

Radomir Iliev Slavchov

List of Publications by Year in descending order

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41
papers

673
citations

623734

14
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580821

25
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42
all docs

42
docs citations

42
times ranked

683
citing authors

#	ARTICLE	IF	CITATIONS
1	On the nature of Athabasca Oil Sands. <i>Advances in Colloid and Interface Science</i> , 2005, 114-115, 53-60.	14.7	95
2	Surface tension of concentrated electrolyte solutions. <i>Journal of Colloid and Interface Science</i> , 2012, 387, 234-243.	9.4	52
3	Hofmeister effect on micellization, thin films and emulsion stability. <i>Advances in Colloid and Interface Science</i> , 2011, 168, 93-104.	14.7	51
4	The Polarization of Polycyclic Aromatic Hydrocarbons Curved by Pentagon Incorporation: The Role of the Flexoelectric Dipole. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27154-27163.	3.1	48
5	Comparative validation of the analytical models for the Marangoni effect on foam film drainage. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2010, 365, 122-136.	4.7	38
6	Polar curved polycyclic aromatic hydrocarbons in soot formation. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 1117-1123.	3.9	37
7	Quadrupole terms in the Maxwell equations: Born energy, partial molar volume, and entropy of ions. <i>Journal of Chemical Physics</i> , 2014, 140, 074503.	3.0	28
8	Quadrupole terms in the Maxwell equations: Debye-Hückel theory in quadrupolarizable solvent and self-salting-out of electrolytes. <i>Journal of Chemical Physics</i> , 2014, 140, 164510.	3.0	27
9	Gigaseal Mechanics: Creep of the Gigaseal under the Action of Pressure, Adhesion, and Voltage. <i>Journal of Physical Chemistry B</i> , 2014, 118, 12660-12672.	2.6	25
10	Flexoelectricity and the Formation of Carbon Nanoparticles in Flames. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22210-22215.	3.1	23
11	An adsorption-precipitation model for the formation of injector external deposits in internal combustion engines. <i>Applied Energy</i> , 2018, 228, 1423-1438.	10.1	21
12	Equilibrium profile and rupture of wetting film on heterogeneous substrates. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2005, 261, 135-140.	4.7	20
13	The polarized interface between quadrupolar insulators: Maxwell stress tensor, surface tension, and potential. <i>Journal of Chemical Physics</i> , 2015, 143, 154707.	3.0	17
14	Surface tension and surface potential of concentrated $Z^{+}Z^{-}$ electrolyte solutions. <i>Journal of Colloid and Interface Science</i> , 2013, 403, 113-126.	9.4	14
15	Adsorption parameters and phase behaviour of non-ionic surfactants at liquid interfaces. <i>Soft Matter</i> , 2017, 13, 8829-8848.	2.7	14
16	Streaming Potential Effect on the Drainage of Thin Liquid Films Stabilized by Ionic Surfactants. <i>Langmuir</i> , 2010, 26, 4703-4708.	3.5	13
17	Barrier kinetics of adsorption-desorption of alcohol monolayers on water under constant surface tension. <i>Soft Matter</i> , 2019, 15, 1730-1746.	2.7	13
18	Evaporating foam films of pure liquid stabilized via the thermal Marangoni effect. <i>Chemical Engineering Science</i> , 2017, 171, 520-533.	3.8	12

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19	Characterization of capillary waves: A review and a new optical method. <i>Physics of Fluids</i> , 2021, 33, .	4.0	11
20	Markov chain model for the critical micelle concentration of surfactant mixtures. <i>Colloid and Polymer Science</i> , 2014, 292, 2927-2937.	2.1	9
21	A spherical cavity model for quadrupolar dielectrics. <i>Journal of Chemical Physics</i> , 2016, 144, 114502.	3.0	9
22	Adsorption of Ions at Uncharged Insoluble Monolayers. <i>Langmuir</i> , 2016, 32, 8858-8871.	3.5	9
23	Quantum hydrodynamics of electron gases. <i>Journal of Chemical Physics</i> , 2010, 132, 084505.	3.0	8
24	Effective osmotic cohesion due to the solvent molecules in a delocalized adsorbed monolayer. <i>Journal of Colloid and Interface Science</i> , 2018, 532, 746-757.	9.4	8
25	Effect of the surface polarizability on electrostatic screening in semiconductors. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 5873-5879.	1.8	7
26	Vapor Pressure and Heat of Vaporization of Molecules That Associate in the Gas Phase. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 5722-5731.	3.7	7
27	The role of NO ₂ and NO in the mechanism of hydrocarbon degradation leading to carbonaceous deposits in engines. <i>Fuel</i> , 2020, 267, 117218.	6.4	7
28	Ionic Surfactants and Ion-Specific Effects. , 2014, , 53-118.		7
29	Fully atomistic molecular-mechanical model of liquid alkane oils: Computational validation. <i>Journal of Computational Chemistry</i> , 2014, 35, 776-788.	3.3	6
30	Adsorption of ions at the interface oil aqueous electrolyte and at interfaces with adsorbed alcohol. <i>Journal of Colloid and Interface Science</i> , 2014, 428, 257-266.	9.4	6
31	Energy of Liposome Patch Adhesion to the Pipet Glass Determined by Confocal Fluorescence Microscopy. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 4530-4534.	4.6	6
32	Adsorption model and phase transitions of diblock perfluoroalkylated surfactants at the water-alkane interface. <i>Journal of Colloid and Interface Science</i> , 2021, 594, 372-388.	9.4	6
33	Screened potential of a charged step defect on a semiconductor surface. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 226005.	1.8	4
34	Justification of biexponential rate law of spreading over heterogeneous and rough surfaces. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2010, 354, 252-260.	4.7	4
35	Comment on "A spherical cavity model for quadrupolar dielectrics" [J. Chem. Phys. 144, 114502 (2016)]. <i>Journal of Chemical Physics</i> , 2017, 146, .	3.0	3
36	From the molecular quadrupole moment of oxygen to the macroscopic quadrupolarizability of its liquid phase. <i>Journal of Chemical Physics</i> , 2019, 151, 064502.	3.0	3

#	ARTICLE	IF	CITATIONS
37	Comment on "Surface tension of concentrated electrolyte solutions" (R.I. Slavchov, J.K. Novev, J.) Tj ETQq1 1 0,784314 9,4 10,784314 10,784314 /Over	0,784314	9,4
38	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
39	Quadrupolarizability of Liquid Mixtures. Journal of Physical Chemistry B, 2020, 124, 11711-11717.	2.6	1
40	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
41	10.1063/5.0066759.1. , 2021, , .		0