Shigeyuki Komura

List of Publications by Year
in descending order

114	1,903	304743	330143
papers	citations	22 h-index	37 g-index

115	115	115	1549
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Onsagerâ€“Machlup Integral for Non-Reciprocal Systems with Odd Elasticity. Journal of the Physical Society of Japan, 2022, 91, .	1.6	9
2	Autonomous elastic microswimmer. Europhysics Letters, 2021, 133, 34001.	2.0	3
3	Brownian motion of a charged colloid in restricted confinement. Physical Review E, 2021, 103, 042607.	2.1	5
4	Nonreciprocal response of a two-dimensional fluid with odd viscosity. Physical Review E, 2021, 103, 042610.	2.1	19
5	Nonreciprocality of a micromachine driven by a catalytic chemical reaction. Physical Review E, 2021, 103, 062113.	2.1	8
6	Odd Microswimmer. Journal of the Physical Society of Japan, 2021, 90, 075001.	1.6	11
7	Irreversibility and entropy production of a thermally driven micromachine. Physica A: Statistical Mechanics and Its Applications, 2021, 562, 125277.	2.6	6
8	Emergent stripes of active rotors in shear flows. Physical Review Research, 2021, 3, .	3.6	3
9	Hydrodynamic lift of a two-dimensional liquid domain with odd viscosity. Physical Review E, 2021, 104, 064613.	2.1	14
10	Dynamics of passive and active membrane tubes. Soft Matter, 2020, 16, 9319-9330.	2.7	3
11	Reciprocal microswimmers in a viscoelastic fluid. Physics of Fluids, 2020, 32, .	4.0	10
12	Dynamics of a membrane coupled to an active fluid. Physical Review E, 2020, 101, 042601.	2.1	2
13	Shear viscosity of two-state enzyme solutions. Physical Review E, 2020, 101, 012610.	2.1	9
14	Mechanochemical enzymes and protein machines as hydrodynamic force dipoles: the active dimer model. Soft Matter, 2020, 16, 10734-10749.	2.7	15
15	Brownian Motion Confined in a Brownian Surface. JPSJ News and Comments, 2020, 17, 08.	0.1	0
16	Hydrodynamic Interaction between Two Elastic Microswimmers. Journal of the Physical Society of Japan, 2019, 88, 054804.	1.6	9
17	Nonequilibrium probability flux of a thermally driven micromachine. Physical Review E, 2019, 100, 022607.	2.1	16
18	Pattern formation of skin cancers: Effects of cancer proliferation and hydrodynamic interactions. Physical Review E, 2019, 99, 032416.	2.1	9

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19	Kosmotropic effect leads to LCST decrease in thermoresponsive polymer solutions. Journal of Chemical Physics, 2018, 148, 084903.	3.0	13
20	Dynamics of a bilayer membrane with membrane-solvent partial slip boundary conditions. Soft Materials, 2018, 16, 186-191.	1.7	2
21	Thermal and active fluctuations of a compressible bilayer vesicle. Journal of Physics Condensed Matter, 2018, 30, 175101.	1.8	2
22	Morphogenesis of Small Intestinal Villus. Biophysical Journal, 2018, 114, 104a.	0.5	1
23	A three-sphere microswimmer in a structured fluid. Europhysics Letters, 2018, 123, 34002.	2.0	4
24	Three-disk microswimmer in a supported fluid membrane. Physical Review E, 2018, 97, 052612.	2.1	6
25	Anomalous diffusion in viscoelastic media with active force dipoles. Physical Review E, 2017, 95, 032417.	2.1	13
26	Localization and diffusion of tracer particles in viscoelastic media with active force dipoles. Europhysics Letters, 2017, 117, 38001.	2.0	11
27	Elastic Three-Sphere Microswimmer in a Viscous Fluid. Journal of the Physical Society of Japan, 2017, 86, 093801.	1.6	14
28	Swimmer-Microrheology. Journal of the Physical Society of Japan, 2017, 86, 043801.	1.6	8
29	Dynamics of a bilayer membrane coupled to a two-dimensional cytoskeleton: Scale transfers of membrane deformations. Physical Review E, 2017, 96, 012416.	2.1	3
30	Coexistences of lamellar phases in ternary surfactant solutions. Soft Materials, 2017, 15, 272-281.	1.7	1
31	Lateral diffusion induced by active proteins in a biomembrane. Physical Review E, 2017, 95, 052407.	2.1	13
32	Spherically Symmetric Solvent is Sufficient to Explain the LCST Mechanism in Polymer Solutions. Macromolecular Theory and Simulations, 2017, 26, 1600073.	1.4	4
33	Permeation through a lamellar stack of lipid mixtures. Europhysics Letters, 2017, 120, 18004.	2.0	1
34	Thermally Driven Elastic Micromachines. Journal of the Physical Society of Japan, 2017, 86, 113801.	1.6	12
35	Nano-domain formation in charged membranes: Beyond the Debye-HÃ¼ckel approximation. Europhysics Letters, 2016, 114, 28002.	2.0	2
36	Phase Diagrams and Ordering in Charged Membranes: Binary Mixtures of Charged and Neutral Lipids. Journal of Physical Chemistry B, 2016, 120, 6358-6367.	2.6	11

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37	Relaxation dynamics of two-component fluid bilayer membranes. European Physical Journal E, 2016, 39, 52.	1.6	12
38	Budding transition of asymmetric two-component lipid domains. Physical Review E, 2016, 94, 032406.	2.1	4
39	Dynamics of a membrane interacting with an active wall. Physical Review E, 2016, 93, 052407.	2.1	4
40	Relaxation dynamics of a compressible bilayer vesicle containing highly viscous fluid. Physical Review E, 2016, 94, 062414.	2.1	10
41	Dynamics of two-component membranes surrounded by viscoelastic media. Journal of Physics Condensed Matter, 2015, 27, 432001.	1.8	6
42	Correlated lateral phase separations in stacks of lipid membranes. Journal of Chemical Physics, 2015, 143, 243124.	3.0	5
43	Budding of domains in mixed bilayer membranes. Physical Review E, 2015, 91, 012708.	2.1	10
44	Structural Rheology of the Smectic Phase. Materials, 2014, 7, 5146-5168.	2.9	15
45	Diffusion coefficients in leaflets of bilayer membranes. Physical Review E, 2014, 89, 022713.	2.1	13
46	Structural rheology of focal conic domains: a stress-quench experiment. Soft Matter, 2014, 10, 5289.	2.7	8
47	Charge-induced phase separation in lipid membranes. Soft Matter, 2014, 10, 7959-7967.	2.7	69
48	Physical aspects of heterogeneities in multi-component lipid membranes. Advances in Colloid and Interface Science, 2014, 208, 34-46.	14.7	57
49	Growth kinetics of circular liquid domains on vesicles by diffusion-controlled coalescence. Journal of Physics Condensed Matter, 2013, 25, 195105.	1.8	2
50	Drag Coefficient of a Rigid Spherical Particle in a Near-Critical Binary Fluid Mixture. Journal of the Physical Society of Japan, 2013, 82, 084003.	1.6	22
51	Lateral Dynamics in Polymer-Supported Membranes. Materials, 2012, 5, 1923-1932.	2.9	7
52	Viscoelasticity of two-layer vesicles in solution. Physical Review E, 2012, 86, 061401.	2.1	2
53	Anomalous lateral diffusion in a viscous membrane surrounded by viscoelastic media. Europhysics Letters, 2012, 97, 68007.	2.0	16
54	Concentration fluctuations and phase transitions in coupled modulated bilayers. Physical Review E, 2012, 86, 021916.	2.1	34

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55	Dynamics of Heterogeneity in Fluid Membranes. Behavior Research Methods, 2012, , 129-164.	4.0	2
56	Hydrodynamic Effects in Multicomponent Fluid Membranes. Series in Sof Condensed Matter, 2012, , 197-274.	0.1	0
57	Non-Equilibrium Soft Matter Physics. Series in Sof Condensed Matter, 2012, , .	0.1	6
58	Hydrodynamic effects on concentration fluctuations in multicomponent membranes. Soft Matter, 2011, 7, 1524.	2.7	19
59	Dynamics of a polymer chain confined in a membrane. European Physical Journal E, 2011, 34, 46.	1.6	29
60	Elasticity of smectic liquid crystals with focal conic domains. Journal of Physics Condensed Matter, 2011, 23, 235105.	1.8	20
61	Charged bilayer membranes in asymmetric ionic solutions: Phase diagrams and critical behavior. Physical Review E, 2011, 84, 031919.	2.1	20
62	Diffusion coefficient of an inclusion in a liquid membrane supported by a solvent of arbitrary thickness. Physical Review E, 2011, 84, 021905.	2.1	21
63	Hydrodynamic coupling between two fluid membranes. Journal of Physics Condensed Matter, 2011, 23, 072205.	1.8	3
64	Effects of an embedding bulk fluid on phase separation dynamics in a thin liquid film. Europhysics Letters, 2010, 89, 56001.	2.0	37
65	Drag coefficient of a liquid domain in a two-dimensional membrane. European Physical Journal E, 2010, 31, 303-310.	1.6	25
66	Smectic rheology close to the smectic-nematic transition. Europhysics Letters, 2010, 90, 64001.	2.0	21
67	Coupled Modulated Bilayers: A Phenomenological Model. ChemPhysChem, 2009, 10, 2839-2846.	2.1	30
68	Surface activity of solid particles with extremely rough surfaces. Journal of Colloid and Interface Science, 2008, 317, 501-506.	9.4	20
69	The phase behavior of mixed lipid membranes in the presence of the rippled phase. European Physical Journal E, 2008, 26, 197-204.	1.6	7
70	Non-linear rheology of lamellar liquid crystals. European Physical Journal E, 2008, 25, 91-101.	1.6	39
71	Lamellar to micelle transition of nonionic surfactant assemblies induced by addition of colloidal particles. Journal of Chemical Physics, 2008, 129, 134903.	3.0	13
72	Dynamical Brazovskii Effect. Soft Materials, 2008, 6, 85-95.	1.7	0

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73	Formation and Characterization of Microemulsions Containing Polymeric Silicone. Langmuir, 2008, 24, 7658-7662.	3.5	16
74	Adsorption Dynamics in Pickering Emulsions. Progress of Theoretical Physics Supplement, 2008, 175, 81-92.	0.1	12
75	The dynamics of orderâ€“order phase separation. Journal of Physics Condensed Matter, 2008, 20, 155107.	1.8	9
76	Mesoscale structures in microemulsions. Journal of Physics Condensed Matter, 2007, 19, 463101.	1.8	20
77	Growth Dynamics of Domains in Ternary Fluid Vesicles. Biophysical Journal, 2007, 92, 115-125.	0.5	116
78	Shear-induced structural transition in the lamellar phase of the C16E7/D2O system. Time evolution of small-angle neutron scattering at a constant shear rate. Journal of Applied Crystallography, 2007, 40, s332-s334.	4.5	6
79	Tension-Induced Morphological Transition in Mixed Lipid Bilayers. Langmuir, 2006, 22, 6771-6774.	3.5	28
80	Adsorption of Microstructured Particles at Liquidâ^'Liquid Interfaces. Journal of Physical Chemistry B, 2006, 110, 13124-13129.	2.6	66
81	Adsorption of colloidal particles to curved interfaces. Journal of Chemical Physics, 2006, 124, 241104.	3.0	39
82	Surfactant mesophases mediated by colloidal particles. Journal of Physics Condensed Matter, 2005, 17, S2929-S2935.	1.8	3
83	Effects of Added Electrolytes on the Structure of Charged Polymeric Micelles. Soft Materials, 2005, 3, 89-120.	1.7	2
84	Polymer-confinement-induced nematic transition of microemulsion droplets. Europhysics Letters, 2005, 71, 494-500.	2.0	24
85	Phase behaviour of three-component lipid mixtures. Journal of Physics Condensed Matter, 2005, 17, S2951-S2956.	1.8	13
86	Surface-Active Particles with Microstructured Surfaces. Langmuir, 2005, 21, 9409-9411.	3.5	19
87	Shear-induced structural transition in a lyotropic lamellar phase studied using small angle neutron and light scattering. Journal of Physics Condensed Matter, 2005, 17, S2923-S2928.	1.8	8
88	Adsorption of Rod-Shaped Surface-Active Particles at Liquid-Liquid Interfaces. Journal of Oleo Science, 2004, 53, 607-610.	1.4	11
89	Adhesion induced buckling of spherical shells. Journal of Physics Condensed Matter, 2004, 16, L421-L428.	1.8	14
90	Lateral phase separation in mixtures of lipids and cholesterol. Europhysics Letters, 2004, 67, 321-327.	2.0	68

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91	Adsorption of Disk-Shaped Janus Beads at Liquidâ^'Liquid Interfaces. Langmuir, 2004, 20, 11821-11823.	3.5	113
92	Self-Assembly of Surface-Active Powder at the Interfaces of Selective Liquids. 2:Â Behavior of an Organic-Crystalline Powder. Langmuir, 2003, 19, 10152-10156.	3.5	27
93	The unbinding transition of mixed fluid membranes. Europhysics Letters, 2003, 64, 844-850.	2.0	15
94	Phase behavior of charged lipid bilayer membranes with added electrolyte. Journal of Chemical Physics, 2003, 119, 1157-1164.	3.0	5
95	Phenomenological Theories of Microemulsions. Oleoscience, 2003, 3, 523-530,508.	0.0	1
96	Real-space mean-field approach to polymeric ternary systems. Journal of Chemical Physics, 2002, 117, 9903-9919.	3.0	11
97	Mean-field approach to polymeric microemulsions. Europhysics Letters, 2001, 53, 46-52.	2.0	11
98	Scaling theory of mixed amphiphilic monolayers. European Physical Journal E, 2001, 5, 337-351.	1.6	16
99	Deformation and tribology of multi-walled hollow nanoparticles. Europhysics Letters, 2000, 50, 762-768.	2.0	55
100	High- and Low-Pitch Helical Structures of Tilted Chiral Lipid Bilayers. Physical Review Letters, 1998, 81, 473-476.	7.8	39
101	Two-order-parameter model for an oil-water-surfactant system. Physical Review E, 1997, 55, 1722-1727.	2.1	77
102	Bicontinuous Microemulsions under Steady Shear Flow. Journal De Physique II, 1997, 7, 7-14.	0.9	11
103	Kelvin-Helmholtz Instability of Langmuir Monolayers. Journal De Physique II, 1997, 7, 1331-1335.	0.9	2
104	Interface dynamics in a block copolymer melt and the effect of noise. Physical Review E, 1996, 53, R5588-R5591.	2.1	9
105	Monte Carlo study of a self-avoiding polymerized membrane with negative bending rigidity. Journal of Physics A, 1996, 29, 7439-7449.	1.6	3
106	Scattering function of the disordered phase of block copolymers under shear flow. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 208, 108-112.	2.1	3
107	Viscoelasticity of vesicle dispersions. Physica A: Statistical Mechanics and Its Applications, 1995, 219, 253-289.	2.6	18
108	Diffusion Constant of a Polymer Chain in Biomembranes. Journal De Physique II, 1995, 5, 5-9.	0.9	47

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109	Dynamical fluctuations of spherically closed fluid membranes. Physica A: Statistical Mechanics and Its Applications, 1993, 192, 27-46.	2.6	30
110	Brownian dynamics in a thin sheet with momentum decay. Physical Review E, 1993, 47, 2377-2383.	2.1	26
111	Frustration-induced ripple phase in bilayer membranes. Journal De Physique II, 1993, 3, 1305-1311.	0.9	9
112	Fluctuations and stability of polymerized vesicles. Journal De Physique II, 1992, 2, 1563-1575.	0.9	14
113	A Theory of Optical Anisotropy Decay in Membranes. Journal of the Physical Society of Japan, 1990, 59, 2584-2595.	1.6	3
114	Sound Attenuation in a One-Dimensional Periodic Inhomogeneous Medium. Journal of the Physical Society of Japan, 1990, 59, 101-110.	1.6	4