



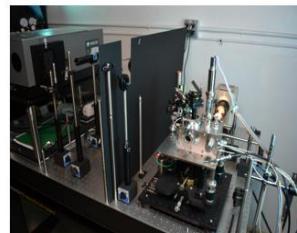
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This Document is intended to provide a sampling of SFA (Surface Forces Apparatus) related publications and attempts to correlate a given reference to the SFA 2000 configuration that was used or could have been used to perform work cited based on an older SFA model. The SFA configuration (orange columns) are subdivided by Top Mounts which host the upper SFA surface and attaches to the top of the SFA Main Chamber, and Bottom Mounts which host the lower SFA surface and reside inside the SFA Main Chamber. Also shown is an approximate categorization (green columns) of the type of work performed in each reference. The excel version of the file has an additional column with links to each paper.

Please feel free to contact me- I'm sure we can configure our SFA systems to meet your research needs.

Jeff Scott  
CEO SurForce LLC



Reference							SFA2000 equipment explicitly used 'X' or attachments needed to perform similar experiments 'O' in an SFA2000 System.							Topics of Interest																
							Top Mounts			Bottom Mounts																				
Title	Authors (Short Form)	Authors	Journal	Year	Vol (#) Pgs	Paper Hyperlink	Background Reference	SFA Review (Technique or hardware)	Piezoelectric Att.	Friction Device Att.	Electrochemical (EC) Top Mount Att.	3D Actuator / Sensor Att.	Main Translation Stage Att.	High-Speed Rotating Disk Att.	Bimorph Vibrator Att.	1D Bimorph Slider Att.	Viscosity of liquids	Simulations/Modeling	Biological/Molecular	Colloids	Ionic Liquids	Cavitation	Polymers near Tg	Polymers / Polymer Brushes	Friction & Lubrication	Instability / Patterns	Adhesion	Temperature Effects	Pressure Solution / Dissolution	non-FEO Friction / Adhesion
Understanding the surface properties and rheology of a silica suspension mediated by a comb-type poly(acrylic acid)/poly(ethylene oxide) (PAA/PEO) copolymer: effect of salinity	DingZheng Yang, et al.	D. Yang, B. Yan, L. Xiang, H. Xu, X. Wang and H. Zeng	Soft Matter	2018	14 () 4810-4819	<a href="#">link</a>		X					X										X							
Protein-Resistant Property of Egg White Ovomucin under Different pHs and Ionic Strengths	X. Sun, et al.	X. Sun, J. Huang, Hongbo Zeng, , and Jianping Wu	J. Agric. Food Chem.,	2018	in press	<a href="#">link</a>		X					X							X	X									
Surface chemical heterogeneity modulates silica surface hydration	A. Shrader, et al.	Alex M. Shrader, J. Monroe, R. Shell, H. Dobbs, T. Keller, Y. Li, S. Jain, M. S. Shell, J. N. Israelachvili, and S. Han	PNAS	2018	115 (12) 2890-2895	<a href="#">link</a>		X					X													X				
Friction forces of saliva and red wine on hydrophobic and hydrophilic surfaces	Waterlot & Kuhl	Aude A. Waterlot, Tonya L. Kuhl, Andrew L. Waterhouse	Food Research International	2018	in press	<a href="#">link</a>			X								X		X						X					
Multivalent ions induce lateral structural inhomogeneities in polyelectrolyte brushes	Jing, et al.	Jing Yu, Nicholas Jackson, Xin Xu, Blair Buttman, Marina Ruths, Juan de Pablo, Matthew Tirrell	Science Advances	2017	3 (12) eaao1497	<a href="#">link</a>		X					X							X		X	X		X					
Tuning underwater adhesion with cation-π interactions	Gebbie, et al.	M. Gebbie, W. Wei, A. Schrader, T. Cristiani, H. Dobbs, M. Idso, B. Chmelka, J. H. Waite, R. Mittal, M. Rutland, M. Sorkin, B. Atkin, J. Israelachvili, and Joan-Emma	Nature Chemistry	2017	9 () 473-479	<a href="#">link</a>		X					X								X					X				
Long range electrostatic forces in ionic liquids: controversies and opportunities	Gebbie, et al.	M. Gebbie, A. Smith, H. Dobbs, A. Lee, G. Warr, X. Banquy, M. Valtiner, M. Rutland, M. Sorkin, B. Atkin, J. Israelachvili, and Joan-Emma	Chem. Commun.	2017	53 (7) 1214-1224	<a href="#">link</a>		X					X									X								
Surface force measurements and simulations of mussel-derived peptide adhesives on wet organic surfaces	Z. Levine, et al.	Z. Levine, M. Rapp, W. Wei, R. Muller, C. Wu, G. H. Zerze, J. Mittal, J. H. Waite, J. N. Israelachvili, and Joan-Emma	PNAS	2016	113 (16) 4332-4337	<a href="#">link</a>		X					X							X	X					X				
Probing Molecular Interactions of Asphaltenes in Heptol Using a Surface Forces Apparatus: Implications on Stability of Water-in-Oil Emulsions	Ling Zhang, et al.	Ling Zhang, Chen Shih, Qingye Lu, Qingya Liu, and Hongbo Zeng	Langmuir	2016	32 (19) 4886-4895	<a href="#">link</a>		X					X												X					
Analyzing refractive index profiles of confined fluids by interferometry part II: Multilayer and asymmetric systems	Kienle , et al.	Daniel F. Kienle, Tonya L. Kuhl	Analytica Chimica Acta	2016	936 () 236-244	<a href="#">link</a>	X	X	X				X						X											
On the conformational state of molecules in molecularly thin shearing films	Israelachvili & Drummond	J.N. Israelachvili, C. Drummond	PNAS	2015	(36) E4973	<a href="#">link</a>	X	X																						
Real-Time Monitoring of Aluminum Crevice Corrosion and Its Inhibition by Vanadates with MBI in a SFA	Shrestha et al.	B. Shrestha, Q. Hu, T. Baimpos, K. Kristiansen, J.N. Israelachvili, M. Valtiner	J. Electrochemical Soc.	2015	162 (7) C327-C332	<a href="#">link</a>			X					X												X				
Real-time MBI reveals complex deformations of metal-organic-framework upon humidity	Baimpos et al.	T. Baimpos, B. Shrestha, Q. Hu, G. Genchev, M. Valtiner	J. Phys. Chem. C	2015	119 () 16769-16776	<a href="#">link</a>		X					X													X				
Surface-initiated self-healing of polymers in aqueous media	Ahn, K et al.	B. Kolbe Ahn, Dong Woog Lee, J. N. Israelachvili, J. H. Waite	Nature Materials	2014	13 () 867-872	<a href="#">link</a>		X					X			X					X						X			
Analyzing refractive index profiles of confined fluids by interferometr	Kienle & Kuhl	D. Kienle, T. Kuhl	Analytical Chem.	2014	86 () 11860-11867	<a href="#">link</a>	X	X	X				X			X				X										
Ionic liquids behave as dissociable polar liquids	M. Gebbie et al.	Matthew A. Gebbie, Markus Valtiner, Xavier Banquy, Eric Fox, Wesley A. Henderson and Jacob N. Israelachvili	PNAS	2013	110 (24) 9674-9679	<a href="#">link</a>			X		X		X		X						X									
Surface Forces and Nanomechanics of Molecularly Thin Films	RM. uths et al.	Marina Ruths and Jacob N. Israelachvili	Nanotribology & Nanomechanics II	2011	Part 1 () 107-202	<a href="#">link</a>	X		X				X			X			X		X	X	X	X	X	X	X			
Measurement and characterization of 'resonance friction' at high sliding speeds in a model automotive wet clutch	X. Banquy et al.	Xavier Banquy, Daniel D. Lowrey, Nataly Belman, Younjin Min, Gregory Mordukovich, Jacob N. Israelachvili	Tribology Letters	2011	43 (2) 185-195	<a href="#">link</a>							X		X										X					
Adaptive mechanically controlled lubrication mechanism found in articular joints	G. Greene et al.	George W. Greene, Xavier Banquy, Dong Woog Lee, Daniel D. Lowrey, Jing Yu, and Jacob N. Israelachvili	PNAS	2011	108 (13) 5255-5259	<a href="#">link</a>			X	X			X		X		X			X						X				
High-Speed Friction Measurements Using a Modified Surface Forces Apparatus	D. Lowrey et al.	D. D. Lowrey, K. Tasaka, J. H. Kindt, X. Banquy, N. Belman, Y. Min, N. S. Pesika, G. Mordukovich, J. N. Israelachvili	Tribology Letters	2011	42 () 117-127	<a href="#">link</a>							X		X		X								X					
Design Rules for Biomolecular Adhesion: Lessons from Force Measurements	D. Leckband	Deborah Leckband	Annual Review of Chemical and Biomolecular Engineering	2010	1 () 365-389	<a href="#">link</a>	X													X						X				



Elucidating the intersection of interfacial forces and (electro)chemical reactions	J. Israelachvili et al.	Jacob Israelachvili, Kai Kristiansen, Matthew Gebbie, Dong Woog Lee, Stephen Donaldson, Saurabh Das, Michael Rapp, Xavier Banquy, Markus Valtiner, Jing Yu	J. Phys. Chem. B	2013	(51) 16369-16387	<a href="#">link</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Brushes of strong polyelectrolytes in mixed mono- and tri-valent ionic media at fixed total ionic strengths	R. Farina et al.	Farina, Robert, Laugel, Nicolas; Pincus, Philip, Tirrell, Matt	Soft Matter	2013	9 (44) 10458-10472	<a href="#">link</a>			X	X								X				
Nanomechanics of Cation-pi Interactions in Aqueous Solution	L. Qingye et al.	Lu Qingye, D.X. Oh, Youjinng Lee; Yongseok Iho, Dong Soo Hwang, Hongbo Zeng	Angewandte Chemie International Edition	2013	52 (14) 3944-3948	<a href="#">link</a>		X		X							?					
Normal and shear interactions between high grafting density polymer brushes grown by atom transfer radical polymerization	W. Liao et al.	Wei-Po Liao, Ian G. Elliott, Roland Faller, Tonya Kuhl, Suzanne M., Balko, Torsten Kreer, Philip J Costanzo, T.E. Patten, A. Johner, T.L. Kuhl, C.M. Marques	Soft Matter	2013	9 (24) 5753-5761	<a href="#">link</a>		X	X					X					X			
Polymer Brushes under High Load	S. Balko et al.	Balko, Torsten Kreer, Philip J Costanzo, T.E. Patten, A. Johner, T.L. Kuhl, C.M. Marques	PLOS ONE	2013	8 (3) e58392	<a href="#">link</a>	X	X			X								X			
Measurements of anisotropic (off-axis) friction-induced motion	K. Kristiansen et al.	Kai Kristiansen, Xavier Banquy, Hongbo Zeng, Eric Charraut, Suzanne Giasson, Jacob Israelachvili	Advanced Materials	2012	24 (38) 5236-5241	<a href="#">link</a>	X				X								X			
Friction at the liquid/liquid interface of two immiscible polymer films	H. Zeng et al.	Hongbo Zeng, Yu Tian, Boxin Zhao, Matthew Tirrell, Jacob Israelachvili	Langmuir	2009	25 (9) 4954-4964	<a href="#">link</a>			X					X	X			X	X			
Contact mechanics with adhesion: Interfacial separation and contact area	C. Yang et al.	C. Yang, B. N. J. Persson, J. Israelachvili, K. Rosenberg	Europhysics Letters	2008	84 () 46004 1-5	<a href="#">link</a>	X													X		
3D Force and Displacement Sensor for SFA and AFM measurements	K. Kristiansen et al.	Kai Kristiansen, Patricia McGuigan, Greg Carver, Carl Meinhart, Jacob Israelachvili	Langmuir	2008	24 (4) 1541-1549	<a href="#">link</a>	X	X			X			X					X	X		
Transient Surface Patterns and Instabilities at Adhesive Junctions of Viscoelastic Films	H. Zeng et al.	Zeng, H.; Tian, Y.; Zhao, B.; Tirrell, M., Israelachvili, J	Macromolecules	2007	40 (23) 8409-8422	<a href="#">link</a>		X			X			X					X	X	X	
Friction studies of polymer lubricated surfaces	P. McGuiggan et al.	Patricia McGuigan, Michelle Gee, Hisae Yoshizawa, Susan Hirz, J. Israelachvili	Macromolecules	2007	40 () 2126-2133	<a href="#">link</a>		X	X					X					X	X	X	
Role of nanometer roughness on the adhesion and friction of a rough polymer surface and a molecularly smooth mica surface	B. Zappone et al.	Bruno Zappone, Kenny Rosenberg, Jacob Israelachvili	Tribology Letters	2007	26 191-201	<a href="#">link</a>		O			O		O						X	X	X	
Transient surface patterns during adhesion and coalescence of thin liquid films	H. Zeng et al.	Hongbo Zeng, Boxin Zhao, Yu Tian, Matthew Tirrell, L. Gary Leal, Jacob Israelachvili	Soft Matter	2007	3 () 88-93	<a href="#">link</a>		X			X								X	X	X	
Adhesion and detachment mechanisms of sugar surfaces from the solid (glassy) to liquid (viscous) states	B. Zhao et al.	Boxin Zhao, Hongbo Zeng, Yu Tian, Jacob Israelachvili	PNAS	2006	103 () 19624-19629	<a href="#">link</a>		X			X							X	X		X	
Limit cycles in dynamic adhesion and friction processes: a discussion	H. Zeng et al.	Hongbo Zeng, Matthew Tirrell, Jacob Israelachvili	Journal of Adhesion	2006	82 () 933-943	<a href="#">link</a>	X	X	X		X		X	X					X	X		
The Deformation and Adhesion of Randomly Rough and Patterned Surfaces	M. Benz et al.	Marcel Benz, Kenneth J. Rosenberg, Edward J. Kramer, Jacob N. Israelachvili	J. Phys. Chem. B	2006	110 () 11884-11893	<a href="#">link</a>	X		X			X							X		X	
Adhesion and Friction of Polystyrene Surfaces around Tg	H. Zeng et al.	Hongbo Zeng, Nobuo Maeda, Nianhuan Chen, Matthew Tirrell, and Jacob Israelachvili	Macromolecules	2006	39 () 2350-2363	<a href="#">link</a>		X			X								X	X	X	
Adhesion and Friction of Polymer surfaces: The effect of chain ends	N. Chen et al.	Nianhuan Chen, Nobuo Maeda, Matt Tirrell, and Jacob Israelachvili	Macromolecules	2005	38 () 3491-3503	<a href="#">link</a>	X		X	X				X					X	X	X	
Large deformations during the coalescence of fluid interfaces	N. Chen et al.	Nianhuan Chen, Tonya Kuhl, Rafael Tadmor, Qi Lin and Jacob Israelachvili	Physical Review Letters	2004	92 () 024501	<a href="#">link</a>	X		X			X			X				X	X		
Adhesion and friction mechanisms of polymer-on-polymer surfaces	N. Maeda et al.	Nobuo Maeda, Nianhuan Chen, Tonya Kuhl, Rafael Tadmor, Qi Lin and Jacob Israelachvili	Science	2002	297 () 379-382	<a href="#">link</a>			X					X					X	X	X	
Tribology of shearing polymer surfaces. Part II – Polymer (PBMA) sliding on Mica	G. Luengo et al.	G. Luengo, M. Heuberger, J. N. Israelachvili	J. Phys. Chem.	2000	104 () 7944-7950	<a href="#">link</a>			X					X					X	X	X	
Dynamic Behavior of Confined Branched Hydrocarbon Lubricant Fluids under Shear	C. Drummond et al.	Carlos Drummond & Jacob Israelachvili	Macromolecules	2000	33 () 4910-4920	<a href="#">link</a>	X		X					X						X		
Tribology of shearing polymer surfaces. Part I – Mica sliding on polymer (PnBMA)	M. Heuberger et al.	M. Heuberger, G. Luengo, J. N. Israelachvili	J. Phys. Chem. B	1999	103 () 10127-10135	<a href="#">link</a>			X					X					X	X	X	
Temperature and time effects in the ‘adhesion dynamics’ of poly-butyl-methacrylate (PBMA) surfaces	G. Luengo et al.	Gustavo Luengo, Jian-mei Pan, Manfred Heuberger, Jacob N. Israelachvili	Langmuir	1998	14 () 3873-3881	<a href="#">link</a>	X	O			O								X	X	X	
Experimental and theoretical investigations of stick-slip friction mechanisms	A. Berman et al.	A. D. Berman, W. A. Ducker, J. N. Israelachvili	Physics of Sliding Friction, NATO Advanced Science Institute Series, Edited by B. Persson & E. Tosati	1996	Kluwer Academic Publishers, pp. 51-67	<a href="#">link</a>	X		O				O							X		
Origin and characterization of different stick-slip friction mechanisms	A. Berman et al.	Alan D. Berman, William A. Ducker, Jacob N. Israelachvili	Langmuir	1996	12 () 4559-4563	<a href="#">link</a>	X	O	O				O							X		
Mechanism of cavitation damage in thin liquid films: collapse damage versus inception damage	Y. Chen et al.	Y. L. Chen, T. Kuhl, J. N. Israelachvili	Wear	1992	153 () 31-51	<a href="#">link</a>		O			O							X		X		
New Mechanism of Cavitation Damage	Y. Chen et al.	Y. L. Chen, J. N. Israelachvili	Science	1991	252 () 1157-1160	<a href="#">link</a>		O			O							X	X			
Interactions between Surfaces Bearing End-Adsorbed Chains in a Good Solvent	H. Tauton et al.	HJ Tauton, C. Toprakcioglu, U. Fetters, J. Klein	Macromolecules	1990	23 (2) 571-580	<a href="#">link</a>	X													X		
Shear Properties and Structure of Simple Liquids in Molecularly Thin Films: the Transition from Bulk (Continuum) to Molecular Behavior with Decreasing Film Thickness	J. Israelachvili et al.	J. N. Israelachvili, S. J. Kott	J. Colloid Interface Sci.	1989	129 () 461-467	<a href="#">link</a>			O					O	X					X		
Measurements of Dynamic Interactions in Thin Fluid Films: the Transition from Simple to Complex (Non-Newtonian) Behavior	J. Israelachvili et al.	J. N. Israelachvili, S. J. Kott, U. Fetters	J. Polymer Sci., Part B: Polymer Physics	1989	27 () 489-502	<a href="#">link</a>	X	O			O			O	X				X	X	X	

