

Rossen Sedev

List of Publications by Year in descending order

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Version: 2024-02-01

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 | Contact Angles of a Brine on a Bituminous Coal in Compressed Hydrogen. <i>Geophysical Research Letters</i> , 2022, 49, . | 4.0 | 20 |
| 2 | Evaporation-Driven Flow in Micropillar Arrays: Transport Dynamics and Chemical Analysis under Varied Sample and Ambient Conditions. <i>Analytical Chemistry</i> , 2020, 92, 16043-16050. | 6.5 | 7 |
| 3 | Precipitation of Drug Particles Using a Gas Antisolvent Process on a High-Pressure Microfluidic Platform. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 11905-11913. | 3.7 | 6 |
| 4 | Loading of 5-fluorouracil onto Halloysite nanotubes for targeted drug delivery using a subcritical gas antisolvent process (GAS). <i>Journal of Supercritical Fluids</i> , 2020, 159, 104756. | 3.2 | 23 |
| 5 | Microfluidic solvent extraction of rare earth elements from a mixed oxide concentrate leach solution using Cyanex® 572. <i>Chemical Engineering Science</i> , 2016, 148, 212-218. | 3.8 | 77 |
| 6 | Tuning and predicting the wetting of nanoengineered material surface. <i>Nanoscale</i> , 2016, 8, 4635-4642. | 5.6 | 54 |
| 7 | The molecular-kinetic approach to wetting dynamics: Achievements and limitations. <i>Advances in Colloid and Interface Science</i> , 2015, 222, 661-669. | 14.7 | 36 |
| 8 | Elasticity of liquid marbles. <i>Journal of Colloid and Interface Science</i> , 2015, 449, 341-346. | 9.4 | 54 |
| 9 | Capillary Filling of Nanoscale Channels and Surface Structure. <i>Israel Journal of Chemistry</i> , 2014, 54, 1519-1532. | 2.3 | 17 |
| 10 | Probing fluid flow using the force measurement capability of optical trapping. <i>Advanced Powder Technology</i> , 2014, 25, 1249-1253. | 4.1 | 6 |
| 11 | Wetting films: A technique for probing the microscopic meniscus using white light interferometry. <i>Advanced Powder Technology</i> , 2014, 25, 1171-1176. | 4.1 | 6 |
| 12 | The influence of topography on dynamic wetting. <i>Advances in Colloid and Interface Science</i> , 2014, 206, 275-293. | 14.7 | 98 |
| 13 | Small surface nanotopography encourages fibroblast and osteoblast cell adhesion. <i>RSC Advances</i> , 2013, 3, 10309. | 3.6 | 59 |
| 14 | Rolling, penetration and evaporation of alcohol-water drops on coarse and fine hydrophobic powders. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 436, 639-646. | 4.7 | 14 |
| 15 | Dynamic Electrowetting and Dewetting of Ionic Liquids at a Hydrophobic Solid-Liquid Interface. <i>Langmuir</i> , 2013, 29, 2631-2639. | 3.5 | 47 |
| 16 | Contact Line Motion on Nanorough Surfaces: A Thermally Activated Process. <i>Journal of the American Chemical Society</i> , 2013, 135, 7159-7171. | 13.7 | 48 |
| 17 | A quantitative experimental study of wetting hysteresis on discrete and continuous chemical heterogeneities. <i>Colloid and Polymer Science</i> , 2013, 291, 271-277. | 2.1 | 14 |
| 18 | Yielding and fracturing of concentrated emulsions in narrow gaps. <i>Soft Matter</i> , 2013, 9, 5975. | 2.7 | 5 |

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|----|---|-----|-----------|
| 19 | Microfluidic Solvent Extraction of Metal Ions from Industrial Grade Leach Solutions: Extraction Performance and Channel Aging. <i>Journal of Flow Chemistry</i> , 2013, 3, 76-80. | 1.9 | 14 |
| 20 | Free running droplets on packed powder beds. , 2013, , . | | 2 |
| 21 | Electrowetting of Ionic Liquids on Teflon AF1600 in Ambient Hexadecane. <i>Journal of Adhesion Science and Technology</i> , 2012, 26, 2047-2067. | 2.6 | 9 |
| 22 | pH-tunable gradients of wettability and surface potential. <i>Soft Matter</i> , 2012, 8, 8399. | 2.7 | 57 |
| 23 | Femtoliter Droplet Handling in Nanofluidic Channels: A Laplace Nanovalve. <i>Analytical Chemistry</i> , 2012, 84, 10812-10816. | 6.5 | 46 |
| 24 | Nanoroughness Impact on Liquid-Liquid Displacement. <i>Journal of Physical Chemistry C</i> , 2012, 116, 10934-10943. | 3.1 | 19 |
| 25 | Spontaneous liquid marble formation on packed porous beds. <i>Soft Matter</i> , 2012, 8, 11336. | 2.7 | 25 |
| 26 | Microfluidic Solvent Extraction of Metal Ions and Complexes from Leach Solutions Containing Nanoparticles. <i>Chemical Engineering and Technology</i> , 2012, 35, 1312-1319. | 1.5 | 48 |
| 27 | Structure-induced spreading of liquid in micropillar arrays. <i>Microsystem Technologies</i> , 2012, 18, 167-173. | 2.0 | 9 |
| 28 | Contact Line Friction in Liquid-Liquid Displacement on Hydrophobic Surfaces. <i>Journal of Physical Chemistry C</i> , 2011, 115, 24975-24986. | 3.1 | 44 |
| 29 | Electrostatics and Metal Oxide Wettability. <i>Journal of Physical Chemistry C</i> , 2011, 115, 14914-14921. | 3.1 | 26 |
| 30 | Dynamic wetting of a fluoropolymer surface by ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 3952. | 2.8 | 44 |
| 31 | Surface tension, interfacial tension and contact angles of ionic liquids. <i>Current Opinion in Colloid and Interface Science</i> , 2011, 16, 310-316. | 7.4 | 72 |
| 32 | Electrowetting: Electrocapillarity, saturation, and dynamics. <i>European Physical Journal: Special Topics</i> , 2011, 197, 307-319. | 2.6 | 27 |
| 33 | Microfluidic extraction of copper from particle-laden solutions. <i>International Journal of Mineral Processing</i> , 2011, 98, 168-173. | 2.6 | 55 |
| 34 | Photosensitized dimerization in pyrimidine-based thin solid films. <i>Thin Solid Films</i> , 2011, 519, 6010-6014. | 1.8 | 0 |
| 35 | Contact Line Pinning on Microstructured Surfaces for Liquids in the Wenzel State. <i>Langmuir</i> , 2010, 26, 860-865. | 3.5 | 127 |
| 36 | Electrowetting of Aqueous Solutions of Ionic Liquid in Solid-Liquid-Liquid Systems. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8383-8388. | 3.1 | 48 |

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|----|--|------|-----------|
| 37 | Influence of Surface Charge on Wetting Kinetics. <i>Langmuir</i> , 2010, 26, 17218-17224. | 3.5 | 47 |
| 38 | Differential capacitance of the double layer at the electrode/ionic liquids interface. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 12499. | 2.8 | 284 |
| 39 | The unusual surface chemistry of γ -Al ₂ O ₃ (0001). <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 13724. | 2.8 | 52 |
| 40 | Static and Dynamic Electrowetting of an Ionic Liquid in a Solid/Liquid/Liquid System. <i>Journal of the American Chemical Society</i> , 2010, 132, 8301-8308. | 13.7 | 84 |
| 41 | Orientation and mutual location of ions at the surface of ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 13816. | 2.8 | 86 |
| 42 | Functionalized gold nanoparticles: Synthesis, structure and colloid stability. <i>Journal of Colloid and Interface Science</i> , 2009, 331, 251-262. | 9.4 | 351 |
| 43 | The uniform capillary model for packed beds and particle wettability. <i>Journal of Colloid and Interface Science</i> , 2009, 337, 162-169. | 9.4 | 19 |
| 44 | Asymmetric Wetting Hysteresis on Hydrophobic Microstructured Surfaces. <i>Langmuir</i> , 2009, 25, 5655-5660. | 3.5 | 69 |
| 45 | Double-Scale Roughness and Superhydrophobicity on Metalized Toray Carbon Fiber Paper. <i>Langmuir</i> , 2009, 25, 4760-4766. | 3.5 | 17 |
| 46 | Design of Pyrimidine-Based Photoresponsive Surfaces and Light-Regulated Wettability. <i>Langmuir</i> , 2009, 25, 11486-11494. | 3.5 | 3 |
| 47 | Experimental investigations of the wettability of clays and shales. <i>Journal of Geophysical Research</i> , 2009, 114, . | 3.3 | 125 |
| 48 | Microfluidic Solvent Extraction of Copper for Mineral Processing. , 2009, , . | | 0 |
| 49 | Inferring wettability of heterogeneous surfaces by ToF-SIMS. <i>Journal of Colloid and Interface Science</i> , 2008, 320, 563-568. | 9.4 | 32 |
| 50 | The terminal rise velocity of 10 ⁻⁶ -10 ⁻⁴ m diameter bubbles in water. <i>Journal of Colloid and Interface Science</i> , 2008, 322, 168-172. | 9.4 | 144 |
| 51 | Angle-resolved X-ray photoelectron spectroscopy of the surface of imidazolium ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 1330. | 2.8 | 185 |
| 52 | Dynamics of Wetting from an Experimental Point of View. <i>Annual Review of Materials Research</i> , 2008, 38, 23-43. | 9.3 | 102 |
| 53 | Differential Capacitance of the Electrical Double Layer in Imidazolium-Based Ionic Liquids: Influence of Potential, Cation Size, and Temperature. <i>Journal of Physical Chemistry C</i> , 2008, 112, 7486-7495. | 3.1 | 449 |
| 54 | Influence of the Work of Adhesion on the Dynamic Wetting of Chemically Heterogeneous Surfaces. <i>Langmuir</i> , 2008, 24, 13007-13012. | 3.5 | 40 |

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|----|--|------|-----------|
| 55 | Capillary Rise with Velocity-Dependent Dynamic Contact Angle. <i>Langmuir</i> , 2008, 24, 12710-12716. | 3.5 | 94 |
| 56 | Light-Induced Aggregation of Colloidal Gold Nanoparticles Capped by Thymine Derivatives. <i>Langmuir</i> , 2008, 24, 4506-4511. | 3.5 | 33 |
| 57 | Asymmetric Wetting Hysteresis on Chemical Defects. <i>Physical Review Letters</i> , 2007, 99, 026103. | 7.8 | 54 |
| 58 | Synthesis and Surface Structure of Thymine-Functionalized, Self-Assembled Monolayer-Protected Gold Nanoparticles. <i>Langmuir</i> , 2007, 23, 9170-9177. | 3.5 | 35 |
| 59 | Colloid Stability of Thymine-Functionalized Gold Nanoparticles. <i>Langmuir</i> , 2007, 23, 12096-12103. | 3.5 | 35 |
| 60 | Fabrication of silica-on-titania and titania-on-silica nanoparticle assemblies. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 292, 1-7. | 4.7 | 6 |
| 61 | Electrowetting of Ionic Liquids. <i>Journal of the American Chemical Society</i> , 2006, 128, 3098-3101. | 13.7 | 138 |
| 62 | The formation and stability of self-assembled monolayers of octadecylphosphonic acid on titania. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 291, 51-58. | 4.7 | 44 |
| 63 | Directed crystallisation of zinc oxide on patterned surfaces. <i>Journal of Colloid and Interface Science</i> , 2006, 303, 333-336. | 9.4 | 17 |
| 64 | The interfacial conformation of polypropylene glycols and their foam properties. <i>Minerals Engineering</i> , 2006, 19, 703-712. | 4.3 | 11 |
| 65 | The role of surfactant structure on foam behaviour. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2005, 263, 233-238. | 4.7 | 47 |
| 66 | Foaming of polypropylene glycols and glycol/MIBC mixtures. <i>Minerals Engineering</i> , 2005, 18, 179-188. | 4.3 | 65 |
| 67 | Marangoni effects in aqueous polypropylene glycol foams. <i>Journal of Colloid and Interface Science</i> , 2005, 286, 719-729. | 9.4 | 38 |
| 68 | Thermally- and Photoinduced Changes in the Water Wettability of Low-Surface-Area Silica and Titania. <i>Langmuir</i> , 2005, 21, 2400-2407. | 3.5 | 118 |
| 69 | Preparation of Silica-on-Titania Patterns with a Wettability Contrast. <i>Langmuir</i> , 2005, 21, 5790-5794. | 3.5 | 24 |
| 70 | Contact Angle Saturation in Electrowetting. <i>Journal of Physical Chemistry B</i> , 2005, 109, 6268-6275. | 2.6 | 205 |
| 71 | WETTABILITY AND SURFACE ENERGETICS OF ROUGH FLUOROPOLYMER SURFACES. <i>Journal of Adhesion</i> , 2004, 80, 497-520. | 3.0 | 31 |
| 72 | Contact angle measurements using the Wilhelmy balance for asymmetrically treated samples. <i>Journal of Adhesion Science and Technology</i> , 2004, 18, 29-37. | 2.6 | 5 |

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|----|---|------|-----------|
| 73 | The interfacial conformation of polypropylene glycols and foam behaviour. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2004, 250, 307-315. | 4.7 | 23 |
| 74 | Influence of the Electrical Double Layer in Electrowetting. <i>Journal of Physical Chemistry B</i> , 2003, 107, 1163-1169. | 2.6 | 144 |
| 75 | Wettability of Photoresponsive Titanium Dioxide Surfaces. <i>Langmuir</i> , 2003, 19, 3272-3275. | 3.5 | 138 |
| 76 | The structure of PEO- <i>b</i> -PPO- <i>b</i> -PEO triblock copolymers at the water/air interface. <i>Physica B: Condensed Matter</i> , 2002, 315, 267-272. | 2.7 | 35 |
| 77 | Limiting Area per Molecule of Nonionic Surfactants at the Water/Air Interface. <i>Langmuir</i> , 2001, 17, 562-564. | 3.5 | 22 |
| 78 | Poly(ethylene oxide)-poly(propylene oxide)-poly(ethylene)oxide triblock copolymers at the water/air interface and in foam films. <i>Colloid and Polymer Science</i> , 2000, 278, 119-123. | 2.1 | 31 |
| 79 | Surface force measurement in foam films from mixtures of protein and polymeric surfactants. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 149, 141-144. | 4.7 | 17 |
| 80 | Thinning of microscopic foam films formed from a mixture of bovine serum albumin and Pluronic L62. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 149, 179-184. | 4.7 | 7 |
| 81 | Formation of a stable, highly concentrated O/W emulsion modeled by means of foam films. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 149, 23-28. | 4.7 | 19 |
| 82 | PEO-brush at the liquid/gas interface. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 156, 65-70. | 4.7 | 16 |
| 83 | DLVO and non-DLVO surface forces in foam films from amphiphilic block copolymers. <i>Advances in Colloid and Interface Science</i> , 1999, 83, 111-136. | 14.7 | 92 |
| 84 | FOAMABILITY OF PEO-PPO-PEO TRIBLOCK COPOLYMERS (P85 AND F108) AND ROLE OF THE FOAM FILMS. <i>Journal of Dispersion Science and Technology</i> , 1999, 20, 1759-1776. | 2.4 | 7 |
| 85 | On the origin of electrostatic interaction in foam films from ABA triblock copolymers. , 1998, , 29-34. | | 10 |
| 86 | Rheological Behaviour and Drainage of Microscopic Foam Films from Infasurf. , 1998, , 55-56. | | 0 |
| 87 | SURFACE FORCES IN FOAM FILMS FROM AN ABA TRIBLOCK COPOLYME. <i>Journal of Dispersion Science and Technology</i> , 1997, 18, 751-767. | 2.4 | 29 |
| 88 | Transition from electrostatic to steric stabilization in foam films from ABA triblock copolymers of poly(ethylene oxide) and poly(propylene oxide). <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1997, 123-124, 277-282. | 4.7 | 34 |
| 89 | Surface forces in foam films from ABA block copolymer: a dynamic method study. <i>Colloid and Polymer Science</i> , 1995, 273, 906-911. | 2.1 | 21 |
| 90 | Relaxation behaviour of human albumin adsorbed at the solution/air interface. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1993, 76, 179-185. | 4.7 | 68 |

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|----|--|-----|-----------|
| 91 | Relaxation of adsorption layers at solution/air interfaces using axisymmetric drop-shape analysis. Colloids and Surfaces, 1993, 69, 209-216. | 0.9 | 71 |
| 92 | Influence of geometry on steady dewetting kinetics. Colloids and Surfaces, 1992, 62, 141-151. | 0.9 | 13 |