Vincent S J Craig

List of Publications by Year
in descending order

133 papers	10,153 citations	36303 51 h-index	33894 99 g-index
135 all docs	135 docs citations	135 times ranked	7868 citing authors

#	Article	IF	Citations
1	Boundary slip in Newtonian liquids: a review of experimental studies. Reports on Progress in Physics, 2005, 68, 2859-2897.	20.1	946
2	Mechanism of cationic surfactant adsorption at the solidâ€"aqueous interface. Advances in Colloid and Interface Science, 2003, 103, 219-304.	14.7	557
3	The effect of electrolytes on bubble coalescence in water. The Journal of Physical Chemistry, 1993, 97, 10192-10197.	2.9	465
4	Shear-Dependent Boundary Slip in an Aqueous Newtonian Liquid. Physical Review Letters, 2001, 87, 054504.	7.8	441
5	Electrochemical Principles for Active Control of Liquids on Submillimeter Scales. Science, 1999, 283, 57-60.	12.6	437
6	A History of Nanobubbles. Langmuir, 2016, 32, 11086-11100.	3.5	394
7	Physical Properties of Nanobubbles on Hydrophobic Surfaces in Water and Aqueous Solutions. Langmuir, 2006, 22, 5025-5035.	3.5	380
8	Effect of electrolytes on bubble coalescence. Nature, 1993, 364, 317-319.	27.8	307
9	Surface Roughness and Hydrodynamic Boundary Slip of a Newtonian Fluid in a Completely Wetting System. Physical Review Letters, 2003, 90, 144501.	7.8	274
10	Very small bubbles at surfacesâ€"the nanobubble puzzle. Soft Matter, 2011, 7, 40-48.	2.7	241
11	Cleaning using nanobubbles: Defouling by electrochemical generation of bubbles. Journal of Colloid and Interface Science, 2008, 328, 10-14.	9.4	238
12	Cleaning with Bulk Nanobubbles. Langmuir, 2016, 32, 11203-11211.	3.5	189
13	Bubble coalescence and specific-ion effects. Current Opinion in Colloid and Interface Science, 2004, 9, 178-184.	7.4	187
14	Effect of Dissolved Gas and Salt on the Hydrophobic Force between Polypropylene Surfaces. Langmuir, 1994, 10, 2736-2742.	3.5	167
15	A Deliberation on Nanobubbles at Surfaces and in Bulk. ChemPhysChem, 2012, 13, 2179-2187.	2.1	163
16	Adsorption Kinetics and Structural Arrangements of Cationic Surfactants on Silica Surfaces. Langmuir, 2000, 16, 9374-9380.	3.5	154
17	The influence of chain length and electrolyte on the adsorption kinetics of cationic surfactants at the silicaâ€"aqueous solution interface. Journal of Colloid and Interface Science, 2003, 266, 236-244.	9.4	129
18	Ion-Specific Coalescence of Bubbles in Mixed Electrolyte Solutions. Journal of Physical Chemistry C, 2007, 111, 1015-1023.	3.1	129

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19	Superhydrophobic and Superoleophilic Porous Boron Nitride Nanosheet/Polyvinylidene Fluoride Composite Material for Oilâ€Polluted Water Cleanup. Advanced Materials Interfaces, 2015, 2, 1400267.	3.7	125
20	Direct Measurement of Hydrophobic Forces:Â A Study of Dissolved Gas, Approach Rate, and Neutron Irradiation. Langmuir, 1999, 15, 1562-1569.	3.5	120
21	Cleaning of Protein-Coated Surfaces Using Nanobubbles: An Investigation Using a Quartz Crystal Microbalance. Journal of Physical Chemistry C, 2008, 112, 16748-16753.	3.1	119
22	Water Droplet Motion Control on Superhydrophobic Surfaces: Exploiting the Wenzel-to-Cassie Transition. Langmuir, 2011, 27, 2595-2600.	3.5	118
23	Mimosa Origami: A nanostructure-enabled directional self-organization regime of materials. Science Advances, 2016, 2, e1600417.	10.3	108
24	Superhydrophobic and Superoleophilic Boron Nitride Nanotubeâ€Coated Stainless Steel Meshes for Oil and Water Separation. Advanced Materials Interfaces, 2014, 1, 1300002.	3.7	107
25	What is the fundamental ion-specific series for anions and cations? Ion specificity in standard partial molar volumes of electrolytes and electrostriction in water and non-aqueous solvents. Chemical Science, 2017, 8, 7052-7065.	7.4	101
26	Understanding specific ion effects and the Hofmeister series. Physical Chemistry Chemical Physics, 2022, 24, 12682-12718.	2.8	101
27	Adsorption Kinetics and Structural Arrangements of Cetylpyridinium Bromide at the Silicaâ^'Aqueous Interface. Langmuir, 2001, 17, 6155-6163.	3.5	100
28	Colloid Probe Characterization:â€‰ Radius and Roughness Determination. Langmuir, 2001, 17, 2097-2099.	3.5	97
29	Study of the Long-Range Hydrophobic Attraction in Concentrated Salt Solutions and Its Implications for Electrostatic Models. Langmuir, 1998, 14, 3326-3332.	3.5	93
30	Evidence of shear-dependent boundary slip in newtonian liquids. European Physical Journal E, 2003, 12, 71-74.	1.6	89
31	Hofmeister Effects in pH Measurements:Â Role of Added Salt and Co-Ions. Journal of Physical Chemistry B, 2003, 107, 2875-2878.	2.6	88
32	Adsorption of 12-s-12 Gemini Surfactants at the Silicaâ^'Aqueous Solution Interface. Journal of Physical Chemistry B, 2003, 107, 2978-2985.	2.6	87
33	In Situ Calibration of Colloid Probe Cantilevers in Force Microscopy:â€‰ Hydrodynamic Drag on a Sphere Approaching a Wall. Langmuir, 2001, 17, 6018-6022.	3.5	86
34	Interfacial Nanobubbles Are Leaky: Permeability of the Gas/Water Interface. ACS Nano, 2014, 8, 6193-6201.	14.6	83
35	Improved Cleaning of Hydrophilic Protein-Coated Surfaces using the Combination of Nanobubbles and SDS. ACS Applied Materials & Interfaces, 2009, 1, 481-487.	8.0	82
36	Surface Nanobubbles in Nonaqueous Media: Looking for Nanobubbles in DMSO, Formamide, Propylene Carbonate, Ethylammonium Nitrate, and Propylammonium Nitrate. ACS Nano, 2015, 9, 7596-7607.	14.6	77

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37	The Link between Ion Specific Bubble Coalescence and Hofmeister Effects Is the Partitioning of Ions within the Interface. Langmuir, 2010, 26, 6478-6483.	3.5	76
38	Ion-beam-induced porosity of GaN. Applied Physics Letters, 2000, 77, 1455-1457.	3.3	71
39	Wetting of nanophases: Nanobubbles, nanodroplets and micropancakes on hydrophobic surfaces. Advances in Colloid and Interface Science, 2015, 222, 9-17.	14.7	71
40	Forwardâ€Osmosis Desalination with Poly(Ionic Liquid) Hydrogels as Smart Draw Agents. Advanced Materials, 2016, 28, 4156-4161.	21.0	70
41	Differentiating between Nanoparticles and Nanobubbles by Evaluation of the Compressibility and Density of Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 21998-22007.	3.1	70
42	Selective separation of oil and water with mesh membranes by capillarity. Advances in Colloid and Interface Science, 2016, 235, 46-55.	14.7	64
43	Determination of coupled solvent mass in quartz crystal microbalance measurements using deuterated solvents. Journal of Colloid and Interface Science, 2003, 262, 126-129.	9.4	62
44	Surface forces: Surface roughness in theory and experiment. Journal of Chemical Physics, 2014, 140, 164701.	3.0	60
45	Specific-ion effects in non-aqueous systems. Current Opinion in Colloid and Interface Science, 2016, 23, 82-93.	7.4	60
46	Generation of nanoparticles upon mixing ethanol and water; Nanobubbles or Not?. Journal of Colloid and Interface Science, 2019, 542, 136-143.	9.4	59
47	An historical review of surface force measurement techniques. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 129-130, 75-93.	4.7	58
48	Atomic Force Microscopy Study of the Interaction between Adsorbed Poly(ethylene oxide) Layers:Â Effects of Surface Modification and Approach Velocity. Langmuir, 2005, 21, 2199-2208.	3.5	57
49	A Mobile Gasâˆ'Water Interface in Electrolyte Solutions. Journal of Physical Chemistry C, 2008, 112, 15094-15097.	3.1	57
50	Adsorbed layer structure of a weak polyelectrolyte studied by colloidal probe microscopy and QCM-D as a function of pH and ionic strength. Physical Chemistry Chemical Physics, 2004, 6, 2379-2386.	2.8	56
51	Ion-Specific Influence of Electrolytes on Bubble Coalescence in Nonaqueous Solvents. Langmuir, 2008, 24, 7979-7985.	3.5	56
52	Armoured nanobubbles; ultrasound contrast agents under pressure. Journal of Colloid and Interface Science, 2019, 537, 123-131.	9.4	51
53	The hydrophobic force: nanobubbles or polymeric contaminant?. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 101-105.	2.6	48
54	Volcano Plots Emerge from a Sea of Nonaqueous Solvents: The Law of Matching Water Affinities Extends to All Solvents. ACS Central Science, 2018, 4, 1056-1064.	11.3	48

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55	Roughness in Surface Force Measurements: Extension of DLVO Theory To Describe the Forces between Hafnia Surfaces. Journal of Physical Chemistry B, 2017, 121, 6442-6453.	2.6	46
56	Probing the Hofmeister series beyond water: Specific-ion effects in non-aqueous solvents. Journal of Chemical Physics, 2018, 148, 222805.	3.0	44
57	The electrostatic origins of specific ion effects: quantifying the Hofmeister series for anions. Chemical Science, 2021, 12, 15007-15015.	7.4	44
58	Cation-Specific Conformational Behavior of Polyelectrolyte Brushes: From Aqueous to Nonaqueous Solvent. Langmuir, 2014, 30, 12850-12859.	3.5	43
59	Reorganization of hydrogen bond network makes strong polyelectrolyte brushes pH-responsive. Science Advances, 2016, 2, e1600579.	10.3	43
60	Insights into Ion Specificity in Waterâ€"Methanol Mixtures via the Reentrant Behavior of Polymer. Langmuir, 2012, 28, 1893-1899.	3.5	40
61	Direct Measurement of van der Waals and Diffuse Double-Layer Forces between Titanium Dioxide Surfaces Produced by Atomic Layer Deposition. Journal of Physical Chemistry C, 2012, 116, 7838-7847.	3.1	39
62	The effect of surfactant adsorption on liquid boundary slippage. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 60-65.	2.6	38
63	Sensing Cantilever Beam Bending by the Optical Lever Technique and Its Application to Surface Stress. Journal of Physical Chemistry B, 2006, 110, 5450-5461.	2.6	36
64	Porous carbon nanotube/polyvinylidene fluoride composite material: Superhydrophobicity/superoleophilicity and tunability of electrical conductivity. Polymer, 2014, 55, 5616-5622.	3.8	36
65	Roughness of Microspheres for Force Measurements. Langmuir, 2008, 24, 7528-7531.	3.5	35
66	Physical Properties of Phase-Change Emulsions. Langmuir, 2006, 22, 9538-9545.	3.5	32
67	Measurement of no-slip and slip boundary conditions in confined Newtonian fluids using atomic force microscopy. Physical Chemistry Chemical Physics, 2009, 11, 9514.	2.8	32
68	Macroscopically flat and smooth superhydrophobic surfaces: Heating induced wetting transitions up to the Leidenfrost temperature. Faraday Discussions, 2010, 146, 141.	3.2	31
69	Do hydration forces play a role in thin film drainage and rupture observed in electrolyte solutions?. Current Opinion in Colloid and Interface Science, 2011, 16, 597-600.	7.4	31
70	Flexible Transparent Hierarchical Nanomesh for Rose Petalâ€Like Droplet Manipulation and Lossless Transfer. Advanced Materials Interfaces, 2015, 2, 1500071.	3.7	31
71	Long-Term Stability of Surface Nanobubbles in Undersaturated Aqueous Solution. Langmuir, 2019, 35, 718-728.	3.5	31
72	Inhibition of Bubble Coalescence by Osmolytes: Sucrose, Other Sugars, and Urea. Langmuir, 2009, 25, 11406-11412.	3.5	30

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73	The Role of Citric Acid in the Stabilization of Nanoparticles and Colloidal Particles in the Environment: Measurement of Surface Forces between Hafnium Oxide Surfaces in the Presence of Citric Acid. Langmuir, 2018, 34, 2595-2605.	3.5	29
74	Does gas supersaturation by a chemical reaction produce bulk nanobubbles?. Journal of Colloid and Interface Science, 2019, 554, 388-395.	9.4	29
75	Elasto-plastic and visco-elastic deformations of a polymer sphere measured using colloid probe and scanning electron microscopy. International Journal of Adhesion and Adhesives, 2000, 20, 445-448.	2.9	28
76	Application of a Dynamic Atomic Force Microscope for the Measurement of Lubrication Forces and Hydrodynamic Thickness between Surfaces Bearing Adsorbed Polyelectrolyte Layers. Macromolecules, 2003, 36, 2903-2906.	4.8	28
77	Very slow surfactant adsorption at the solidâ€"liquid interface is due to long lived surface aggregates. Soft Matter, 2009, 5, 3061.	2.7	27
78	Adsorption and Desorption of Polymer/Surfactant Mixtures at Solidâˆ'Liquid Interfaces:Â Substitution Experiments. Langmuir, 2004, 20, 8114-8123.	3.5	26
79	Swelling and Collapse of an Adsorbed pH-Responsive Film-Forming Microgel Measured by Optical Reflectometry and QCM. Langmuir, 2010, 26, 14615-14623.	3.5	26
80	Effects of Electrolytes on Bubble Coalescence. Langmuir, 1997, 13, 4772-4774.	3.5	25
81	Laser Actuation of Cantilevers for Picometre Amplitude Dynamic Force Microscopy. Scientific Reports, 2014, 4, 5567.	3.3	25
82	Calibration of colloid probe cantilevers using the dynamic viscous response of a confined liquid. Review of Scientific Instruments, 2003, 74, 4026-4032.	1.3	24
83	A scanning electron microscope study of the surface structure of mineral pigments, latices and thickeners used for paper coating on non-absorbent substrates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 238, 1-11.	4.7	24
84	Adsorption Pattern of Mixtures of Trimethylammonium-Modified Hydroxyethylcellulose and Sodium Dodecyl Sulfate at Solidâˆ'Liquid Interfaces. Langmuir, 2004, 20, 2282-2291.	3.5	24
85	Floc Strength Characterization Technique. An Insight into Silica Aggregation. Langmuir, 2004, 20, 6450-6457.	3.5	24
86	Adsorption of the Cationic Surfactant Cetyltrimethylammonium Bromide to Silica in the Presence of Sodium Salicylate: Surface Excess and Kinetics. Langmuir, 2009, 25, 13015-13024.	3.5	22
87	Hydrophobic Attraction Measured between Asymmetric Hydrophobic Surfaces. Langmuir, 2018, 34, 3588-3596.	3.5	22
88	Formation of Micronuclei Responsible for Decompression Sickness. Journal of Colloid and Interface Science, 1996, 183, 260-268.	9.4	20
89	Application of the Light-Lever Technique to the Study of Colloidal Forces. Langmuir, 1996, 12, 3557-3562.	3.5	19
90	Direct Measurement of Interaction Forces between Surfaces in Liquids Using Atomic Force Microscopy. KONA Powder and Particle Journal, 2019, 36, 187-200.	1.7	18

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91	Measurement of the Adhesion of a Viscoelastic Sphere to a Flat Non-Compliant Substrate. Journal of Adhesion, 2000, 74, 125-142.	3.0	16
92	Experimental Studies of the Dynamic Mechanical Response of a Single Polymer Chain. Macromolecules, 2006, 39, 6180-6185.	4.8	16
93	Effect of electrolyte species on the adsorption of a cationic surfactant to silica: The common intersection point. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 347, 109-113.	4.7	16
94	Re-entrant swelling and redissolution of polyelectrolytes arises from an increased electrostatic decay length at high salt concentrations. Journal of Colloid and Interface Science, 2020, 579, 369-378.	9.4	16
95	Artificial neural networks for the prediction of solvation energies based on experimental and computational data. Physical Chemistry Chemical Physics, 2020, 22, 24359-24364.	2.8	15
96	Contact Angles of Aqueous Solutions on Copper Surfaces Bearing Self-Assembled Monolayers. Journal of Chemical Education, 2001, 78, 345.	2.3	14
97	Adsorption Isotherms and Structure of Cationic Surfactants Adsorbed on Mineral Oxide Surfaces Prepared by Atomic Layer Deposition. Langmuir, 2013, 29, 14748-14755.	3.5	14
98	Stiff chains inhibit and flexible chains promote protein adsorption to polyelectrolyte multilayers. Soft Matter, 2014, 10, 3806-3816.	2.7	14
99	Adsorption of Ionic Surfactants to a Plasma Polymer Substrate. Langmuir, 2003, 19, 4222-4227.	3.5	13
100	Model Surfaces Produced by Atomic Layer Deposition. Chemistry Letters, 2012, 41, 1247-1249.	1.3	12
101	Surface Forces between Titanium Dioxide Surfaces in the Presence of Cationic Surfactant as a Function of Surfactant Concentration, Electrolyte Concentration, and pH. Langmuir, 2014, 30, 2789-2798.	3.5	12
102	Structured near-infrared Magnetic Circular Dichroism spectra of the Mn4CaO5 cluster of PSII in T. vulcanus are dominated by Mn(IV) d-d â€˜spin-flipâ€™ transitions. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 88-98.	1.0	12
103	Dynamically Gasâ€Phase Switchable Super(de)wetting States by Reversible Amphiphilic Functionalization: A Powerful Approach for Smart Fluid Gating Membranes. Advanced Functional Materials, 2018, 28, 1704423.	14.9	12
104	Inhibition of Bubble Coalescence by Electrolytes in Binary Mixtures of Dimethyl Sulfoxide and Propylene Carbonate. Langmuir, 2009, 25, 10495-10500.	3.5	11
105	Ion Specific Electrolyte Effects on Thin Film Drainage in Nonaqueous Solvents Propylene Carbonate and Formamide. Langmuir, 2009, 25, 9931-9937.	3.5	11
106	Surface Force Measurements between Titanium Dioxide Surfaces Prepared by Atomic Layer Deposition in Electrolyte Solutions Reveal Non-DLVO Interactions: Influence of Water and Argon Plasma Cleaning. Langmuir, 2014, 30, 2093-2100.	3.5	11
107	Interaction of Particles with Surfactant Thin Films: Implications for Dust Suppression. Langmuir, 2019, 35, 7641-7649.	3.5	11
108	High Yield Stress Associated with Capillary Attraction between Alumina Surfaces in the Presence of Low Molecular Weight Dicarboxylic Acids. Langmuir, 2010, 26, 3067-3076.	3.5	10

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109	PEO-PPO-PEO surfactant exfoliated graphene cyclodextrin drug carriers for photoresponsive release. Materials Chemistry and Physics, 2018, 205, 154-163.	4.0	10
110	Use of the light-lever technique for the measurement of colloidal forces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1998, 144, 1-8.	4.7	9
111	The Origin of Surface Stress Induced by Adsorption of Iodine on Gold. Journal of Physical Chemistry B, 2006, 110, 19507-19514.	2.6	9
112	Coadsorption of Low-Molecular Weight Aromatic and Aliphatic Alcohols and Acids with the Cationic Surfactant, CTAB, on Silica Surfaces. Langmuir, 2014, 30, 6704-6712.	3.5	9
113	Mimicking enzymatic systems: modulation of the performance of polymeric organocatalysts by ion-specific effects. Chemical Communications, 2016, 52, 3392-3395.	4.1	9
114	Focused ion beam milling as a universal template technique for patterned growth of carbon nanotubes. Applied Physics Letters, 2007, 90, 093126.	3.3	8
115	Synthesis and chemical modifications of in-situ grown anatase TiO2 microspheres with isotropically exposed {0 0 1} facets for superhydrophobic and self-cleaning properties. Applied Surface Science, 2015, 357, 2022-2027.	6.1	8
116	Surface Forces in Particle Technology: Wet Systems. Procedia Engineering, 2015, 102, 24-34.	1.2	7
117	Interfacial and Bulk Nanostructure of Liquid Polymer Nanocomposites. Langmuir, 2015, 31, 3763-3770.	3.5	7
118	Surface Forces and Rheology of Titanium Dioxide in the Presence of Dicarboxylic Acids: From Molecular Interactions to Yield Stress. Langmuir, 2017, 33, 1496-1506.	3.5	7
119	Colloidal Systems in Concentrated Electrolyte Solutions Exhibit Re-entrant Long-Range Electrostatic Interactions due to Underscreening. Langmuir, 2022, 38, 6164-6173.	3.5	7
120	Modification of a Commercial Atomic Force Microscope for Nanorheological Experiments: Adsorbed Polymer Layers. Microscopy and Microanalysis, 2000, 6, 121-128.	0.4	6
121	Surface nanobubbles or Knudsen bubbles?. Physics Magazine, 0, 4, .	0.1	6
122	Reply to Comment on Water Droplet Motion Control on Superhydrophobic Surfaces: Exploiting the Wenzel-to-Cassie Transition. Langmuir, 2011, 27, 13962-13963.	3.5	4
123	Polyelectrolyte multilayers under compression: concurrent osmotic stress and colloidal probe atomic force microscopy. Soft Matter, 2018, 14, 961-968.	2.7	4
124	Adsorption of dispersants at a polyester resinâ€"alkane interface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 377, 318-324.	4.7	3
125	Measurement of long range attractive forces between hydrophobic surfaces produced by vapor phase adsorption of palmitic acid. Soft Matter, 2017, 13, 8910-8921.	2.7	3
126	Forces between zinc sulphide surfaces; amplification of the hydrophobic attraction by surface charge. Physical Chemistry Chemical Physics, 2019, 21, 20055-20064.	2.8	3

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127	The effect of electrolytes on bubble coalescence in water. [Erratum to document cited in CA119(18):189613s]. The Journal of Physical Chemistry, 1994, 98, 1518-1518.	2.9	2
128	Avoiding bends. Nature, 1994, 368, 490-490.	27.8	2
129	Comment on â€œDeformation of fluid interfaces under double-layer forces stabilizes bubble dispersionsâ€. Physical Review E, 1998, 57, 7362-7363.	2.1	2
130	Specific Ion Effects at the Airâ€"Water Interface: Experimental Studies. , 2009, , 191-214.		2
131	Reply to â€œComment on â€˜The Origin of Surface Stress Induced by Adsorption of Iodine on Gold'â€. Journal of Physical Chemistry C, 2007, 111, 8136-8136.	3.1	1
132	A Forecast of Developments in Scanned Probe Microscopy. Australian Journal of Chemistry, 2006, 59, 355.	0.9	1
133	Acoustic investigation of cavitation noise from offset ink film splitting. Nordic Pulp and Paper Research Journal, 2006, 21, 314-322.	0.7	0