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	Growth Dynamics of Domains in Ternary Fluid Vesicles. Biophysical Journal, 2007, 92, 115-125.	0.5	116
2	Adsorption of Disk-Shaped Janus Beads at Liquidâ^'Liquid Interfaces. Langmuir, 2004, 20, 11821-11823.	3.5	113
3	Two-order-parameter model for an oil-water-surfactant system. Physical Review E, 1997, 55, 1722-1727.	2.1	77
4	Charge-induced phase separation in lipid membranes. Soft Matter, 2014, 10, 7959-7967.	2.7	69
5	Lateral phase separation in mixtures of lipids and cholesterol. Europhysics Letters, 2004, 67, 321-327.	2.0	68
6	Adsorption of Microstructured Particles at Liquidâ^'Liquid Interfaces. Journal of Physical Chemistry B, 2006, 110, 13124-13129.	2.6	66
7	Physical aspects of heterogeneities in multi-component lipid membranes. Advances in Colloid and Interface Science, 2014, 208, 34-46.	14.7	57
8	Deformation and tribology of multi-walled hollow nanoparticles. Europhysics Letters, 2000, 50, 762-768.	2.0	55
9	Diffusion Constant of a Polymer Chain in Biomembranes. Journal De Physique II, 1995, 5, 5-9.	0.9	47
10	High- and Low-Pitch Helical Structures of Tilted Chiral Lipid Bilayers. Physical Review Letters, 1998, 81, 473-476.	7.8	39
11	Adsorption of colloidal particles to curved interfaces. Journal of Chemical Physics, 2006, 124, 241104.	3.0	39
12	Non-linear rheology of lamellar liquid crystals. European Physical Journal E, 2008, 25, 91-101.	1.6	39
13	Effects of an embedding bulk fluid on phase separation dynamics in a thin liquid film. Europhysics Letters, 2010, 89, 56001.	2.0	37
14	Concentration fluctuations and phase transitions in coupled modulated bilayers. Physical Review E, 2012, 86, 021916.	2.1	34
15	Dynamical fluctuations of spherically closed fluid membranes. Physica A: Statistical Mechanics and Its Applications, 1993, 192, 27-46.	2.6	30
16	Coupled Modulated Bilayers: A Phenomenological Model. ChemPhysChem, 2009, 10, 2839-2846.	2.1	30
17	Dynamics of a polymer chain confined in a membrane. European Physical Journal E, 2011, 34, 46.	1.6	29
18	Tension-Induced Morphological Transition in Mixed Lipid Bilayers. Langmuir, 2006, 22, 6771-6774.	3.5	28

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19	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
20	Brownian dynamics in a thin sheet with momentum decay. Physical Review E, 1993, 47, 2377-2383.	2.1	26
21	Drag coefficient of a liquid domain in a two-dimensional membrane. European Physical Journal E, 2010, 31, 303-310.	1.6	25
22	Polymer-confinement-induced nematic transition of microemulsion droplets. Europhysics Letters, 2005, 71, 494-500.	2.0	24
23	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
24	Smectic rheology close to the smectic-nematic transition. Europhysics Letters, 2010, 90, 64001.	2.0	21
25	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
26	Mesoscale structures in microemulsions. Journal of Physics Condensed Matter, 2007, 19, 463101.	1.8	20
27	Surface activity of solid particles with extremely rough surfaces. Journal of Colloid and Interface Science, 2008, 317, 501-506.	9.4	20
28	Elasticity of smectic liquid crystals with focal conic domains. Journal of Physics Condensed Matter, 2011, 23, 235105.	1.8	20
29	Charged bilayer membranes in asymmetric ionic solutions: Phase diagrams and critical behavior. Physical Review E, 2011, 84, 031919.	2.1	20
30	Surface-Active Particles with Microstructured Surfaces. Langmuir, 2005, 21, 9409-9411.	3.5	19
31	Hydrodynamic effects on concentration fluctuations in multicomponent membranes. Soft Matter, 2011, 7, 1524.	2.7	19
32	Nonreciprocal response of a two-dimensional fluid with odd viscosity. Physical Review E, 2021, 103, 042610.	2.1	19
33	Viscoelasticity of vesicle dispersions. Physica A: Statistical Mechanics and Its Applications, 1995, 219, 253-289.	2.6	18
34	Scaling theory of mixed amphiphilic monolayers. European Physical Journal E, 2001, 5, 337-351.	1.6	16
35	Formation and Characterization of Microemulsions Containing Polymeric Silicone. Langmuir, 2008, 24, 7658-7662.	3.5	16
36	Anomalous lateral diffusion in a viscous membrane surrounded by viscoelastic media. Europhysics Letters, 2012, 97, 68007.	2.0	16

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37	Nonequilibrium probability flux of a thermally driven micromachine. Physical Review E, 2019, 100, 022607.	2.1	16
38	The unbinding transition of mixed fluid membranes. Europhysics Letters, 2003, 64, 844-850.	2.0	15
39	Structural Rheology of the Smectic Phase. Materials, 2014, 7, 5146-5168.	2.9	15
40	Mechanochemical enzymes and protein machines as hydrodynamic force dipoles: the active dimer model. Soft Matter, 2020, 16, 10734-10749.	2.7	15
41	Adhesion induced buckling of spherical shells. Journal of Physics Condensed Matter, 2004, 16, L421-L428.	1.8	14
42	Elastic Three-Sphere Microswimmer in a Viscous Fluid. Journal of the Physical Society of Japan, 2017, 86, 093801.	1.6	14
43	Fluctuations and stability of polymerized vesicles. Journal De Physique II, 1992, 2, 1563-1575.	0.9	14
44	Hydrodynamic lift of a two-dimensional liquid domain with odd viscosity. Physical Review E, 2021, 104, 064613.	2.1	14
45	Phase behaviour of three-component lipid mixtures. Journal of Physics Condensed Matter, 2005, 17, S2951-S2956.	1.8	13
46	Lamellar to micelle transition of nonionic surfactant assemblies induced by addition of colloidal particles. Journal of Chemical Physics, 2008, 129, 134903.	3.0	13
47	Diffusion coefficients in leaflets of bilayer membranes. Physical Review E, 2014, 89, 022713.	2.1	13
48	Anomalous diffusion in viscoelastic media with active force dipoles. Physical Review E, 2017, 95, 032417.	2.1	13
49	Lateral diffusion induced by active proteins in a biomembrane. Physical Review E, 2017, 95, 052407.	2.1	13
50	Kosmotropic effect leads to LCST decrease in thermoresponsive polymer solutions. Journal of Chemical Physics, 2018, 148, 084903.	3.0	13
51	Adsorption Dynamics in Pickering Emulsions. Progress of Theoretical Physics Supplement, 2008, 175, 81-92.	0.1	12
52	Relaxation dynamics of two-component fluid bilayer membranes. European Physical Journal E, 2016, 39, 52.	1.6	12
53	Thermally Driven Elastic Micromachines. Journal of the Physical Society of Japan, 2017, 86, 113801.	1.6	12
54	Bicontinuous Microemulsions under Steady Shear Flow. Journal De Physique II, 1997, 7, 7-14.	0.9	11

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55	Mean-field approach to polymeric microemulsions. Europhysics Letters, 2001, 53, 46-52.	2.0	11
56	Real-space mean-field approach to polymeric ternary systems. Journal of Chemical Physics, 2002, 117, 9903-9919.	3.0	11
57	Adsorption of Rod-Shaped Surface-Active Particles at Liquid-Liquid Interfaces. Journal of Oleo Science, 2004, 53, 607-610.	1.4	11
58	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
59	Localization and diffusion of tracer particles in viscoelastic media with active force dipoles. Europhysics Letters, 2017, 117, 38001.	2.0	11
60	Odd Microswimmer. Journal of the Physical Society of Japan, 2021, 90, 075001.	1.6	11
61	Budding of domains in mixed bilayer membranes. Physical Review E, 2015, 91, 012708.	2.1	10
62	Relaxation dynamics of a compressible bilayer vesicle containing highly viscous fluid. Physical Review E, 2016, 94, 062414.	2.1	10
63	Reciprocal microswimmers in a viscoelastic fluid. Physics of Fluids, 2020, 32, .	4.0	10
64	Frustration-induced ripple phase in bilayer membranes. Journal De Physique II, 1993, 3, 1305-1311.	0.9	9
65	Interface dynamics in a block copolymer melt and the effect of noise. Physical Review E, 1996, 53, R5588-R5591.	2.1	9
66	The dynamics of orderâ€“order phase separation. Journal of Physics Condensed Matter, 2008, 20, 155107.	1.8	9
67	Hydrodynamic Interaction between Two Elastic Microswimmers. Journal of the Physical Society of Japan, 2019, 88, 054804.	1.6	9
68	Pattern formation of skin cancers: Effects of cancer proliferation and hydrodynamic interactions. Physical Review E, 2019, 99, 032416.	2.1	9
69	Shear viscosity of two-state enzyme solutions. Physical Review E, 2020, 101, 012610.	2.1	9
70	The Onsagerâ€“Machlup Integral for Non-Reciprocal Systems with Odd Elasticity. Journal of the Physical Society of Japan, 2022, 91, .	1.6	9
71	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
72	Structural rheology of focal conic domains: a stress-quench experiment. Soft Matter, 2014, 10, 5289.	2.7	8

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73	Swimmer-Microrheology. Journal of the Physical Society of Japan, 2017, 86, 043801.	1.6	8
74	Nonreciprocality of a micromachine driven by a catalytic chemical reaction. Physical Review E, 2021, 103, 062113.	2.1	8
75	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
76	Lateral Dynamics in Polymer-Supported Membranes. Materials, 2012, 5, 1923-1932.	2.9	7
77	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
78	Dynamics of two-component membranes surrounded by viscoelastic media. Journal of Physics Condensed Matter, 2015, 27, 432001.	1.8	6
79	Three-disk microswimmer in a supported fluid membrane. Physical Review E, 2018, 97, 052612.	2.1	6
80	Irreversibility and entropy production of a thermally driven micromachine. Physica A: Statistical Mechanics and Its Applications, 2021, 562, 125277.	2.6	6
81	Non-Equilibrium Soft Matter Physics. Series in Sof Condensed Matter, 2012, , .	0.1	6
82	Phase behavior of charged lipid bilayer membranes with added electrolyte. Journal of Chemical Physics, 2003, 119, 1157-1164.	3.0	5
83	Correlated lateral phase separations in stacks of lipid membranes. Journal of Chemical Physics, 2015, 143, 243124.	3.0	5
84	Brownian motion of a charged colloid in restricted confinement. Physical Review E, 2021, 103, 042607.	2.1	5
85	Sound Attenuation in a One-Dimensional Periodic Inhomogeneous Medium. Journal of the Physical Society of Japan, 1990, 59, 101-110.	1.6	4
86	Budding transition of asymmetric two-component lipid domains. Physical Review E, 2016, 94, 032406.	2.1	4
87	Dynamics of a membrane interacting with an active wall. Physical Review E, 2016, 93, 052407.	2.1	4
88	Spherically Symmetric Solvent is Sufficient to Explain the LCST Mechanism in Polymer Solutions. Macromolecular Theory and Simulations, 2017, 26, 1600073.	1.4	4
89	A three-sphere microswimmer in a structured fluid. Europhysics Letters, 2018, 123, 34002.	2.0	4
90	A Theory of Optical Anisotropy Decay in Membranes. Journal of the Physical Society of Japan, 1990, 59, 2584-2595.	1.6	3

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91	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
92	Monte Carlo study of a self-avoiding polymerized membrane with negative bending rigidity. Journal of Physics A, 1996, 29, 7439-7449.	1.6	3
93	Surfactant mesophases mediated by colloidal particles. Journal of Physics Condensed Matter, 2005, 17, S2929-S2935.	1.8	3
94	Hydrodynamic coupling between two fluid membranes. Journal of Physics Condensed Matter, 2011, 23, 072205.	1.8	3
95	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
96	Dynamics of passive and active membrane tubes. Soft Matter, 2020, 16, 9319-9330.	2.7	3
97	Autonomous elastic microswimmer. Europhysics Letters, 2021, 133, 34001.	2.0	3
98	Emergent stripes of active rotors in shear flows. Physical Review Research, 2021, 3, .	3.6	3
99	Effects of Added Electrolytes on the Structure of Charged Polymeric Micelles. Soft Materials, 2005, 3, 89-120.	1.7	2
100	Viscoelasticity of two-layer vesicles in solution. Physical Review E, 2012, 86, 061401.	2.1	2
101	Dynamics of Heterogeneity in Fluid Membranes. Behavior Research Methods, 2012, , 129-164.	4.0	2
102	Growth kinetics of circular liquid domains on vesicles by diffusion-controlled coalescence. Journal of Physics Condensed Matter, 2013, 25, 195105.	1.8	2
103	Nano-domain formation in charged membranes: Beyond the Debye-HÃ¼ckel approximation. Europhysics Letters, 2016, 114, 28002.	2.0	2
104	Dynamics of a bilayer membrane with membrane-solvent partial slip boundary conditions. Soft Materials, 2018, 16, 186-191.	1.7	2
105	Thermal and active fluctuations of a compressible bilayer vesicle. Journal of Physics Condensed Matter, 2018, 30, 175101.	1.8	2
106	Dynamics of a membrane coupled to an active fluid. Physical Review E, 2020, 101, 042601.	2.1	2
107	Kelvin-Helmholtz Instability of Langmuir Monolayers. Journal De Physique II, 1997, 7, 1331-1335.	0.9	2
108	Phenomenological Theories of Microemulsions. Oleoscience, 2003, 3, 523-530,508.	0.0	1

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109	Coexistences of lamellar phases in ternary surfactant solutions. Soft Materials, 2017, 15, 272-281.	1.7	1
110	Permeation through a lamellar stack of lipid mixtures. Europhysics Letters, 2017, 120, 18004.	2.0	1
111	Morphogenesis of Small Intestinal Villus. Biophysical Journal, 2018, 114, 104a.	0.5	1
112	Dynamical Brazovskii Effect. Soft Materials, 2008, 6, 85-95.	1.7	0
113	Hydrodynamic Effects in Multicomponent Fluid Membranes. Series in Sof Condensed Matter, 2012, , 197-274.	0.1	0
114	Brownian Motion Confined in a Brownian Surface. JPSJ News and Comments, 2020, 17, 08.	0.1	0