Dominique Salin

List of Publications by Year
in descending order

64 papers	2,438 citations	201674 27 h-index	197818 49 g-index
64 all docs	64 docs citations	64 times ranked	1573 citing authors

#	Article	IF	Citations
1	Revisiting the linear stability analysis and absoluteâ€“convective transition of two fluid core annular flow. Journal of Fluid Mechanics, 2019, 865, 743-761.	3.4	12
2	Stripes instability of an oscillating non-Brownian iso-dense suspension of spheres. Europhysics Letters, 2018, 121, 54002.	2.0	2
3	Experimental Evidence for Three Universality Classes for Reaction Fronts in Disordered Flows. Physical Review Letters, 2015, 114, 234502.	7.8	36
4	Pore Network Modeling of Drying Processes in Macroporous Materials: Effects of Gravity, Mass Boundary Layer and Pore Microstructure. Transport in Porous Media, 2015, 110, 175-196.	2.6	17
5	Autocatalytic Reaction Fronts Inside a Porous Medium of Glass Spheres. Physical Review Letters, 2013, 110, 148301.	7.8	32
6	Phase diagram of sustained wave fronts opposing the flow in disordered porous media. Europhysics Letters, 2013, 101, 38003.	2.0	22
7	Viscous lock-exchange in rectangular channels. Journal of Fluid Mechanics, 2011, 673, 132-146.	3.4	19
8	Lock-exchange experiments with an autocatalytic reaction front. Journal of Chemical Physics, 2010, 133, 244505.	3.0	25
9	Convective/absolute instability in miscible core-annular flow. Part 1: Experiments. Journal of Fluid Mechanics, 2009, 618, 305-322.	3.4	38
10	Pearl and mushroom instability patterns in two miscible fluids' core annular flows. Physics of Fluids, 2008, 20, .	4.0	56
11	On the selection principle for viscous fingering in porous media. Journal of Fluid Mechanics, 2006, 557, 225.	3.4	29
12	Gravity Waves at the Interface between Miscible Fluids and at the Top of a Settling Suspension. Physical Review Letters, 2005, 94, 204501.	7.8	3
13	Mixing and reaction fronts in laminar flows. Journal of Chemical Physics, 2004, 120, 7314-7321.	3.0	18
14	Fluid displacement between two parallel plates: a non-empirical model displaying change of type from hyperbolic to elliptic equations. Journal of Fluid Mechanics, 2004, 519, 105-132.	3.4	9
15	Pattern of Reaction Diffusion Fronts in Laminar Flows. Physical Review Letters, 2003, 90, 128302.	7.8	69
16	Asymptotic regimes in unstable miscible displacements in random porous media. Advances in Water Resources, 2002, 25, 885-898.	3.8	24
17	Delineation of Microscale Regimes of Fully-Developed Drainage and Implications for Continuum Models. Computational Geosciences, 2001, 5, 257-278.	2.4	14
18	Non-Gaussian Dynamics in Quasi-2D Noncolloidal Suspensions. Physical Review Letters, 1999, 83, 1058-1061.	7.8	25

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19	11. Acoustical and Electrical Methods for the Study of Fluid Mixing in Porous Media. Experimental Methods in the Physical Sciences, 1999, 35, 425-475.	0.1	3
20	Miscible displacement in a Hele-Shaw cell at high rates. Journal of Fluid Mechanics, 1999, 398, 299-319.	3.4	140
21	Invasion percolation with viscous forces. Physical Review E, 1998, 57, 739-751.	2.1	107
22	Phase Diagram of Fully Developed Drainage in Porous Media. Physical Review Letters, 1997, 79, 4581-4584.	7.8	81
23	3D Instability of Miscible Displacements in a Hele-Shaw Cell. Physical Review Letters, 1997, 79, 5254-5257.	7.8	101
24	Miscible displacement between two parallel plates: BGK lattice gas simulations. Journal of Fluid Mechanics, 1997, 338, 277-297.	3.4	85
25	Fingering in 2D Parallel Viscous Flow. Journal De Physique II, 1997, 7, 967-972.	0.9	4
26	Phase diagram of stable miscible displacements in layered porous media. Europhysics Letters, 1996, 36, 105-110.	2.0	11
27	Correlation of Saturation Profiles in Slow Drainage in Porous Media. Journal De Physique, I, 1996, 6, 753-767.	1.2	0
28	Viscous coupling in a model porous medium geometry: Effect of fluid contact area. Flow, Turbulence and Combustion, 1995, 55, 155-169.	0.2	21
29	Boltzmann cellular automata studies of the spinodal decomposition. Physica A: Statistical Mechanics and Its Applications, 1995, 222, 105-118.	2.6	6
30	Two-color nonlinear Boltzmann cellular automata: Surface tension and wetting. Physical Review E, 1995, 51, 3718-3728.	2.1	76
31	Correlation of Occupation Profiles in Invasion Percolation. Physical Review Letters, 1995, 74, 694-697.	7.8	18
32	Hydrodynamic Dispersion of Noncolloidal Suspensions: Measurement from Einstein's Argument. Physical Review Letters, 1995, 74, 1347-1350.	7.8	27
33	Evidence of New Instability Thresholds in Miscible Displacements in Porous Media. Europhysics Letters, 1995, 32, 633-638.	2.0	25
34	Interfacial Phenomena in Boltzmann Cellular Automata. Europhysics Letters, 1994, 28, 317-322.	2.0	5
35	Invasion percolation in a hydrostatic or permeability gradient: Experiments and simulations. Physical Review E, 1994, 49, 4133-4139.	2.1	48
36	Capillary effects in drainage in heterogeneous porous media: continuum modelling, experiments and pore network simulations. Chemical Engineering Science, 1994, 49, 2447-2466.	3.8	53

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37	Large-scale percolation theory of drainage. Transport in Porous Media, 1993, 10, 171-195.	2.6	48
38	Dispersion, permeability heterogeneity, and viscous fingering: Acoustic experimental observations and particleâ€tracking simulations. Physics of Fluids A, Fluid Dynamics, 1993, 5, 1558-1574.	1.6	92
39	Capillary Effects in Immiscible Flows in Heterogeneous Porous Media. Europhysics Letters, 1993, 21, 19-24.	2.0	22
40	Wave Vector Selection in the Instability of an Interface in a Magnetic or Electric Field. Europhysics Letters, 1993, 21, 667-670.	2.0	19
41	Cellular-automata studies of circular Couette flows and chaotic mixing. Physical Review E, 1993, 48, 757-766.	2.1	6
42	Miscible viscous fingering: Experiments versus continuum approach. Physics of Fluids A, Fluid Dynamics, 1992, 4, 1611-1619.	1.6	40
43	Cellular automata studies of mixing in chaotic flows. Computational Materials Science, 1992, 1, 87-93.	3.0	31
44	Three-dimensional miscible viscous fingering in porous media. Physical Review Letters, 1991, 67, 2005-2008.	7.8	42
45	Magnetic-fluid oscillator: Observation of nonlinear period doubling. Physical Review Letters, 1991, 67, 50-53.	7.8	26
46	Ultrasonic diagnostic in porous media and suspensions. Journal De Physique III, 1991, 1, 1455-1466.	0.3	17
47	Anomalous dispersion and finiteâ€size effects in hydrodynamic dispersion. Physics of Fluids A, Fluid Dynamics, 1990, 2, 674-680.	1.6	20
48	Ionic ferrofluids: A crossing of chemistry and physics. Journal of Magnetism and Magnetic Materials, 1990, 85, 27-32.	2.3	220
49	Capillary Hyperdiffusion as a Test of Wettability. Europhysics Letters, 1990, 11, 127-132.	2.0	26
50	Magnetic liquids. Endeavour, 1988, 12, 76-83.	0.4	35
51	Magnetic and thermal behaviour of Î³-Fe 2 O 3 fine grains. Journal of Magnetism and Magnetic Materials, 1988, 71, 246-254.	2.3	21
52	Magnetic Wetting Transition of a Ferrofluid on a Wire. Europhysics Letters, 1988, 5, 547-552.	2.0	17
53	MULTIPLE SCISSIONS OF IONIC FERROFLUID DROPS. Chemical Engineering Communications, 1988, 67, 205-216.	2.6	8
54	Magnetic drop-sheath wetting transition of a ferrofluid on a wire. Revue De Physique AppliquÃ©e, 1988, 23, 1017-1022.	0.4	18

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55	Experimental Evidence of Disorder Effects in Hydrodynamic Dispersion. Physical Review Letters, 1987, 58, 2035-2038.	7.8	45
56	Ionic ferrofluid: Optical properties. Journal of Magnetism and Magnetic Materials, 1987, 65, 285-288.	2.3	32
57	Sound velocity of a sandstone saturated with oil and brine at different concentrations. Geophysical Research Letters, 1986, 13, 326-328.	4.0	33
58	Magnetic colloidal properties of ionic ferrofluids. Journal of Magnetism and Magnetic Materials, 1986, 62, 36-46.	2.3	201
59	Acoustic Study of Suspension Sedimentation. Europhysics Letters, 1986, 2, 123-128.	2.0	46
60	Bistability of ferrofluid magnetic drops under magnetic field,. Journal of Magnetism and Magnetic Materials, 1983, 39, 48-50.	2.3	46
61	Critical behavior of order-parameter fluctuations in liquidHe4nearTÎ». Physical Review B, 1979, 20, 1025-1034.	3.2	3
62	Direct measurement of the modified equation of state of thin helium films. Journal of Low Temperature Physics, 1979, 37, 679-693.	1.4	4
63	Inhomogeneities in thin helium films. Journal of Low Temperature Physics, 1977, 28, 359-368.	1.4	5
64	Quasielastic Rayleigh Scattering in a Smectic-ACrystal. Physical Review Letters, 1974, 32, 6-9.	7.8	54