

# Bamin Khomami

## List of Publications by Year in descending order

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184  
papers

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#	ARTICLE	IF	CITATIONS
1	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. <i>Journal of Fluid Mechanics</i> , 2022, 931, .	1.4	7
2	Nonequilibrium Thermodynamics of Polymeric Liquids via Atomistic Simulation. <i>Entropy</i> , 2022, 24, 175.	1.1	2
3	Observation of anomalous carotenoid and blind chlorophyll activations in photosystem I under synthetic membrane confinements. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2022, , 183930.	1.4	0
4	Atomistic simulation of shear flow of linear alkane and polyethylene liquids: A 50-year retrospective. <i>Journal of Rheology</i> , 2022, 66, 415-489.	1.3	11
5	Elucidating the role of network topology dynamics on the coil-stretch transition hysteresis in extensional flow of entangled polymer melts. <i>Journal of Rheology</i> , 2022, 66, 551-569.	1.3	7
6	3D printed interdigitated supercapacitor using reduced graphene oxide-MnO <sub>2</sub> /Mn <sub>3</sub> O <sub>4</sub> based electrodes. <i>RSC Advances</i> , 2022, 12, 17321-17329.	1.7	9
7	High-fidelity robust and efficient finite difference algorithm for simulation of polymer-induced turbulence in cylindrical coordinates. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2022, 307, 104875.	1.0	4
8	MOF-derived PtCo/Co <sub>3</sub> O <sub>4</sub> nanocomposites in carbonaceous matrices as high-performance ORR electrocatalysts synthesized via laser ablation techniques. <i>Catalysis Science and Technology</i> , 2021, 11, 3002-3013.	2.1	19
9	Broadband Plasmonic Photocurrent Enhancement from Photosystem I Assembled with Tailored Arrays of Au and Ag Nanodisks. <i>ACS Applied Nano Materials</i> , 2021, 4, 1209-1219.	2.4	9
10	A theory for the coexistence of coiled and stretched configurational phases in the extensional flow of entangled polymer melts. <i>Journal of Chemical Physics</i> , 2021, 154, 204907.	1.2	2
11	A method for calculating the nonequilibrium entropy of a flowing polymer melt via atomistic simulation. <i>Journal of Chemical Physics</i> , 2021, 155, 111101.	1.2	3
12	Direct numerical simulation of inertio-elastic turbulent Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2021, 926, .	1.4	17
13	A reverse transition route from inertial to elasticity-dominated turbulence in viscoelastic Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2021, 927, .	1.4	12
14	The Oldroyd-B fluid in elastic instabilities, turbulence and particle suspensions. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2021, 298, 104672.	1.0	24
15	A Thermodynamically Inspired Method for Quantifying Phase Transitions in Polymeric Liquids with Application to Flow-Induced Crystallization of a Polyethylene Melt. <i>Macromolecules</i> , 2020, 53, 10487-10502.	2.2	11
16	Polymer-induced flow relaminarization and drag enhancement in spanwise-rotating plane Couette flow. <i>Journal of Fluid Mechanics</i> , 2020, 905, .	1.4	11
17	A new platform for development of photosystem I based thin films with superior photocurrent: TCNQ charge transfer salts derived from ZIF-8. <i>Nanoscale Advances</i> , 2020, 2, 5171-5180.	2.2	6
18	Self-assembly of linear diblock copolymers in selective solvents: from single micelles to particles with tri-continuous inner structures. <i>Soft Matter</i> , 2020, 16, 6056-6062.	1.2	13

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19	Effects of chain length and polydispersity on shear banding in simple shear flow of polymeric melts. <i>Soft Matter</i> , 2020, 16, 6468-6483.	1.2	15
20	Flow-Induced Phase Separation and Crystallization in Entangled Polyethylene Solutions under Elongational Flow. <i>Macromolecules</i> , 2020, 53, 6432-6451.	2.2	13
21	An Atomistic Molecular Dynamics Study of Titanium Dioxide Adhesion to Lipid Bilayers. <i>Langmuir</i> , 2020, 36, 1043-1052.	1.6	10
22	All-Printed In-Plane Supercapacitors by Sequential Additive Manufacturing Process. <i>ACS Applied Energy Materials</i> , 2020, 3, 4965-4973.	2.5	32
23	Flow-induced crystallization of a polyethylene liquid above the melting temperature and its nonequilibrium phase diagram. <i>Physical Review Research</i> , 2020, 2, .	1.3	12
24	Elucidating the Molecular Rheology of Entangled Polymeric Fluids via Comparison of Atomistic Simulations and Model Predictions. <i>Macromolecules</i> , 2019, 52, 8124-8143.	2.2	32
25	The correspondence between drag enhancement and vortical structures in turbulent Taylor-Couette flows with polymer additives: a study of curvature dependence. <i>Journal of Fluid Mechanics</i> , 2019, 881, 602-616.	1.4	20
26	Jolly green MOF: confinement and photoactivation of photosystem I in a metal-organic framework. <i>Nanoscale Advances</i> , 2019, 1, 94-104.	2.2	18
27	Laser-induced synthesis of ZIF-67: a facile approach for the fabrication of crystalline MOFs with tailored size and geometry. <i>Materials Chemistry Frontiers</i> , 2019, 3, 1302-1309.	3.2	20
28	Individual Molecular Dynamics of an Entangled Polyethylene Melt Undergoing Steady Shear Flow: Steady-State and Transient Dynamics. <i>Polymers</i> , 2019, 11, 476.	2.0	40
29	Plasmon-Enhanced Photocurrent from Photosystem I Assembled on Ag Nanopyramids. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 970-977.	2.1	20
30	Stretching Dynamics of Single Comb Polymers in Extensional Flow. <i>Macromolecules</i> , 2018, 51, 1507-1517.	2.2	28
31	Microenvironment alterations enhance photocurrents from photosystem I confined in supported lipid bilayers. <i>Journal of Materials Chemistry A</i> , 2018, 6, 12281-12290.	5.2	14
32	In-plane and out-of-plane rotational motion of individual chain molecules in steady shear flow of polymer melts and solutions. <i>Journal of Molecular Graphics and Modelling</i> , 2018, 81, 184-196.	1.3	15
33	Configurational Microphase Separation in Elongational Flow of an Entangled Polymer Liquid. <i>Physical Review Letters</i> , 2018, 121, 247802.	2.9	23
34	Communication: A coil-stretch transition in planar elongational flow of an entangled polymeric melt. <i>Journal of Chemical Physics</i> , 2018, 148, 141103.	1.2	25
35	Tuning the photocurrent generations from photosystem I assembled in tailored biotic-abiotic interfaces. <i>MRS Communications</i> , 2018, 8, 823-829.	0.8	4
36	Turbulent drag reduction in plane Couette flow with polymer additives: a direct numerical simulation study. <i>Journal of Fluid Mechanics</i> , 2018, 846, 482-507.	1.4	21

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37	Letter to the Editor: BDpack, an open source parallel Brownian dynamics simulation package. <i>Journal of Rheology</i> , 2017, 61, 147-149.	1.3	3
38	A facile and surfactant-free route for nanomanufacturing of tailored ternary nanoalloys as superior oxygen reduction reaction electrocatalysts. <i>Catalysis Science and Technology</i> , 2017, 7, 2074-2086.	2.1	45
39	Tuning the photoexcitation response of cyanobacterial Photosystem I via reconstitution into Proteoliposomes. <i>Scientific Reports</i> , 2017, 7, 2492.	1.6	13
40	Hybrid nanocomposites of nanostructured Co <sub>3</sub> O <sub>4</sub> interfaced with reduced/nitrogen-doped graphene oxides for selective improvements in electrocatalytic and/or supercapacitive properties. <i>RSC Advances</i> , 2017, 7, 33166-33176.	1.7	41
41	Computationally efficient algorithms for Brownian dynamics simulation of long flexible macromolecules modeled as bead-rod chains. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	9
42	Evaluation of reptation-based modeling of entangled polymeric fluids including chain rotation via nonequilibrium molecular dynamics simulation. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	25
43	Elucidating the flow-microstructure coupling in the entangled polymer melts. Part I: Single chain dynamics in shear flow. <i>Journal of Rheology</i> , 2016, 60, 849-859.	1.3	29
44	Elucidating the flow-microstructure coupling in entangled polymer melts. Part II: Molecular mechanism of shear banding. <i>Journal of Rheology</i> , 2016, 60, 861-872.	1.3	32
45	Macromol. Rapid Commun. 21/2016. <i>Macromolecular Rapid Communications</i> , 2016, 37, 1784-1784.	2.0	0
46	A new bead-spring model for simulation of semi-flexible macromolecules. <i>Journal of Chemical Physics</i> , 2016, 145, 204902.	1.2	8
47	Elucidating the role of methyl viologen as a scavenger of photoactivated electrons from photosystem I under aerobic and anaerobic conditions. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8512-8521.	1.3	22
48	Lipid-Detergent Phase Transitions During Detergent-Mediated Liposome Solubilization. <i>Journal of Membrane Biology</i> , 2016, 249, 523-538.	1.0	20
49	Template-Free Bottom-Up Method for Fabricating Diblock Copolymer Patchy Particles. <i>ACS Nano</i> , 2016, 10, 5199-5203.	7.3	28
50	Elucidating the Molecular Processes for Creating Large or Bimodal Soft Nanoparticles from Block Copolymers via Blending. <i>Macromolecular Rapid Communications</i> , 2016, 37, 1760-1764.	2.0	0
51	Molecularly based criteria for shear banding in transient flow of entangled polymeric fluids. <i>Physical Review E</i> , 2016, 93, 062606.	0.8	21
52	Flexible polyelectrolyte chain in a strong electrolyte solution: Insight into equilibrium properties and force-extension behavior from mesoscale simulation. <i>Journal of Chemical Physics</i> , 2016, 144, 024903.	1.2	4
53	Thermolysis Synthesis of Pure Phase Nano-Sized Cobalt(II) Oxide from Novel Cobalt(II)-Pyrazole Discrete Nano Coordination Compound. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2016, 26, 335-343.	1.9	5
54	A novel visible-light Nd-doped CdTe photocatalyst for degradation of Reactive Red 43: Synthesis, characterization, and photocatalytic properties. <i>Journal of Rare Earths</i> , 2016, 34, 45-54.	2.5	25

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55	Synthesis and characterization of samarium-doped ZnS nanoparticles: A novel visible light responsive photocatalyst. <i>Materials Research Bulletin</i> , 2016, 76, 411-421.	2.7	37
56	Praseodymium-doped ZnS nanomaterials: Hydrothermal synthesis and characterization with enhanced visible light photocatalytic activity. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 34, 41-50.	2.9	43
57	Simple framework for understanding the universality of the maximum drag reduction asymptote in turbulent flow of polymer solutions. <i>Physical Review E</i> , 2015, 92, 043014.	0.8	19
58	Molecular based prediction of the extensional rheology of high molecular weight polystyrene dilute solutions: A hi-fidelity Brownian dynamics approach. <i>Journal of Rheology</i> , 2015, 59, 1507-1525.	1.3	14
59	Direct numerical simulation of Taylor-Couette flow subjected to a radial temperature gradient. <i>Physics of Fluids</i> , 2015, 27, .	1.6	20
60	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. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2015, 641, 2466-2472.	0.6	18
61	Elucidating the Morphological Complexities of Linear Symmetric Triblock Polymers Confined Between Two Parallel Plates: A Self-Consistent Field Theoretic Approach. <i>Macromolecular Theory and Simulations</i> , 2015, 24, 556-565.	0.6	1
62	Quantitative Phase Fraction Detection in Organic Photovoltaic Materials through EELS Imaging. <i>Polymers</i> , 2015, 7, 2446-2460.	2.0	16
63	Synthesis and structural characterization of new bismuth (III) nano coordination polymer: A precursor to produce pure phase nano-sized bismuth (III) oxide. <i>Journal of Molecular Structure</i> , 2015, 1091, 43-48.	1.8	29
64	Synthesis, characterization and photocatalytic performance of Yb-doped CdTe nanoparticles. <i>Materials Letters</i> , 2015, 145, 253-257.	1.3	25
65	Block copolymer micelle formation in a solvent good for all the blocks. <i>Colloid and Polymer Science</i> , 2015, 293, 2799-2805.	1.0	15
66	Molecular Processes Leading to Shear Banding in Well Entangled Polymeric Melts. <i>ACS Macro Letters</i> , 2015, 4, 684-688.	2.3	34
67	Matrix-free Brownian dynamics simulation technique for semidilute polymeric solutions. <i>Physical Review E</i> , 2015, 92, 033307.	0.8	19
68	Characterization of the Flory-Huggins interaction parameter of polymer thermodynamics. <i>Europhysics Letters</i> , 2014, 108, 66003.	0.7	13
69	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. <i>Journal of Chemical Physics</i> , 2014, 140, 184903.	1.2	23
70	Block Copolymer Morphology Formation on Topographically Complex Surfaces: A Self-Consistent Field Theoretical Study. <i>Macromolecular Rapid Communications</i> , 2014, 35, 702-707.	2.0	8
71	The impact of selective solvents on the evolution of structure and function in solvent annealed organic photovoltaics. <i>RSC Advances</i> , 2014, 4, 27931-27938.	1.7	18
72	Molecular Dynamics Simulations of Tri- <i>n</i> -butyl-phosphate/ <i>n</i> -Dodecane Mixture: Thermophysical Properties and Molecular Structure. <i>Journal of Physical Chemistry B</i> , 2014, 118, 10750-10760.	1.2	22

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73	The onset of purely elastic and thermo-elastic instabilities in Taylor-Couette flow: Influence of gap ratio and fluid thermal sensitivity. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2014, 208-209, 108-117.	1.0	5
74	Electron Energy-Loss Spectroscopic Imaging for Phase Detection in Organic Photovoltaics. <i>Microscopy and Microanalysis</i> , 2014, 20, 538-539.	0.2	0
75	Effect of varying the $\lambda^4$ intramolecular scaling factor in atomistic simulations of long-chain N-alkanes with the OPLS-AA model. <i>Journal of Molecular Modeling</i> , 2013, 19, 1251-1258.	0.8	30
76	Self-assembly of spherical Janus particles in electrolytes. <i>Soft Matter</i> , 2013, 9, 4815.	1.2	27
77	Molecular Simulation of Water Extraction into a Tri-n-Butylphosphate/Dodecane Solution. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14835-14841.	1.2	22
78	Polymer-Induced Drag Enhancement in Turbulent Taylor-Couette Flows: Direct Numerical Simulations and Mechanistic Insight. <i>Physical Review Letters</i> , 2013, 111, 114501.	2.9	23
79	Elastically induced turbulence in Taylor-Couette flow: direct numerical simulation and mechanistic insight. <i>Journal of Fluid Mechanics</i> , 2013, 737, .	1.4	44
80	Sedimentation of a sphere in a viscoelastic fluid: a multiscale simulation approach. <i>Journal of Fluid Mechanics</i> , 2012, 694, 78-99.	1.4	12
81	Molecular Dynamics Simulation of Tri-n-butyl-Phosphate Liquid: A Force Field Comparative Study. <i>Journal of Physical Chemistry B</i> , 2012, 116, 305-313.	1.2	38
82	Impact of particle morphology on surface oxidation of nanoparticles: A kinetic Monte Carlo based study. <i>AIChE Journal</i> , 2012, 58, 3341-3353.	1.8	7
83	Morphology Tailoring of Thin Film Block Copolymers on Patterned Substrates. <i>Macromolecular Rapid Communications</i> , 2012, 33, 392-395.	2.0	11
84	Modulation of cyanobacterial photosystem I deposition properties on alkanethiolate Au substrate by various experimental conditions. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 88, 181-190.	2.5	23
85	A mean-field anisotropic diffusion model for unentangled polymeric liquids and semi-dilute solutions: Model development and comparison with experimental and simulation data. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2011, 166, 593-606.	1.0	22
86	Continuum and multi-scale simulation of mixed kinematics polymeric flows with stagnation points: Closure approximation and the high Weissenberg number problem. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2011, 166, 533-545.	1.0	5
87	A computational study of the influence of viscoelasticity on the interfacial dynamics of dip coating flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2011, 166, 614-627.	1.0	16
88	Detergent-protein interactions in aqueous buffer suspensions of Photosystem I (PS I). <i>Journal of Colloid and Interface Science</i> , 2011, 358, 477-484.	5.0	26
89	Irreversible nanogel formation in surfactant solutions by microporous flow. <i>Nature Materials</i> , 2010, 9, 436-441.	13.3	83
90	Influence of Nitric Acid on Uranyl Nitrate Association in Aqueous Solutions: A Molecular Dynamics Simulation Study. <i>Solvent Extraction and Ion Exchange</i> , 2010, 28, 1-18.	0.8	41

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91	Elucidating the Formation of Block Copolymer Nanostructures on Patterned Surfaces: A Self-Consistent Field Theory Study. <i>Macromolecules</i> , 2010, 43, 9594-9597.	2.2	18
92	Controlling the Morphology of Photosystem I Assembly on Thiol-Activated Au Substrates. <i>Langmuir</i> , 2010, 26, 16048-16054.	1.6	37
93	Uranyl nitrate complex extraction into TBP/dodecane organic solutions: a molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 15406.	1.3	40
94	Flow of branched polymer melts in a lubricated cross-slot channel: a combined computational and experimental study. <i>Rheologica Acta</i> , 2009, 48, 97-108.	1.1	12
95	Single-chain dynamics of linear polyethylene liquids under shear flow. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 769-772.	0.9	29
96	Synthesis of visible light-active nanostructured TiO <sub>x</sub> (x<2) photocatalysts in a flame aerosol reactor. <i>Applied Catalysis B: Environmental</i> , 2009, 86, 145-151.	10.8	39
97	Interfacial Complex Formation in Uranyl Extraction by Tributyl Phosphate in Dodecane Diluent: A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2009, 113, 9852-9862.	1.2	38
98	Dynamic simulations of individual macromolecules in oscillatory shear flow. <i>Journal of Rheology</i> , 2009, 53, 275-291.	1.3	5
99	Nonlinear dynamics of viscoelastic Taylor-Couette flow: effect of elasticity on pattern selection, molecular conformation and drag. <i>Journal of Fluid Mechanics</i> , 2009, 620, 353-382.	1.4	37
100	Anomalous pressure drop behaviour of mixed kinematics flows of viscoelastic polymer solutions: a multiscale simulation approach. <i>Journal of Fluid Mechanics</i> , 2009, 631, 231-253.	1.4	18
101	A Modified Solid-State Reduction Method to Prepare Supported Platinum Nanoparticle Catalysts for Low Temperature Fuel Cell Application. <i>Current Nanoscience</i> , 2009, 5, 252-256.	0.7	2
102	A computationally efficient approach for Hi fidelity fine graining from bead-spring models to bead-rod models. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2008, 149, 20-27.	1.0	4
103	Self-similar shear thickening behavior in CTAB/NaSal surfactant solutions. <i>Journal of Rheology</i> , 2008, 52, 527-550.	1.3	45
104	Temperature increases caused by shear banding in as-cast and relaxed Zr-based bulk metallic glasses under compression. <i>Journal of Materials Research</i> , 2008, 23, 2967-2974.	1.2	7
105	Dynamics of Branched Polymer Melts in Complex Kinematics Flows: A Computational-Experimental Study. <i>AIP Conference Proceedings</i> , 2008, , .	0.3	0
106	Reversible and Irreversible Flow-Induced Phase Transitions in Micellar Solutions. <i>AIP Conference Proceedings</i> , 2008, , .	0.3	2
107	An efficient algorithm for multiscale flow simulation of dilute polymeric solutions using bead-spring chains. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007, 141, 180-192.	1.0	19
108	An experimental/theoretical investigation of interfacial instabilities in superposed pressure-driven channel flow of Newtonian and well characterized viscoelastic fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2007, 143, 131-132.	1.0	8

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109	Influence of rheological parameters on polymer induced turbulent drag reduction. Journal of Non-Newtonian Fluid Mechanics, 2006, 140, 23-40.	1.0	119
110	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.	1.0	55
111	Time-dependent simulations of non-axisymmetric patterns in Taylor-Couette flow of dilute polymer solutions. Journal of Non-Newtonian Fluid Mechanics, 2006, 138, 111-133.	1.0	25
112	The influence of finite extensibility on the eigenspectrum of dilute polymeric solutions. Journal of Non-Newtonian Fluid Mechanics, 2005, 129, 56-60.	1.0	5
113	Passive scalar transport in polymer drag-reduced turbulent channel flow. AIChE Journal, 2005, 51, 1938-1950.	1.8	26
114	Viscoelastic effects on interfacial dynamics in air-liquid displacement under gravity stabilization. Journal of Fluid Mechanics, 2005, 531, 59-83.	1.4	8
115	The influence of polymer concentration and chain architecture on free surface displacement flows of polymeric fluids. Journal of Rheology, 2005, 49, 929-962.	1.3	15
116	An Evaluation of Single-Segment Reptation Theories for Linear Entangled Polymeric Systems. Applied Rheology, 2004, 14, 22-32.	3.5	0
117	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.	1.9	14
118	Effect of non-normal interactions on the interfacial instability of multilayer viscoelastic channel flows. Journal of Non-Newtonian Fluid Mechanics, 2004, 116, 407-429.	1.0	4
119	Review of Computational Rheology by R.G. Owens and T.N. Phillips. Journal of Non-Newtonian Fluid Mechanics, 2004, 117, 71.	1.0	0
120	Effect of inertia on thermoelastic flow instability. Journal of Non-Newtonian Fluid Mechanics, 2004, 120, 93-100.	1.0	7
121	Hydrodynamic stability of unidirectional shear flow of linear and branched polymeric melts. Journal of Non-Newtonian Fluid Mechanics, 2004, 121, 101-115.	1.0	2
122	Influence of viscoelasticity on the interfacial dynamics of air displacing fluid flows—a computational study. Journal of Non-Newtonian Fluid Mechanics, 2004, 122, 313-332.	1.0	10
123	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.	1.9	21
124	Computer Simulation of the Surface Free Energy of the Si(100) Surface and the Line Free Energies Associated with Steps on This Surface. Journal of Physical Chemistry B, 2004, 108, 19721-19728.	1.2	5
125	Thermo-mechanical instabilities in Dean and Taylor-Couette flows: mechanisms and scaling laws. Journal of Fluid Mechanics, 2004, 517, 251-279.	1.4	5
126	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.	1.3	41



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127	The effect of confinement on dynamics and rheology of dilute deoxyribose nucleic acid solutions. II. Effective rheology and single chain dynamics. <i>Journal of Rheology</i> , 2004, 48, 299-318.	1.3	30
128	A density functional view of transition state theory: Simulating the rates at which Si adatoms hop on a silicon surface. <i>Journal of Chemical Physics</i> , 2003, 119, 9783-9794.	1.2	3
129	High-Volume Single-Wafer Reactors for Silicon Epitaxy. <i>Industrial &amp; Engineering Chemistry Research</i> , 2002, 41, 732-743.	1.8	5
130	Adaptive configuration fields: a new multiscale simulation technique for reptation-based models with a stochastic strain measure and local variations of life span distribution. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2002, 108, 99-122.	1.0	17
131	Experimental investigation of purely elastic instabilities in periodic flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2002, 108, 209-226.	1.0	38
132	Brownian dynamics simulations of bead-rod and bead-spring chains: numerical algorithms and coarse-graining issues. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2002, 108, 227-255.	1.0	160
133	A study of viscoelastic free surface flows by the finite element method: Heleâ€“Shaw and slot coating flows. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2002, 108, 327-362.	1.0	54
134	An Integrated Molecular Dynamics and Monte Carlo Approach to Study Epitaxial Deposition of Silicon. <i>Materials Research Society Symposia Proceedings</i> , 2001, 672, 1.	0.1	1
135	The instability mechanism of single and multilayer Newtonian and viscoelastic flows down an inclined plane. <i>Rheologica Acta</i> , 2001, 40, 467-484.	1.1	21
136	Role of dynamic modulation on stability of multilayer Newtonian and viscoelastic flows down an inclined plane. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2001, 97, 67-86.	1.0	6
137	A new approach for studying the hydrodynamic stability of fluids with microstructure. <i>Physics of Fluids</i> , 2001, 13, 1811-1814.	1.6	12
138	Computer simulation of surface and adatom properties of Lennard-Jones solids: A comparison between face-centered-cubic and hexagonal-close-packed structures. <i>Journal of Chemical Physics</i> , 2001, 114, 6315-6326.	1.2	11
139	The role of dynamic modulation in the stability of viscoelastic flow down an inclined plane. <i>Journal of Fluid Mechanics</i> , 2000, 425, 213-233.	1.4	8
140	A flexible approach to modeling and simulation of polymeric composite materials processing using object oriented techniques. <i>Computers and Chemical Engineering</i> , 2000, 24, 1961-1980.	2.0	9
141	Linear stability and dynamics of viscoelastic flows using time-dependent stochastic simulation techniques. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 93, 339-362.	1.0	30
142	Observations of elastic instabilities in lid-driven cavity flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 94, 15-35.	1.0	14
143	Energetic effects on the stability of viscoelastic Dean flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 95, 277-293.	1.0	18
144	An experimental/theoretical investigation of interfacial instabilities in superposed pressure-driven channel flow of Newtonian and well characterized viscoelastic fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 91, 59-84.	1.0	56

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145	An experimental/theoretical investigation of interfacial instabilities in superposed pressure-driven channel flow of Newtonian and well-characterized viscoelastic fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 91, 85-104.	1.0	13
146	Birefringence and computational studies of a polystyrene Boger fluid in axisymmetric stagnation flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 91, 189-220.	1.0	19
147	A Theoretical/Experimental Study of Silicon Epitaxy in Horizontal Single-Wafer Chemical Vapor Deposition Reactors. <i>Journal of the Electrochemical Society</i> , 2000, 147, 1538.	1.3	43
148	Simulation of the third law free energies of face-centered-cubic and hexagonal-close-packed Lennard-Jones solids. <i>Journal of Chemical Physics</i> , 2000, 113, 4320-4330.	1.2	10
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