Eugenia Corvera Poire

List of Publications by Year
in descending order

46 papers	770 citations	566801 15 h-index	525886 27 g-index
49 all docs	49 docs citations	49 times ranked	576 citing authors

#	Article	IF	Citations
1	Viscous fingering in non-Newtonian fluids. Journal of Fluid Mechanics, 2002, 469, 237-256.	1.4	144
2	Tumor Angiogenesis and Vascular Patterning: A Mathematical Model. PLoS ONE, 2011, 6, e19989.	1.1	104
3	Pushing a non-Newtonian fluid in a Hele-Shaw cell: From fingers to needles. Physics of Fluids, 1999, 11, 1757-1767.	1.6	57
4	Finger Behavior of a Shear Thinning Fluid in a Hele-Shaw Cell. Physical Review Letters, 1998, 81, 2048-2051.	2.9	42
5	Analytical solution of the mean-spherical approximation for a system of hard spheres with a surface adhesion. Physical Review A, 1989, 39, 371-373.	1.0	34
6	Pattern Formation and Morphology Evolution in Langmuir Monolayers. Journal of Physical Chemistry B, 2006, 110, 4824-4835.	1.2	33
7	A Novel Analytical Approach to Pulsatile Blood Flow in the Arterial Network. Annals of Biomedical Engineering, 2016, 44, 3047-3068.	1.3	29
8	Pinning and Avalanches in Hydrophobic Microchannels. Physical Review Letters, 2011, 106, 194501.	2.9	27
9	Controlling viscoelastic flow by tuning frequency during occlusions. Physical Review E, 2007, 76, 026301.	0.8	23
10	Phase-field model of Hele-Shaw flows in the high-viscosity contrast regime. Physical Review E, 2003, 68, 046310.	0.8	21
11	A plausible explanation for heart rates in mammals. Journal of Theoretical Biology, 2010, 265, 599-603.	0.8	20
12	Controlling Viscoelastic Flow in Microchannels with Slip. Langmuir, 2011, 27, 2075-2079.	1.6	19
13	Phase equilibria of confined liquid crystals. Molecular Physics, 2002, 100, 2597-2604.	0.8	17
14	Dynamic Characterization of Permeabilities and Flows in Microchannels. Physical Review Letters, 2008, 101, 224501.	2.9	16
15	Application of finite-size scaling to the Pink model for lipid bilayers. Physical Review E, 1993, 47, 696-703.	0.8	15
16	Flow and anastomosis in vascular networks. Journal of Theoretical Biology, 2013, 317, 257-270.	0.8	14
17	Obstructions in Vascular Networks: Relation Between Network Morphology and Blood Supply. PLoS ONE, 2015, 10, e0128111.	1.1	12
18	Resonances of Newtonian fluids in elastomeric microtubes. Physics of Fluids, 2017, 29, 122003.	1.6	10

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19	Estimating Central Pulse Pressure From Blood Flow by Identifying the Main Physical Determinants of Pulse Pressure Amplification. Frontiers in Physiology, 2021, 12, 608098.	1.3	10
20	Stream of droplets as an actuator for oscillatory flows in microfluidics. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	9
21	Growth and morphology in Langmuir monolayers. Europhysics Letters, 2006, 74, 799-805.	0.7	8
22	Frequency-Induced Stratification in Viscoelastic Microfluidics. Langmuir, 2010, 26, 15084-15086.	1.6	8
23	Experimental Resonances in Viscoelastic Microfluidics. Frontiers in Physics, 2021, 9, .	1.0	8
24	Lateral instability in normal viscous fingers. Physical Review E, 2005, 71, 016312.	0.8	7
25	Microfluidic flow spectrometer. Journal of Micromechanics and Microengineering, 2017, 27, 077001.	1.5	7
26	An analytical framework to determine flow velocities within nanotubes from their vibration frequencies. Physics of Fluids, 2018, 30, 122001.	1.6	7
27	Singular behavior of microfluidic pulsatile flow due to dynamic curving of air-fluid interfaces. Physical Review Fluids, 2021, 6, .	1.0	7
28	Dynamic response of a compressible binary fluid mixture. Physical Review Fluids, 2020, 5, .	1.0	7
29	Viscoelastic fingering with a pulsed pressure signal. Journal of Physics Condensed Matter, 2004, 16, S2055-S2060.	0.7	6
30	Enhanced imbibition from the cooperation between wetting and inertia via pulsatile forcing. Physics of Fluids, 2019, 31, .	1.6	6
31	Steady states for viscous fingers with anisotropic surface tension. Physical Review E, 1995, 52, 4063-4067.	0.8	5
32	Phase field approach to spatial perturbations in normal Saffman-Taylor fingers. Physical Review E, 2006, 73, 066308.	0.8	5
33	Fluctuations in Saffman-Taylor fingers with quenched disorder. Physical Review E, 2006, 73, 046302.	0.8	5
34	When do redundant fluidic networks outperform non-redundant ones?. Europhysics Letters, 2017, 117, 64002.	0.7	5
35	Resonances in the response of fluidic networks inherent to the cooperation between elasticity and bifurcations. Royal Society Open Science, 2019, 6, 190661.	1.1	5
36	Cooperation and competition of viscoelastic fluids and elastomeric microtubes subject to pulsatile forcing. Physical Review Fluids, 2020, 5, .	1.0	5

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37	A continuum model to study fluid dynamics within oscillating elastic nanotubes. Journal of Fluid Mechanics, 2021, 916, .	1.4	4
38	Saffman-Taylor fingers with anisotropic surface tension. Physica A: Statistical Mechanics and Its Applications, 1995, 220, 48-59.	1.2	2
39	Pulsatile parallel flow of air and a viscoelastic fluid with multiple characteristic times. An application to mucus in the trachea and the frequency of cough. Journal of Physics Condensed Matter, 2022, 34, 314003.	0.7	2
40	Linear-solvability condition in the Saffman-Taylor problem. Physical Review E, 1993, 48, 964-968.	0.8	1
41	Maximizing the dynamic permeability during occlusions. European Physical Journal: Special Topics, 2007, 143, 95-100.	1.2	1
42	Experiments of periodic forcing of Saffman-Taylor fingers. Physical Review E, 2008, 77, 036207.	0.8	1
43	Self organized array of quantum nanostructures via a strain induced morphological instability. Materials Research Society Symposia Proceedings, 2001, 696, 1.	0.1	0
44	Self Organized Array of Quantum Nanostructures Via a Strain Induced Morphological Instability. Materials Research Society Symposia Proceedings, 2001, 707, 331.	0.1	0
45	Morphological instability at the early stages of heteroepitaxial growth on vicinal surfaces. Journal of Physics Condensed Matter, 2002, 14, L49-L55.	0.7	0
46	Contact line dynamics of pulsatile fluid interfaces modulated by patterned substrates. Physics of Fluids, 2022, 34, 052001.	1.6	0