Emilio JosÃ© Vega RodrÃ-guez

List of Publications by Year
in descending order

41 papers	740 citations	516710 16 h-index	552781 26 g-index
41 all docs	41 docs citations	41 times ranked	673 citing authors

#	Article	IF	Citations
1	Numerical simulation of electrospray in the cone-jet mode. Physical Review E, 2012, 86, 026305.	2.1	75
2	Global and local instability of flow focusing: The influence of the geometry. Physics of Fluids, 2010, 22, .	4.0	72
3	Measurement of relaxation times in extensional flow of weakly viscoelastic polymer solutions. Rheologica Acta, 2017, 56, 11-20.	2.4	57
4	Influence of the Surface Viscosity on the Breakup of a Surfactant-Laden Drop. Physical Review Letters, 2017, 118, 024501.	7.8	49
5	Generation of micro-sized PDMS particles by a flow focusing technique for biomicrofluidics applications. Biomicrofluidics, 2016, 10, 014122.	2.4	34
6	Flexible PDMS microparticles to mimic RBCs in blood particulate analogue fluids. Mechanics Research Communications, 2019, 100, 103399.	1.8	29
7	Exploring the precision of backlight optical imaging in microfluidics close to the diffraction limit. Measurement: Journal of the International Measurement Confederation, 2011, 44, 1300-1311.	5.0	27
8	A new flow focusing technique to produce very thin jets. Journal of Micromechanics and Microengineering, 2013, 23, 065009.	2.6	26
9	Suppressing prompt splash with polymer additives. Experiments in Fluids, 2017, 58, 1.	2.4	25
10	Numerical simulation of a liquid bridge in a coaxial gas flow. Physics of Fluids, 2011, 23, .	4.0	24
11	Micrometer glass nozzles for flow focusing. Journal of Micromechanics and Microengineering, 2010, 20, 075035.	2.6	22
12	Dynamics of an axisymmetric liquid bridge close to the minimum-volume stability limit. Physical Review E, 2014, 90, 013015.	2.1	22
13	A novel technique to produce metallic microdrops for additive manufacturing. International Journal of Advanced Manufacturing Technology, 2014, 70, 1395-1402.	3.0	22
14	Blood Particulate Analogue Fluids: A Review. Materials, 2021, 14, 2451.	2.9	20
15	On the precision of optical imaging to study free surface dynamics at high frame rates. Experiments in Fluids, 2009, 47, 251-261.	2.4	19
16	Damping of linear oscillations in axisymmetric liquid bridges. Physics of Fluids, 2009, 21, .	4.0	17
17	On the validity of a universal solution for viscous capillary jets. Physics of Fluids, 2011, 23, .	4.0	15
18	Effects of surface-active impurities on the liquid bridge dynamics. Experiments in Fluids, 2016, 57, 1.	2.4	15

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19	Fast, flexible and low-cost multiphase blood analogue for biomedical and energy applications. Experiments in Fluids, 2020, 61, 1.	2.4	14
20	A novel technique for producing metallic microjets and microdrops. Microfluidics and Nanofluidics, 2013, 14, 101-111.	2.2	13
21	The production of viscoelastic capillary jets with gaseous flow focusing. Journal of Non-Newtonian Fluid Mechanics, 2016, 229, 8-15.	2.4	13
22	Shrinkage and colour in the production of micro-sized PDMS particles for microfluidic applications. Journal of Micromechanics and Microengineering, 2018, 28, 075002.	2.6	13
23	Production of microbubbles from axisymmetric flow focusing in the jetting regime for moderate Reynolds numbers. Physical Review E, 2014, 89, 063012.	2.1	12
24	Gaseous flow focusing for spinning micro and nanofibers. Polymer, 2019, 178, 121623.	3.8	12
25	A simple emulsification technique for the production of micro-sized flexible powder of polydimethylsiloxane (PDMS). Powder Technology, 2020, 366, 610-616.	4.2	12
26	Smooth printing of viscoelastic microfilms with a flow focusing ejector. Journal of Non-Newtonian Fluid Mechanics, 2017, 249, 1-7.	2.4	10
27	Complex behavior very close to the pinching of a liquid free surface. Physical Review Fluids, 2019, 4, .	2.5	10
28	Stabilization of axisymmetric liquid bridges through vibration-induced pressure fields. Journal of Colloid and Interface Science, 2018, 513, 409-417.	9.4	9
29	Fire-shaped cylindrical glass micronozzles to measure cell deformability. Journal of Micromechanics and Microengineering, 2019, 29, 105001.	2.6	9
30	Sub-micrometer precision of optical imaging to locate the free surface of a micrometer fluid shape. Journal of Colloid and Interface Science, 2009, 339, 271-274.	9.4	8
31	The effects of ambient impurities on the surface tension. EPJ Web of Conferences, 2016, 114, 02098.	0.3	8
32	Experimental Analysis of the Extensional Flow of Very Weakly Viscoelastic Polymer Solutions. Materials, 2020, 13, 192.	2.9	7
33	Breakup of an electrified viscoelastic liquid bridge. Physical Review E, 2020, 102, 033103.	2.1	6
34	Unexpected stability of micrometer weakly viscoelastic jets. Physics of Fluids, 2022, 34, .	4.0	4
35	Viscoelastic transition in transonic flow focusing. Physical Review Fluids, 2022, 7, .	2.5	3
36	An experimental technique to produce micrometer waves on a cylindrical sub-millimeter free surface. Measurement Science and Technology, 2014, 25, 075303.	2.6	2

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37	Magnetic PDMS Microparticles for Biomedical and Energy Applications. Lecture Notes in Computational Vision and Biomechanics, 2019, , 578-584.	0.5	2
38	An experimental setup for the study of the steady air flow in a diesel engine chamber. EPJ Web of Conferences, 2012, 25, 01014.	0.3	1
39	Electrical Conductivity of a Stretching Viscoelastic Filament. Materials, 2021, 14, 1294.	2.9	1
40	Fire-Shaped Nozzles to Produce a Stress Peak for Deformability Studies. Polymers, 2022, 14, 2784.	4.5	1
41	An experimental technique to measure the capillary waves in electrified microjets. EPJ Web of Conferences, 2012, 25, 01097.	0.3	0