Elias I Franses

List of Publications by Year
in descending order

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83 papers	3,410 citations	172457 29 h-index	144013 57 g-index
83 all docs	83 docs citations	83 times ranked	2992 citing authors

#	Article	IF	Citations
1	Adsorption dynamics of surfactants at the air/water interface: a critical review of mathematical models, data, and mechanisms. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1995, 100, 1-45.	4.7	630
2	Adsorption and surface tension of ionic surfactants at the airâ€“water interface: review and evaluation of equilibrium models. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 178, 1-40.	4.7	325
3	Effect of concentration and denaturation on adsorption and surface tension of bovine serum albumin. Colloids and Surfaces B: Biointerfaces, 2003, 28, 63-75.	5.0	126
4	Adsorption of bovine serum albumin at solid/aqueous interfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 260, 265-275.	4.7	116
5	Aggregation Behavior in Water of Monomeric and Gemini Cationic Surfactants Derived from Arginine. Langmuir, 1999, 15, 3134-3142.	3.5	113
6	Ultrathin PMMA films spin-coated from toluene solutions. Thin Solid Films, 2003, 429, 71-76.	1.8	111
7	FTIR ATR analysis for microstructure and water uptake in poly(methyl methacrylate) spin cast and Langmuir-Blodgett thin films. Macromolecules, 1994, 27, 7316-7328.	4.8	86
8	Effects of Backbone and Side Chain on the Molecular Environments of Chiral Cavities in Polysaccharide-Based Biopolymers. Biomacromolecules, 2007, 8, 1676-1685.	5.4	85
9	Techniques to measure dynamic surface tension. Current Opinion in Colloid and Interface Science, 1996, 1, 296-303.	7.4	82
10	Dynamic tension behavior of aqueous octanol solutions under constant-area and pulsating-area conditions. Chemical Engineering Science, 1994, 49, 313-325.	3.8	77
11	Adsorption Dynamics of Native and Pentylated Bovine Serum Albumin at Airâ€“Water Interfaces: Surface Concentration/ Surface Pressure Measurements. Journal of Colloid and Interface Science, 1997, 191, 312-325.	9.4	71
12	Deformation and breakup of a stretching liquid bridge covered with an insoluble surfactant monolayer. Physics of Fluids, 2006, 18, 022101.	4.0	71
13	Direct Probing of Sorbentâ^'Solvent Interactions for Amylose Tris(3,5-dimethylphenylcarbamate) Using Infrared Spectroscopy, X-ray Diffraction, Solid-state NMR, and DFT Modeling. Journal of Physical Chemistry B, 2006, 110, 14114-14122.	2.6	66
14	Experimental probing and modeling of key sorbentâ€“solute interactions of norephedrine enantiomers with polysaccharide-based chiral stationary phases. Journal of Chromatography A, 2008, 1190, 110-119.	3.7	61
15	Relation of foam stability to solution and surface properties of gemini cationic surfactants derived from arginine. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 189, 225-235.	4.7	59
16	Thermodynamics of mixed micellization. Pseudo-phase separation models. Industrial & Engineering Chemistry Fundamentals, 1983, 22, 230-239.	0.7	55
17	Surface Densities of Adsorbed Layers of Aqueous Sodium Myristate Inferred from Surface Tension and Infrared Reflection Absorption Spectroscopy. Langmuir, 2000, 16, 6987-6994.	3.5	54
18	Adsorption Dynamics of Native and Alkylated Derivatives of Bovine Serum Albumin at Airâ€“Water Interfaces. Journal of Colloid and Interface Science, 1996, 178, 348-357.	9.4	44

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19	Infrared Reflection Absorption Spectroscopy (IRRAS) of Aqueous Nonsurfactant Salts, Ionic Surfactants, and Mixed Ionic Surfactants. Langmuir, 2002, 18, 9234-9242.	3.5	41
20	Equilibrium Adsorption and Tension of Binary Surfactant Mixtures at the Air/Water Interface. Langmuir, 1996, 12, 354-362.	3.5	39
21	Effect of Protonation on the Solution and Phase Behavior of Aqueous Sodium Myristate. Journal of Colloid and Interface Science, 2000, 231, 42-51.	9.4	38
22	New protocols for preparing dipalmitoylphosphatidylcholine dispersions and controlling surface tension and competitive adsorption with albumin at the air/aqueous interface. Colloids and Surfaces B: Biointerfaces, 2005, 43, 256-266.	5.0	38
23	Effect of sodium dodecylsulfate monomers and micelles on the stability of aqueous dispersions of titanium dioxide pigment nanoparticles against agglomeration and sedimentation. Journal of Colloid and Interface Science, 2015, 450, 434-445.	9.4	38
24	Interactions of charged Langmuir monolayers with dissolved ions. Journal of Chemical Physics, 1991, 95, 8486-8493.	3.0	36
25	Comparison of DLPC and DPPC in Controlling the Dynamic Adsorption and Surface Tension of Their Aqueous Dispersions. Langmuir, 2002, 18, 8888-8896.	3.5	36
26	Surface tension measurements with the pulsating bubble method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 114, 185-197.	4.7	34
27	Role of Subsurface Particulates on the Dynamic Adsorption of Dipalmitoylphosphatidylcholine at the Air/Water Interface. Langmuir, 2001, 17, 3194-3201.	3.5	34
28	Experimental and computational studies of enantioseparation of structurally similar chiral compounds on amylose tris(3,5â€dimethylphenylcarbamate). Chirality, 2010, 22, 565-579.	2.6	34
29	Adsorption of bovine serum albumin at the air/water interface and its effect on the formation of DPPC surface film. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 190, 319-332.	4.7	32
30	Competitive adsorption of fibrinogen and dipalmitoylphosphatidylcholine at the air/aqueous interface. Journal of Colloid and Interface Science, 2006, 295, 84-92.	9.4	29
31	Equilibrium and dynamic surface tension behavior of aqueous soaps: sodium octanoate and sodium dodecanoate (sodium laurate). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 108, 225-242.	4.7	28
32	Exclusion of bovine serum albumin from the air/water interface by sodium myristate. Colloids and Surfaces B: Biointerfaces, 2003, 30, 1-11.	5.0	28
33	Effect of sonication and freezingâ€“thawing on the aggregate size and dynamic surface tension of aqueous DPPC dispersions. Journal of Colloid and Interface Science, 2007, 311, 217-227.	9.4	28
34	Infrared Spectroscopy and Molecular Simulations of a Polymeric Sorbent and Its Enantioselective Interactions with Benzoin Enantiomers. Journal of Physical Chemistry B, 2011, 115, 12785-12800.	2.6	28
35	Insights into chromatographic enantiomeric separation of allenes on cellulose carbamate stationary phase. Journal of Chromatography A, 2014, 1362, 119-128.	3.7	28
36	Adsorption and surface tension of fibrinogen at the air/water interface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 214, 249-262.	4.7	26

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37	Dynamic surface tension behavior of hexadecanol spread and adsorbed monolayers. Langmuir, 1993, 9, 3640-3648.	3.5	24
38	Surface Tension and Adsorption Synergism for Solutions of Binary Surfactants. Industrial & Engineering Chemistry Research, 1996, 35, 3223-3232.	3.7	23
39	Ellipsometry and Infrared Reflection Absorption Spectroscopy of Adsorbed Layers of Soluble Surfactants at the Airâ€“Water Interface. Journal of Colloid and Interface Science, 2001, 233, 295-305.	9.4	23
40	Self-aggregation in dimeric arginine-based cationic surfactants solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 255, 73-78.	4.7	23
41	Thickness and quality of spin-coated polymer films by two-angle ellipsometry. Thin Solid Films, 1999, 347, 167-177.	1.8	22
42	Chiral Recognition Mechanism of Acyloin-Containing Chiral Solutes by Amylose Tris[(S)-Î±-methylbenzylcarbamate]. Journal of Physical Chemistry B, 2013, 117, 9203-9216.	2.6	22
43	Effect of Interparticle Interactions on Agglomeration and Sedimentation Rates of Colloidal Silica Microspheres. Langmuir, 2016, 32, 5111-5123.	3.5	22
44	Interpretation of chromatographic retentions of simple solutes with an amylose-based sorbent using infrared spectroscopy and DFT modeling. Adsorption, 2006, 12, 405-416.	3.0	21
45	Adsorption and Direct Probing of Fibrinogen and Sodium Myristate at the Air/Water Interface. Journal of Colloid and Interface Science, 2002, 250, 271-280.	9.4	20
46	Retention models and interaction mechanisms of acetone and other carbonyl-containing molecules with amylose tris[(S)-Î±-methylbenzylcarbamate] sorbent. Journal of Chromatography A, 2013, 1279, 36-48.	3.7	19
47	Dynamic tension and adsorption behavior of aqueous lung surfactants. Colloids and Surfaces B: Biointerfaces, 1999, 15, 325-338.	5.0	18
48	Effects of dynamic surface tension and fluid flow on the oscillations of a supported bubble. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 282-283, 183-202.	4.7	18
49	Dynamic adsorption and tension of nonionic binary surfactant mixtures. AICHE Journal, 1997, 43, 1569-1578.	3.6	17
50	Unusually low dynamic surface tensions of aqueous solutions of sodium myristate. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1998, 143, 371-380.	4.7	17
51	Micellar dissolution and diffusion effects on adsorption dynamics of surfactants. AICHE Journal, 2003, 49, 3229-3240.	3.6	17
52	New thermodynamic/electrostatic models of adsorption and tension equilibria of aqueous ionic surfactant mixtures: application to sodium dodecyl sulfate/sodium dodecyl sulfonate systems. Journal of Colloid and Interface Science, 2003, 263, 606-615.	9.4	17
53	Expulsion of bovine serum albumin from the air/water interface by a sparingly soluble lecithin lipid. Journal of Colloid and Interface Science, 2004, 275, 477-487.	9.4	17
54	Surface tension behavior of aqueous solutions of a propoxylated surfactant and interfacial tension behavior against a crude oil. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 537, 163-172.	4.7	17

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55	Effect of alcohol aggregation on the retention factors of chiral solutes with an amylose-based sorbent: Modeling and implications for the adsorption mechanism. Journal of Chromatography A, 2014, 1328, 52-65.	3.7	15
56	Hydrodynamic effects on the oscillations of supported bubbles: implications for accurate measurements of surface properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 250, 367-384.	4.7	13
57	Dynamic Adsorption and Surface Tension of Aqueous Dilauroylphosphatidylcholine Dispersions under Physiological Conditions. Langmuir, 2004, 20, 4004-4010.	3.5	13
58	Effect of a PEGylated Lipid on the Dispersion Stability and Dynamic Surface Tension of Aqueous DPPC and on the Interactions with Albumin. Langmuir, 2010, 26, 6932-6942.	3.5	13
59	Ion adsorption and ion exchange in ultrathin films of fatty acids. AICHE Journal, 1994, 40, 1046-1054.	3.6	12
60	A New â€œQuasi-Dynamicâ€•Method for Determining the Hamaker Constant of Solids Using an Atomic Force Microscope. Langmuir, 2017, 33, 714-725.	3.5	12
61	Effect of diffusional losses on the formation of monolayers of soluble proteins at air/water interfaces with Trurnit's method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 117, 45-54.	4.7	11
62	Computation of dynamic adsorption with adaptive integral, finite difference, and finite element methods. Journal of Colloid and Interface Science, 2003, 258, 310-321.	9.4	11
63	Effect of buffer composition and preparation protocol on the dispersion stability and interfacial behavior of aqueous DPPC dispersions. Colloids and Surfaces B: Biointerfaces, 2008, 67, 253-260.	5.0	11
64	Light scattering theory from monodisperse spheroidal particles in the Rayleighâ€“Debyeâ€“Gans regime. Journal of Chemical Physics, 1990, 92, 140-156.	3.0	10
65	Microstructure and water transport in spin cast films of poly(hexylmethacrylate) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 342 Tc	1.8	10
66	Surface tension and adsorption behavior of mixtures of diacyl glycerol arginine-based surfactants with DPPC and DMPC phospholipids. Colloids and Surfaces B: Biointerfaces, 2009, 74, 67-74.	5.0	10
67	Use of Close-Packed Vesicular Dispersions to Stabilize Colloidal Particle Dispersions against Sedimentation. Langmuir, 2015, 31, 8802-8808.	3.5	10
68	Adsorption of Myrj 45 on copper phthalocyanine pigment nanoparticles and effect on their dispersion stability in aqueous solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 390, 74-85.	4.7	9
69	Rayleigh and Rayleigh-Debye-Gans light scattering intensities and spetroturbidimetry of dispersions of unilamellar vesicles and multilamellar liposomes. Journal of Colloid and Interface Science, 2020, 578, 471-483.	9.4	9
70	New Mathematical Models of Mixed Micellization. ACS Symposium Series, 1986, , 44-60.	0.5	8
71	Modeling of Equilibrium Adsorption and Surface Tension of Cationic Gemini Surfactants. Journal of Colloid and Interface Science, 2001, 240, 590-600.	9.4	8
72	Light scattering theory from dispersions of nonspherical Rayleigh particles. Journal of Chemical Physics, 1985, 83, 1531-1545.	3.0	7

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73	Effect of Dispersed Tetradecanol Particles or Droplets on the Dynamic Surface Tension of Aqueous Tetradecanol Systems. Langmuir, 1999, 15, 1556-1561.	3.5	6
74	Effects of Light Dispersed Particles on the Stability of Dense Suspended Particles Against Sedimentation. Journal of Physical Chemistry B, 2019, 123, 922-935.	2.6	5
75	A systematic procedure for estimating the orientation distribution for nonspherical Rayleigh particles. Journal of Chemical Physics, 1985, 83, 6371-6384.	3.0	4
76	Theory and measurements of orientation distributions of spheroidal particles by Rayleighâ€“Debyeâ€“Gans light scattering. Journal of Chemical Physics, 1993, 98, 3600-3611.	3.0	4
77	Mechanistic Studies of Chiral Discrimination in Polysaccharide Phases. Advances in Chromatography, 2012, 50, 47-91.	1.0	3
78	Non-ideal diffusion effects, short-range ordering, and unsteady-state effects strongly influence Brownian aggregation rates in concentrated dispersions of interacting spheres. Journal of Chemical Physics, 2015, 143, 074706.	3.0	3
79	Relationship of Various Interfacial Tensions of Surfactants/Brine/Oil Formulations to Oil Recovery Efficiency. Energy & Fuels, 2021, 35, 7768-7777.	5.1	3
80	Spectroturbidimetry theory for determining orientation distributions of spheroidal particles in the Rayleighâ€“Debyeâ€“Gans and Rayleigh scattering regimes. Journal of Chemical Physics, 1994, 100, 2422-2428.	3.0	2
81	Effects of the Method of Preparation and Dispersion Media on the Optical Properties and Particle Sizes of Aqueous Dispersions of a Double-Chain Cationic Surfactant. Langmuir, 2021, 37, 8290-8304.	3.5	2
82	Compositions of Langmuir Monolayers and Langmuirâ€”Blodgett Films with Mixed Counterions. ACS Symposium Series, 1992, , 342-353.	0.5	1
83	Accurate Determination of the Equilibrium Surface Tension Values with Area Perturbation Tests. Journal of Visualized Experiments, 2019, , .	0.3	1