Digital Holography: A Super-Tool in Biomedical and Bioengineering Fields. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 235-241.	0.3	1
160	Engineering problem involving diophantine algebra. AIChE Journal, 1996, 42, 3296-3299.	1.8	0
161	Non linear dynamics of a network of reactors with periodical feed switching. Computer Aided Chemical Engineering, 2002, 10, 535-540.	0.3	0
162	Effect of short-time treatment with ursodeoxycholic acid on postprandial gallbladder bile flow in gallstone patients: a statistical-mathematical analysis of ultrasonographic data. Gastroenterology, 2003, 124, A247.	0.6	0

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163	4th Annual European Rheology Conference (AERC 2007) Naples, Italy, 12â€“14 April 2007. Rheologica Acta, 2008, 47, 477-477.	1.1	0
164	Rotation of a Sphere in a Viscoelastic Fluid under Flow. AIP Conference Proceedings, 2008, , .	0.3	0
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