Mark W Rutland

List of Publications by Year
in descending order

250	16,400	13865 67	19190 118
papers	citations	h-index	g-index

258	258	258	11171
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structure and Nanostructure in Ionic Liquids. Chemical Reviews, 2015, 115, 6357-6426.	47.7	1,793
2	Structure in Confined Room-Temperature Ionic Liquids. Journal of Physical Chemistry C, 2007, 111, 5162-5168.	3.1	456
3	At the interface: solvation and designing ionic liquids. Physical Chemistry Chemical Physics, 2010, 12, 1709.	2.8	377
4	The Smallest Amphiphiles:â€‰ Nanostructure in Protic Room-Temperature Ionic Liquids with Short Alkyl Groups. Journal of Physical Chemistry B, 2008, 112, 4164-4166.	2.6	352
5	Double Layer Structure of Ionic Liquids at the Au(111) Electrode Interface: An Atomic Force Microscopy Investigation. Journal of Physical Chemistry C, 2011, 115, 6855-6863.	3.1	336
6	AFM and STM Studies on the Surface Interaction of [BMP]TFSA and [EMIm]TFSA Ionic Liquids with Au(111). Journal of Physical Chemistry C, 2009, 113, 13266-13272.	3.1	305
7	Long range electrostatic forces in ionic liquids. Chemical Communications, 2017, 53, 1214-1224.	4.1	285
8	Forces Measured between Hydrophobic Surfaces due to a Submicroscopic Bridging Bubble. Physical Review Letters, 1998, 80, 5357-5360.	7.8	272
9	Amphiphilicity determines nanostructure in protic ionic liquids. Physical Chemistry Chemical Physics, 2011, 13, 3237-3247.	2.8	270
10	Do solvation layers of ionic liquids influence electrochemical reactions?. Physical Chemistry Chemical Physics, 2010, 12, 1724.	2.8	240
11	Techniques for measuring surface forces. Advances in Colloid and Interface Science, 1996, 67, 119-183.	14.7	239
12	An in situ STM/AFM and impedance spectroscopy study of the extremely pure 1-butyl-1-methylpyrrolidinium tris(pentafluoroethyl)trifluorophosphate/Au(111) interface: potential dependent solvation layers and the herringbone reconstruction. Physical Chemistry Chemical Physics, 2011, 13, 6849.	2.8	224
13	Adsorption of CTAB on Hydrophilic Silica Studied by Linear and Nonlinear Optical Spectroscopy. Journal of the American Chemical Society, 2008, 130, 17434-17445.	13.7	223
14	The Nature of Hydrogen Bonding in Protic Ionic Liquids. Angewandte Chemie - International Edition, 2013, 52, 4623-4627.	13.8	208
15	Feeling Small: Exploring the Tactile Perception Limits. Scientific Reports, 2013, 3, 2617.	3.3	205
16	Control of Nanoscale Friction on Gold in an Ionic Liquid by a Potential-Dependent Ionic Lubricant Layer. Physical Review Letters, 2012, 109, 155502.	7.8	201
17	The interface ionic liquid(s)/electrode(s): In situSTM and AFM measurements. Faraday Discussions, 2012, 154, 221-233.	3.2	176
18	Activity and thermal stability of lysozyme in alkylammonium formate ionic liquidsâ€”influence of cation modification. Green Chemistry, 2009, 11, 785.	9.0	173

#	Article	IF	Citations
19	How Water Dissolves in Protic Ionic Liquids. Angewandte Chemie - International Edition, 2012, 51, 7468-7471.	13.8	173
20	Pronounced Structure in Confined Aprotic Room-Temperature Ionic Liquids. Journal of Physical Chemistry B, 2009, 113, 7049-7052.	2.6	169
21	Pronounced sponge-like nanostructure in propylammonium nitrate. Physical Chemistry Chemical Physics, 2011, 13, 13544.	2.8	166
22	Effect of alkyl chain length and anion species on the interfacial nanostructure of ionic liquids at the Au(111)â€“ionic liquid interface as a function of potential. Physical Chemistry Chemical Physics, 2013, 15, 14624.	2.8	163
23	Nanostructure of the Ionic Liquidâ€“Graphite Stern Layer. ACS Nano, 2015, 9, 7608-7620.	14.6	156
24	An ionic liquid lubricant enables superlubricity to be â€œswitched onâ€•in situ using an electrical potential. Chemical Communications, 2014, 50, 4368.	4.1	154
25	Phase Behavior and Microstructure of Microemulsions with a Room-Temperature Ionic Liquid as the Polar Phase. Journal of Physical Chemistry B, 2007, 111, 9309-9316.	2.6	153
26	Self-assembled nanostructures in ionic liquids facilitate charge storage at electrified interfaces. Nature Materials, 2019, 18, 1350-1357.	27.5	144
27	Adsorption of the poly(oxyethylene) nonionic surfactant C12E5 to silica: a study using atomic force microscopy. Langmuir, 1993, 9, 412-418.	3.5	143
28	Atomic force microscopy and direct surface force measurements (IUPAC Technical Report). Pure and Applied Chemistry, 2005, 77, 2149-2170.	1.9	140
29	Ionic liquid lubrication: influence of ion structure, surface potential and sliding velocity. Physical Chemistry Chemical Physics, 2013, 15, 14616.	2.8	140
30	Surfaces Forces between Silica Surfaces in Cationic Surfactant Solutions: Adsorption and Bilayer Formation at Normal and High pH. Langmuir, 1994, 10, 1110-1121.	3.5	135
31	Structure and dynamics of the interfacial layer between ionic liquids and electrode materials. Journal of Molecular Liquids, 2014, 192, 44-54.	4.9	133
32	Hydration State of Nonionic Surfactant Monolayers at the Liquid/Vapor Interface:Â Structure Determination by Vibrational Sum Frequency Spectroscopy. Journal of the American Chemical Society, 2005, 127, 16848-16859.	13.7	131
33	Hydration forces between silica surfaces: Experimental data and predictions from different theories. Journal of Chemical Physics, 2005, 123, 034708.	3.0	127
34	Influence of Temperature and Molecular Structure on Ionic Liquid Solvation Layers. Journal of Physical Chemistry B, 2009, 113, 5961-5966.	2.6	123
35	Adsorption of pNIPAM Layers on Hydrophobic Gold Surfaces, Measured in Situ by QCM and SPR. Langmuir, 2003, 19, 6837-6844.	3.5	121
36	Adsorbed and near surface structure of ionic liquids at a solid interface. Physical Chemistry Chemical Physics, 2013, 15, 3320.	2.8	114

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37	Effect of Cation Alkyl Chain Length and Anion Type on Protic Ionic Liquid Nanostructure. Journal of Physical Chemistry C, 2014, 118, 13998-14008.	3.1	111
38	Self-Assembly of a Nonionic Surfactant at the Graphite/Ionic Liquid Interface. Journal of the American Chemical Society, 2005, 127, 11940-11941.	13.7	105
39	Tactile perception: Finger friction, surface roughness and perceived coarseness. Tribology International, 2011, 44, 505-512.	5.9	101
40	Lubricating Properties of the Initial Salivary Pellicle â€" an AFM Study. Biofouling, 2003, 19, 365-369.	2.2	100
41	Tip friction â€" torsional spring constant determination. Colloids and Surfaces B: Biointerfaces, 2000, 19, 397-405.	5.0	98
42	A Vibrational Sum Frequency Spectroscopy Study of the Liquidâ^'Gas Interface of Acetic Acidâ^'Water Mixtures:Â 1. Surface Speciation. Journal of Physical Chemistry B, 2005, 109, 321-328.	2.6	97
43	Specific heat control of nanofluids: A critical review. International Journal of Thermal Sciences, 2016, 107, 25-38.	4.9	97
44	Comparison of different methods to calibrate torsional spring constant and photodetector for atomic force microscopy friction measurements in air and liquid. Review of Scientific Instruments, 2007, 78, 093702.	1.3	96
45	Superlubricity Using Repulsive van der Waals Forces. Langmuir, 2008, 24, 2274-2276.	3.5	96
46	Rheology of Protic Ionic Liquids and Their Mixtures. Journal of Physical Chemistry B, 2013, 117, 13930-13935.	2.6	94
47	Xyloglucan in cellulose modification. Cellulose, 2007, 14, 625-641.	4.9	93
48	Propylammonium Nitrate as a Solvent for Amphiphile Self-Assembly into Micelles, Lyotropic Liquid Crystals, and Microemulsions. Journal of Physical Chemistry B, 2010, 114, 1350-1360.	2.6	93
49	Ion structure controls ionic liquid near-surface and interfacial nanostructure. Chemical Science, 2015, 6, 527-536.	7.4	93
50	A Vibrational Sum Frequency Spectroscopy Study of the Liquidâ^'Gas Interface of Acetic Acidâ^'Water Mixtures:Â 2. Orientation Analysis. Journal of Physical Chemistry B, 2005, 109, 329-341.	2.6	90
51	Tunable Nanolubrication between Dual-Responsive Polyionic Grafts. Nano Letters, 2009, 9, 2984-2990.	9.1	89
52	Effect of Capillary Condensation on Friction Force and Adhesion. Langmuir, 2007, 23, 517-522.	3.5	83
53	Surprising Particle Stability and Rapid Sedimentation Rates in an Ionic Liquid. Journal of Physical Chemistry Letters, 2010, 1, 64-68.	4.6	82
54	Effect of cation alkyl chain length on surface forces and physical properties in deep eutectic solvents. Journal of Colloid and Interface Science, 2017, 494, 373-379.	9.4	82

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55	Ionic liquid nanotribology: micaâ€“silica interactions in ethylammonium nitrate. Physical Chemistry Chemical Physics, 2012, 14, 5147-5152.	2.8	80
56	Friction and forces between cellulose model surfaces: A comparison. Journal of Colloid and Interface Science, 2006, 303, 117-123.	9.4	79
57	3-Dimensional atomic scale structure of the ionic liquidâ€“graphite interface elucidated by AM-AFM and quantum chemical simulations. Nanoscale, 2014, 6, 8100-8106.	5.6	78
58	Structural and aggregate analyses of (Li salt + glyme) mixtures: the complex nature of solvate ionic liquids. Physical Chemistry Chemical Physics, 2015, 17, 22321-22335.	2.8	78
59	Structure and Self Assembly of Pluronic Amphiphiles in Ethylammonium Nitrate and at the Silica Surface. Journal of Physical Chemistry B, 2009, 113, 12201-12213.	2.6	77
60	Phospholipid Monolayers Probed by Vibrational Sum Frequency Spectroscopy: Instability of Unsaturated Phospholipids. Biophysical Journal, 2010, 98, L50-L52.	0.5	74
61	Surface wrinkling: the phenomenon causing bees in bitumen. Journal of Materials Science, 2013, 48, 6970-6976.	3.7	72
62	Membrane selectivity by W-tagging of antimicrobial peptides. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 1081-1091.	2.6	71
63	Adsorbed and near-surface structure of ionic liquids determines nanoscale friction. Chemical Communications, 2013, 49, 6797.	4.1	71
64	Effect of dissolved LiCl on the ionic liquidâ€“Au(111) electrical double layer structure. Chemical Communications, 2012, 48, 10246.	4.1	70
65	Interactions of Cellulose Surfaces:â€‰ Effect of Electrolyte. Langmuir, 1999, 15, 5584-5590.	3.5	68
66	Surface Forces in Aqueous Polyvinylamine Solutions. I. Glass Surfaces. Langmuir, 1999, 15, 7789-7794.	3.5	68
67	Amphiphilic Self-Assembly of Alkanols in Protic Ionic Liquids. Journal of Physical Chemistry B, 2014, 118, 9983-9990.	2.6	68
68	Adsorption of Xyloglucan onto Cellulose Surfaces of Different Morphologies: An Entropy-Driven Process. Biomacromolecules, 2016, 17, 2801-2811.	5.4	68
69	Comparison of the Adsorption of Different Charge Density Polyelectrolytes:Â A Quartz Crystal Microbalance and X-ray Photoelectron Spectroscopy Study. Langmuir, 2003, 19, 4673-4681.	3.5	67
70	Combined STM, AFM, and DFT Study of the Highly Ordered Pyrolytic Graphite/1-Octyl-3-methyl-imidazolium Bis(trifluoromethylsulfonyl)imide Interface. Journal of Physical Chemistry C, 2014, 118, 10833-10843.	3.1	65
71	Friction between Cellulose Surfaces and Effect of Xyloglucan Adsorption. Biomacromolecules, 2006, 7, 2147-2153.	5.4	63
72	Surface force measurements between cellulose surfaces using scanning probe microscopy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 123-124, 369-374.	4.7	62

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73	Structure of the Ethylammonium Nitrate Surface: An X-ray Reflectivity and Vibrational Sum Frequency Spectroscopy Study. Langmuir, 2010, 26, 8282-8288.	3.5	62
74	Nanostructure of [Li(G4)] TFSI and [Li(G4)] NO₃solvate ionic liquids at HOPG and Au(111) electrode interfaces as a function of potential. Physical Chemistry Chemical Physics, 2015, 17, 325-333.	2.8	61
75	Ionic Liquid Nanotribology: Stiction Suppression and Surface Induced Shear Thinning. Langmuir, 2012, 28, 9967-9976.	3.5	60
76	Structure and Hydration of Poly(ethylene oxide) Surfactants at the Air/Liquid Interface. A Vibrational Sum Frequency Spectroscopy Study. Journal of Physical Chemistry C, 2007, 111, 11642-11652.	3.1	59
77	Direct Surface Force Measurements of Polyelectrolyte Multilayer Films Containing Nanocrystalline Cellulose. Langmuir, 2010, 26, 17190-17197.	3.5	59
78	Ionic Liquid Lubrication of Stainless Steel: Friction is Inversely Correlated with Interfacial Liquid Nanostructure. ACS Sustainable Chemistry and Engineering, 2017, 5, 11737-11743.	6.7	59
79	Sliding Friction between Cellulose and Silica Surfaces. Langmuir, 2001, 17, 5911-5916.	3.5	58
80	Atomic Force Microscopy Measurements of Adsorbed Polyelectrolyte Layers. 1. Dynamics of Forces and Friction. Langmuir, 2003, 19, 4173-4179.	3.5	58
81	Finger Friction Measurements on Coated and Uncoated Printing Papers. Tribology Letters, 2010, 37, 389-399.	2.6	58
82	Tribotronic control of friction in oil-based lubricants with ionic liquid additives. Physical Chemistry Chemical Physics, 2016, 18, 23657-23662.	2.8	58
83	Nanostructure of Deep Eutectic Solvents at Graphite Electrode Interfaces as a Function of Potential. Journal of Physical Chemistry C, 2016, 120, 2225-2233.	3.1	58
84	Electrical Double Layer Structure in Ionic Liquids and Its Importance for Supercapacitor, Battery, Sensing, and Lubrication Applications. Journal of Physical Chemistry C, 2021, 125, 13707-13720.	3.1	56
85	Adsorption of a Cationic Polyelectrolyte followed by Surfactant-Induced Swelling, Studied with a Quartz Crystal Microbalance. Langmuir, 2002, 18, 1274-1280.	3.5	54
86	Mixtures of n-dodecyl-Î²-d-maltoside and hexaoxyethylene dodecyl ether â€" Surface properties, bulk properties, foam films, and foams. Advances in Colloid and Interface Science, 2010, 155, 5-18.	14.7	54
87	In situ STM, AFM and DTS study of the interface 1-hexyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate/Au(111). Electrochimica Acta, 2012, 82, 48-59.	5.2	53
88	Mechanisms of tactile sensory deterioration amongst the elderly. Scientific Reports, 2018, 8, 5303.	3.3	53
89	Bulk nanostructure of the prototypical â€˜goodâ€™ and â€˜poorâ€™ solvate ionic liquids [Li(G4)][TFSI] and [Li(G4)][NO₃]. Physical Chemistry Chemical Physics, 2016, 18, 17224-17236.	2.8	49
90	Dynamic Surface Force Measurement. 2. Friction and the Atomic Force Microscope. Langmuir, 1999, 15, 553-563.	3.5	48

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91	Application of the JKR Method to the Measurement of Adhesion to Langmuirâ€“Blodgett Cellulose Surfaces. Journal of Colloid and Interface Science, 2000, 230, 441-447.	9.4	48
92	Ionic Liquid Adsorption and Nanotribology at the Silicaâ€“Oil Interface: Hundred-Fold Dilution in Oil Lubricates as Effectively as the Pure Ionic Liquid. Journal of Physical Chemistry Letters, 2014, 5, 4095-4099.	4.6	48
93	In Situ Atomic Force Microscopic Studies of the Interfacial Multilayer Nanostructure of LiTFSIâ€“[Py_{1,Â4}]TFSI on Au(111): Influence of Li⁺ Ion Concentration on the Au(111)/IL Interface. Journal of Physical Chemistry C, 2015, 119, 16734-16742.	3.1	48
94	Surface Forces in Aqueous Polyvinylamine Solutions. 2. Interactions between Glass and Cellulose. Langmuir, 2000, 16, 1987-1992.	3.5	47
95	Atomic Force Microscopy Measurements of Adsorbed Polyelectrolyte Layers. 2. Effect of Composition and Substrate on Structure, Forces, and Friction. Langmuir, 2003, 19, 4180-4187.	3.5	47
96	A novel technique for the in situ calibration and measurement of friction with the atomic force microscope. Review of Scientific Instruments, 2005, 76, 083710.	1.3	47
97	Conformation of Poly(ethylene oxide) Dissolved in Ethylammonium Nitrate. Journal of Physical Chemistry B, 2011, 115, 648-652.	2.6	47
98	Influence of alkyl chain length and anion species on ionic liquid structure at the graphite interface as a function of applied potential. Journal of Physics Condensed Matter, 2014, 26, 284115.	1.8	47
99	Low friction and high load bearing capacity layers formed by cationic-block-non-ionic bottle-brush copolymers in aqueous media. Soft Matter, 2013, 9, 5361.	2.7	46
100	Addition of low concentrations of an ionic liquid to a base oil reduces friction over multiple length scales: a combined nano- and macrotribology investigation. Physical Chemistry Chemical Physics, 2016, 18, 6541-6547.	2.8	46
101	Nanostructured ionic liquids and their solutions: Recent advances and emerging challenges. Current Opinion in Green and Sustainable Chemistry, 2018, 12, 27-32.	5.9	46
102	pH-dependent interactions of mica surfaces in aqueous dodecylammonium/dodecylamine solutions. Langmuir, 1992, 8, 176-183.	3.5	45
103	The origin of surfactant amphiphilicity and self-assembly in protic ionic liquids. Chemical Science, 2015, 6, 6189-6198.	7.4	45
104	Adsorption of lysozyme, Î²-casein and their layer-by-layer formation on hydrophilic surfaces: Effect of ionic strength. Colloids and Surfaces B: Biointerfaces, 2010, 77, 1-11.	5.0	44
105	Assessment of the Density Functional Tight Binding Method for Protic Ionic Liquids. Journal of Chemical Theory and Computation, 2014, 10, 4633-4643.	5.3	44
106	Solvation of Inorganic Nitrate Salts in Protic Ionic Liquids. Journal of Physical Chemistry C, 2014, 118, 21215-21225.	3.1	44
107	Interaction Forces between BSA Layers Adsorbed on Silica Surfaces Measured with an Atomic Force Microscope. Journal of Physical Chemistry B, 2004, 108, 5365-5371.	2.6	43
108	Probing the protic ionic liquid surface using X-ray reflectivity. Physical Chemistry Chemical Physics, 2011, 13, 20828.	2.8	41

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109	Effect of ion structure on nanoscale friction in protic ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 16651.	2.8	41
110	Interfacial structuring of non-halogenated imidazolium ionic liquids at charged surfaces: effect of alkyl chain length. Physical Chemistry Chemical Physics, 2020, 22, 8450-8460.	2.8	41
111	Polyelectrolyte-Mediated Interaction between Similarly Charged Surfaces:Â Role of Divalent Counter Ions in Tuning Surface Forces. Langmuir, 2001, 17, 8321-8327.	3.5	40
112	Effect of relative humidity on adhesion and frictional properties of micro- and nano-scopic contacts. Journal of Adhesion Science and Technology, 2005, 19, 165-179.	2.6	40
113	Supported Phospholipid Monolayers. The Molecular Structure Investigated by Vibrational Sum Frequency Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 10617-10629.	3.1	40
114	Electrostatically Anchored Branched Brush Layers. Langmuir, 2012, 28, 15537-15547.	3.5	40
115	Dodecylamine collector â€" pH effect on mica flotation and correlation with thin aqueous foam film and surface force measurements. International Journal of Mineral Processing, 1996, 46, 245-262.	2.6	39
116	Influence of Water on the Interfacial Nanostructure and Wetting of [Rmim][NTf2] Ionic Liquids at Mica Surfaces. Langmuir, 2016, 32, 8818-8825.	3.5	39
117	Existence of Hydration Forces in the Interaction between Apoferritin Molecules Adsorbed on Silica Surfaces. Langmuir, 2005, 21, 9544-9554.	3.5	38
118	Atomistic Insight into Tetraalkylphosphonium-Bis(oxalato)borate Ionic Liquid/Water Mixtures. I. Local Microscopic Structure. Journal of Physical Chemistry B, 2015, 119, 5251-5264.	2.6	38
119	Dynamic surface force measurement. I. van der Waals collisions. Review of Scientific Instruments, 1998, 69, 3852-3866.	1.3	37
120	A Study of the Adsorption of Ammonium Perfluorononanoate at the Airâ"Liquid Interface by Vibrational Sum-Frequency Spectroscopy. Journal of Physical Chemistry C, 2007, 111, 316-329.	3.1	37
121	Nanostructure of an ionic liquidâ€"glycerol mixture. Physical Chemistry Chemical Physics, 2014, 16, 13182-13190.	2.8	37
122	Metal ion adsorption at the ionic liquidâ€"mica interface. Nanoscale, 2016, 8, 906-914.	5.6	36
123	Structure and surface properties of diaminocyclohexane plasma polymer films. Journal of Applied Polymer Science, 1993, 49, 39-51.	2.6	35
124	Combined Nano- and Macrotribology Studies of Titania Lubrication Using the Oil-Ionic Liquid Mixtures. ACS Sustainable Chemistry and Engineering, 2016, 4, 5005-5012.	6.7	35
125	Non-ionic assembly of nanofibrillated cellulose and polyethylene glycol grafted carboxymethyl cellulose and the effect of aqueous lubrication in nanocomposite formation. Soft Matter, 2013, 9, 7448.	2.7	34
126	The effect of nonionic surfactant on ion adsorption and hydration forces. Langmuir, 1990, 6, 1083-1087.	3.5	33

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127	Electro-responsivity of ionic liquid boundary layers in a polar solvent revealed by neutron reflectance. Journal of Chemical Physics, 2018, 148, 193806.	3.0	33
128	Interaction between Cellulose and Xylan: An Atomic Force Microscope and Quartz Crystal Microbalance Study. ACS Symposium Series, 2003, , 269-290.	0.5	32
129	Robust Hydrophobic Surfaces Displaying Different Surface Roughness Scales While Maintaining the Same Wettability. Langmuir, 2011, 27, 8153-8159.	3.5	32
130	Ionic liquid nanostructure enables alcohol self assembly. Physical Chemistry Chemical Physics, 2016, 18, 12797-12809.	2.8	32
131	Mediation of the Nanotribological Properties of Cellulose by Chitosan Adsorption. Biomacromolecules, 2009, 10, 645-650.	5.4	31
132	In situ scanning tunneling microscopy (STM), atomic force microscopy (AFM) and quartz crystal microbalance (EQCM) studies of the electrochemical deposition of tantalum in two different ionic liquids with the 1-butyl-1-methylpyrrolidinium cation. Electrochimica Acta, 2016, 197, 374-387.	5.2	31
133	Adhesion Dynamics for Cellulose Nanocomposites. ACS Applied Materials & Interfaces, 2009, 1, 2098-2103.	8.0	30
134	Nanostructureâ€“Thermal Conductivity Relationships in Protic Ionic Liquids. Journal of Physical Chemistry B, 2014, 118, 12017-12024.	2.6	30
135	Conformation of poly(ethylene oxide) dissolved in the solvate ionic liquid [Li(G4)]TFSI. Physical Chemistry Chemical Physics, 2015, 17, 14872-14878.	2.8	30
136	Boundary layer friction of solvate ionic liquids as a function of potential. Faraday Discussions, 2017, 199, 311-322.	3.2	30
137	Top-Down Grafting of Xyloglucan to Gold Monitored by QCM-D and AFM: Enzymatic Activity and Interactions with Cellulose. Biomacromolecules, 2008, 9, 942-948.	5.4	29
138	Surface structure of a â€œnon-amphiphilicâ€•protic ionic liquid. Physical Chemistry Chemical Physics, 2012, 14, 5106.	2.8	29
139	Analysis of atomic force microscopy data for deformable materials. Journal of Adhesion Science and Technology, 2004, 18, 1199-1215.	2.6	28
140	Interactions between Crossed Hair Fibers at the Nanoscale. Langmuir, 2010, 26, 18909-18915.	3.5	28
141	Note: Determination of torsional spring constant of atomic force microscopy cantilevers: Combining normal spring constant and classical beam theory. Review of Scientific Instruments, 2013, 84, 096102.	1.3	28
142	Micro-minicircle Gene Therapy: Implications of Size on Fermentation, Complexation, Shearing Resistance, and Expression. Molecular Therapy - Nucleic Acids, 2014, 3, e140.	5.1	28
143	Weighing the surface charge of an ionic liquid. Nanoscale, 2015, 7, 16039-16045.	5.6	28
144	Is the boundary layer of an ionic liquid equally lubricating at higher temperature?. Physical Chemistry Chemical Physics, 2016, 18, 9232-9239.	2.8	28

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145	Acceleration of diffusion in ethylammonium nitrate ionic liquid confined between parallel glass plates. Physical Chemistry Chemical Physics, 2017, 19, 25853-25858.	2.8	28
146	Nonionic Surfactant Adsorption at the Ethylammonium Nitrate Surface: A Neutron Reflectivity and Vibrational Sum Frequency Spectroscopy Study. Langmuir, 2010, 26, 8313-8318.	3.5	27
147	Compact Poly(ethylene oxide) Structures Adsorbed at the Ethylammonium Nitrateâ^'Silica Interface. Langmuir, 2011, 27, 3541-3549.	3.5	27
148	Factors Affecting Peptide Interactions with Surface-Bound Microgels. Biomacromolecules, 2016, 17, 669-678.	5.4	27
149	Surfactant Adsorption at the Surface of Mixed Ionic Liquids and Ionic Liquid Water Mixtures. Langmuir, 2012, 28, 13224-13231.	3.5	26
150	The charging properties of monodisperse colloidal silica in symmetrical quaternary ammonium ion solutions. Journal of Colloid and Interface Science, 1989, 130, 448-456.	9.4	25
151	Molecular Structure upon Compression and Stability toward Oxidation of Langmuir Films of Unsaturated Fatty Acids: A Vibrational Sum Frequency Spectroscopy Study. Langmuir, 2010, 26, 14024-14031.	3.5	25
152	Micelle Structure of Novel Diblock Polyethers in Water and Two Protic Ionic Liquids (EAN and PAN). Macromolecules, 2015, 48, 1843-1851.	4.8	25
153	Can Cobalt(II) and Chromium(III) Ions Released from Joint Prostheses Influence the Friction Coefficient?. ACS Biomaterials Science and Engineering, 2015, 1, 617-620.	5.2	25
154	Electro-Responsive Surface Composition and Kinetics of an Ionic Liquid in a Polar Oil. Langmuir, 2019, 35, 15692-15700.	3.5	25
155	Friction force measurements relevant to de-inking by means of atomic force microscope. Journal of Colloid and Interface Science, 2005, 291, 361-368.	9.4	24
156	A comparative AFM study of the interfacial nanostructure in imidazolium or pyrrolidinium ionic liquid electrolytes for zinc electrochemical systems. Physical Chemistry Chemical Physics, 2016, 18, 29337-29347.	2.8	24
157	Interactions between bovine serum albumin layers adsorbed on different substrates measured with an atomic force microscope. Physical Chemistry Chemical Physics, 2004, 6, 1482-1486.	2.8	23
158	Electrostatic Swelling Transitions in Surface-Bound Microgels. ACS Applied Materials & Interfaces, 2016, 8, 27129-27139.	8.0	23
159	Interfacial Behavior of Orthoborate Ionic Liquids at Inorganic Oxide Surfaces Probed by NMR, IR, and Raman Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 19687-19698.	3.1	23
160	Potential-Dependent Superlubricity of Ionic Liquids on a Graphite Surface. Journal of Physical Chemistry C, 2021, 125, 3940-3947.	3.1	23
161	Nanotribology of Ionic Liquids as Lubricant Additives for Alumina Surfaces. Journal of Physical Chemistry C, 2017, 121, 28348-28353.	3.1	23
162	Calcium soaps in flotation deinking; fundamental studies using surface force and coagulation techniques. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 125, 33-46.	4.7	22

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163	Forces between Silica Surfaces with Adsorbed Cationic Surfactants:â€‰ Influence of Salt and Added Nonionic Surfactants. Langmuir, 2005, 21, 1875-1883.	3.5	22
164	Interactions of Hydroxyapatite Surfaces: Conditioning Films of Human Whole Saliva. Langmuir, 2008, 24, 7262-7268.	3.5	21
165	Pinewood pyrolysis occurs at lower temperatures following treatment with choline-amino acid ionic liquids. Fuel, 2019, 236, 306-312.	6.4	21
166	Feeling fine - the effect of topography and friction on perceived roughness and slipperiness. Biotribology, 2017, 11, 92-101.	1.9	20
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