Derek Y C Chan

List of Publications by Year
in descending order

238 papers	14,102 citations	20817 60 h-index	23533 111 g-index
243 all docs	243 docs citations	243 times ranked	8876 citing authors

#	Article	IF	Citations
1	Measurement of surface and interfacial tension using pendant drop tensiometry. Journal of Colloid and Interface Science, 2015, 454, 226-237.	9.4	704
2	The drainage of thin liquid films between solid surfaces. Journal of Chemical Physics, 1985, 83, 5311-5324.	3.0	702
3	Electric-Field-Directed Growth of Gold Nanorods in Aqueous Surfactant Solutions. Advanced Functional Materials, 2004, 14, 571-579.	14.9	540
4	Stabilization of Leidenfrost vapour layer by textured superhydrophobic surfaces. Nature, 2012, 489, 274-277.	27.8	467
5	A simple algorithm for the calculation of the electrostatic repulsion between identical charged surfaces in electrolyte. Journal of Colloid and Interface Science, 1980, 77, 283-285.	9.4	347
6	Film drainage and coalescence between deformable drops and bubbles. Soft Matter, 2011, 7, 2235-2264.	2.7	342
7	The interaction of colloidal particles collected at fluid interfaces. Journal of Colloid and Interface Science, 1981, 79, 410-418.	9.4	325
8	Electrokinetics of the silica-solution interface: a flat plate streaming potential study. Langmuir, 1992, 8, 965-974.	3.5	299
9	Dynamic Forces Between Two Deformable Oil Droplets in Water. Science, 2006, 313, 210-213.	12.6	234
10	Calculations of Electric Double-Layer Force and Interaction Free Energy between Dissimilar Surfaces. Journal of Colloid and Interface Science, 1995, 169, 177-196.	9.4	228
11	Double Layer Forces between Heterogeneous Charged Surfaces. The Journal of Physical Chemistry, 1994, 98, 9022-9032.	2.9	227
12	Direct force measurements between titanium dioxide surfaces. Journal of the American Chemical Society, 1993, 115, 11885-11890.	13.7	226
13	Regulation of surface potential at amphoteric surfaces during particle–particle interaction. Journal of the Chemical Society Faraday Transactions I, 1975, 71, 1046.	1.0	220
14	The electrostatic interaction in colloidal systems with low added electrolyte. Journal of Colloid and Interface Science, 1985, 105, 216-234.	9.4	208
15	Stability of Interfacial Nanobubbles. Langmuir, 2013, 29, 1017-1023.	3.5	189
16	The structure of electrolytes at charged surfaces: Ion–dipole mixtures. Journal of Chemical Physics, 1980, 73, 2949-2957.	3.0	187
17	Dynamic interactions between microbubbles in water. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11177-11182.	7.1	179
18	A model of solvent structure around ions. Journal of Chemical Physics, 1979, 70, 2946-2957.	3.0	178

#	Article	IF	Citations
19	Drag Reduction by Leidenfrost Vapor Layers. Physical Review Letters, 2011, 106, 214501.	7.8	169
20	Measuring Forces and Spatiotemporal Evolution of Thin Water Films between an Air Bubble and Solid Surfaces of Different Hydrophobicity. ACS Nano, 2015, 9, 95-104.	14.6	164
21	Computation of Forces between Spherical Colloidal Particles: Nonlinear Poisson-Boltzmann Theory. Journal of Colloid and Interface Science, 1994, 165, 116-128.	9.4	163
22	The structure of electrolytes at charged surfaces: The primitive model. Journal of Chemical Physics, 1981, 74, 1472-1478.	3.0	147
23	Electrical double layer interactions under regulation by surface ionization equilibriaâ€"dissimilar amphoteric surfaces. Journal of the Chemical Society Faraday Transactions I, 1976, 72, 2844.	1.0	145
24	Interaction Free Energy between Plates with Charge Regulation: A Linearized Model. Journal of Colloid and Interface Science, 1993, 161, 260-264.	9.4	143
25	Forces between a Rigid Probe Particle and a Liquid Interface. Journal of Colloid and Interface Science, 2001, 236, 141-154.	9.4	139
26	Accurate Analytic Formulas for the Double-Layer Interaction between Spheres. Journal of Colloid and Interface Science, 1995, 171, 46-54.	9.4	138
27	Measurement and analysis of forces in bubble and droplet systems using AFM. Journal of Colloid and Interface Science, 2012, 371, 1-14.	9.4	138
28	Direct Force Measurements between Silica and AluminaÂ§. Langmuir, 1997, 13, 2109-2112.	3.5	133
29	Theory of non-equilibrium force measurements involving deformable drops and bubbles. Advances in Colloid and Interface Science, 2011, 165, 70-90.	14.7	118
30	The free energy of an electrical double layer. Journal of Colloid and Interface Science, 1983, 95, 193-197.	9.4	114
31	Refractive Index Gradient of Human Lenses. Optometry and Vision Science, 1989, 66, 822-829.	1.2	114
32	Electrical Double Layer Interaction between Dissimilar Spherical Colloidal Particles and between a Sphere and a Plate: The Linearized Poisson-Boltzmann Theory. Langmuir, 1994, 10, 2993-3009.	3.5	114
33	van der Waals Interaction, Surface Free Energies, and Contact Angles:Â Dispersive Polymers and Liquids. Langmuir, 1997, 13, 3890-3895.	3.5	113
34	Forces between two oil drops in aqueous solution measured by AFM. Journal of Colloid and Interface Science, 2004, 273, 339-342.	9.4	112
35	2-D and 3-D Interactions in Random Sequential Adsorption of Charged Particles. Journal of Colloid and Interface Science, 1997, 194, 138-153.	9.4	111
36	Long-Range Electrostatic Attractions between Identically Charged Particles in Confined Geometries: An Unresolved Problem. Journal of Colloid and Interface Science, 1999, 213, 268-269.	9.4	109

#	Article	IF	Citations
37	Probing the Hydrophobic Interaction between Air Bubbles and Partially Hydrophobic Surfaces Using Atomic Force Microscopy. Journal of Physical Chemistry C, 2014, 118, 25000-25008.	3.1	108
38	Direct Force Measurements between Dissimilar Metal Oxides. The Journal of Physical Chemistry, 1995, 99, 2114-2118.	2.9	103
39	Pore-scale network model for drainage-dominated three-phase flow in porous media. Transport in Porous Media, 1996, 24, 167-201.	2.6	102
40	Repulsive van der Waals Forces in Soft Matter: Why Bubbles Do Not Stick to Walls. Physical Review Letters, 2011, 106, 064501.	7.8	101
41	Hydrodynamic Boundary Conditions and Dynamic Forces between Bubbles and Surfaces. Physical Review Letters, 2008, 101, 024501.	7.8	98
42	Measurement of Dynamical Forces between Deformable Drops Using the Atomic Force Microscope. I. Theory. Langmuir, 2005, 21, 2912-2922.	3.5	97
43	Dynamic Forces between Bubbles and Surfaces and Hydrodynamic Boundary Conditions. Langmuir, 2008, 24, 11533-11543.	3.5	94
44	Measurement of the Hydrophobic Force in a Soft Matter System. Journal of Physical Chemistry Letters, 2013, 4, 3872-3877.	4.6	92
45	Fluorocarbons:‰ Surface Free Energies and van der Waals Interaction. Langmuir, 1996, 12, 2617-2621.	3.5	89
46	Assembly of Gold Nanoparticles into Microwire Networks Induced by Drying Liquid Bridges. Physical Review Letters, 2009, 102, 058303.	7.8	89
47	Colloidal behaviour of materials with ionizable group surfaces. Pure and Applied Chemistry, 1980, 52, 1207-1219.	1.9	86
48	Compound sessile drops. Soft Matter, 2012, 8, 11042.	2.7	83
49	Long-Range Electrostatic Attractions between Identically Charged Particles in Confined Geometries and the Poissonˆ�’Boltzmann Theory. Langmuir, 2000, 16, 324-331.	3.5	82
50	The statistical mechanics of the electrical double layer: Stress tensor and contact conditions. Journal of Chemical Physics, 1981, 74, 1293-1297.	3.0	80
51	Interaction Free Energy between Identical Spherical Colloidal Particles: The Linearized Poisson-Boltzmann Theory. Journal of Colloid and Interface Science, 1993, 155, 297-312.	9.4	80
52	The hydrophobic force: measurements and methods. Physical Chemistry Chemical Physics, 2014, 16, 18065-18075.	2.8	79
53	Theory of Contact Angles and the Free Energy of Formation of Ionizable Surfaces: Application to Heptylamine Radio-Frequency Plasma-Deposited Films. Langmuir, 1995, 11, 4122-4128.	3.5	74
54	Hydrodynamic forces involving deformable interfaces at nanometer separations. Physics of Fluids, 2008, 20, 032101.	4.0	71

#	Article	IF	Citations
55	Dynamics of Interactions Involving Deformable Drops: Hydrodynamic Dimpling under Attractive and Repulsive Electrical Double Layer Interactions. Langmuir, 2007, 23, 626-637.	3.5	69
56	Bubble Coalescence during Acoustic Cavitation in Aqueous Electrolyte Solutions. Langmuir, 2011, 27, 12025-12032.	3.5	66
57	Spatiotemporal Evolution of Thin Liquid Films during Impact of Water Bubbles on Glass on a Micrometer to Nanometer Scale. Physical Review Letters, 2012, 108, 247803.	7.8	64
58	Leidenfrost vapour layer moderation of the drag crisis and trajectories of superhydrophobic and hydrophilic spheres falling in water. Soft Matter, 2014, 10, 5662-5668.	2.7	63
59	Bubble Colloidal AFM Probes Formed from Ultrasonically Generated Bubbles. Langmuir, 2008, 24, 603-605.	3.5	61
60	Highly asymmetric electrolytes: A model for strongly interacting colloidal systems. Chemical Physics Letters, 1982, 92, 474-478.	2.6	60
61	Force Balance Model for Bubble Rise, Impact, and Bounce from Solid Surfaces. Langmuir, 2015, 31, 6763-6772.	3.5	59
62	Anomalous Stability of Carbon Dioxide in pHâ€Controlled Bubble Coalescence. Angewandte Chemie - International Edition, 2011, 50, 3454-3456.	13.8	58
63	The hydrodynamics of bubble rise and impact with solid surfaces. Advances in Colloid and Interface Science, 2016, 235, 214-232.	14.7	56
64	Hydrodynamic and Electrokinetic Properties of Decane Droplets in Aqueous Sodium Dodecyl Sulfate Solutions. Langmuir, 2001, 17, 7210-7218.	3.5	54
65	Improvement on the Hogg-Healy-Fuerstenau formulas for the interaction of dissimilar double layers. Journal of Colloid and Interface Science, 1983, 92, 232-242.	9.4	53
66	Precision AFM Measurements of Dynamic Interactions between Deformable Drops in Aqueous Surfactant and Surfactant-Free Solutions. Langmuir, 2011, 27, 2676-2685.	3.5	53
67	Self-determined shapes and velocities of giant near-zero drag gas cavities. Science Advances, 2017, 3, e1701558.	10.3	52
68	Nondestructive Method of Constructing Three-Dimensional Gradient Index Models for Crystalline Lenses: I. Theory and Experiment. Optometry and Vision Science, 1988, 65, 481-491.	1.2	51
69	Forces between a Rigid Probe Particle and a Liquid Interface:Â Comparison between Experiment and Theory. Langmuir, 2003, 19, 2124-2133.	3.5	51
70	Dynamic Air Layer on Textured Superhydrophobic Surfaces. Langmuir, 2013, 29, 11074-11081.	3.5	50
71	Non-Newtonian effects on immiscible viscous fingering in a radial Hele-Shaw cell. Physical Review E, 1994, 49, 420-432.	2.1	48
72	Universal Behavior of the Initial Stage of Drop Impact. Physical Review Letters, 2014, 113, 194501.	7.8	48

#	Article	IF	Citations
73	Classical theory of dynamical image interactions. Surface Science, 1973, 39, 437-440.	1.9	47
74	Correlations in inhomogeneous Coulomb systems. Molecular Physics, 1984, 51, 1047-1070.	1.7	47
75	On the theory of dipolar fluids and ion–dipole mixtures. Journal of Chemical Physics, 1978, 69, 691-696.	3.0	46
76	Measurements of dynamic forces between drops with the AFM: novel considerations in comparisons between experiment and theory. Soft Matter, 2008, 4, 1270.	2.7	46
77	Homo- and hetero-interactions between air bubbles and oil droplets measured by atomic force microscopy. Soft Matter, 2011, 7, 8977.	2.7	46
78	Short-range interactions mediated by a solvent with surface adhesion. Molecular Physics, 1978, 35, 1669-1679.	1.7	45
79	Transient Responses of a Wetting Film to Mechanical and Electrical Perturbations. Langmuir, 2008, 24, 1381-1390.	3.5	45
80	Dynamic deformations and forces in soft matter. Soft Matter, 2009, 5, 2858.	2.7	45
81	Electrical double layer interactions between dissimilar oxide surfaces with charge regulation and Stern–Grahame layers. Journal of Colloid and Interface Science, 2006, 296, 150-158.	9.4	44
82	Anomalous pH Dependent Stability Behavior of Surfactant-Free Nonpolar Oil Drops in Aqueous Electrolyte Solutions. Langmuir, 2007, 23, 9335-9340.	3.5	44
83	The Smoluchowski-Poisson-Boltzmann description of ion diffusion at charged interfaces. Biophysical Journal, 1984, 46, 387-407.	0.5	43
84	Phase Separation in Deionized Colloidal Systems:‰ Extended Debye−Hückel Theory. Langmuir, 2001, 17, 4202-4210.	3.5	43
85	Interaction forces between oil–water particle interfaces—Non-DLVO forces. Faraday Discussions, 2005, 129, 111-124.	3.2	43
86	Drainage of the air–water–quartz film: experiments and theory. Physical Chemistry Chemical Physics, 2011, 13, 1434-1439.	2.8	43
87	Structural Forces in Soft Matter Systems. Journal of Physical Chemistry Letters, 2011, 2, 434-437.	4.6	43
88	The impact and bounce of air bubbles at a flat fluid interface. Soft Matter, 2016, 12, 3271-3282.	2.7	43
89	Surface Potentials Derived from Co-Ion Exclusion Measurements on Homoionic Montmorillonite and Illite. Clays and Clay Minerals, 1984, 32, 131-138.	1.3	42
90	Non-singular boundary integral methods for fluid mechanics applications. Journal of Fluid Mechanics, 2012, 696, 468-478.	3.4	42

#	Article	IF	Citations
91	Static and dynamic interactions with spatially dispersive media. Journal of Physics C: Solid State Physics, 1976, 9, 163-168.	1.5	41
92	The stillingerâ€"lovett condition for non-uniform electrolytes. Chemical Physics Letters, 1981, 77, 437-440.	2.6	41
93	Force distribution in a two dimensional sandpile. Powder Technology, 1992, 72, 255-267.	4.2	41
94	Polymeric Stabilized Emulsions: Steric Effects and Deformation in Soft Systems. Langmuir, 2012, 28, 4599-4604.	3.5	41
95	Coalescence Dynamics of Mobile and Immobile Fluid Interfaces. Langmuir, 2018, 34, 2096-2108.	3.5	41
96	Order/disorder transitions in concentrated electrocratic dispersions. Journal of the Chemical Society, Faraday Transactions 2, 1978, 74, 136.	1.1	40
97	Combined AFMâˆ'Confocal Microscopy of Oil Droplets: Absolute Separations and Forces in Nanofilms. Journal of Physical Chemistry Letters, 2011, 2, 961-965.	4.6	40
98	BEM simulations of potential flow with viscous effects as applied to a rising bubble. Engineering Analysis With Boundary Elements, 2011, 35, 489-494.	3.7	40
99	Interpreting the Dynamic Interaction between a Very Small Rising Bubble and a Hydrophilic Titania Surface. Journal of Physical Chemistry C, 2010, 114, 1942-1946.	3.1	39
100	Effect of Gold Oxide in Measurements of Colloidal Force. Langmuir, 2011, 27, 6026-6030.	3.5	39
101	A Simple Algorithm for Calculating Electrical Double Layer Interactions in Asymmetric Electrolytesâ€"Poissonâ€"Boltzmann Theory. Journal of Colloid and Interface Science, 2002, 245, 307-310.	9.4	38
102	Dynamic interactions between dropsâ€"a critical assessment. Soft Matter, 2008, 4, 1613.	2.7	38
103	The statistical mechanics of ion-dipole-tetrahedral quadrupole mixtures. Molecular Physics, 1981, 43, 1115-1138.	1.7	37
104	Use of Atomic Force Microscopy Force Measurements To Monitor Citrate Displacement by Amines on Gold in Aqueous Solution. Langmuir, 1997, 13, 2429-2431.	3.5	37
105	Dynamic Forces between a Moving Particle and a Deformable Drop. Journal of Physical Chemistry C, 2008, 112, 567-574.	3.1	37
106	Leidenfrost Vapor Layers Reduce Drag without the Crisis in High Viscosity Liquids. Physical Review Letters, 2016, 117, 114503.	7.8	36
107	Structural forces in soft matter systems: unique flocculation pathways between deformable droplets. Soft Matter, 2011, 7, 11334.	2.7	35
108	Determination and modeling of the 3-D gradient refractive indices in crystalline lenses. Applied Optics, 1988, 27, 926.	2.1	34

#	ARTICLE	IF	CITATIONS
109	The Impedance of the Planar Diffuse Double Layer: An Exact Low-Frequency Theory. Journal of Colloid and Interface Science, 1995, 170, 522-537.	9.4	33
110	Viscosity Effects on Hydrodynamic Drainage Force Measurements Involving Deformable Bodies. Langmuir, 2010, 26, 11921-11927.	3.5	33
111	Effects of hydrodynamic film boundary conditions on bubble–wall impact. Soft Matter, 2013, 9, 9755.	2.7	33
112	A force balance model for the motion, impact, and bounce of bubbles. Physics of Fluids, 2014, 26, .	4.0	33
113	Mobile-surface bubbles and droplets coalesce faster but bounce stronger. Science Advances, 2019, 5, eaaw4292.	10.3	33
114	The stability of a colloidal suspension of coated magnetic particles in an aqueous solution. IBM Journal of Research and Development, 1985, 29, 11-17.	3.1	30
115	Electrical double-layer interactions in concentrated colloidal systems. Faraday Discussions of the Chemical Society, 1983, 76, 65.	2.2	29
116	Dissociation kinetics of secondary-minimum flocculated colloidal particles. Journal of Colloid and Interface Science, 1984, 102, 400-409.	9.4	29
117	Simulating flow in porous media. Physical Review A, 1988, 38, 4106-4120.	2.5	29
118	Solvent Quality Dependent Continuum van der Waals Attraction and Phase Behavior for Colloids Bearing Nonuniform Adsorbed Polymer Layers. Langmuir, 2002, 18, 7845-7852.	3.5	29
119	The influence of discrete surface charges on the force between charged surfaces. Journal of Chemical Physics, 2005, 122, 104705.	3.0	29
120	Compound Pendant Drop Tensiometry for Interfacial Tension Measurement at Zero Bond Number. Langmuir, 2014, 30, 15388-15391.	3.5	29
121	Boundary regularized integral equation formulation of the Helmholtz equation in acoustics. Royal Society Open Science, 2015, 2, 140520.	2.4	28
122	Nonsingular Field-Only Surface Integral Equations for Electromagnetic Scattering. IEEE Transactions on Antennas and Propagation, 2017, 65, 972-977.	5.1	28
123	Conformation of a non-interacting polymer near a "sticky" wall. Journal of the Chemical Society, Faraday Transactions 2, 1975, 71, 235-268.	1.1	27
124	The modelling of solvent structure in the electrical double layer. Advances in Colloid and Interface Science, 1982, 16, 81-100.	14.7	27
125	Pair Interactions between Heterogeneous Spheres. Langmuir, 1997, 13, 1577-1586.	3.5	27
126	Stabilization of Thin Liquid Films by Repulsive van der Waals Force. Langmuir, 2014, 30, 5162-5169.	3.5	27

#	Article	IF	Citations
127	On the stress depression under a sandpile. Powder Technology, 1994, 78, 263-271.	4.2	26
128	Stochastically evolving networks. Physical Review E, 2003, 68, 066124.	2.1	26
129	Electrophoretic Motion of Two Spherical Particles with Thick Double Layers. Journal of Colloid and Interface Science, 1997, 191, 357-371.	9.4	25
130	Electrical Double-Layer Interaction between Charged Particles near Surfaces and in Confined Geometries. Journal of Colloid and Interface Science, 1999, 218, 423-432.	9.4	25
131	Density functional theory of charged colloidal systems. Physical Review E, 2001, 63, 061806.	2.1	25
132	A robust and non-singular formulation of the boundary integral method for the potential problem. Engineering Analysis With Boundary Elements, 2014, 43, 117-123.	3.7	25
133	Modelling bubble rise and interaction with a glass surface. Applied Mathematical Modelling, 2014, 38, 4249-4261.	4.2	24
134	Competitive adsorption from binary mixtures: Adhesive hard sphere model. Journal of Colloid and Interface Science, 1979, 72, 27-40.	9.4	23
135	Electrical double-layer interaction between spherical colloidal particles: An exact solution. Journal of Colloid and Interface Science, 1983, 92, 281-283.	9.4	23
136	Particulate Templates and Ordered Liquid Bridge Networks in Evaporative Lithography. Langmuir, 2009, 25, 13311-13314.	3.5	23
137	Robust multiscale field-only formulation of electromagnetic scattering. Physical Review B, 2017, 95, .	3.2	23
138	Measurement and modeling on hydrodynamic forces and deformation of an air bubble approaching a solid sphere in liquids. Advances in Colloid and Interface Science, 2015, 217, 31-42.	14.7	22
139	Ionic and dipolar adsorption from an ion–dipole mixture. A model for the stern layer. Journal of the Chemical Society, Faraday Transactions 2, 1982, 78, 695-722.	1.1	21
140	Effect of Chain Stiffness on Polyelectrolyte Condensation. Macromolecules, 2005, 38, 3017-3025.	4.8	21
141	Dynamic interactions between deformable drops in the Hele–Shaw geometry. Soft Matter, 2010, 6, 1809.	2.7	21
142	Field-only surface integral equations: scattering from a dielectric body. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, 284.	1.5	21
143	Field-only surface integral equations: scattering from a perfect electric conductor. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, 276.	1.5	21
144	Effects of Internal Flow and Viscosity Ratio on Measurements of Dynamic Forces between Deformable Drops. Langmuir, 2009, 25, 3352-3355.	3.5	19

#	Article	IF	Citations
145	Navier slip model of drag reduction by Leidenfrost vapor layers. Physics of Fluids, 2017, 29, .	4.0	19
146	A scalable parallel Monte Carlo method for free energy simulations of molecular systems. Journal of Computational Chemistry, 2005, 26, 72-77.	3.3	18
147	Dispersion interactions across binary liquid mixtures. A proper account of structural effects. Journal of Colloid and Interface Science, 1979, 68, 462-470.	9.4	17
148	Atomic force microscopy: Loading position dependence of cantilever spring constants and detector sensitivity. Review of Scientific Instruments, 2007, 78, 116102.	1.3	17
149	Conformational properties of a polymer confined between two adsorbing surfaces. Journal of the Chemical Society, Faraday Transactions 2, 1976, 72, 1584.	1.1	16
150	Ionic adsorption from a primitive model electrolyteâ€"nonlinear treatment. Journal of Chemical Physics, 1981, 75, 3485-3494.	3.0	16
151	A physically consistent theory of fracture in a brittle solid. Journal of Colloid and Interface Science, 1987, 115, 240-259.	9.4	16
152	Fluid capacity distributions of random porous media. Transport in Porous Media, 1988, 3, 81-94.	2.6	16
153	Transient gas flow around boreholes. Transport in Porous Media, 1993, 10, 137-152.	2.6	16
154	Analysis of inhomogeneous optical systems by the use of ray tracing I Planar systems. Applied Optics, 1997, 36, 5303.	2.1	16
155	The phase behavior of charged colloidal systems in the mean spherical approximation. Journal of Chemical Physics, 2002, 116, 8588.	3.0	16
156	Soft matter: from shapes to forces on the nanoscale. Soft Matter, 2008, 4, 471.	2.7	16
157	Stokesian dynamics of pill-shaped Janus particles with stick and slip boundary conditions. Physical Review E, 2013, 87, 043009.	2.1	16
158	Modelling drop-drop interactions in an atomic force microscope. ANZIAM Journal, 0, 46, 805.	0.0	16
159	A general theory of free energies of inhomogeneous spatially dispersive media. I. Journal of Physics C: Solid State Physics, 1975, 8, 2509-2521.	1.5	15
160	The orientation-averaged interaction of a pair of magnetic dipolar spheres in an external magnetic field. Journal of Colloid and Interface Science, 1984, 101, 419-423.	9.4	15
161	Ion diffusion at charged interfaces. Molecular Physics, 1986, 57, 1105-1137.	1.7	15
162	Cellular-automata calculation of frequency-dependent permeability of porous media. Physical Review E, 1993, 47, 2593-2597.	2.1	15

#	ARTICLE	IF	CITATIONS
163	Rheooptical Studies of Polydiacetylene Solutions. Journal of Physical Chemistry B, 1997, 101, 7732-7735.	2.6	15
164	Anomalous Pull-Off Forces between Surfactant-Free Emulsion Drops in Different Aqueous Electrolytes. Langmuir, 2012, 28, 4259-4266.	3.5	15
165	Evaporation of a capillary bridge between a particle and a surface. Soft Matter, 2014, 10, 8489-8499.	2.7	15
166	Anomalous Sinking of Spheres due to Local Fluidization of Apparently Fixed Powder Beds. Physical Review Letters, 2016, 116, 068001.	7.8	15
167	The electrostatic interaction between spherical colloidal particles—a comment on the paper by Barouch et al. Journal of Colloid and Interface Science, 1980, 74, 303-305.	9.4	14
168	Theoretical Analysis of the Soiling of "Nonstick"Organic Materials. Langmuir, 1996, 12, 3356-3359.	3.5	14
169	Determination of the Intrinsic Acid–Base Dissociation Constant and Site Density of Ionizable Surface Groups by Capillary Rise Measurements. Langmuir, 1997, 13, 3043-3046.	3.5	14
170	Layer with reduced viscosity at water-oil interfaces probed by fluorescence correlation spectroscopy. Physical Review E, 2013, 87, 012403.	2.1	14
171	A simple and accurate method for calculation of the structure factor of interacting charged spheres. Journal of Colloid and Interface Science, 2014, 426, 80-82.	9.4	14
172	Drag Moderation by the Melting of an Ice Surface in Contact with Water. Physical Review Letters, 2015, 115, 044501.	7.8	14
173	A self-consistent study of ion adsorption and discrete charge effects in the electrical double layer. Journal of Chemical Physics, 1980, 72, 5159-5162.	3.0	13
174	Fluctuations, viscous fingering, and diffusion-limited aggregation. Physical Review A, 1986, 34, 4079-4082.	2.5	13
175	A boot-strap Poisson–Boltzmann theory for the structure and thermodynamics of charged colloidal solutions. Journal of Chemical Physics, 2003, 118, 5248-5259.	3.0	13
176	Variations in properties of atomic force microscope cantilevers fashioned from the same wafer. Nanotechnology, 2008, 19, 105709.	2.6	13
177	Silica nano-particle super-hydrophobic surfaces: the effects of surface morphology and trapped air pockets on hydrodynamic drainage forces. Faraday Discussions, 2009, 143, 151.	3.2	13
178	Towards a microscopic theory of hydrophobic solutions. Journal of the Chemical Society, Faraday Transactions 2, 1978, 74, 2050.	1.1	11
179	Forces due to solvent structure in particle interactions: the one-dimensional problem. Journal of the Chemical Society, Faraday Transactions 2, 1979, 75, 556.	1.1	11
180	Solvent structure in particle interactions. Low pressure effects and analytic limits. Journal of the Chemical Society, Faraday Transactions 2, 1980, 76, 776.	1.1	11

#	ARTICLE	IF	CITATIONS
181	Mathematical description of isogyre formation in refracting structures. Ophthalmic and Physiological Optics, 1993, 13, 212-215.	2.0	11
182	A non-linear truncation scheme for the Ornstein-Zernike equation for dipolar fluids. Molecular Physics, 1982, 47, 881-896.	1.7	10
183	Ion diffusion near charged surfaces. Exact analytic solutions. Journal of the Chemical Society, Faraday Transactions 2, 1987, 83, 2271.	1.1	10
184	On the universality of fracture surface roughness. Europhysics Letters, 1996, 34, 121-126.	2.0	10
185	Monte Carlo Simulations of Stretched Charged Polymersâ€. Journal of Physical Chemistry B, 2003, 107, 8131-8139.	2.6	10
186	Non-linear and cyclical collisions between drops and bubbles: using AFM to understand droplet interactions in micro-scale flows. Soft Matter, 2013, 9, 2426.	2.7	10
187	Boundary regularized integral equation formulation of Stokes flow. Physics of Fluids, 2015, 27, 023102.	4.0	10
188	Field-only integral equation method for time domain scattering of electromagnetic pulses. Applied Optics, 2017, 56, 9377.	1.8	10
189	Free energies across inhomogeneous dispersive media. III. Metals and retardation effects. Journal of Physics C: Solid State Physics, 1976, 9, 153-162.	1.5	9
190	Lateral Hydrodynamic Interactions between an Emulsion Droplet and a Flat Surface Evaluated by Frictional Force Microscopy. Langmuir, 2010, 26, 8002-8007.	3.5	9
191	Space-time domain solutions of the wave equation by a non-singular boundary integral method and Fourier transform. Journal of the Acoustical Society of America, 2017, 142, 697-707.	1.1	9
192	The unusual fluid dynamics of particle electrophoresis. Journal of Colloid and Interface Science, 2019, 553, 845-863.	9.4	9
193	Helmholtz Decomposition and Boundary Element Method Applied to Dynamic Linear Elastic Problems. Journal of Elasticity, 2019, 137, 83-100.	1.9	9
194	On the existence of hydrodynamic fluctuation forces. Physica A: Statistical Mechanics and Its Applications, 1983, 122, 505-515.	2.6	8
195	Ion diffusion in a Coulombic field. Journal of Statistical Physics, 1988, 52, 383-394.	1.2	8
196	Analysis of inhomogeneous optical systems by the use of ray tracing II Three-dimensional systems with symmetry. Applied Optics, 1998, 37, 5106.	2.1	8
197	Terminal Velocity and Mobile Surface Species in Rising Microbubbles. Langmuir, 2009, 25, 8899-8902.	3.5	8
198	A robust and accurate formulation of molecular and colloidal electrostatics. Journal of Chemical Physics, 2016, 145, 054106.	3.0	8

#	Article	IF	Citations
199	Free energies of inhomogeneous spatially dispersive media. II. Thin films. Journal of Physics C: Solid State Physics, 1975, 8, 3221-3231.	1.5	7
200	Influence of Surfactants on the Force between Two Bubbles. Langmuir, 2010, 26, 655-662.	3.5	7
201	Eliminating the fictitious frequency problem in BEM solutions of the external Helmholtz equation. Engineering Analysis With Boundary Elements, 2019, 109, 106-116.	3.7	7
202	Phase transitions in adsorbed polymer systems. Faraday Discussions of the Chemical Society, 1975, 59, 181.	2.2	6
203	Solvent mediated interactions—solute size effects and predictions of mean field theory. Chemical Physics Letters, 1978, 56, 533-536.	2.6	6
204	Resistor networks with distributed breakdown voltages. Physical Review A, 1991, 43, 2905-2909.	2.5	6
205	Interpreting atomic force microscopy measurements of hydrodynamic and surface forces with nonlinear parametric estimation. Review of Scientific Instruments, 2012, 83, 103702.	1.3	6
206	Study of Fluid and Transport Properties of Porous Anodic Aluminum Membranes by Dynamic Atomic Force Microscopy. Langmuir, 2013, 29, 8969-8977.	3.5	6
207	On the derivation of the Smoluchowski result of electrophoretic mobility. Journal of Colloid and Interface Science, 2020, 568, 176-184.	9.4	6
208	On a random process interpolating between Markovian and non-Markovian random walks. Journal of Physics A, 1984, 17, L121-L127.	1.6	5
209	Colloidal Interactions in Low Volume Fraction Pressurized Ultrafiltration Systems. Journal of Colloid and Interface Science, 1995, 173, 304-318.	9.4	5
210	Dependence of the Far Field Effective Potential on Surface Inhomogeneities. Journal of Colloid and Interface Science, 1996, 182, 516-525.	9.4	5
211	Bubbles in Wet, Gummed Wine Labels. SIAM Review, 1999, 41, 363-372.	9.5	5
212	Analytical solution for an acoustic boundary layer around an oscillating rigid sphere. Physics of Fluids, 2020, 32, 126105.	4.0	5
213	Non-retarded van der Waals interactions between two spatially dispersive media. Physics Letters, Section A: General, Atomic and Solid State Physics, 1975, 51, 323-324.	2.1	4
214	A simple theory for the partial molar volumes of a binary mixture. Molecular Physics, 1999, 96, 1145-1149.	1.7	4
215	A Four-Component Model for Small Colloidal Particles in an Aqueous Electrolyte. Langmuir, 1999, 15, 4940-4943.	3.5	4
216	Modeling the Structure of Charged Binary Colloidal Dispersions. Langmuir, 2003, 19, 1121-1126.	3.5	4

#	ARTICLE	IF	CITATIONS
217	Thermodynamic properties of a fluid of hard spheres with water-like dipole and quadrupole moments. Chemical Physics Letters, 1981, 79, 588-590.	2.6	3
218	Tunable noise. Nature, 1987, 325, 489-489.	27.8	3
219	Mean first passage times of ions between charged surfaces. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 3585.	1.7	3
220	Phonon Interaction Energy of an Elastic Layer on an Infinite Half Space Solid. Journal of Colloid and Interface Science, 1994, 163, 100-107.	9.4	3
221	FÃ¶rster energy transfer between Langmuir-Blodgett film layers in aqueous solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1995, 102, 1-19.	4.7	3
222	The interaction of optically active molecules. Chemical Physics Letters, 1972, 16, 287-288.	2.6	2
223	The electrostatic interaction between surfaces bearing amphoteric ionizable groups across a 1:1 electrolyte. Journal of Theoretical Biology, 1974, 48, 253-256.	1.7	2
224	Tensile stresses around boreholes due to transient fluid flow. International Journal for Numerical and Analytical Methods in Geomechanics, 1993, 17, 659-667.	3.3	2
225	Order from Chaos: Dynamics of density segregation in continuously aerated granular systems. Advanced Powder Technology, 2020, 31, 843-847.	4.1	2
226	Phase transitions in polymer solutions and the prediction of ? temperatures. Journal of the Chemical Society, Faraday Transactions 2, 1974, 70, 586.	1.1	1
227	Reply to comments on the theory of dipolar fluids. Journal of Chemical Physics, 1979, 70, 1578-1578.	3.0	1
228	A self-consistent mean-field model of polyelectrolyte solutions. An introduction. Colloid and Polymer Science, 1990, 268, 290-302.	2.1	1
229	Integration of multiple small gensets in a mobile microgrid system. , 2015, , .		1
230	Dynamic power demand allocation and battery energy compensation control of a mobile microgrid system. , 2015, , .		1
231	Electric Double-Layer Interaction between Dissimilar Charge-Conserved Conducting Plates. Langmuir, 2015, 31, 9889-9892.	3.5	1
232	Image effects and ion diffusion times in lamella systems. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 1433.	1.7	0
233	Perturbed spectra of glasslike chains. Physical Review E, 1993, 48, 1207-1217.	2.1	0
234	Direct and robust boundary integral method for electromagnetic scattering of perfect electric conductors. , 2016, , .		0

#	Article	IF	Citations
235	Effective simulation methods for polyelectrolytes in low dielectric solvents. ANZIAM Journal, 0, 46, 1254.	0.0	0
236	10.1063/1.4960033.1. , 2016, , .		0
237	10.1063/5.0033933.1. , 2020, , .		0
238	10.1063/5.0033933.2. , 2020, , .		0