Francesca Ravera

List of Publications by Year
in descending order

117 papers	4,871 citations	76294 40 h-index	102432 66 g-index
121 all docs	121 docs citations	121 times ranked	2747 citing authors

#	Article	IF	Citations
1	Effect of Nanoparticles on the Interfacial Properties of Liquid/Liquid and Liquid/Air Surface Layers. Journal of Physical Chemistry B, 2006, 110, 19543-19551.	1.2	311
2	Influence of surface processes on the dilational visco-elasticity of surfactant solutions. Advances in Colloid and Interface Science, 2005, 117, 75-100.	7.0	180
3	Interfacial dilational rheology by oscillating bubble/drop methods. Current Opinion in Colloid and Interface Science, 2010, 15, 217-228.	3.4	178
4	Liquidâ€“liquid interfacial properties of mixed nanoparticleâ€“surfactant systems. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 323, 99-108.	2.3	174
5	Wettability of silicananoparticleâ€“surfactant nanocomposite interfacial layers. Soft Matter, 2012, 8, 837-843.	1.2	142
6	Emulsification and emulsion stability: The role of the interfacial properties. Advances in Colloid and Interface Science, 2021, 288, 102344.	7.0	142
7	Adsorption and partitioning of surfactants in liquidâ€“liquid systems. Advances in Colloid and Interface Science, 2000, 88, 129-177.	7.0	125
8	A diffusion-based approach to mixed adsorption kinetics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 114, 351-359.	2.3	120
9	Drop and Bubble Shape Analysis as a Tool For Dilational Rheological Studies of Interfacial Layers. Studies in Interface Science, 2001, 11, 439-483.	0.0	107
10	Effect of Hydrophilic and Hydrophobic Nanoparticles on the Surface Pressure Response of DPPC Monolayers. Journal of Physical Chemistry C, 2011, 115, 21715-21722.	1.5	105
11	Wide-frequency dilational rheology investigation of mixed silica nanoparticleâ€“CTAB interfacial layers. Soft Matter, 2011, 7, 7699.	1.2	100
12	Dynamic properties of mixed nanoparticle/surfactant adsorption layers. Soft Matter, 2013, 9, 3305.	1.2	99
13	Interfacial rheology of Span 80 adsorbed layers at paraffin oilâ€“water interface and correlation with the corresponding emulsion properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 309, 270-279.	2.3	96
14	Adsorption Kinetics of Alkylphosphine Oxides at Water/Hexane Interface. Journal of Colloid and Interface Science, 1997, 186, 40-45.	5.0	86
15	Sorption Kinetics Considered as a Renormalized Diffusion Process. Journal of Colloid and Interface Science, 1993, 156, 109-116.	5.0	85
16	DPPCâ€“DOPC Langmuir monolayers modified by hydrophilic silica nanoparticles: Phase behaviour, structure and rheology. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 413, 174-183.	2.3	85
17	Adsorption Kinetics of Alkylphosphine Oxides at Water/Hexane Interface. Journal of Colloid and Interface Science, 1997, 186, 46-52.	5.0	79
18	Mixed DPPCâ€“cholesterol Langmuir monolayers in presence of hydrophilic silica nanoparticles. Colloids and Surfaces B: Biointerfaces, 2013, 105, 284-293.	2.5	79

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19	Study of the monolayer structure and wettability properties of silica nanoparticles and CTAB using the Langmuir trough technique. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 382, 186-191.	2.3	71
20	Influence of silica nanoparticles on phase behavior and structural properties of DPPCâ€"Palmitic acid Langmuir monolayers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 413, 280-287.	2.3	71
21	A surface rheological study of non-ionic surfactants at the waterâ€"air interface and the stability of the corresponding thin foam films. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 298, 12-21.	2.3	69
22	A new experimental method for the measurement of the interfacial tension between immiscible fluids at zero bond number. Journal of Colloid and Interface Science, 1991, 146, 152-162.	5.0	66
23	Dynamic Interfacial Tension Measurements by a Capillary Pressure Method. Journal of Colloid and Interface Science, 1995, 169, 226-237.	5.0	66
24	Measurement of the Surface Dilational Viscoelasticity of Adsorbed Layers with a Capillary Pressure Tensiometer. Journal of Colloid and Interface Science, 2002, 255, 225-235.	5.0	62
25	Biofouling control by superhydrophobic surfaces in shallow euphotic seawater. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 480, 369-375.	2.3	62
26	Influence of silica nanoparticles on dilational rheology of DPPCâ€"palmitic acid Langmuir monolayers. Soft Matter, 2012, 8, 3938.	1.2	61
27	Determination of equilibrium surface tension values by extrapolation via long time approximations. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 122, 269-273.	2.3	60
28	Adsorption layer characteristics of Tritons surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 334, 16-21.	2.3	58
29	Perturbationâ€"response relationship in liquid interfacial systems: non-linearity assessment by frequencyâ€"domain analysis. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 261, 57-63.	2.3	56
30	Particle and Particle-Surfactant Mixtures at Fluid Interfaces: Assembly, Morphology, and Rheological Description. Advances in Condensed Matter Physics, 2015, 2015, 1-17.	0.4	55
31	Surface rheology as a tool for the investigation of processes internal to surfactant adsorption layers. Faraday Discussions, 2005, 129, 125.	1.6	53
32	Interfacial properties of carbon particulate-laden liquid interfaces and stability of related foams and emulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 365, 189-198.	2.3	53
33	Properties of Fatty Amineâ€"Silica Nanoparticle Interfacial Layers at the Hexaneâ€"Water Interface. Journal of Physical Chemistry C, 2012, 116, 3050-3058.	1.5	53
34	Adsorption Properties of C10E8at the Waterâ^'Hexane Interface. Journal of Physical Chemistry B, 1998, 102, 10521-10527.	1.2	52
35	Frequency Characteristics of Amplitude and Phase of Oscillating Bubble Systems in a Closed Measuring Cell. Journal of Colloid and Interface Science, 2002, 252, 433-442.	5.0	45
36	Properties and structure of interfacial layers formed by hydrophilic silica dispersions and palmitic acid. Physical Chemistry Chemical Physics, 2012, 14, 607-615.	1.3	45

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37	2D dynamical arrest transition in a mixed nanoparticle-phospholipid layer studied in real and momentum spaces. Scientific Reports, 2015, 5, 17930.	1.6	45
38	Interaction of Carbon Black Particles and Dipalmitoylphosphatidylcholine at the Water/Air Interface: Thermodynamics and Rheology. Journal of Physical Chemistry C, 2015, 119, 26937-26947.	1.5	43
39	Interfacial Properties of Mixed DPPCâ€“Hydrophobic Fumed Silica Nanoparticle Layers. Journal of Physical Chemistry C, 2015, 119, 21024-21034.	1.5	41
40	Rheological surface properties of C12DMPO solution as obtained from amplitude- and phase-frequency characteristics of an oscillating bubble system. Journal of Colloid and Interface Science, 2004, 280, 498-505.	5.0	40
41	Adsorption of Sodium Dodecyl Sulfate at Waterâ€“Dodecane Interface in Relation to the Oil in Water Emulsion Properties. Langmuir, 2018, 34, 5978-5989.	1.6	40
42	Molecular reorientation in the adsorption of some CiEj at the water-air interface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 156, 455-463.	2.3	39
43	Modelling of dilational visco-elasticity of adsorbed layers with multiple kinetic processes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 282-283, 210-216.	2.3	39
44	Two-Dimensional DPPC Based Emulsion-like Structures Stabilized by Silica Nanoparticles. Langmuir, 2014, 30, 11504-11512.	1.6	39
45	Surface dilational rheological properties in the nonlinear domain. Advances in Colloid and Interface Science, 2015, 222, 110-118.	7.0	39
46	Equilibrium Interfacial Tension of Hexane/Water plus Triton X-100. Journal of Colloid and Interface Science, 1995, 169, 238-240.	5.0	38
47	Molecular orientation as a controlling process in adsorption dynamics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 175, 51-60.	2.3	37
48	Dynamic tensiometric characterization of espresso coffee beverage. Food Hydrocolloids, 2004, 18, 387-393.	5.6	36
49	Surfactant adsorption at superhydrophobic surfaces. Applied Physics Letters, 2006, 89, 053104.	1.5	36
50	Effect of silica nanoparticles on the interfacial properties of a canonical lipid mixture. Colloids and Surfaces B: Biointerfaces, 2015, 136, 971-980.	2.5	36
51	Surface properties and foamability of saponin and saponin-chitosan systems. Colloids and Surfaces B: Biointerfaces, 2019, 181, 198-206.	2.5	34
52	Sorption Kinetics at Liquid-Liquid Interfaces with the Surface-Active Component Soluble in Both Phases. Journal of Colloid and Interface Science, 1994, 163, 309-314.	5.0	32
53	Interfacial properties of coffee oils. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 365, 79-82.	2.3	32
54	Preparation of a superhydrophobic surface by mixed inorganic-organic coating. Applied Physics Letters, 2006, 88, 203125.	1.5	31

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55	Effect of the Incorporation of Nanosized Titanium Dioxide on the Interfacial Properties of 1,2-Dipalmitoyl-sn-glycerol-3-phosphocholine Langmuir Monolayers. Langmuir, 2017, 33, 10715-10725.	1.6	31
56	Dynamic Elasticity of Adsorption Layers in the Presence of Internal Reorientation Processes. Journal of Physical Chemistry B, 2001, 105, 195-203.	1.2	30
57	Amphiphobic coatings for antifouling in marine environment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 505, 158-164.	2.3	30
58	Oscillation of interfacial properties in liquid systems: assessment of harmonic distortion. Physical Chemistry Chemical Physics, 2004, 6, 1375-1379.	1.3	29
59	Synthesis of carbon monoliths with a tailored hierarchical pore structure for selective CO2 capture. Journal of CO2 Utilization, 2018, 26, 36-44.	3.3	29
60	Surfactants and wetting at superhydrophobic surfaces: Water solutions and non aqueous liquids. Advances in Colloid and Interface Science, 2010, 161, 22-28.	7.0	28
61	Short time dynamic interfacial tension as studied by the growing drop capillary pressure technique. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 365, 62-69.	2.3	28
62	Surface Rheology Investigation of the 2-D Phase Transition inn-Dodecanol Monolayers at the Waterâ^'Air Interface. Langmuir, 2003, 19, 10233-10240.	1.6	27
63	Nanoparticle laden interfacial layers and application to foams and solid foams. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 438, 132-140.	2.3	26
64	Drop formation instabilities induced by entrapped gas bubbles. Journal of Colloid and Interface Science, 1990, 140, 436-443.	5.0	25
65	Determination of the dilational viscoelasticity by the oscillating drop/bubble method in a capillary pressure tensiometer. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 365, 2-13.	2.3	23
66	Methods and models to investigate the physicochemical functionality of pulmonary surfactant. Current Opinion in Colloid and Interface Science, 2021, 55, 101467.	3.4	23
67	Hydrophobic Silica Nanoparticles Induce Gel Phases in Phospholipid Monolayers. Langmuir, 2016, 32, 4868-4876.	1.6	21
68	Surface properties of binary TiO2 - SiO2 nanoparticle dispersions relevant for foams stabilization. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 575, 299-309.	2.3	21
69	Soot particles at the aqueous interface and effects on foams stability. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 413, 216-223.	2.3	20
70	Dilational rheology of spread and adsorbed layers of silica nanoparticles at the liquid-gas interface. Colloid Journal, 2014, 76, 127-138.	0.5	20
71	Dilational surface elasticity of spread monolayers of pulmonary lipids in a broad range of surface pressure. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 541, 137-144.	2.3	19
72	Interaction of Particles with Langmuir Monolayers of 1,2-Dipalmitoyl-Sn-Glycero-3-Phosphocholine: A Matter of Chemistry?. Coatings, 2020, 10, 469.	1.2	19

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73	Characterization of surfactant aggregates at solidâ€“liquid surfaces by atomic force microscopy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 249, 63-67.	2.3	18
74	Project proposal for the investigation of particle-stabilised emulsions and foams by microgravity experiments. Microgravity Science and Technology, 2006, 18, 104-107.	0.7	18
75	Adsorption and surface rheology of n-dodecanol at the water/air interface. Journal of Colloid and Interface Science, 2004, 272, 277-280.	5.0	17
76	Surfactant induced complex formation and their effects on the interfacial properties of seawater. Colloids and Surfaces B: Biointerfaces, 2014, 123, 701-709.	2.5	17
77	Dynamic Surface Elasticity of Adsorption Layers in the Presence of a Surface Phase Transition from Monomers to Large Aggregates. Langmuir, 2002, 18, 3592-3599.	1.6	16
78	Interfacial properties of coffee-based beverages. Food Hydrocolloids, 2007, 21, 1374-1378.	5.6	16
79	Adsorption layer properties and foam film drainage of aqueous solutions of tetraethyleneglycol monododecyl ether. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 392, 233-241.	2.3	16
80	Capillary pressure tensiometry and applications in microgravity. Studies in Interface Science, 1998, 6, 239-278.	0.0	15
81	Recent developments in emulsion characterization: Diffusing Wave Spectroscopy beyond average values. Advances in Colloid and Interface Science, 2021, 288, 102341.	7.0	14
82	A multi-probe non-intrusive electrical technique for monitoring emulsification of hexane-in-water with the emulsifier C10E5 soluble in both phases. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 354, 353-363.	2.3	13
83	Carbon Sootâ€“Ionic Surfactant Mixed Layers at Water/Air Interfaces. Journal of Nanoscience and Nanotechnology, 2015, 15, 3618-3625.	0.9	13
84	Adsorption kinetics of the ionic surfactant decanoic acid. International Journal of Heat and Mass Transfer, 2016, 102, 36-44.	2.5	13
85	Interfacial Properties and Emulsification of Biocompatible Liquid-Liquid Systems. Coatings, 2020, 10, 397.	1.2	13
86	Film tension and dilational film rheology of a single foam bubble. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 261, 115-121.	2.3	12
87	Dynamic interfacial properties of drops relevant to W/O-emulsion-forming systems: A refined measurement apparatus. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 323, 3-11.	2.3	12
88	Capillary pressure studies under low gravity conditions. Advances in Colloid and Interface Science, 2010, 161, 102-114.	7.0	12
89	The role of emulsifier in stabilization of emulsions containing colloidal alumina particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 413, 239-247.	2.3	12
90	Effect of tea polyphenols on the dilational rheology of human whole saliva (HWS): Part 2, polyphenolsâ€“HWS interaction. Colloids and Surfaces B: Biointerfaces, 2013, 110, 474-479.	2.5	12

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91	Carbon based porous materials from particle stabilized wet foams. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 473, 24-31.	2.3	11
92	Effect of tea polyphenols on the dilational rheology of Human Whole Saliva (HWS): Part 1, HWS characterization. Colloids and Surfaces B: Biointerfaces, 2013, 110, 466-473.	2.5	10
93	Activated carbon monoliths from particle stabilized foams. Microporous and Mesoporous Materials, 2017, 239, 45-53.	2.2	8
94	Evaluating the Impact of Hydrophobic Silicon Dioxide in the Interfacial Properties of Lung Surfactant Films. Environmental Science & Technology, 2022, 56, 7308-7318.	4.6	8
95	A Multistate Adsorption Model for the Adsorption of C14EO4 and C14EO8 at the Solution/Air Interface. Colloids and Interfaces, 2021, 5, 39.	0.9	7
96	Results of the Facility for Adsorption and Surface Tension (FAST) experiments onboard STS-107, in the framework of the project FASES. Microgravity Science and Technology, 2005, 16, 196-200.	0.7	6
97	Adsorption properties of C10E8 at water/ hexane interface investigated onboard STS-107, by the FAST facility. Microgravity Science and Technology, 2005, 16, 201-204.	0.7	6
98	Results of microgravity investigation on adsorption and interfacial rheology of soluble surfactants from the experiment FAST onboard STS-107. Microgravity Science and Technology, 2006, 18, 112-116.	0.7	6
99	Optical Observation of High-Frequency Drop Oscillations by a Spectrum Compression Technique applied to the Capillary Pressure Tensiometry. Langmuir, 2009, 25, 12780-12786.	1.6	6
100	Dynamic properties of Span-80 adsorbed layers at paraffin-oil/water interface: Capillary pressure experiments under low gravity conditions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 532, 228-243.	2.3	6
101	Diffusing wave spectroscopy for investigating emulsions: II. Characterization of a paradigmatic oil-in-water emulsion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 580, 123724.	2.3	6
102	Effect of Temperature on the Dynamic Properties of Mixed Surfactant Adsorbed Layers at the Water/Hexane Interface under Low-Gravity Conditions. Colloids and Interfaces, 2020, 4, 27.	0.9	6
103	Evaluation of the impact of carbonaceous particles in the mechanical performance of lipid Langmuir monolayers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 634, 127974.	2.3	6
104	M.I.T.E. maser-4 results: Interfacial tension measurement in microgravity and drop growth instabilities. Advances in Space Research, 1991, 11, 59-68.	1.2	5
105	Wetting of Single and Mixed Surfactant Solutions on Superhydrophobic Surfaces. Journal of Adhesion Science and Technology, 2009, 23, 483-492.	1.4	5
106	Spherical cap-shaped emulsion films: thickness evaluation at the nanoscale level by the optical evanescent wave effect. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 413, 101-107.	2.3	5
107	Messung der dynamischen GrenzflÃchen-spannung im System wÃÄŸrige TensidlÃ¶sung/organisches LÃ¶sungsmittel. Chemie-Ingenieur-Technik, 1998, 70, 89-99.	0.4	4
108	Analysis of amplitude- and phase-frequency characteristics of oscillating bubble system with closed measuring cell. Microgravity Science and Technology, 2005, 16, 186-190.	0.7	4

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109	Dynamic Properties of Mixed Cationic/Nonionic Adsorbed Layers at the N-Hexane/Water Interface: Capillary Pressure Experiments Under Low Gravity Conditions. Colloids and Interfaces, 2018, 2, 53.	0.9	4
110	The Role of Endogenous Proteins on the Emulsification of Silicone Oils Used in Vitreoretinal Surgery. BioMed Research International, 2020, 2020, 1-8.	0.9	4
111	Effects of Oil Phase on the Inversion of Pickering Emulsions Stabilized by Palmitic Acid Decorated Silica Nanoparticles. Colloids and Interfaces, 2022, 6, 27.	0.9	4
112	Dynamic capillary pressure measurements in the short time range by applying a fast growing drop technique. Microgravity Science and Technology, 2006, 18, 95-99.	0.7	3
113	Thermodynamics, Kinetics and Dilational Visco-Elasticity of Adsorbed CnEOm Layers at the Aqueous Solution/Air Interface. Colloids and Interfaces, 2021, 5, 16.	0.9	3
114	Facility for adsorption and surface tension studies (FAST) on board of shuttle STS-107 mission: Determination of the surface dilational modulus as a function of concentration and temperature for aqueous solutions of dodecyl-dimethyl-phosphine-oxide, in the 0.01â€“0.32 Hz frequency range. Microgravity Science and Technology, 2006, 18, 100-103.	0.7	1
115	Interfacial Dilational Viscoelasticity of Adsorption Layers at the Hydrocarbon/Water Interface: The Fractional Maxwell Model. Colloids and Interfaces, 2019, 3, 66.	0.9	1
116	A <I>Special Section on</I> Nanoparticles in Liquid Media for Material Processing, Environment and Industrial Applications. Journal of Nanoscience and Nanotechnology, 2015, 15, 3443-3444.	0.9	0
117	A Multistate Adsorption Model for the Characterization of C₁₃DMPO Adsorption Layers at the Aqueous Solution/Air Interface. Langmuir, 2022, 38, 4913-4920.	1.6	0