Radomir Iliev Slavchov

List of Publications by Year
in descending order

41	673	623734	580821
papers	citations	14 h-index	25 g-index

42	42	42	683
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Adsorption model and phase transitions of diblock perfluoroalkylated surfactants at the waterâˆ£alkane interface. Journal of Colloid and Interface Science, 2021, 594, 372-388.	9.4	6
2	The cause of accelerated desorption of sparingly soluble dodecanol monolayers: Convection or leakage?. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 629, 127414.	4.7	0
3	10.1063/5.0066759.1. , 2021, , .		0
4	Characterization of capillary waves: A review and a new optical method. Physics of Fluids, 2021, 33, .	4.0	11
5	The role of NO2 and NO in the mechanism of hydrocarbon degradation leading to carbonaceous deposits in engines. Fuel, 2020, 267, 117218.	6.4	7
6	Quadrupolarizability of Liquid Mixtures. Journal of Physical Chemistry B, 2020, 124, 11711-11717.	2.6	1
7	Polar curved polycyclic aromatic hydrocarbons in soot formation. Proceedings of the Combustion Institute, 2019, 37, 1117-1123.	3.9	37
8	From the molecular quadrupole moment of oxygen to the macroscopic quadrupolarizability of its liquid phase. Journal of Chemical Physics, 2019, 151, 064502.	3.0	3
9	Barrier kinetics of adsorptionâ€“desorption of alcohol monolayers on water under constant surface tension. Soft Matter, 2019, 15, 1730-1746.	2.7	13
10	Vapor Pressure and Heat of Vaporization of Molecules That Associate in the Gas Phase. Industrial & Engineering Chemistry Research, 2018, 57, 5722-5731.	3.7	7
11	Flexoelectricity and the Formation of Carbon Nanoparticles in Flames. Journal of Physical Chemistry C, 2018, 122, 22210-22215.	3.1	23
12	An adsorption-precipitation model for the formation of injector external deposits in internal combustion engines. Applied Energy, 2018, 228, 1423-1438.	10.1	21
13	Effective osmotic cohesion due to the solvent molecules in a delocalized adsorbed monolayer. Journal of Colloid and Interface Science, 2018, 532, 746-757.	9.4	8
14	Comment on â€œA spherical cavity model for quadrupolar dielectricsâ€•[J. Chem. Phys. 144, 114502 (2016)]. Journal of Chemical Physics, 2017, 146, .	3.0	3
15	Evaporating foam films of pure liquid stabilized via the thermal Marangoni effect. Chemical Engineering Science, 2017, 171, 520-533.	3.8	12
16	The Polarization of Polycyclic Aromatic Hydrocarbons Curved by Pentagon Incorporation: The Role of the Flexoelectric Dipole. Journal of Physical Chemistry C, 2017, 121, 27154-27163.	3.1	48
17	Adsorption parameters and phase behaviour of non-ionic surfactants at liquid interfaces. Soft Matter, 2017, 13, 8829-8848.	2.7	14
18	Contribution of the surface dipole moment and the contact potential-induced disjoining pressure to the stress balance at a three-phase contact. Colloid Journal, 2017, 79, 815-821.	1.3	1

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19	A spherical cavity model for quadrupolar dielectrics. Journal of Chemical Physics, 2016, 144, 114502.	3.0	9
20	Adsorption of Ions at Uncharged Insoluble Monolayers. Langmuir, 2016, 32, 8858-8871.	3.5	9
21	Energy of Liposome Patch Adhesion to the Pipet Glass Determined by Confocal Fluorescence Microscopy. Journal of Physical Chemistry Letters, 2016, 7, 4530-4534.	4.6	6
22	The polarized interface between quadrupolar insulators: Maxwell stress tensor, surface tension, and potential. Journal of Chemical Physics, 2015, 143, 154707.	3.0	17
23	Markov chain model for the critical micelle concentration of surfactant mixtures. Colloid and Polymer Science, 2014, 292, 2927-2937.	2.1	9
24	Quadrupole terms in the Maxwell equations: Debye-HÃ¼ckel theory in quadrupolarizable solvent and self-salting-out of electrolytes. Journal of Chemical Physics, 2014, 140, 164510.	3.0	27
25	Comment on â€œSurface tension of concentrated electrolyte solutionsâ€•(R.I. Slavchov, J.K. Novev, J.) Tj ETQq1 1 0.784314 rgBT /Ov	9.4	2
26	Quadrupole terms in the Maxwell equations: Born energy, partial molar volume, and entropy of ions. Journal of Chemical Physics, 2014, 140, 074503.	3.0	28
27	Fully atomistic molecularâ€mechanical model of liquid alkane oils: Computational validation. Journal of Computational Chemistry, 2014, 35, 776-788.	3.3	6
28	Gigaseal Mechanics: Creep of the Gigaseal under the Action of Pressure, Adhesion, and Voltage. Journal of Physical Chemistry B, 2014, 118, 12660-12672.	2.6	25
29	Adsorption of ions at the interface oil | aqueous electrolyte and at interfaces with adsorbed alcohol. Journal of Colloid and Interface Science, 2014, 428, 257-266.	9.4	6
30	Ionic Surfactants and Ion-Specific Effects. , 2014, , 53-118.		7
31	Surface tension and surface Î”Ï‡-potential of concentrated Z+:Zâ¯ electrolyte solutions. Journal of Colloid and Interface Science, 2013, 403, 113-126.	9.4	14
32	Surface tension of concentrated electrolyte solutions. Journal of Colloid and Interface Science, 2012, 387, 234-243.	9.4	52
33	Hofmeister effect on micellization, thin films and emulsion stability. Advances in Colloid and Interface Science, 2011, 168, 93-104.	14.7	51
34	Justification of biexponential rate law of spreading over heterogeneous and rough surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 354, 252-260.	4.7	4
35	Comparative validation of the analytical models for the Marangoni effect on foam film drainage. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 365, 122-136.	4.7	38
36	Quantum hydrodynamics of electron gases. Journal of Chemical Physics, 2010, 132, 084505.	3.0	8

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37	Streaming Potential Effect on the Drainage of Thin Liquid Films Stabilized by Ionic Surfactants. Langmuir, 2010, 26, 4703-4708.	3.5	13
38	Screened potential of a charged step defect on a semiconductor surface. Journal of Physics Condensed Matter, 2007, 19, 226005.	1.8	4
39	Effect of the surface polarizability on electrostatic screening in semiconductors. Journal of Physics Condensed Matter, 2006, 18, 5873-5879.	1.8	7
40	On the nature of Athabasca Oil Sands. Advances in Colloid and Interface Science, 2005, 114-115, 53-60.	14.7	95
41	Equilibrium profile and rupture of wetting film on heterogeneous substrates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 261, 135-140.	4.7	20