Bamin Khomami

List of Publications by Year
in descending order

184	4,381	87886	182417
papers	citations	38 h-index	51 g-index

188	188	188	2891
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Brownian dynamics simulations of bead-rod and bead-spring chains: numerical algorithms and coarse-graining issues. Journal of Non-Newtonian Fluid Mechanics, 2002, 108, 227-255.	2.4	160
2	Influence of rheological parameters on polymer induced turbulent drag reduction. Journal of Non-Newtonian Fluid Mechanics, 2006, 140, 23-40.	2.4	119
3	Resin flow through fiber beds during composite manufacturing processes. Part II: Numerical and experimental studies of newtonian flow through ideal and actual fiber beds. Polymer Engineering and Science, 1992, 32, 231-239.	3.1	86
4	Resin flow through fiber beds during composite manufacturing processes. Part I: Review of newtonian flow through fiber beds. Polymer Engineering and Science, 1992, 32, 221-230.	3.1	83
5	Irreversible nanogel formation in surfactant solutions by microporous flow. Nature Materials, 2010, 9, 436-441.	27.5	83
6	An experimental investigation of interfacial instabilities in multilayer flow of viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 1992, 45, 355-384.	2.4	81
7	An experimental investigation of interfacial instabilities in multilayer flow of viscoelastic fluids. Part II. Elastic and nonlinear effects in incompatible polymer systems. Journal of Rheology, 1993, 37, 315-339.	2.6	78
8	Interfacial stability of multilayer viscoelastic fluids in slit and converging channel die geometries. Journal of Rheology, 1992, 36, 357-387.	2.6	76
9	Polymeric flow through fibrous media. Journal of Rheology, 1992, 36, 589-620.	2.6	69
10	Application of higher order finite element methods to viscoelastic flow in porous media. Journal of Rheology, 1992, 36, 1377-1416.	2.6	68
11	Modeling of viscoelastic lid driven cavity flow using finite element simulations. Journal of Non-Newtonian Fluid Mechanics, 1999, 88, 99-131.	2.4	63
12	Purely elastic interfacial instabilities in superposed flow of polymeric fluids. Rheologica Acta, 1992, 31, 413-420.	2.4	59
13	An experimental/theoretical investigation of interfacial instabilities in superposed pressure-driven channel flow of Newtonian and well characterized viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 2000, 91, 59-84.	2.4	56
14	An investigation of interfacial instabilities in the superposed channel flow of viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 1999, 81, 27-69.	2.4	55
15	Turbulent channel flow of dilute polymeric solutions: Drag reduction scaling and an eddy viscosity model. Journal of Non-Newtonian Fluid Mechanics, 2006, 139, 177-189.	2.4	55
16	Stability of viscoelastic flow around periodic arrays of cylinders. Rheologica Acta, 1997, 36, 367-383.	2.4	54
17	A study of viscoelastic free surface flows by the finite element method: Heleâ€“Shaw and slot coating flows. Journal of Non-Newtonian Fluid Mechanics, 2002, 108, 327-362.	2.4	54
18	Interfacial stability and deformation of two stratified power law fluids in plane poiseuille flow Part I. Stability analysis. Journal of Non-Newtonian Fluid Mechanics, 1990, 36, 289-303.	2.4	49

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19	An experimental investigation of interfacial instabilities in multilayer flow of viscoelastic fluids. III. Compatible polymer systems. Journal of Rheology, 1993, 37, 341-354.	2.6	49
20	Modeling of injected pultrusion processes: A numerical approach. Polymer Composites, 1998, 19, 335-346.	4.6	49
21	Accurate permeability characterization of preforms used in polymer matrix composite fabrication processes. Polymer Composites, 1997, 18, 368-377.	4.6	45
22	Self-similar shear thickening behavior in CTAB/NaSal surfactant solutions. Journal of Rheology, 2008, 52, 527-550.	2.6	45
23	A facile and surfactant-free route for nanomanufacturing of tailored ternary nanoalloys as superior oxygen reduction reaction electrocatalysts. Catalysis Science and Technology, 2017, 7, 2074-2086.	4.1	45
24	Interfacial stability and deformation of two stratified power law fluids in plane poiseuille flow Part II. Interface deformation. Journal of Non-Newtonian Fluid Mechanics, 1990, 37, 19-36.	2.4	44
25	Elastically induced turbulence in Taylorâ€“Couette flow: direct numerical simulation and mechanistic insight. Journal of Fluid Mechanics, 2013, 737, .	3.4	44
26	A comparative study of higherâ€•and lowerâ€•order finite element techniques for computation of viscoelastic flows. Journal of Rheology, 1994, 38, 255-289.	2.6	43
27	Flow of viscoelastic fluids past periodic square arrays of cylinders: inertial and shear thinning viscosity and elasticity effects. Journal of Non-Newtonian Fluid Mechanics, 1995, 57, 177-202.	2.4	43
28	A Theoretical/Experimental Study of Silicon Epitaxy in Horizontal Single-Wafer Chemical Vapor Deposition Reactors. Journal of the Electrochemical Society, 2000, 147, 1538.	2.9	43
29	Praseodymium-doped ZnS nanomaterials: Hydrothermal synthesis and characterization with enhanced visible light photocatalytic activity. Journal of Industrial and Engineering Chemistry, 2016, 34, 41-50.	5.8	43
30	Effect of confinement on dynamics and rheology of dilute DNA solutions. I. Entropic spring force under confinement and a numerical algorithm. Journal of Rheology, 2004, 48, 281-298.	2.6	41
31	Influence of Nitric Acid on Uranyl Nitrate Association in Aqueous Solutions: A Molecular Dynamics Simulation Study. Solvent Extraction and Ion Exchange, 2010, 28, 1-18.	2.0	41
32	Hybrid nanocomposites of nanostructured Co₃O₄interfaced with reduced/nitrogen-doped graphene oxides for selective improvements in electrocatalytic and/or supercapacitive properties. RSC Advances, 2017, 7, 33166-33176.	3.6	41
33	Uranyl nitrate complex extraction into TBP/dodecane organic solutions: a molecular dynamics study. Physical Chemistry Chemical Physics, 2010, 12, 15406.	2.8	40
34	Individual Molecular Dynamics of an Entangled Polyethylene Melt Undergoing Steady Shear Flow: Steady-State and Transient Dynamics. Polymers, 2019, 11, 476.	4.5	40
35	Flow birefringence and computational studies of a shear thinning polymer solution in axisymmetric stagnation flow. Journal of Non-Newtonian Fluid Mechanics, 1998, 74, 151-193.	2.4	39
36	Synthesis of visible light-active nanostructured TiOx (x<2) photocatalysts in a flame aerosol reactor. Applied Catalysis B: Environmental, 2009, 86, 145-151.	20.2	39

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37	Experimental investigation of purely elastic instabilities in periodic flows. Journal of Non-Newtonian Fluid Mechanics, 2002, 108, 209-226.	2.4	38
38	Interfacial Complex Formation in Uranyl Extraction by Tributyl Phosphate in Dodecane Diluent: A Molecular Dynamics Study. Journal of Physical Chemistry B, 2009, 113, 9852-9862.	2.6	38
39	Molecular Dynamics Simulation of Tri-n-butyl-Phosphate Liquid: A Force Field Comparative Study. Journal of Physical Chemistry B, 2012, 116, 305-313.	2.6	38
40	Experimental studies of interfacial instabilities in multilayer pressure-driven flow of polymeric melts. Rheologica Acta, 1997, 36, 345-366.	2.4	37
41	Nonlinear dynamics of viscoelastic Taylorâ€“Couette flow: effect of elasticity on pattern selection, molecular conformation and drag. Journal of Fluid Mechanics, 2009, 620, 353-382.	3.4	37
42	Controlling the Morphology of Photosystem I Assembly on Thiol-Activated Au Substrates. Langmuir, 2010, 26, 16048-16054.	3.5	37
43	Synthesis and characterization of samarium-doped ZnS nanoparticles: A novel visible light responsive photocatalyst. Materials Research Bulletin, 2016, 76, 411-421.	5.2	37
44	A note on selection of spaces in computation of viscoelastic flows using the hp-finite element method. Journal of Non-Newtonian Fluid Mechanics, 1994, 52, 293-307.	2.4	35
45	Simulations of sedimentation of a sphere in a viscoelastic fluid using molecular based constitutive models. Journal of Non-Newtonian Fluid Mechanics, 1999, 82, 429-452.	2.4	34
46	Molecular Processes Leading to Shear Banding in Well Entangled Polymeric Melts. ACS Macro Letters, 2015, 4, 684-688.	4.8	34
47	Elucidating the flow-microstructure coupling in entangled polymer melts. Part II: Molecular mechanism of shear banding. Journal of Rheology, 2016, 60, 861-872.	2.6	32
48	Elucidating the Molecular Rheology of Entangled Polymeric Fluids via Comparison of Atomistic Simulations and Model Predictions. Macromolecules, 2019, 52, 8124-8143.	4.8	32
49	All-Printed In-Plane Supercapacitors by Sequential Additive Manufacturing Process. ACS Applied Energy Materials, 2020, 3, 4965-4973.	5.1	32
50	Linear stability and dynamics of viscoelastic flows using time-dependent stochastic simulation techniques. Journal of Non-Newtonian Fluid Mechanics, 2000, 93, 339-362.	2.4	30
51	The effect of confinement on dynamics and rheology of dilute deoxyribose nucleic acid solutions. II. Effective rheology and single chain dynamics. Journal of Rheology, 2004, 48, 299-318.	2.6	30
52	Effect of varying the 1â€“4 intramolecular scaling factor in atomistic simulations of long-chain N-alkanes with the OPLS-AA model. Journal of Molecular Modeling, 2013, 19, 1251-1258.	1.8	30
53	Single-chain dynamics of linear polyethylene liquids under shear flow. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 769-772.	2.1	29
54	Synthesis and structural characterization of new bismuth (III) nano coordination polymer: A precursor to produce pure phase nano-sized bismuth (III) oxide. Journal of Molecular Structure, 2015, 1091, 43-48.	3.6	29

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55	Elucidating the flow-microstructure coupling in the entangled polymer melts. Part I: Single chain dynamics in shear flow. Journal of Rheology, 2016, 60, 849-859.	2.6	29
56	Template-Free Bottom-Up Method for Fabricating Diblock Copolymer Patchy Particles. ACS Nano, 2016, 10, 5199-5203.	14.6	28
57	Stretching Dynamics of Single Comb Polymers in Extensional Flow. Macromolecules, 2018, 51, 1507-1517.	4.8	28
58	Numerical solution of eigenvalue problems using spectral techniques. Journal of Computational Physics, 1992, 100, 297-305.	3.8	27
59	Self-assembly of spherical Janus particles in electrolytes. Soft Matter, 2013, 9, 4815.	2.7	27
60	3-D nonisothermal flow simulation model for injected pultrusion processes. AICHE Journal, 1999, 45, 151-163.	3.6	26
61	Passive scalar transport in polymer drag-reduced turbulent channel flow. AICHE Journal, 2005, 51, 1938-1950.	3.6	26
62	Detergentâ€“protein interactions in aqueous buffer suspensions of Photosystem I (PS I). Journal of Colloid and Interface Science, 2011, 358, 477-484.	9.4	26
63	Time-dependent simulations of non-axisymmetric patterns in Taylorâ€“Couette flow of dilute polymer solutions. Journal of Non-Newtonian Fluid Mechanics, 2006, 138, 111-133.	2.4	25
64	Synthesis, characterization and photocatalytic performance of Yb-doped CdTe nanoparticles. Materials Letters, 2015, 145, 253-257.	2.6	25
65	A novel visible-light Nd-doped CdTe photocatalyst for degradation of Reactive Red 43: Synthesis, characterization, and photocatalytic properties. Journal of Rare Earths, 2016, 34, 45-54.	4.8	25
66	Communication: A coil-stretch transition in planar elongational flow of an entangled polymeric melt. Journal of Chemical Physics, 2018, 148, 141103.	3.0	25
67	Evaluation of reptation-based modeling of entangled polymeric fluids including chain rotation via nonequilibrium molecular dynamics simulation. Physical Review Fluids, 2017, 2, .	2.5	25
68	The Oldroyd-B fluid in elastic instabilities, turbulence and particle suspensions. Journal of Non-Newtonian Fluid Mechanics, 2021, 298, 104672.	2.4	24
69	Modulation of cyanobacterial photosystem I deposition properties on alkanethiolate Au substrate by various experimental conditions. Colloids and Surfaces B: Biointerfaces, 2011, 88, 181-190.	5.0	23
70	Polymer-Induced Drag Enhancement in Turbulent Taylor-Couette Flows: Direct Numerical Simulations and Mechanistic Insight. Physical Review Letters, 2013, 111, 114501.	7.8	23
71	Computationally efficient algorithms for incorporation of hydrodynamic and excluded volume interactions in Brownian dynamics simulations: A comparative study of the Krylov subspace and Chebyshev based techniques. Journal of Chemical Physics, 2014, 140, 184903.	3.0	23
72	Configurational Microphase Separation in Elongational Flow of an Entangled Polymer Liquid. Physical Review Letters, 2018, 121, 247802.	7.8	23

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73	A mean-field anisotropic diffusion model for unentangled polymeric liquids and semi-dilute solutions: Model development and comparison with experimental and simulation data. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 593-606.	2.4	22
74	Molecular Simulation of Water Extraction into a Tri-n-Butylphosphate/n-Dodecane Solution. Journal of Physical Chemistry B, 2013, 117, 14835-14841.	2.6	22
75	Molecular Dynamics Simulations of Tri-n-butyl-phosphate/n-Dodecane Mixture: Thermophysical Properties and Molecular Structure. Journal of Physical Chemistry B, 2014, 118, 10750-10760.	2.6	22
76	Elucidating the role of methyl viologen as a scavenger of photoactivated electrons from photosystem I under aerobic and anaerobic conditions. Physical Chemistry Chemical Physics, 2016, 18, 8512-8521.	2.8	22
77	The instability mechanism of single and multilayer Newtonian and viscoelastic flows down an inclined plane. Rheologica Acta, 2001, 40, 467-484.	2.4	21
78	Simulation of aerosol dynamics and transport in chemically reacting particulate matter laden flows. Part II: Application to CVD reactors. Chemical Engineering Science, 2004, 59, 359-371.	3.8	21
79	Molecularly based criteria for shear banding in transient flow of entangled polymeric fluids. Physical Review E, 2016, 93, 062606.	2.1	21
80	Turbulent drag reduction in plane Couette flow with polymer additives: a direct numerical simulation study. Journal of Fluid Mechanics, 2018, 846, 482-507.	3.4	21
81	An experimental investigation of interfacial instability in superposed flow of viscoelastic fluids in a converging/diverging channel geometry. Journal of Non-Newtonian Fluid Mechanics, 1995, 58, 47-65.	2.4	20
82	Direct numerical simulation of Taylor-Couette flow subjected to a radial temperature gradient. Physics of Fluids, 2015, 27, .	4.0	20
83	Lipid-Detergent Phase Transitions During Detergent-Mediated Liposome Solubilization. Journal of Membrane Biology, 2016, 249, 523-538.	2.1	20
84	Plasmon-Enhanced Photocurrent from Photosystem I Assembled on Ag Nanopyramids. Journal of Physical Chemistry Letters, 2018, 9, 970-977.	4.6	20
85	The correspondence between drag enhancement and vortical structures in turbulent Taylorâ€“Couette flows with polymer additives: aÂstudy of curvature dependence. Journal of Fluid Mechanics, 2019, 881, 602-616.	3.4	20
86	Laser-induced synthesis of ZIF-67: a facile approach for the fabrication of crystalline MOFs with tailored size and geometry. Materials Chemistry Frontiers, 2019, 3, 1302-1309.	5.9	20
87	Birefringence and computational studies of a polystyrene Boger fluid in axisymmetric stagnation flow. Journal of Non-Newtonian Fluid Mechanics, 2000, 91, 189-220.	2.4	19
88	An efficient algorithm for multiscale flow simulation of dilute polymeric solutions using bead-spring chains. Journal of Non-Newtonian Fluid Mechanics, 2007, 141, 180-192.	2.4	19
89	Simple framework for understanding the universality of the maximum drag reduction asymptote in turbulent flow of polymer solutions. Physical Review E, 2015, 92, 043014.	2.1	19
90	Matrix-free Brownian dynamics simulation technique for semidilute polymeric solutions. Physical Review E, 2015, 92, 033307.	2.1	19

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91	MOF-derived PtCo/Co₃O₄ nanocomposites in carbonaceous matrices as high-performance ORR electrocatalysts synthesized via laser ablation techniques. Catalysis Science and Technology, 2021, 11, 3002-3013.	4.1	19
92	Higher order finite element techniques for viscoelastic flow problems with change of type and singularities. Journal of Non-Newtonian Fluid Mechanics, 1995, 59, 49-72.	2.4	18
93	Energetic effects on the stability of viscoelastic Dean flow. Journal of Non-Newtonian Fluid Mechanics, 2000, 95, 277-293.	2.4	18
94	Anomalous pressure drop behaviour of mixed kinematics flows of viscoelastic polymer solutions: a multiscale simulation approach. Journal of Fluid Mechanics, 2009, 631, 231-253.	3.4	18
95	Elucidating the Formation of Block Copolymer Nanostructures on Patterned Surfaces: A Self-Consistent Field Theory Study. Macromolecules, 2010, 43, 9594-9597.	4.8	18
96	The impact of selective solvents on the evolution of structure and function in solvent annealed organic photovoltaics. RSC Advances, 2014, 4, 27931-27938.	3.6	18
97	Effects of Halogen Bonding in Chemical Activity of Lead(II) Electron Pair: Sonochemical Synthesis, Structural Studies, and Thermal Analysis of Novel Lead(II) Nano Coordination Polymer. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2015, 641, 2466-2472.	1.2	18
98	Jolly green MOF: confinement and photoactivation of photosystem I in a metalâ€“organic framework. Nanoscale Advances, 2019, 1, 94-104.	4.6	18
99	Adaptive configuration fields: a new multiscale simulation technique for reptation-based models with a stochastic strain measure and local variations of life span distribution. Journal of Non-Newtonian Fluid Mechanics, 2002, 108, 99-122.	2.4	17
100	Direct numerical simulation of inertio-elastic turbulent Taylorâ€“Couette flow. Journal of Fluid Mechanics, 2021, 926, .	3.4	17
101	A computational study of the influence of viscoelasticity on the interfacial dynamics of dip coating flow. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 614-627.	2.4	16
102	Quantitative Phase Fraction Detection in Organic Photovoltaic Materials through EELS Imaging. Polymers, 2015, 7, 2446-2460.	4.5	16
103	A theoretical investigation of interfacial instabilities in the three layer superposed channel flow of viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 1998, 79, 315-360.	2.4	15
104	The influence of polymer concentration and chain architecture on free surface displacement flows of polymeric fluids. Journal of Rheology, 2005, 49, 929-962.	2.6	15
105	Block copolymer micelle formation in a solvent good for all the blocks. Colloid and Polymer Science, 2015, 293, 2799-2805.	2.1	15
106	In-plane and out-of-plane rotational motion of individual chain molecules in steady shear flow of polymer melts and solutions. Journal of Molecular Graphics and Modelling, 2018, 81, 184-196.	2.4	15
107	Effects of chain length and polydispersity on shear banding in simple shear flow of polymeric melts. Soft Matter, 2020, 16, 6468-6483.	2.7	15
108	The effect of transient viscoelastic properties on interfacial instabilities in superposed pressure driven channel flows. Journal of Non-Newtonian Fluid Mechanics, 1999, 80, 217-249.	2.4	14

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109	Observations of elastic instabilities in lid-driven cavity flow. Journal of Non-Newtonian Fluid Mechanics, 2000, 94, 15-35.	2.4	14
110	Simulation of aerosol dynamics and transport in chemically reacting particulate matter laden flows. Part I: Algorithm development and validation. Chemical Engineering Science, 2004, 59, 345-358.	3.8	14
111	Molecular based prediction of the extensional rheology of high molecular weight polystyrene dilute solutions: A hi-fidelity Brownian dynamics approach. Journal of Rheology, 2015, 59, 1507-1525.	2.6	14
112	Microenvironment alterations enhance photocurrents from photosystem I confined in supported lipid bilayers. Journal of Materials Chemistry A, 2018, 6, 12281-12290.	10.3	14
113	An experimental/theoretical investigation of interfacial instabilities in superposed pressure-driven channel flow of Newtonian and well-characterized viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 2000, 91, 85-104.	2.4	13
114	Characterization of the Flory-Huggins interaction parameter of polymer thermodynamics. Europhysics Letters, 2014, 108, 66003.	2.0	13
115	Tuning the photoexcitation response of cyanobacterial Photosystem I via reconstitution into Proteoliposomes. Scientific Reports, 2017, 7, 2492.	3.3	13
116	Self-assembly of linear diblock copolymers in selective solvents: from single micelles to particles with tri-continuous inner structures. Soft Matter, 2020, 16, 6056-6062.	2.7	13
117	Flow-Induced Phase Separation and Crystallization in Entangled Polyethylene Solutions under Elongational Flow. Macromolecules, 2020, 53, 6432-6451.	4.8	13
118	Processingâ€“property interactions in poly(vinylidene fluoride). I. An analysis of melt stress history in an extensional flow geometry. Journal of Applied Polymer Science, 1988, 36, 859-876.	2.6	12
119	A new approach for studying the hydrodynamic stability of fluids with microstructure. Physics of Fluids, 2001, 13, 1811-1814.	4.0	12
120	Flow of branched polymer melts in a lubricated cross-slot channel: a combined computational and experimental study. Rheologica Acta, 2009, 48, 97-108.	2.4	12
121	Sedimentation of a sphere in a viscoelastic fluid: a multiscale simulation approach. Journal of Fluid Mechanics, 2012, 694, 78-99.	3.4	12
122	A reverse transition route from inertial to elasticity-dominated turbulence in viscoelastic Taylorâ€“Couette flow. Journal of Fluid Mechanics, 2021, 927, .	3.4	12
123	Flow-induced crystallization of a polyethylene liquid above the melting temperature and its nonequilibrium phase diagram. Physical Review Research, 2020, 2, .	3.6	12
124	Uniaxial extensional characterization of a shear thinning fluid using axisymmetric flow birefringence. Journal of Rheology, 1999, 43, 147-165.	2.6	11
125	Computer simulation of surface and adatom properties of Lennard-Jones solids: A comparison between face-centered-cubic and hexagonal-close-packed structures. Journal of Chemical Physics, 2001, 114, 6315-6326.	3.0	11
126	Morphology Tailoring of Thin Film Block Copolymers on Patterned Substrates. Macromolecular Rapid Communications, 2012, 33, 392-395.	3.9	11

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127	A Thermodynamically Inspired Method for Quantifying Phase Transitions in Polymeric Liquids with Application to Flow-Induced Crystallization of a Polyethylene Melt. Macromolecules, 2020, 53, 10487-10502.	4.8	11
128	Polymer-induced flow relaminarization and drag enhancement in spanwise-rotating plane Couette flow. Journal of Fluid Mechanics, 2020, 905, .	3.4	11
129	Atomistic simulation of shear flow of linear alkane and polyethylene liquids: A 50-year retrospective. Journal of Rheology, 2022, 66, 415-489.	2.6	11
130	Simulation of the third law free energies of face-centered-cubic and hexagonal-close-packed Lennard-Jones solids. Journal of Chemical Physics, 2000, 113, 4320-4330.	3.0	10
131	Influence of viscoelasticity on the interfacial dynamics of air displacing fluid flowsâ€"a computational study. Journal of Non-Newtonian Fluid Mechanics, 2004, 122, 313-332.	2.4	10
132	An Atomistic Molecular Dynamics Study of Titanium Dioxide Adhesion to Lipid Bilayers. Langmuir, 2020, 36, 1043-1052.	3.5	10
133	The effect of interfacial instabilities on the strength of the interface in two-layer plastic structures. Polymer Engineering and Science, 1996, 36, 1875-1885.	3.1	9
134	A flexible approach to modeling and simulation of polymeric composite materials processing using object oriented techniques. Computers and Chemical Engineering, 2000, 24, 1961-1980.	3.8	9
135	Broadband Plasmonic Photocurrent Enhancement from Photosystem I Assembled with Tailored Arrays of Au and Ag Nanodisks. ACS Applied Nano Materials, 2021, 4, 1209-1219.	5.0	9
136	Computationally efficient algorithms for Brownian dynamics simulation of long flexible macromolecules modeled as bead-rod chains. Physical Review Fluids, 2017, 2, .	2.5	9
137	3D printed interdigitated supercapacitor using reduced graphene oxide-MnO_x/Mn₃O₄ based electrodes. RSC Advances, 2022, 12, 17321-17329.	3.6	9
138	The role of dynamic modulation in the stability of viscoelastic flow down an inclined plane. Journal of Fluid Mechanics, 2000, 425, 213-233.	3.4	8
139	Viscoelastic effects on interfacial dynamics in airâ€"liquid displacement under gravity stabilization. Journal of Fluid Mechanics, 2005, 531, 59-83.	3.4	8
140	â€œAn experimental/theoretical investigation of interfacial instabilities in superposed pressure-driven channel flow of Newtonian and well characterized viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 2007, 143, 131-132.	2.4	8
141	Block Copolymer Morphology Formation on Topographically Complex Surfaces: A Selfâ€Consistent Field Theoretical Study. Macromolecular Rapid Communications, 2014, 35, 702-707.	3.9	8
142	A new bead-spring model for simulation of semi-flexible macromolecules. Journal of Chemical Physics, 2016, 145, 204902.	3.0	8
143	Effect of inertia on thermoelastic flow instability. Journal of Non-Newtonian Fluid Mechanics, 2004, 120, 93-100.	2.4	7
144	Temperature increases caused by shear banding in as-cast and relaxed Zr-based bulk metallic glasses under compression. Journal of Materials Research, 2008, 23, 2967-2974.	2.6	7

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145	Impact of particle morphology on surface oxidation of nanoparticles: A kinetic Monte Carlo based study. AICHE Journal, 2012, 58, 3341-3353.	3.6	7
146	Relaminarization of spanwise-rotating viscoelastic plane Couette flow via a transition sequence from a drag-reduced inertial to a drag-enhanced elasto-inertial turbulent flow. Journal of Fluid Mechanics, 2022, 931, .	3.4	7
147	Elucidating the role of network topology dynamics on the coil-stretch transition hysteresis in extensional flow of entangled polymer melts. Journal of Rheology, 2022, 66, 551-569.	2.6	7
148	A note on start-up and large amplitude oscillatory shear flow of multimode viscoelastic fluids. Rheologica Acta, 1996, 35, 211-224.	2.4	6
149	Role of dynamic modulation on stability of multilayer Newtonian and viscoelastic flows down an inclined plane. Journal of Non-Newtonian Fluid Mechanics, 2001, 97, 67-86.	2.4	6
150	A new platform for development of photosystem I based thin films with superior photocurrent: TCNQ charge transfer salts derived from ZIF-8. Nanoscale Advances, 2020, 2, 5171-5180.	4.6	6
151	Processingâ€“property interactions in poly(vinylidene fluoride). II. Morphology and property characterization of extruded films. Journal of Applied Polymer Science, 1988, 36, 877-889.	2.6	5
152	High-Volume Single-Wafer Reactors for Silicon Epitaxy. Industrial & Engineering Chemistry Research, 2002, 41, 732-743.	3.7	5
153	Computer Simulation of the Surface Free Energy of the Si(100) Surface and the Line Free Energies Associated with Steps on This Surfaceâ€. Journal of Physical Chemistry B, 2004, 108, 19721-19728.	2.6	5
154	Thermo-mechanical instabilities in Dean and Taylorâ€“Couette flows: mechanisms and scaling laws. Journal of Fluid Mechanics, 2004, 517, 251-279.	3.4	5
155	The influence of finite extensibility on the eigenspectrum of dilute polymeric solutions. Journal of Non-Newtonian Fluid Mechanics, 2005, 129, 56-60.	2.4	5
156	Dynamic simulations of individual macromolecules in oscillatory shear flow. Journal of Rheology, 2009, 53, 275-291.	2.6	5
157	Continuum and multi-scale simulation of mixed kinematics polymeric flows with stagnation points: Closure approximation and the high Weissenberg number problem. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 533-545.	2.4	5
158	The onset of purely elastic and thermo-elastic instabilities in Taylorâ€“Couette flow: Influence of gap ratio and fluid thermal sensitivity. Journal of Non-Newtonian Fluid Mechanics, 2014, 208-209, 108-117.	2.4	5
159	Thermolysis Synthesis of Pure Phase Nano-Sized Cobalt(II) Oxide from Novel Cobalt(II)-Pyrazole Discrete Nano Coordination Compound. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 335-343.	3.7	5
160	Processing-Property interactions in vinylidene fluoride/trifluoroethylene random copolymers. Polymer Engineering and Science, 1991, 31, 803-811.	3.1	4
161	Accuracy and convergence of thep- andhp-type finite element methods for the Navier-Stokes equation. AICHE Journal, 1992, 38, 83-92.	3.6	4
162	Effect of non-normal interactions on the interfacial instability of multilayer viscoelastic channel flows. Journal of Non-Newtonian Fluid Mechanics, 2004, 116, 407-429.	2.4	4

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163	A computationally efficient approach for Hi fidelity fine graining from bead-spring models to bead-rod models. Journal of Non-Newtonian Fluid Mechanics, 2008, 149, 20-27.	2.4	4
164	Flexible polyelectrolyte chain in a strong electrolyte solution: Insight into equilibrium properties and force-extension behavior from mesoscale simulation. Journal of Chemical Physics, 2016, 144, 024903.	3.0	4
165	Tuning the photocurrent generations from photosystem I assembled in tailored biotic-abiotic interfaces. MRS Communications, 2018, 8, 823-829.	1.8	4
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