Noriyoshi Arai

List of Publications by Year
in descending order

54	706	567144 15	580701 25
papers	citations	h-index	g-index

55	55	55	696
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Self-Assembly of Surfactants and Polymorphic Transition in Nanotubes. Journal of the American Chemical Society, 2008, 130, 7916-7920.	6.6	87
2	A vesicle cell under collision with a Janus or homogeneous nanoparticle: translocation dynamics and late-stage morphology. Nanoscale, 2013, 5, 9089.	2.8	50
3	Spontaneous self-assembly process for threadlike micelles. Journal of Chemical Physics, 2007, 126, 244905.	1.2	47
4	Self-Assembly of Janus Oligomers into Onion-like Vesicles with Layer-by-Layer Water Discharging Capability: A Minimalist Model. ACS Nano, 2016, 10, 8026-8037.	7.3	43
5	Self-Assembly of Triblock Janus Nanoparticle in Nanotube. Journal of Chemical Theory and Computation, 2013, 9, 179-187.	2.3	34
6	Programmed Self-Assembly of Branched Nanocrystals with an Amphiphilic Surface Pattern. ACS Nano, 2017, 11, 9312-9320.	7.3	32
7	Self-assembly of Janus nanoparticles with a hydrophobic hemisphere in nanotubes. Soft Matter, 2016, 12, 378-385.	1.2	29
8	Self-assembly behaviours of primitive and modern lipid membrane solutions: a coarse-grained molecular simulation study. Physical Chemistry Chemical Physics, 2016, 18, 19426-19432.	1.3	28
9	Self-Assembly and Viscosity Behavior of Janus Nanoparticles in Nanotube Flow. Langmuir, 2017, 33, 736-743.	1.6	28
10	Multiscale prediction of functional self-assembled materials using machine learning: high-performance surfactant molecules. Nanoscale, 2018, 10, 16013-16021.	2.8	24
11	Nanochannel with Uniform and Janus Surfaces: Shear Thinning and Thickening in Surfactant Solution. Langmuir, 2012, 28, 2866-2872.	1.6	23
12	Structure and dynamics of amphiphilic Janus spheres and spherocylinders under shear. Soft Matter, 2020, 16, 476-486.	1.2	23
13	Understanding Molecular Motor Walking along a Microtubule: A Themosensitive Asymmetric Brownian Motor Driven by Bubble Formation. Journal of the American Chemical Society, 2013, 135, 8616-8624.	6.6	18
14	Molecular dynamics simulation of the melting processes of coreâ€“shell and pure nanoparticles. Molecular Simulation, 2015, 41, 905-912.	0.9	16
15	Poisson property of the occurrence of flip-flops in a model membrane. Journal of Chemical Physics, 2014, 140, 064901.	1.2	15
16	Asymmetric Brownian Motor Driven by Bubble Formation in a Hydrophobic Channel. ACS Nano, 2010, 4, 5905-5913.	7.3	14
17	Nanotube Active Water Pump Driven by Alternating Hydrophobicity. ACS Nano, 2021, 15, 2481-2489.	7.3	14
18	Phase diagrams of confined solutions of dimyristoylphosphatidylcholine (DMPC) lipid and cholesterol in nanotubes. Microfluidics and Nanofluidics, 2013, 14, 995-1010.	1.0	11

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19	Polymodal rheological behaviors induced by self-assembly of surfactants confined in nanotubes. Journal of Molecular Liquids, 2019, 274, 328-337.	2.3	11
20	Predicting molecular ordering in a binary liquid crystal using machine learning. Liquid Crystals, 2020, 47, 438-448.	0.9	11
21	Structural analysis of telechelic polymer solution using dissipative particle dynamics simulations. Molecular Simulation, 2015, 41, 996-1001.	0.9	10
22	Predominant Factor Determining Thermal Conductivity Behavior of Nanofluid: Effect of Cluster Structures with Various Nanoparticles. Journal of the Electrochemical Society, 2019, 166, B3223-B3227.	1.3	9
23	Simulation study on the effects of the self-assembly of nanoparticles on thermal conductivity of nanofluids. Chemical Physics Letters, 2021, 785, 139129.	1.2	9
24	Liquid-crystal ordering mediated by self-assembly of surfactant solution confined in nanodroplet: a dissipative particle dynamics study. Molecular Simulation, 2017, 43, 1218-1226.	0.9	8
25	Size dependence of static polymer droplet behavior from many-body dissipative particle dynamics simulation. Physical Review E, 2017, 95, 043109.	0.8	8
26	Janus or homogeneous nanoparticle mediated self-assembly of polymer electrolyte fuel cell membranes. RSC Advances, 2018, 8, 18568-18575.	1.7	8
27	Water permeation in polymeric membranes: Mechanism and synthetic strategy for water-inhibiting functional polymers. Journal of Membrane Science, 2018, 564, 184-192.	4.1	8
28	Molecular Insight into the Possible Mechanism of Drag Reduction of Surfactant Aqueous Solution in Pipe Flow. International Journal of Molecular Sciences, 2021, 22, 7573.	1.8	8
29	Structure and Shear Response of Janus Colloidâ€“Polymer Mixtures in Solution. Langmuir, 2020, 36, 14214-14223.	1.6	7
30	Performance of Coarse Graining in Estimating Polymer Properties: Comparison with the Atomistic Model. Polymers, 2020, 12, 382.	2.0	7
31	Polymorphic transitions mediated by surfactants in liquid crystal nanodroplet. Liquid Crystals, 2019, 46, 1428-1439.	0.9	7
32	Self-assembly of surfactant aqueous solution confined in a Janus amphiphilic nanotube. Molecular Simulation, 2017, 43, 1153-1159.	0.9	6
33	Self-assembly of spheroidal triblock Janus nanoparticle solutions in nanotubes. Molecular Systems Design and Engineering, 2019, 4, 122-132.	1.7	6
34	A biointerface effect on the self-assembly of ribonucleic acids: a possible mechanism of RNA polymerisation in the self-replication cycle. Nanoscale, 2020, 12, 6691-6698.	2.8	6
35	Amphiphilic self-assembly of semiconductor nanocrystals with heterogeneous compositions. Europhysics Letters, 2017, 118, 68001.	0.7	5
36	Relationship between water permeation and flip-flop motion in a bilayer membrane. Physical Chemistry Chemical Physics, 2018, 20, 28155-28161.	1.3	5

#	Article	IF	Citations
37	Self-assembly of polymer-tethered nanoparticles with uniform and Janus surfaces in nanotubes. Soft Matter, 2021, 17, 4047-4058.	1.2	5
38	Self-assembled morphology of tripod nanoparticle solutions: the effect of arm length and hydrophobic ratio. Molecular Systems Design and Engineering, 2018, 3, 572-580.	1.7	4
39	Self-assembly of peptide amphiphiles by vapor pressure osmometry and dissipative particle dynamics. RSC Advances, 2018, 8, 26461-26468.	1.7	4
40	Effect of chemical design of grafted polymers on the self-assembled morphology of polymer-tethered nanoparticles in nanotubes. Journal of Physics Condensed Matter, 2021, 33, 365404.	0.7	3
41	Theory of nanobubble formation and induced force in nanochannels. Physical Review E, 2017, 96, 042802.	0.8	2
42	Understanding a molecular motor walking along a microtubule: an asymmetric Brownian motor driven by bubble formation with a focus on binding affinity. Molecular Simulation, 2018, 44, 523-529.	0.9	2
43	Programmed self-assembly of tetrapod nanoparticles with an amphiphilic surface pattern: the effect of arm length and hydrophobic ratio. Molecular Systems Design and Engineering, 2019, 4, 1095-1102.	1.7	2
44	Replica exchange dissipative particle dynamics method on threadlike micellar aqueous solutions. Journal of Physics Condensed Matter, 2020, 32, 115901.	0.7	2
45	Effect of the Janus Amphiphilic Wall on the Viscosity Behavior of Aqueous Surfactant Solutions. Langmuir, 2020, 36, 10690-10698.	1.6	2
46	Cylindrical defect structures formed by chiral nematic liquid crystals in quasi-one-dimensional systems. Physical Chemistry Chemical Physics, 2020, 22, 16896-16904.	1.3	2
47	Dissipative particle dynamics simulation of the relaxation behaviour of a triblock copolymer supramolecular network. Molecular Simulation, 2018, 44, 534-539.	0.9	1
48	Self-assembly Behaviors of Surfactant and Colloidal Solutions under Flow. Japanese Journal of Multiphase Flow, 2020, 34, 11-18.	0.1	1
49	Dissociation effect of non-covalent bond for morphological behavior of triblock copolymers: a dissipative particle dynamics study. Chemical Engineering Communications, 2021, 208, 1-13.	1.5	1
50	Dissipative Particle Dynamics Studies on the Self-Assembling Dynamics of the Peptide Amphiphiles. Materials Research Society Symposia Proceedings, 2008, 1135, 60201.	0.1	0
51	3PT155 Direct observations of flip-flops in membranes(The 50th Annual Meeting of the Biophysical) Tj ETQq1 1 0.784314 rgBT /Overl	0.0	0
52	Dissipative Particle Dynamics Simulation for Soft Matters. Journal of the Visualization Society of Japan, 2019, 39, 19-25.	0.0	0
53	A stochastic Hamiltonian formulation applied to dissipative particle dynamics. Applied Mathematics and Computation, 2022, 426, 127126.	1.4	0
54	Coarse-Grained Molecular Simulation for Soft Matters. Journal of the Japan Society of Colour Material, 2022, 95, 92-97.	0.0	0