Jacob N Israelachvili

List of Publications by Year
in descending order

242	35,145	4831 87	3941 183
papers	citations	h-index	g-index

245	245	245	27966
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanometer-Scale Force Profiles of Short Single- and Double-Stranded DNA Molecules on a Gold Surface Measured Using a Surface Forces Apparatus. Langmuir, 2021, 37, 13346-13352.	1.6	4
2	The shape and dynamics of deformations of viscoelastic fluids by water droplets. Journal of Colloid and Interface Science, 2020, 580, 776-784.	5.0	2
3	Crude Oil/Brine/Rock Interactions during SmartWater Flooding in Carbonates: Novel Surface Forces Apparatus Measurements at Reservoir Conditions. , 2020, , .		0
4	Mineral Dissolution under Electric Stimulation. Journal of Physical Chemistry C, 2020, 124, 16515-16523.	1.5	1
5	Automated Measurement of Spatially Resolved Hairâ€“Hair Single Fiber Adhesion. Langmuir, 2019, 35, 15614-15627.	1.6	3
6	Multimodal Miniature Surface Forces Apparatus (Î¼SFA) for Interfacial Science Measurements. Langmuir, 2019, 35, 15500-15514.	1.6	12
7	Impact of Molecular Architecture and Adsorption Density on Adhesion of Mussel-Inspired Surface Primers with Catechol-Cation Synergy. Journal of the American Chemical Society, 2019, 141, 18673-18681.	6.6	40
8	Electrochemically Enhanced Dissolution of Silica and Alumina in Alkaline Environments. Langmuir, 2019, 35, 15651-15660.	1.6	5
9	Surface Damage Influences the JKR Contact Mechanics of Glassy Low-Molecular-Weight Polystyrene Films. Langmuir, 2019, 35, 15674-15680.	1.6	5
10	Triple Function Lubricant Additives Based on Organicâ€“Inorganic Hybrid Star Polymers: Friction Reduction, Wear Protection, and Viscosity Modification. ACS Applied Materials & Interfaces, 2019, 11, 1363-1375.	4.0	31
11	Time-Dependent Physicochemical Changes of Carbonate Surfaces from SmartWater (Diluted Seawater) Flooding Processes for Improved Oil Recovery. Langmuir, 2019, 35, 41-50.	1.6	19
12	Surface chemical heterogeneity modulates silica surface hydration. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2890-2895.	3.3	105
13	Ultraâ€Smooth, Chemically Functional Silica Surfaces for Surface Interaction Measurements and Optical/Interferometryâ€Based Techniques. Advanced Engineering Materials, 2018, 20, 1700630.	1.6	6
14	Isothermal Stimulation of Mineral Dissolution Processes by Acoustic Perturbation. Journal of Physical Chemistry C, 2018, 122, 28665-28673.	1.5	10
15	Characterizing Dynamic, High-Frequency Friction in Lubricating Complex-Fluid Thin Films Between Viscoelastic Surfaces. Tribology Letters, 2018, 66, 1.	1.2	1
16	Modulation of Hydrophobic Interaction by Mediating Surface Nanoscale Structure and Chemistry, not Monotonically by Hydrophobicity. Angewandte Chemie, 2018, 130, 12079-12084.	1.6	16
17	Modulation of Hydrophobic Interaction by Mediating Surface Nanoscale Structure and Chemistry, not Monotonically by Hydrophobicity. Angewandte Chemie - International Edition, 2018, 57, 11903-11908.	7.2	62
18	Role of Electrochemical Surface Potential and Irradiation on Garnet-Type Almandineâ€™s Dissolution Kinetics. Journal of Physical Chemistry C, 2018, 122, 17268-17277.	1.5	15

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19	Rates of cavity filling by liquids. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8070-8075.	3.3	21
20	Simple-to-Apply Wetting Model to Predict Thermodynamically Stable and Metastable Contact Angles on Textured/Rough/Patterned Surfaces. Journal of Physical Chemistry C, 2017, 121, 5642-5656.	1.5	64
21	Tuning underwater adhesion with cationâ€“Ï€ interactions. Nature Chemistry, 2017, 9, 473-479.	6.6	239
22	Surface Forces and Nanorheology of Molecularly Thin Films. , 2017, , 457-518.		8
23	Influence of Humidity on Grip and Release Adhesion Mechanisms for Gecko-Inspired Microfibrillar Surfaces. ACS Applied Materials & Interfaces, 2017, 9, 14497-14505.	4.0	34
24	Long range electrostatic forces in ionic liquids. Chemical Communications, 2017, 53, 1214-1224.	2.2	285
25	Toughening elastomers using mussel-inspired iron-catechol complexes. Science, 2017, 358, 502-505.	6.0	505
26	Duplicating Dynamic Strain-Stiffening Behavior and Nanomechanics of Biological Tissues in a Synthetic Self-Healing Flexible Network Hydrogel. ACS Nano, 2017, 11, 11074-11081.	7.3	105
27	In situ nano- to microscopic imaging and growth mechanism of electrochemical dissolution (e.g.,) Tj ETQq1 1 0.784314 rgBT /Overloc United States of America, 2017, 114, 9541-9546.	3.3	23
28	Effects of Salinity on Oil Recovery (the â€œDilution Effectâ€): Experimental and Theoretical Studies of Crude Oil/Brine/Carbonate Surface Restructuring and Associated Physicochemical Interactions. Energy & Fuels, 2017, 31, 8925-8941.	2.5	69
29	Contact Angle and Adhesion Dynamics and Hysteresis on Molecularly Smooth Chemically Homogeneous Surfaces. Langmuir, 2017, 33, 10041-10050.	1.6	15
30	Significant Performance Enhancement of Polymer Resins by Bioinspired Dynamic Bonding. Advanced Materials, 2017, 29, 1703026.	11.1	63
31	Surface Forces and Nanorheology of Molecularly Thin Films. Springer Handbooks, 2017, , 935-985.	0.3	3
32	Simple peptide coacervates adapted for rapid pressure-sensitive wet adhesion. Soft Matter, 2017, 13, 9122-9131.	1.2	29
33	Adhesion and Detachment Mechanisms between Polymer and Solid Substrate Surfaces: Using Polystyreneâ€“Mica as a Model System. Macromolecules, 2016, 49, 5223-5231.	2.2	54
34	An Underwater Surfaceâ€Drying Peptide Inspired by a Mussel Adhesive Protein. Advanced Functional Materials, 2016, 26, 3496-3507.	7.8	163
35	Communication: Contrasting effects of glycerol and DMSO on lipid membrane surface hydration dynamics and forces. Journal of Chemical Physics, 2016, 145, 041101.	1.2	40
36	Surface force measurements and simulations of mussel-derived peptide adhesives on wet organic surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4332-4337.	3.3	77

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37	Correlated Diffusivities, Solubilities, and Hydrophobic Interactions in Ternary Polydimethylsiloxaneâ€“Waterâ€“Tetrahydrofuran Mixtures. Macromolecules, 2016, 49, 6910-6917.	2.2	14
38	Defining the Catecholâ€“Cation Synergy for Enhanced Wet Adhesion to Mineral Surfaces. Journal of the American Chemical Society, 2016, 138, 9013-9016.	6.6	157
39	Interaction Forces between Supported Lipid Bilayers in the Presence of PEGylated Polymers. Biomacromolecules, 2016, 17, 88-97.	2.6	11
40	Î±,Î²-Dehydro-Dopa: A Hidden Participant in Mussel Adhesion. Biochemistry, 2016, 55, 743-750.	1.2	35
41	Time-Dependent Wetting Behavior of PDMS Surfaces with Bioinspired, Hierarchical Structures. ACS Applied Materials & Interfaces, 2016, 8, 8168-8174.	4.0	67
42	Peptide Length and Dopa Determine Ironâ€Mediated Cohesion of Mussel Foot Proteins. Advanced Functional Materials, 2015, 25, 5840-5847.	7.8	34
43	Real-time intermembrane force measurements and imaging of lipid domain morphology during hemifusion. Nature Communications, 2015, 6, 7238.	5.8	24
44	Hydrophobic, Electrostatic, and Dynamic Polymer Forces at Silicone Surfaces Modified with Long-Chain Bolaform Surfactants. Small, 2015, 11, 2058-2068.	5.2	4
45	Long-range electrostatic screening in ionic liquids. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7432-7437.	3.3	214
46	Mussel adhesive protein provides cohesive matrix for collagen type-1Î±. Biomaterials, 2015, 51, 51-57.	5.7	38
47	Bridging Adhesion of Mussel-Inspired Peptides: Role of Charge, Chain Length, and Surface Type. Langmuir, 2015, 31, 1105-1112.	1.6	78
48	Stickâ€“slip friction of gecko-mimetic flaps on smooth and rough surfaces. Journal of the Royal Society Interface, 2015, 12, 20141346.	1.5	35
49	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.	7.3	164
50	Interfacial pH during mussel adhesive plaque formation. Biofouling, 2015, 31, 221-227.	0.8	112
51	Adaptive synergy between catechol and lysine promotes wet adhesion by surface salt displacement. Science, 2015, 349, 628-632.	6.0	557
52	Effects of Surfactants and Polyelectrolytes on the Interaction between a Negatively Charged Surface and a Hydrophobic Polymer Surface. Langmuir, 2015, 31, 8013-8021.	1.6	14
53	Microphase Behavior and Enhanced Wet-Cohesion of Synthetic Copolyampholytes Inspired by a Mussel Foot Protein. Journal of the American Chemical Society, 2015, 137, 9214-9217.	6.6	125
54	Tough Coating Proteins: Subtle Sequence Variation Modulates Cohesion. Biomacromolecules, 2015, 16, 1002-1008.	2.6	19

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55	Nanofibers: Clumping Criteria of Vertical Nanofibers on Surfaces (Adv. Mater. Interfaces 5/2015). Advanced Materials Interfaces, 2015, 2, .	1.9	1
56	Real-Time Monitoring of Aluminum Crevice Corrosion and Its Inhibition by Vanadates with Multiple Beam Interferometry in a Surface Forces Apparatus. Journal of the Electrochemical Society, 2015, 162, C327-C332.	1.3	16
57	Adsorption Mechanism of Myelin Basic Protein on Model Substrates and Its Bridging Interaction between the Two Surfaces. Langmuir, 2015, 31, 3159-3166.	1.6	20
58	Clumping Criteria of Vertical Nanofibers on Surfaces. Advanced Materials Interfaces, 2015, 2, 1400466.	1.9	14
59	High-performance mussel-inspired adhesives of reduced complexity. Nature Communications, 2015, 6, 8663.	5.8	245
60	On the conformational state of molecules in molecularly thin shearing films. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4973.	3.3	9
61	Correlating steric hydration forces with water dynamics through surface force and diffusion NMR measurements in a lipidâ€“DMSOâ€“H ₂ O system. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10708-10713.	3.3	32
62	Mussel Coating Protein-Derived Complex Coacervates Mitigate Frictional Surface Damage. ACS Biomaterials Science and Engineering, 2015, 1, 1121-1128.	2.6	33
63	Developing a General Interaction Potential for Hydrophobic and Hydrophilic Interactions. Langmuir, 2015, 31, 2051-2064.	1.6	188
64	Shearâ€Induced Aggregation of Mammalian Synovial Fluid Components under Boundary Lubrication Conditions. Advanced Functional Materials, 2014, 24, 3152-3161.	7.8	43
65	A multi-axis confocal rheoscope for studying shear flow of structured fluids. Review of Scientific Instruments, 2014, 85, 033905.	0.6	36
66	Biomimetic Bidirectional Switchable Adhesive Inspired by the Gecko. Advanced Functional Materials, 2014, 24, 574-579.	7.8	86
67	Lipid domains control myelin basic protein adsorption and membrane interactions between model myelin lipid bilayers. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E768-75.	3.3	52
68	Adhesion and Surface Interactions of a Selfâ€Healing Polymer with Multiple Hydrogenâ€Bonding Groups. Advanced Functional Materials, 2014, 24, 2322-2333.	7.8	202
69	Effects of molecular weight of grafted hyaluronic acid on wear initiation. Acta Biomaterialia, 2014, 10, 1817-1823.	4.1	34
70	Surface-initiated self-healing of polymers in aqueous media. Nature Materials, 2014, 13, 867-872.	13.3	414
71	A mussel-derived one component adhesive coacervate. Acta Biomaterialia, 2014, 10, 1663-1670.	4.1	182
72	Adhesives: Biomimetic Bidirectional Switchable Adhesive Inspired by the Gecko (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	7.8	7

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73	Boronate Complex Formation with Dopa Containing Mussel Adhesive Protein Retards pH-Induced Oxidation and Enables Adhesion to Mica. PLoS ONE, 2014, 9, e108869.	1.1	51
74	Recent advances in gecko adhesion and friction mechanisms and development of gecko-inspired dry adhesive surfaces. Friction, 2013, 1, 114-129.	3.4	137
75	Hydrophobic Enhancement of Dopa-Mediated Adhesion in a Mussel Foot Protein. Journal of the American Chemical Society, 2013, 135, 377-383.	6.6	218
76	Asymmetric Electrostatic and Hydrophobicâ€“Hydrophilic Interaction Forces between Mica Surfaces and Silicone Polymer Thin Films. ACS Nano, 2013, 7, 10094-10104.	7.3	65
77	The Intersection of Interfacial Forces and Electrochemical Reactions. Journal of Physical Chemistry B, 2013, 117, 16369-16387.	1.2	15
78	Interactions and visualization of bio-mimetic membrane detachment at smooth and nano-rough gold electrode surfaces. Soft Matter, 2013, 9, 5231.	1.2	16
79	Simulation of edge facilitated adsorption and critical concentration induced rupture of vesicles at a surface. Soft Matter, 2013, 9, 8420.	1.2	14
80	Dynamics of force generation by confined actin filaments. Soft Matter, 2013, 9, 2389.	1.2	6
81	Synergistic Interactions between Grafted Hyaluronic Acid and Lubricin Provide Enhanced Wear Protection and Lubrication. Biomacromolecules, 2013, 14, 1669-1677.	2.6	133
82	Peeling of a tape with large deformations and frictional sliding. Journal of the Mechanics and Physics of Solids, 2013, 61, 1265-1279.	2.3	69
83	Adhesion of Mussel Foot Protein-3 to TiO₂ Surfaces: the Effect of pH. Biomacromolecules, 2013, 14, 1072-1077.	2.6	213
84	Brief History of Intermolecular and Intersurface Forces in Complex Fluid Systems. Langmuir, 2013, 29, 9605-9619.	1.6	21
85	Stick-slip friction and wear of articular joints. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E567-74.	3.3	84
86	JKR Theory for the Stickâ€“Slip Peeling and Adhesion Hysteresis of Gecko Mimetic Patterned Surfaces with a Smooth Glass Surface. Langmuir, 2013, 29, 15006-15012.	1.6	24
87	Interaction of adsorbed polymers with supported cationic bilayers. RSC Advances, 2013, 3, 20405.	1.7	12
88	Adhesion of mussel foot proteins to different substrate surfaces. Journal of the Royal Society Interface, 2013, 10, 20120759.	1.5	258
89	Adaptive hydrophobic and hydrophilic interactions of mussel foot proteins with organic thin films. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15680-15685.	3.3	242
90	Ionic liquids behave as dilute electrolyte solutions. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9674-9679.	3.3	345

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91	Antioxidant efficacy and adhesion rescue by a recombinant mussel foot proteinâ€6. Biotechnology Progress, 2013, 29, 1587-1593.	1.3	28
92	The Electrochemical Surface Forces Apparatus: The Effect of Surface Roughness, Electrostatic Surface Potentials, and Anodic Oxide Growth on Interaction Forces, and Friction between Dissimilar Surfaces in Aqueous Solutions. Langmuir, 2012, 28, 13080-13093.	1.6	108
93	Adhesion of Mussel Foot Protein Mefp-5 to Mica: An Underwater Superglue. Biochemistry, 2012, 51, 6511-6518.	1.2	194
94	Origin of the Contact Angle Hysteresis of Water on Chemisorbed and Physisorbed Self-Assembled Monolayers. Langmuir, 2012, 28, 14609-14617.	1.6	68
95	Hydrophobic Forces, Electrostatic Steering, and Acidâ€"Base Bridging between Atomically Smooth Self-Assembled Monolayers and End-Functionalized PEGolated Lipid Bilayers. Journal of the American Chemical Society, 2012, 134, 1746-1753.	6.6	47
96	Friction and Adhesion of Gecko-Inspired PDMS Flaps on Rough Surfaces. Langmuir, 2012, 28, 11527-11534.	1.6	68
97	The Boundary Lubrication of Chemically Grafted and Cross-Linked Hyaluronic Acid in Phosphate Buffered Saline and Lipid Solutions Measured by the Surface Forces Apparatus. Langmuir, 2012, 28, 2244-2250.	1.6	75
98	Adhesion and hemifusion of cytoplasmic myelin lipid membranes are highly dependent on the lipid composition. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 402-410.	1.4	28
99	Adhesion mechanism in a DOPA-deficient foot protein from green mussels. Soft Matter, 2012, 8, 5640.	1.2	116
100	Measurements of Anisotropic (Offâ€Axis) Frictionâ€Induced Motion. Advanced Materials, 2012, 24, 5236-5241.	11.1	20
101	Mussel protein adhesion depends on interprotein thiol-mediated redox modulation. Nature Chemical Biology, 2011, 7, 588-590.	3.9	378
102	Surface-Induced Patterns from Evaporating Droplets of Aqueous Carbon Nanotube Dispersions. Langmuir, 2011, 27, 7163-7167.	1.6	42
103	Pressure solution â€" The importance of the electrochemical surface potentials. Geochimica Et Cosmochimica Acta, 2011, 75, 6882-6892.	1.6	75
104	Measurement and Characterization of â€œResonance Frictionâ€•at High Sliding Speeds in a Model Automotive Wet Clutch. Tribology Letters, 2011, 43, 185-195.	1.2	6
105	Geckoâ€Inspired Dry Adhesive for Robotic Applications. Advanced Functional Materials, 2011, 21, 3010-3018.	7.8	127
106	Microtribology of Aqueous Carbon Nanotube Dispersions. Advanced Functional Materials, 2011, 21, 4555-4564.	7.8	34
107	Effects of Interfacial Redox in Mussel Adhesive Protein Films on Mica. Advanced Materials, 2011, 23, 2362-2366.	11.1	145
108	Effect of Surface Roughness and Electrostatic Surface Potentials on Forces Between Dissimilar Surfaces in Aqueous Solution. Advanced Materials, 2011, 23, 2294-2299.	11.1	61

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109	Adaptive mechanically controlled lubrication mechanism found in articular joints. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5255-5259.	3.3	200
110	Millimeter size patch behavior of gecko-inspired reversible adhesive. , 2011, , .		2
111	Surface Forces and Nanorheology of Molecularly Thin Films. , 2011, , 107-202.		22
112	The Contribution of DOPA to Substrateâ€“Peptide Adhesion and Internal Cohesion of Musselâ€Inspired Synthetic Peptide Films. Advanced Functional Materials, 2010, 20, 4196-4205.	7.8	314
113	Liquid- to Solid-Like Failure Mechanism of Thin Polymer Films at Micro- and Nanoscales. Macromolecules, 2010, 43, 538-542.	2.2	19
114	Viscosity and interfacial properties in a mussel-inspired adhesive coacervate. Soft Matter, 2010, 6, 3232.	1.2	212
115	Direct Measurement of Double-Layer, van der Waals, and Polymer Depletion Attraction Forces between Supported Cationic Bilayers. Langmuir, 2010, 26, 14458-14465.	1.6	24
116	Surface Forces and Nanorheology of Molecularly Thin Films. , 2010, , 857-922.		10
117	Interaction forces and adhesion of supported myelin lipid bilayers modulated by myelin basic protein. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3154-3159.	3.3	135
118	Friction at the Liquid/Liquid Interface of Two Immiscible Polymer Films. Langmuir, 2009, 25, 4954-4964.	1.6	30
119	Formation of Supported Bilayers on Silica Substrates. Langmuir, 2009, 25, 6997-7005.	1.6	204
120	Role of electrochemical reactions in pressure solution. Geochimica Et Cosmochimica Acta, 2009, 73, 2862-2874.	1.6	63
121	Gecko adhesion pad: a smart surface?. Journal of Physics Condensed Matter, 2009, 21, 464132.	0.7	72
122	Role of Tilted Adhesion Fibrils (Setae) in the Adhesion and Locomotion of Gecko-like Systems. Journal of Physical Chemistry B, 2009, 113, 3615-3621.	1.2	70
123	The Crowding Model as a Tool to Understand and Fabricate Gecko-Inspired Dry Adhesives. Journal of Adhesion, 2009, 85, 512-525.	1.8	18
124	Frictional Adhesion of Patterned Surfaces and Implications for Gecko and Biomimetic Systems. Langmuir, 2009, 25, 7486-7495.	1.6	75
125	The role of interparticle and external forces in nanoparticle assembly. , 2009, , 38-49.		14
126	Changes in pore morphology and fluid transport in compressed articular cartilage and the implications for joint lubrication. Biomaterials, 2008, 29, 4455-4462.	5.7	44

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127	The role of interparticle and external forces in nanoparticle assembly. Nature Materials, 2008, 7, 527-538.	13.3	1,049
128	Surface Forces and Nanorheology of Molecularly Thin Films. , 2008, , 417-515.		10
129	New SFA Techniques for Studying Surface Forces and Thin Film Patterns Induced by Electric Fields. Langmuir, 2008, 24, 1173-1182.	1.6	48
130	Adhesion and Friction Force Coupling of Gecko Setal Arrays:â€‰ Implications for Structured Adhesive Surfaces. Langmuir, 2008, 24, 1517-1524.	1.6	106
131	3D Force and Displacement Sensor for SFA and AFM Measurements. Langmuir, 2008, 24, 1541-1549.	1.6	36
132	Frictional Properties of Surfactant-Coated Rod-Shaped Nanoparticles in Dry and Humid Dodecane. Journal of Physical Chemistry B, 2008, 112, 14395-14401.	1.2	25
133	Molecular Aspects of Boundary Lubrication by Human Lubricin:â€‰ Effect of Disulfide Bonds and Enzymatic Digestion. Langmuir, 2008, 24, 1495-1508.	1.6	120
134	Peel-Zone Model of Tape Peeling Based on the Gecko Adhesive System. Journal of Adhesion, 2007, 83, 383-401.	1.8	159
135	Adhesion mechanisms of the mussel foot proteins mfp-1 and mfp-3. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3782-3786.	3.3	471
136	Transient filamentous network structure of a colloidal suspension excited by stepwise electric fields. Physical Review E, 2007, 75, 011409.	0.8	6
137	Transient surface patterns during adhesion and coalescence of thin liquid films. Soft Matter, 2007, 3, 88-93.	1.2	26
138	Transient Interfacial Patterns and Instabilities Associated with Liquid Film Adhesion and Spreading. Langmuir, 2007, 23, 6126-6135.	1.6	17
139	Forces between Surfaces across Nanoparticle Solutions:Â Role of Size, Shape, and Concentration. Langmuir, 2007, 23, 3961-3969.	1.6	47
140	Transient Surface Patterns and Instabilities at Adhesive Junctions of Viscoelastic Films. Macromolecules, 2007, 40, 8409-8422.	2.2	34
141	Adsorption, Lubrication, and Wear of Lubricin on Model Surfaces: Polymer Brush-Like Behavior of a Glycoprotein. Biophysical Journal, 2007, 92, 1693-1708.	0.2	273
142	Role of nanometer roughness on the adhesion and friction of a rough polymer surface and a molecularly smooth mica surface. Tribology Letters, 2007, 26, 191-201.	1.2	79
143	Surface Forces and Nanorheology of Molecularly Thin Films. , 2007, , 859-924.		10
144	Limit Cycles in Dynamic Adhesion and Friction Processes: A Discussion. Journal of Adhesion, 2006, 82, 933-943.	1.8	31

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145	Adhesion and friction in gecko toe attachment and detachment. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19320-19325.	3.3	546
146	Experimental investigation of the dissolution of quartz by a muscovite mica surface: Implications for pressure solution. Journal of Geophysical Research, 2006, 111, .	3.3	33
147	Comment on Reassessment of Solidification in Fluids Confined between Mica Sheets. Langmuir, 2006, 22, 2397-2398.	1.6	21
148	Adhesion and Friction of Polystyrene Surfaces aroundTg. Macromolecules, 2006, 39, 2350-2363.	2.2	75
149	The Deformation and Adhesion of Randomly Rough and Patterned Surfaces. Journal of Physical Chemistry B, 2006, 110, 11884-11893.	1.2	124
150	Confined fluids and their role in pressure solution. Chemical Geology, 2006, 230, 220-231.	1.4	33
151	Friction and tribochemical reactions occurring at shearing interfaces of nanothin silver films on various substrates. Journal of Chemical Physics, 2006, 124, 174703.	1.2	20
152	Adhesion and detachment mechanisms of sugar surfaces from the solid (glassy) to liquid (viscous) states. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19624-19629.	3.3	16
153	Differences between non-specific and bio-specific, and between equilibrium and non-equilibrium, interactions in biological systems. Quarterly Reviews of Biophysics, 2005, 38, 331-337.	2.4	28
154	Static Forces, Structure and Flow Properties of Complex Fluids in Highly Confined Geometries. Annals of Biomedical Engineering, 2005, 33, 39-51.	1.3	33
155	Effects of Sub-Ã¥ngstrom (pico-scale) Structure of Surfaces on Adhesion, Friction, and Bulk Mechanical Properties. Journal of Materials Research, 2005, 20, 1952-1972.	1.2	52
156	Adhesion and Friction of Polymer Surfaces:Â The Effect of Chain Ends. Macromolecules, 2005, 38, 3491-3503.	2.2	107
157	Crystallization in Thin Liquid Films Induced by Shear. Journal of Physical Chemistry B, 2005, 109, 12509-12514.	1.2	19
158	Large Deformations during the Coalescence of Fluid Interfaces. Physical Review Letters, 2004, 92, 024501.	2.9	41
159	The nonlinear nature of friction. Nature, 2004, 430, 525-528.	13.7	610
160	Lubrication and wear properties of grafted polyelectrolytes, hyaluronan and hylan, measured in the surface forces apparatus. Journal of Biomedical Materials Research Part B, 2004, 71A, 6-15.	3.0	126
161	Fundamental studies of crude oilâ€“surface water interactions and its relationship to reservoir wettability. Journal of Petroleum Science and Engineering, 2004, 45, 61-81.	2.1	147
162	Preparing Contamination-free Mica Substrates for Surface Characterization, Force Measurements, and Imaging. Langmuir, 2004, 20, 3616-3622.	1.6	66

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163	Correlation of AFM and SFA Measurements Concerning the Stability of Supported Lipid Bilayers. Biophysical Journal, 2004, 86, 870-879.	0.2	68
164	Thickness and refractive index measurements using multiple beam interference fringes (FECO). Journal of Colloid and Interface Science, 2003, 264, 548-553.	5.0	33
165	Adhesion and coalescence of ductile metal surfaces and nanoparticles. Acta Materialia, 2003, 51, 31-47.	3.8	56
166	Normal and Shear Forces between Mica and Model Membrane Surfaces with Adsorbed Hyaluronan. Macromolecules, 2003, 36, 9519-9526.	2.2	54
167	Forces and ionic transport between mica surfaces: implications for pressure solution. Geochimica Et Cosmochimica Acta, 2003, 67, 1289-1304.	1.6	137
168	Shear alignment of confined hydrocarbon liquid films. Physical Review E, 2002, 66, 011705.	0.8	41
169	The x-ray surface forces apparatus for simultaneous x-ray diffraction and direct normal and lateral force measurements. Review of Scientific Instruments, 2002, 73, 2486-2488.	0.6	22
170	Effects of Large Load and Shear Rate Variations on the Friction of a Branched Hydrocarbon Liquid. Materials Research Society Symposia Proceedings, 2002, 750, 1.	0.1	0
171	Evidence for van der Waals adhesion in gecko setae. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12252-12256.	3.3	1,617
172	Debye Length and Double-Layer Forces in Polyelectrolyte Solutions. Macromolecules, 2002, 35, 2380-2388.	2.2	93
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