

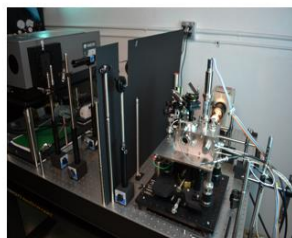


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This Document is intended to provide a sampling of SFA (Surface Forces Apparatus) related publications and attempts to correlate a given reference to the SFA 2000 configuration that was used or could have been used to perform work cited based on an 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																					
Title	Authors (Short Form)	Authors	Journal	Year	Vol (#) Pgs	Paper Hyperlink	Background Reference	Top Mounts					Bottom Mounts					Viscosity of liquids	Simulation/Modeling	Biological/Biomolecular Colloids	Ionic liquids	Cavitation	Polymers near Tg	Polymers / Polymer Brushes	Friction &/or Lubrication	Instabilities / Patterns	Adhesion	Temperature Effects	Pressure Solution / Dissolution	non-PECO Friction/Adhesion							
								SFA Review (technique or hardware)	Piezo Top Mount 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.	PECO														PECO	PECO	PECO	PECO	PECO	PECO	PECO
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	link		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	link		X					X				X	X																			
Surface chemical heterogeneity modulates silica surface hydration	A. Shrader, et al.	Alex M. Schrader, 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	link		X					X																						X		
Friction forces of saliva and red wine on hydrophobic and hydrophilic surfaces	Waterlot & Kuhl	Aude A. Watrelot, Tonya L. Kuhl, Andrew L. Waterhouse	Food Research International	2018	in press	link			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 Tirrel	Science Advances	2017	3 (12) eaao1497	link		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 & J. N. Israelachvili	Nature Chemistry	2017	9 () 473-479	link		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, J.N. Israelachvili, S. Bakkin, & J. N. Israelachvili	Chem. Commun.	2017	53 (7) 1214-1224	link		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. Mullen, C. Wu, G. H. Zerbe, J. Mittal, J. H. Waite, J. N. Israelachvili, and Joan-Emma	PNAS	2016	113 (16) 4332-4337	link		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 Shi, Qingye Lu, Qingxia Liu, and Hongbo Zeng	Langmuir	2016	32 (19) 4886-4895	link		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	link	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	link	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. Frstiansen, J.N. Israelachvili, M. Valtiner	J. Electrochemical Soc.	2015	162 (7) C327-C332	link			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	link			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	link			X									X																		X	
Analyzing refractive index profiles of confined fluids by interferometry	Kienle & Kuhl	D. Kienle, T. Kuhl	Analytical Chem.	2014	86 () 11860-11867	link	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	link			X	X									X																		
Surface Forces and Nanorheology of Molecularly Thin Films	RM. uths et al.	Marina Ruths and Jacob N. Israelachvili	Nanotribology & Nanomechanics II	2011	Part 1 () 107-202	link	X		X									X		X	X	X	X	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 Mordukhovich, Jacob N. Israelachvili	Tribology Letters	2011	43 (2) 185-195	link								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	link			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. Peska, G. Mordukhovich, J. N. Israelachvili	Tribology Letters	2011	42 () 117-127	link								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	link	X											X																		X	

