Rossen Sedev

List of Publications by Year
in descending order

92 papers	5,149 citations	71102 41 h-index	85541 71 g-index
92 all docs	92 docs citations	92 times ranked	6137 citing authors

#	Article	IF	Citations
1	Differential Capacitance of the Electrical Double Layer in Imidazolium-Based Ionic Liquids:â€‰ Influence of Potential, Cation Size, and Temperature. Journal of Physical Chemistry C, 2008, 112, 7486-7495.	3.1	449
2	Functionalized gold nanoparticles: Synthesis, structure and colloid stability. Journal of Colloid and Interface Science, 2009, 331, 251-262.	9.4	351
3	Differential capacitance of the double layer at the electrode/ionic liquids interface. Physical Chemistry Chemical Physics, 2010, 12, 12499.	2.8	284
4	Contact Angle Saturation in Electrowetting. Journal of Physical Chemistry B, 2005, 109, 6268-6275.	2.6	205
5	Angle-resolved X-ray photoelectron spectroscopy of the surface of imidazolium ionic liquids. Physical Chemistry Chemical Physics, 2008, 10, 1330.	2.8	185
6	Influence of the Electrical Double Layer in Electrowetting. Journal of Physical Chemistry B, 2003, 107, 1163-1169.	2.6	144
7	The terminal rise velocity of 10â€“100 Î¼m diameter bubbles in water. Journal of Colloid and Interface Science, 2008, 322, 168-172.	9.4	144
8	Wettability of Photoresponsive Titanium Dioxide Surfaces. Langmuir, 2003, 19, 3272-3275.	3.5	138
9	Electrowetting of Ionic Liquids. Journal of the American Chemical Society, 2006, 128, 3098-3101.	13.7	138
10	Contact Line Pinning on Microstructured Surfaces for Liquids in the Wenzel State. Langmuir, 2010, 26, 860-865.	3.5	127
11	Experimental investigations of the wettability of clays and shales. Journal of Geophysical Research, 2009, 114, .	3.3	125
12	Thermally- and Photoinduced Changes in the Water Wettability of Low-Surface-Area Silica and Titania. Langmuir, 2005, 21, 2400-2407.	3.5	118
13	Dynamics of Wetting from an Experimental Point of View. Annual Review of Materials Research, 2008, 38, 23-43.	9.3	102
14	The influence of topography on dynamic wetting. Advances in Colloid and Interface Science, 2014, 206, 275-293.	14.7	98
15	Capillary Rise with Velocity-Dependent Dynamic Contact Angle. Langmuir, 2008, 24, 12710-12716.	3.5	94
16	DLVO and non-DLVO surface forces in foam films from amphiphilic block copolymers. Advances in Colloid and Interface Science, 1999, 83, 111-136.	14.7	92
17	Orientation and mutual location of ions at the surface of ionic liquids. Physical Chemistry Chemical Physics, 2010, 12, 13816.	2.8	86
18	Static and Dynamic Electrowetting of an Ionic Liquid in a Solid/Liquid/Liquid System. Journal of the American Chemical Society, 2010, 132, 8301-8308.	13.7	84

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19	Microfluidic solvent extraction of rare earth elements from a mixed oxide concentrate leach solution using CyanexÂ® 572. Chemical Engineering Science, 2016, 148, 212-218.	3.8	77
20	Surface tension, interfacial tension and contact angles of ionic liquids. Current Opinion in Colloid and Interface Science, 2011, 16, 310-316.	7.4	72
21	Relaxation of adsorption layers at solution/air interfaces using axisymmetric drop-shape analysis. Colloids and Surfaces, 1993, 69, 209-216.	0.9	71
22	Asymmetric Wetting Hysteresis on Hydrophobic Microstructured Surfaces. Langmuir, 2009, 25, 5655-5660.	3.5	69
23	Relaxation behaviour of human albumin adsorbed at the solution/air interface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1993, 76, 179-185.	4.7	68
24	Foaming of polypropylene glycols and glycol/MIBC mixtures. Minerals Engineering, 2005, 18, 179-188.	4.3	65
25	Small surface nanotopography encourages fibroblast and osteoblast cell adhesion. RSC Advances, 2013, 3, 10309.	3.6	59
26	pH-tunable gradients of wettability and surface potential. Soft Matter, 2012, 8, 8399.	2.7	57
27	Microfluidic extraction of copper from particle-laden solutions. International Journal of Mineral Processing, 2011, 98, 168-173.	2.6	55
28	Asymmetric Wetting Hysteresis on Chemical Defects. Physical Review Letters, 2007, 99, 026103.	7.8	54
29	Elasticity of liquid marbles. Journal of Colloid and Interface Science, 2015, 449, 341-346.	9.4	54
30	Tuning and predicting the wetting of nanoengineered material surface. Nanoscale, 2016, 8, 4635-4642.	5.6	54
31	The unusual surface chemistry of Î±-Al2O3 (0001). Physical Chemistry Chemical Physics, 2010, 12, 13724.	2.8	52
32	Electrowetting of Aqueous Solutions of Ionic Liquid in Solidâ^'Liquidâ^'Liquid Systems. Journal of Physical Chemistry C, 2010, 114, 8383-8388.	3.1	48
33	Microfluidic Solvent Extraction of Metal Ions and Complexes from Leach Solutions Containing Nanoparticles. Chemical Engineering and Technology, 2012, 35, 1312-1319.	1.5	48
34	Contact Line Motion on Nanorough Surfaces: A Thermally Activated Process. Journal of the American Chemical Society, 2013, 135, 7159-7171.	13.7	48
35	The role of surfactant structure on foam behaviour. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 263, 233-238.	4.7	47
36	Influence of Surface Charge on Wetting Kinetics. Langmuir, 2010, 26, 17218-17224.	3.5	47

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37	Dynamic Electrowetting and Dewetting of Ionic Liquids at a Hydrophobic Solidâ€“Liquid Interface. Langmuir, 2013, 29, 2631-2639.	3.5	47
38	Femtoliter Droplet Handling in Nanofluidic Channels: A Laplace Nanovalve. Analytical Chemistry, 2012, 84, 10812-10816.	6.5	46
39	The formation and stability of self-assembled monolayers of octadecylphosphonic acid on titania. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 291, 51-58.	4.7	44
40	Contact Line Friction in Liquidâ€“Liquid Displacement on Hydrophobic Surfaces. Journal of Physical Chemistry C, 2011, 115, 24975-24986.	3.1	44
41	Dynamic wetting of a fluoropolymer surface by ionic liquids. Physical Chemistry Chemical Physics, 2011, 13, 3952.	2.8	44
42	Influence of the Work of Adhesion on the Dynamic Wetting of Chemically Heterogeneous Surfaces. Langmuir, 2008, 24, 13007-13012.	3.5	40
43	Marangoni effects in aqueous polypropylene glycol foams. Journal of Colloid and Interface Science, 2005, 286, 719-729.	9.4	38
44	The molecular-kinetic approach to wetting dynamics: Achievements and limitations. Advances in Colloid and Interface Science, 2015, 222, 661-669.	14.7	36
45	The structure of PEOâ€“PPOâ€“PEO triblock copolymers at the water/air interface. Physica B: Condensed Matter, 2002, 315, 267-272.	2.7	35
46	Synthesis and Surface Structure of Thymine-Functionalized, Self-Assembled Monolayer-Protected Gold Nanoparticles. Langmuir, 2007, 23, 9170-9177.	3.5	35
47	Colloid Stability of Thymine-Functionalized Gold Nanoparticles. Langmuir, 2007, 23, 12096-12103.	3.5	35
48	Transition from electrostatic to steric stabilization in foam films from ABA triblock copolymers of poly(ethylene oxide) and poly(propylene oxide). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 123-124, 277-282.	4.7	34
49	Light-Induced Aggregation of Colloidal Gold Nanoparticles Capped by Thymine Derivatives. Langmuir, 2008, 24, 4506-4511.	3.5	33
50	Inferring wettability of heterogeneous surfaces by ToF-SIMS. Journal of Colloid and Interface Science, 2008, 320, 563-568.	9.4	32
51	Poly(ethylene oxide)-poly(propylene oxide)-poly(ethylene)oxide triblock copolymers at the water/air interface and in foam films. Colloid and Polymer Science, 2000, 278, 119-123.	2.1	31
52	WETTABILITY AND SURFACE ENERGETICS OF ROUGH FLUOROPOLYMER SURFACES. Journal of Adhesion, 2004, 80, 497-520.	3.0	31
53	SURFACE FORCES IN FOAM FILMS FROM AN ABA TRIBLOCK COPOLYME. Journal of Dispersion Science and Technology, 1997, 18, 751-767.	2.4	29
54	Electrowetting: Electrocapillarity, saturation, and dynamics. European Physical Journal: Special Topics, 2011, 197, 307-319.	2.6	27

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55	Electrostatics and Metal Oxide Wettability. Journal of Physical Chemistry C, 2011, 115, 14914-14921.	3.1	26
56	Spontaneous liquid marble formation on packed porous beds. Soft Matter, 2012, 8, 11336.	2.7	25
57	Preparation of Silica-on-Titania Patterns with a Wettability Contrast. Langmuir, 2005, 21, 5790-5794.	3.5	24
58	The interfacial conformation of polypropylene glycols and foam behaviour. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 250, 307-315.	4.7	23
59	Loading of 5-fluorouracil onto Halloysite nanotubes for targeted drug delivery using a subcritical gas antisolvent process (GAS). Journal of Supercritical Fluids, 2020, 159, 104756.	3.2	23
60	Limiting Area per Molecule of Nonionic Surfactants at the Water/Air Interface. Langmuir, 2001, 17, 562-564.	3.5	22
61	Surface forces in foam films from ABA block copolymer: a dynamic method study. Colloid and Polymer Science, 1995, 273, 906-911.	2.1	21
62	Contact Angles of a Brine on a Bituminous Coal in Compressed Hydrogen. Geophysical Research Letters, 2022, 49, .	4.0	20
63	Formation of a stable, highly concentrated O/W emulsion modeled by means of foam films. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 149, 23-28.	4.7	19
64	The uniform capillary model for packed beds and particle wettability. Journal of Colloid and Interface Science, 2009, 337, 162-169.	9.4	19
65	Nanoroughness Impact on Liquidâ€“Liquid Displacement. Journal of Physical Chemistry C, 2012, 116, 10934-10943.	3.1	19
66	Surface force measurement in foam films from mixtures of protein and polymeric surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 149, 141-144.	4.7	17
67	Directed crystallisation of zinc oxide on patterned surfaces. Journal of Colloid and Interface Science, 2006, 303, 333-336.	9.4	17
68	Double-Scale Roughness and Superhydrophobicity on Metalized Toray Carbon Fiber Paper. Langmuir, 2009, 25, 4760-4766.	3.5	17
69	Capillary Filling of Nanoscale Channels and Surface Structure. Israel Journal of Chemistry, 2014, 54, 1519-1532.	2.3	17
70	PEO-brush at the liquid/gas interface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 156, 65-70.	4.7	16
71	Rolling, penetration and evaporation of alcoholâ€“water drops on coarse and fine hydrophobic powders. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 436, 639-646.	4.7	14
72	A quantitative experimental study of wetting hysteresis on discrete and continuous chemical heterogeneities. Colloid and Polymer Science, 2013, 291, 271-277.	2.1	14

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73	Microfluidic Solvent Extraction of Metal Ions from Industrial Grade Leach Solutions: Extraction Performance and Channel Aging. Journal of Flow Chemistry, 2013, 3, 76-80.	1.9	14
74	Influence of geometry on steady dewetting kinetics. Colloids and Surfaces, 1992, 62, 141-151.	0.9	13
75	The interfacial conformation of polypropylene glycols and their foam properties. Minerals Engineering, 2006, 19, 703-712.	4.3	11
76	On the origin of electrostatic interaction in foam films from ABA triblock copolymers. , 1998, , 29-34.		10
77	Electrowetting of Ionic Liquids on Teflon AF1600 in Ambient Hexadecane. Journal of Adhesion Science and Technology, 2012, 26, 2047-2067.	2.6	9
78	Structure-induced spreading of liquid in micropillar arrays. Microsystem Technologies, 2012, 18, 167-173.	2.0	9
79	Thinning of microscopic foam films formed from a mixture of bovine serum albumin and Pluronic L62. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 149, 179-184.	4.7	7
80	FOAMABILITY OF PEO-PPO-PEO TRIBLOCK COPOLYMERS (P85 AND F108) AND ROLE OF THE FOAM FILMS. Journal of Dispersion Science and Technology, 1999, 20, 1759-1776.	2.4	7
81	Evaporation-Driven Flow in Micropillar Arrays: Transport Dynamics and Chemical Analysis under Varied Sample and Ambient Conditions. Analytical Chemistry, 2020, 92, 16043-16050.	6.5	7
82	Fabrication of silica-on-titania and titania-on-silica nanoparticle assemblies. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 292, 1-7.	4.7	6
83	Probing fluid flow using the force measurement capability of optical trapping. Advanced Powder Technology, 2014, 25, 1249-1253.	4.1	6
84	Wetting films: A technique for probing the microscopic meniscus using white light interferometry. Advanced Powder Technology, 2014, 25, 1171-1176.	4.1	6
85	Precipitation of Drug Particles Using a Gas Antisolvent Process on a High-Pressure Microfluidic Platform. Industrial & Engineering Chemistry Research, 2020, 59, 11905-11913.	3.7	6
86	Contact angle measurements using the Wilhelmy balance for asymmetrically treated samples. Journal of Adhesion Science and Technology, 2004, 18, 29-37.	2.6	5
87	Yielding and fracturing of concentrated emulsions in narrow gaps. Soft Matter, 2013, 9, 5975.	2.7	5
88	Design of Pyrimidine-Based Photoresponsive Surfaces and Light-Regulated Wettability. Langmuir, 2009, 25, 11486-11494.	3.5	3
89	Free running droplets on packed powder beds. , 2013, , .		2
90	Microfluidic Solvent Extraction of Copper for Mineral Processing. , 2009, , .		0

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91	Photosensitized dimerization in pyrimidine-based thin solid films. Thin Solid Films, 2011, 519, 6010-6014.	1.8	0
92	Rheological Behaviour and Drainage of Microscopic Foam Films from Infasurf. , 1998, , 55-56.		0