Rogerio Manica

List of Publications by Year
in descending order

80 papers	3,004 citations	136740 32 h-index	168136 53 g-index
80 all docs	80 docs citations	80 times ranked	1718 citing authors

#	Article	IF	Citations
1	CO2-responsive surfactants for greener extraction of heavy oil: A bench-scale demonstration. Journal of Cleaner Production, 2022, 338, 130554.	4.6	11
2	Effect of Viscosity on the Thin-Film Drainage between Bitumen and a Hydrophobic Silica Wafer. Energy & Fuels, 2022, 36, 2600-2608.	2.5	1
3	Effect of Sodium Citrate on the Aggregation of Bitumen Droplets. Energy & Fuels, 2022, 36, 3563-3569.	2.5	3
4	Hydrodynamic collisions involving bubbles and mineral particles. Canadian Journal of Chemical Engineering, 2022, 100, 3270-3287.	0.9	0
5	Effect of solid wettability on three-phase hydrodynamic cavitation. Minerals Engineering, 2022, 180, 107455.	1.8	7
6	Effect of Cu(II) ions on millerite (Î²-NiS) flotation and surface properties in alkaline solutions. Minerals Engineering, 2022, 180, 107443.	1.8	1
7	Liquid-solid triboelectric nanogenerators for a wide operation window based on slippery lubricant-infused surfaces (SLIPS). Chemical Engineering Journal, 2022, 439, 135688.	6.6	19
8	Effect of sodium citrate on asphaltene film at the oilâ€“water interface. Journal of Colloid and Interface Science, 2022, 625, 24-32.	5.0	7
9	Enhancement of selective fine particle flotation by microbubbles generated through hydrodynamic cavitation. Powder Technology, 2022, 405, 117502.	2.1	9
10	Fundamentals of secondary process aids in oil sands extraction. Canadian Journal of Chemical Engineering, 2022, 100, 2682-2706.	0.9	2
11	Control of nanostructures through pH-dependent self-assembly of nanoplatelets. Journal of Colloid and Interface Science, 2021, 582, 439-445.	5.0	11
12	Spreading and receding of oil droplets on silanized glass surfaces in water: Role of three-phase contact line flow direction in spontaneous displacement. Journal of Colloid and Interface Science, 2021, 587, 672-682.	5.0	4
13	Enhancing oilâ€“solid and oilâ€“water separation in heavy oil recovery by <scp>CO₂</scp>â€responsive surfactants. AIChE Journal, 2021, 67, .	1.8	21
14	Probing Specific Adsorption of Electrolytes at Kaoliniteâ€“Aqueous Interfaces by Atomic Force Microscopy. Journal of Physical Chemistry Letters, 2021, 12, 2406-2412.	2.1	7
15	Role of Surfactants Based on Fatty Acids in the Wetting Behavior of Solidâ€“Oilâ€“Aqueous Solution Systems. Langmuir, 2021, 37, 5682-5690.	1.6	8
16	Inward Flow of Intervening Liquid Films Driven by the Marangoni Effect during Bubbleâ€“Solid Collisions in Ethyl Alcoholâ€“NaCl Aqueous Solutions. Langmuir, 2021, 37, 4121-4128.	1.6	1
17	Modulation of Surface Charge by Mediating Surface Chemical Structures in Nonpolar Solvents with Nonionic Surfactant Used as Charge Additives. Journal of Physical Chemistry C, 2021, 125, 19525-19536.	1.5	7
18	Water Film Drainage between a Very Viscous Oil Drop and a Mica Surface. Physical Review Letters, 2021, 127, 124503.	2.9	6

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19	Selective depression of millerite (Î²-NiS) by polysaccharides in alkaline solutions in Cu-Ni sulphides flotation separation. Minerals Engineering, 2021, 172, 107139.	1.8	9
20	Curvature effects on liquidâ€"solid contact electrification. Nano Energy, 2021, 89, 106456.	8.2	18
21	Effect of NaCl and CO2 on the inception control of hydrodynamic cavitation by gas solubility change. Chemical Engineering Science, 2021, 246, 116997.	1.9	4
22	The boundary condition at the airâ€"liquid interface and its effect on film drainage between colliding bubbles. Current Opinion in Colloid and Interface Science, 2020, 50, 101374.	3.4	17
23	Controlling the Interaction Forces between an Air Bubble and Oil with Divalent Cations and Sodium Citrate. Journal of Physical Chemistry C, 2020, 124, 17622-17631.	1.5	8
24	Effect of Sodium Citrate and Calcium Ions on the Spontaneous Displacement of Heavy Oil from Quartz Surfaces. Journal of Physical Chemistry C, 2020, 124, 20991-20997.	1.5	10
25	Role of surfactants in spontaneous displacement of high viscosity oil droplets from solid surfaces in aqueous solutions. Journal of Colloid and Interface Science, 2020, 579, 898-908.	5.0	18
26	Interaction Between the Cyclopentane Hydrate Particle and Water Droplet in Hydrocarbon Oil. Langmuir, 2020, 36, 2063-2070.	1.6	18
27	Effect of Velocity, Solid Wettability, and Temperature on Drainage Dynamics of C5PeC11-in-Toluene Liquid Films between Silica and Water Droplet. Energy & Fuels, 2020, 34, 6834-6843.	2.5	5
28	Coalescence or Bounce? How Surfactant Adsorption in Milliseconds Affects Bubble Collision. Journal of Physical Chemistry Letters, 2019, 10, 5662-5666.	2.1	23
29	Bubbles with tunable mobility of surfaces in ethanol-NaCl aqueous solutions. Journal of Colloid and Interface Science, 2019, 556, 345-351.	5.0	11
30	Mobile or Immobile? Rise Velocity of Air Bubbles in High-Purity Water. Journal of Physical Chemistry C, 2019, 123, 15131-15138.	1.5	38
31	Interfacial properties pertinent to W/O and O/W emulsion systems prepared using polyaromatic compounds. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 575, 283-291.	2.3	11
32	Changing the Interface Between an Asphaltene Model Compound and Water by Addition of an EOâ€"PO Demulsifier through Adsorption Competition or Adsorption Replacement. Energy & Fuels, 2019, 33, 5035-5042.	2.5	23
33	Coalescence of Bubbles with Mobile Interfaces in Water. Physical Review Letters, 2019, 122, 194501.	2.9	73
34	Unraveling Interaction Mechanisms between Molybdenite and a Dodecane Oil Droplet Using Atomic Force Microscopy. Langmuir, 2019, 35, 6024-6031.	1.6	16
35	Molecular Destabilization Mechanism of Asphaltene Model Compound C5Pe Interfacial Film by EO-PO Copolymer: Experiments and MD Simulation. Journal of Physical Chemistry C, 2019, 123, 10501-10508.	1.5	25
36	Spontaneous Displacement of High Viscosity Micrometer Size Oil Droplets from a Curved Solid in Aqueous Solutions. Langmuir, 2019, 35, 615-627.	1.6	11

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37	Coalescence Dynamics of Mobile and Immobile Fluid Interfaces. Langmuir, 2018, 34, 2096-2108.	1.6	41
38	Single-Molecule MoS₂â€“Polymer Interaction and Efficient Aqueous Exfoliation of MoS₂ into Single Layer. Journal of Physical Chemistry C, 2018, 122, 8262-8269.	1.5	11
39	Dynamic Interaction between a Millimeter-Sized Bubble and Surface Microbubbles in Water. Langmuir, 2018, 34, 11667-11675.	1.6	32
40	Probing Boundary Conditions at Hydrophobic Solidâ€“Water Interfaces by Dynamic Film Drainage Measurement. Langmuir, 2018, 34, 12025-12035.	1.6	21
41	Effect of Approach Velocity on Thin Liquid Film Drainage between an Air Bubble and a Flat Solid Surface. Journal of Physical Chemistry C, 2017, 121, 5573-5584.	1.5	45
42	The hydrodynamics of bubble rise and impact with solid surfaces. Advances in Colloid and Interface Science, 2016, 235, 214-232.	7.0	56
43	Simultaneous measurement of dynamic force and spatial thin film thickness between deformable and solid surfaces by integrated thin liquid film force apparatus. Soft Matter, 2016, 12, 9105-9114.	1.2	39
44	Oilâ€water coreâ€annular flow in vertical pipes: A CFD study. Canadian Journal of Chemical Engineering, 2016, 94, 980-987.	0.9	11
45	The impact and bounce of air bubbles at a flat fluid interface. Soft Matter, 2016, 12, 3271-3282.	1.2	43
46	Force Balance Model for Bubble Rise, Impact, and Bounce from Solid Surfaces. Langmuir, 2015, 31, 6763-6772.	1.6	59
47	Prediction of the shape and pressure drop of Taylor bubbles in circular tubes. Microfluidics and Nanofluidics, 2015, 19, 1221-1233.	1.0	23
48	Universal Behavior of the Initial Stage of Drop Impact. Physical Review Letters, 2014, 113, 194501.	2.9	48
49	An extended Bretherton model for long Taylor bubbles at moderate capillary numbers. Physics of Fluids, 2014, 26, .	1.6	72
50	A force balance model for the motion, impact, and bounce of bubbles. Physics of Fluids, 2014, 26, .	1.6	33
51	Modelling bubble rise and interaction with a glass surface. Applied Mathematical Modelling, 2014, 38, 4249-4261.	2.2	24
52	Hydrodynamics of liquidâ€“liquid Taylor flow in microchannels. Chemical Engineering Science, 2013, 92, 180-189.	1.9	86
53	Three Dimensional Effects in Taylor Flow in Circular Microchannels. Houille Blanche, 2013, 99, 60-67.	0.3	8
54	Effects of hydrodynamic film boundary conditions on bubbleâ€“wall impact. Soft Matter, 2013, 9, 9755.	1.2	33

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55	Interpreting atomic force microscopy measurements of hydrodynamic and surface forces with nonlinear parametric estimation. Review of Scientific Instruments, 2012, 83, 103702.	0.6	6
56	Spatiotemporal Evolution of Thin Liquid Films during Impact of Water Bubbles on Glass on a Micrometer to Nanometer Scale. Physical Review Letters, 2012, 108, 247803.	2.9	64
57	Anomalous Pull-Off Forces between Surfactant-Free Emulsion Drops in Different Aqueous Electrolytes. Langmuir, 2012, 28, 4259-4266.	1.6	15
58	Modelo e SimulaÃ§Ã£o NumÃ©rica de InteraÃ§Ãµes Envolvendo Bolhas e Gotas. TeMa, 2012, , 121-132.	0.1	1
59	Drainage of the airâ€"waterâ€"quartz film: experiments and theory. Physical Chemistry Chemical Physics, 2011, 13, 1434-1439.	1.3	43
60	Precision AFM Measurements of Dynamic Interactions between Deformable Drops in Aqueous Surfactant and Surfactant-Free Solutions. Langmuir, 2011, 27, 2676-2685.	1.6	53
61	Combined AFMâˆ'Confocal Microscopy of Oil Droplets: Absolute Separations and Forces in Nanofilms. Journal of Physical Chemistry Letters, 2011, 2, 961-965.	2.1	40
62	Homo- and hetero-interactions between air bubbles and oil droplets measured by atomic force microscopy. Soft Matter, 2011, 7, 8977.	1.2	46
63	Film drainage and coalescence between deformable drops and bubbles. Soft Matter, 2011, 7, 2235-2264.	1.2	342
64	BEM simulations of potential flow with viscous effects as applied to a rising bubble. Engineering Analysis With Boundary Elements, 2011, 35, 489-494.	2.0	40
65	Theory of non-equilibrium force measurements involving deformable drops and bubbles. Advances in Colloid and Interface Science, 2011, 165, 70-90.	7.0	118
66	Repulsive van der Waals Forces in Soft Matter: Why Bubbles Do Not Stick to Walls. Physical Review Letters, 2011, 106, 064501.	2.9	101
67	Dynamic interactions between microbubbles in water. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11177-11182.	3.3	179
68	Interpreting the Dynamic Interaction between a Very Small Rising Bubble and a Hydrophilic Titania Surface. Journal of Physical Chemistry C, 2010, 114, 1942-1946.	1.5	39
69	Viscosity Effects on Hydrodynamic Drainage Force Measurements Involving Deformable Bodies. Langmuir, 2010, 26, 11921-11927.	1.6	33
70	Dynamic interactions between deformable drops in the Heleâ€"Shaw geometry. Soft Matter, 2010, 6, 1809.	1.2	21
71	Dynamic deformations and forces in soft matter. Soft Matter, 2009, 5, 2858.	1.2	45
72	Dynamic interactions between dropsâ€"a critical assessment. Soft Matter, 2008, 4, 1613.	1.2	38

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73	Dynamic Forces between a Moving Particle and a Deformable Drop. Journal of Physical Chemistry C, 2008, 112, 567-574.	1.5	37
74	Transient Responses of a Wetting Film to Mechanical and Electrical Perturbations. Langmuir, 2008, 24, 1381-1390.	1.6	45
75	Hydrodynamic forces involving deformable interfaces at nanometer separations. Physics of Fluids, 2008, 20, 032101.	1.6	71
76	Dynamics of Interactions Involving Deformable Drops: Hydrodynamic Dimpling under Attractive and Repulsive Electrical Double Layer Interactions. Langmuir, 2007, 23, 626-637.	1.6	69
77	Dynamic Forces Between Two Deformable Oil Droplets in Water. Science, 2006, 313, 210-213.	6.0	234
78	Measurement of Dynamical Forces between Deformable Drops Using the Atomic Force Microscope. I. Theory. Langmuir, 2005, 21, 2912-2922.	1.6	97
79	Simulation of sudden expansion flows for power-law fluids. Journal of Non-Newtonian Fluid Mechanics, 2004, 121, 35-40.	1.0	63
80	Modelling drop-drop interactions in an atomic force microscope. ANZIAM Journal, 0, 46, 805.	0.0	16