Yuri Djikaev

List of Publications by Year
in descending order

56	1,032	566801 15	454577 30
papers	citations	h-index	g-index

57	57	57	923
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On the Fokkerâ€“Planck approximation in the kinetic equation of multicomponent classical nucleation theory. Physica A: Statistical Mechanics and Its Applications, 2022, 585, 126375.	1.2	1
2	Effect of chemical aging of aqueous organic aerosols on the rate of their steady-state nucleation. Physical Chemistry Chemical Physics, 2020, 22, 17612-17619.	1.3	4
3	Kinetic equation of concurrent nucleation and chemical aging of an ensemble of aqueous organic aerosols. Physical Review E, 2020, 101, 062801.	0.8	3
4	Formation and evolution of aqueous organic aerosols via concurrent condensation and chemical aging. Advances in Colloid and Interface Science, 2019, 265, 45-67.	7.0	9
5	Depletion of atmospheric organic trace gases due to their uptake by an ensemble of aqueous aerosols evolving via concurrent condensation and chemical aging. Physical Chemistry Chemical Physics, 2019, 21, 13090-13098.	1.3	4
6	Effect of Heterogeneous Chemical Reactions on the KÃ¶hler Activation of Aqueous Organic Aerosols. Journal of Physical Chemistry A, 2018, 122, 4322-4337.	1.1	8
7	Does the Enthalpy of Heterogeneous Chemical Reactions Affect the Formation of Aqueous Secondary Organic Aerosols?. Journal of Physical Chemistry Letters, 2018, 9, 5311-5316.	2.1	6
8	Free energy of formation of a crystal nucleus in incongruent solidification: Implication for modeling the crystallization of aqueous nitric acid droplets in polar stratospheric clouds. Journal of Chemical Physics, 2017, 146, 134709.	1.2	5
9	Dependence of homogeneous crystal nucleation in water droplets on their radii and its implication for modeling the formation of ice particles in cirrus clouds. Physical Chemistry Chemical Physics, 2017, 19, 20075-20081.	1.3	6
10	Self-Consistent Determination of the Iceâ€“Air Interfacial Tension and Iceâ€“Waterâ€“Air Line Tension from Experiments on the Freezing of Water Droplets. Journal of Physical Chemistry C, 2017, 121, 16432-16439.	1.5	9
11	Determination of the Solidâ€“Vapor Interfacial Tension of Nitric Acid Dihydrate Crystals via Experiments on the Freezing of Aqueous Nitric Acid Droplets. Journal of Physical Chemistry C, 2016, 120, 28031-28037.	1.5	2
12	Recent developments in the theoretical, simulational, and experimentalÂstudies of the role of water hydrogen bondingÂinÂhydrophobic phenomena. Advances in Colloid and Interface Science, 2016, 235, 23-45.	7.0	11
13	Fluid transition layer between rigid solute and liquid solvent: is there depletion or enrichment?. Physical Chemistry Chemical Physics, 2016, 18, 7888-7902.	1.3	1
14	Effect of Water Hydrogen Bonding on the Solvent-Mediated â€œOscillatoryâ€•Repulsion of C₆₀ Fullerenes in Water. Journal of Physical Chemistry Letters, 2015, 6, 1761-1766.	2.1	7
15	Temperature dependence of the evaporation lengthscale for water confined between two hydrophobic plates. Journal of Colloid and Interface Science, 2015, 449, 226-235.	5.0	3
16	The solvent-induced interaction of spherical solutes in associated and non-associated liquids. Journal of Chemical Physics, 2014, 141, 034705.	1.2	4
17	Thermodynamics of Water Condensation on a Primary Marine Aerosol Coated by Surfactant Organic Molecules. Journal of Physical Chemistry A, 2014, 118, 9879-9889.	1.1	12
18	Probabilistic Approach to the Length-Scale Dependence of the Effect of Water Hydrogen Bonding on Hydrophobic Hydration. Journal of Physical Chemistry B, 2013, 117, 7015-7025.	1.2	13

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19	Temperature effect on the small-to-large crossover lengthscale of hydrophobic hydration. Journal of Chemical Physics, 2013, 139, 184709.	1.2	7
20	Effect of Waterâ€“Water Hydrogen Bonding on the Hydrophobic Hydration of Large-Scale Particles and Its Temperature Dependence. Journal of Physical Chemistry B, 2012, 116, 2820-2830.	1.2	15
21	Effect of Hydrogen Bonding between Water Molecules on Their Density Distribution near a Hydrophobic Surface. Journal of Physical Chemistry Letters, 2011, 2, 1382-1386.	2.1	18
22	A probabilistic approach to the effect of water hydrogen bonds on the kinetics of protein folding and protein denaturation. Advances in Colloid and Interface Science, 2010, 154, 77-90.	7.0	2
23	Temperature effects on the hydrophobic interaction of parallel plates in the framework of the probabilistic approach to hydrogen bonding. Journal of Colloid and Interface Science, 2010, 343, 510-521.	5.0	5
24	Dependence of the number of hydrogen bonds per water molecule on its distance to a hydrophobic surface and a thereupon-based model for hydrophobic attraction. Journal of Chemical Physics, 2010, 133, 194105.	1.2	13
25	Effect of hydrogen bond networks on the nucleation mechanism of protein folding. Physical Review E, 2009, 80, 061918.	0.8	9
26	A probabilistic approach to the effect of hydrogen bonding on the hydrophobic attraction. Journal of Chemical Physics, 2009, 130, 124713.	1.2	23
27	The role of hydrogen bond networks in the barrierless thermal denaturation of a native protein. Journal of Chemical Physics, 2009, 131, 045105.	1.2	8
28	First passage time analysis of protein folding via nucleation and of barrierless protein denaturation. Advances in Colloid and Interface Science, 2009, 146, 18-30.	7.0	9
29	The effect of hydrogen bonding on the solvent-mediated interaction of composite plates. Journal of Colloid and Interface Science, 2009, 336, 575-583.	5.0	6
30	A kinetic model for the premelting of a crystalline structure. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 134-144.	1.2	7
31	Thermodynamics of Heterogeneous Crystal Nucleation in Contact and Immersion Modes. Journal of Physical Chemistry A, 2008, 112, 11677-11687.	1.1	42
32	Temperature effects on the nucleation mechanism of protein folding and on the barrierless thermal denaturation of a native protein. Physical Chemistry Chemical Physics, 2008, 10, 6281.	1.3	13
33	Effect of the Surface-Stimulated Mode on the Kinetics of Homogeneous Crystal Nucleation in Droplets. Journal of Physical Chemistry A, 2008, 112, 6592-6600.	1.1	18
34	Kinetic Model for the Sublimation of a Solid and Evaporation of Colloidal Particles from a Solid Substrate. Journal of Physical Chemistry C, 2008, 112, 1621-1627.	1.5	2
35	Effect of ionized protein residues on the nucleation pathway of protein folding. Journal of Chemical Physics, 2008, 128, 025103.	1.2	12
36	The interfacial tension and phase diagram of the Widom-Rowlinson mixture via Monte Carlo simulations. Journal of Chemical Physics, 2008, 128, 014712.	1.2	4

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37	Thermal denaturation of a native protein via spinodal decomposition in the framework of first-passage-time analysis. Physical Review E, 2008, 78, 011909.	0.8	13
38	A ternary nucleation model for the nucleation pathway of protein folding. Journal of Chemical Physics, 2007, 126, 175103.	1.2	14
39	Model for the Nucleation Mechanism of Protein Folding. Journal of Physical Chemistry B, 2007, 111, 886-897.	1.2	17
40	New approach to the kinetics of heterogeneous unary nucleation on liquid aerosols of a binary solution. Journal of Chemical Physics, 2006, 125, 244707.	1.2	9
41	A kinetic approach to the theory of heterogeneous nucleation on soluble particles during the deliquescence stage. Journal of Chemical Physics, 2006, 124, 194709.	1.2	12
42	Kinetic theory of binary nucleation based on a first passage time analysis. Journal of Chemical Physics, 2006, 124, 124521.	1.2	15
43	Recent developments in the kinetic theory of nucleation. Advances in Colloid and Interface Science, 2005, 118, 51-72.	7.0	63
44	Kinetic theory of nucleation based on a first passage time analysis: Improvement by the density-functional theory. Journal of Chemical Physics, 2005, 123, 214503.	1.2	15
45	Effect of adsorption on the uptake of organic trace gas by cloud droplets. Journal of Geophysical Research, 2003, 108, .	3.3	29
46	Thermodynamics of crystal nucleation in multicomponent droplets: Adsorption, dissociation, and surface-stimulated nucleation. Journal of Chemical Physics, 2003, 118, 6572-6581.	1.2	40
47	Kinetics of fluctuational deliquescence. Journal of Chemical Physics, 2002, 116, 9865-9874.	1.2	21
48	Surface crystallization of supercooled water in clouds. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15873-15878.	3.3	204
49	Laboratory Evidence for Surface Nucleation of Solid Polar Stratospheric Cloud Particles. Journal of Physical Chemistry A, 2002, 106, 10238-10246.	1.1	82
50	Thermodynamic Conditions for the Surface-Stimulated Crystallization of Atmospheric Droplets. Journal of Physical Chemistry A, 2002, 106, 10247-10253.	1.1	84
51	Activation barrier for multicomponent droplet formation on partially soluble nuclei. Journal of Geophysical Research, 2001, 106, 14447-14463.	3.3	10
52	Theory of Size Dependent Deliquescence of Nanoparticles:Â Relation to Heterogeneous Nucleation and Comparison with Experiments. Journal of Physical Chemistry B, 2001, 105, 7708-7722.	1.2	50
53	Activation barrier for heterogeneous condensation in multicomponent vapor mixtures: Cases of insoluble and mixed nuclei. AIP Conference Proceedings, 2000, , .	0.3	0
54	Microscopic effects and kinetics of binary nucleation beyond the confines of the Fokker-Planck approximation. AIP Conference Proceedings, 2000, , .	0.3	0

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55	Thermodynamics of heterogeneous multicomponent condensation on mixed nuclei. Journal of Chemical Physics, 2000, 113, 6822-6830.	1.2	15
56	Thermodynamics of heterogeneous binary condensation on insoluble nuclei. Journal of Geophysical Research, 1999, 104, 14283-14292.	3.3	18