Jordi OrtÃn

List of Publications by Year
in descending order

95 papers	2,629 citations	212478 28 h-index	232693 48 g-index
97 all docs	97 docs citations	97 times ranked	1461 citing authors

#	Article	IF	Citations
1	Stokes layers in oscillatory flows of viscoelastic fluids. , 2022, 3, 100056.		0
2	Multiphase CFD modeling of front propagation in a Hele-Shaw cell featuring a localized constriction. Physical Review Fluids, 2021, 6, .	1.0	1
3	Stokes layers in oscillatory flows of viscoelastic fluids. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190521.	1.6	4
4	The origin of hysteresis and memory of two-phase flow in disordered media. Communications Physics, 2020, 3, .	2.0	9
5	Capillary jumps of fluid-fluid fronts across an elementary constriction in a model open fracture. Physical Review Fluids, 2020, 5, .	1.0	6
6	Laning, thinning and thickening of sheared colloids in a two-dimensional Taylorâ€“Couette geometry. Soft Matter, 2018, 14, 5121-5129.	1.2	11
7	Spatiotemporal Organization of Correlated Local Activity within Global Avalanches in Slowly Driven Interfaces. Physical Review Letters, 2018, 121, 034101.	2.9	6
8	Avalanches, Non-Gaussian Fluctuations and Intermittency in Fluid Imbibition. Understanding Complex Systems, 2017, , 261-292.	0.3	2
9	Fluid front morphologies in gap-modulated Hele-Shaw cells. Physical Review Fluids, 2017, 2, .	1.0	3
10	Experimental study of stable imbibition displacements in a model open fracture. I. Local avalanche dynamics. Physical Review E, 2016, 93, 012149.	0.8	9
11	Experimental study of stable imbibition displacements in a model open fracture. II. Scale-dependent avalanche dynamics. Physical Review E, 2016, 93, 012150.	0.8	10
12	Flow instabilities in large amplitude oscillatory shear: a cautionary tale. Rheologica Acta, 2014, 53, 885-898.	1.1	33
13	Vortex ring formation in oscillatory pipe flow of wormlike micellar solutions. Journal of Rheology, 2014, 58, 149-181.	1.3	8
14	Disorder-Induced Capillary Bursts Control Intermittency in Slow Imbibition. Physical Review Letters, 2014, 113, 074501.	2.9	13
15	Experiments on the laminar oscillatory flow of wormlike micellar solutions. Rheologica Acta, 2012, 51, 545-557.	1.1	14
16	Capillary rise in Hele-Shaw models of disordered media. Journal of Colloid and Interface Science, 2012, 377, 387-395.	5.0	8
17	Avalanches of imbibition fronts: Towards critical pinning. Europhysics Letters, 2011, 94, 46005.	0.7	31
18	Roughness and intermittent dynamics of imbibition fronts due to capillary and permeability disorder. Journal of Contaminant Hydrology, 2011, 120-121, 157-169.	1.6	15

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19	Laminar oscillatory flow of Maxwell and Oldroyd-B fluids: Theoretical analysis. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 1315-1326.	1.0	33
20	Planet, Santucci, and OrtÃn Reply:. Physical Review Letters, 2010, 105, .	2.9	8
21	Pattern formation and interface pinch-off in rotating Hele-Shaw flows: A phase-field approach. Physical Review E, 2009, 80, 056305.	0.8	30
22	Avalanches and Non-Gaussian Fluctuations of the Global Velocity of Imbibition Fronts. Physical Review Letters, 2009, 102, 094502.	2.9	59
23	Experiments of periodic forcing of Saffman-Taylor fingers. Physical Review E, 2008, 77, 036207.	0.8	1
24	Instabilities in the oscillatory flow of a complex fluid. Physical Review E, 2007, 75, 056307.	0.8	14
25	Pressure-dependent scaling scenarios in experiments of spontaneous imbibition. Physical Review E, 2007, 76, 056312.	0.8	16
26	Fluctuations in Saffman-Taylor fingers with quenched disorder. Physical Review E, 2006, 73, 046302.	0.8	5
27	Relevance of dynamic wetting in viscous fingering patterns. Physical Review E, 2006, 74, 025302.	0.8	39
28	Exact calculation of the energy contributions to theT=0random-field Ising model with metastable dynamics on the Bethe lattice. Physical Review B, 2005, 71, .	1.1	8
29	Measurements of the bulk and interfacial velocity profiles in oscillating Newtonian and Maxwellian fluids. Physical Review E, 2005, 72, 016308.	0.8	23
30	Anomalous Roughening of Viscous Fluid Fronts in Spontaneous Imbibition. Physical Review Letters, 2005, 95, 104501.	2.9	43
31	Nonlinear Saffman-Taylor Instability. Physical Review Letters, 2004, 92, 054501.	2.9	38
32	Low viscosity contrast fingering in a rotating Hele-Shaw cell. Physics of Fluids, 2004, 16, 908-924.	1.6	82
33	Systematic weakly nonlinear analysis of radial viscous fingering. Physical Review E, 2003, 68, 026308.	0.8	33
34	Anomalous roughening in experiments of interfaces in Hele-Shaw flows with strong quenched disorder. Physical Review E, 2003, 67, 056308.	0.8	16
35	Anomalous Roughening of Hele-Shaw Flows with Quenched Disorder. Physical Review Letters, 2002, 89, 026102.	2.9	45
36	Experiments of interfacial roughening in Hele-Shaw flows with weak quenched disorder. Physical Review E, 2002, 66, 031603.	0.8	35

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37	Hysteresis in shape-memory alloys. International Journal of Non-Linear Mechanics, 2002, 37, 1275-1281.	1.4	101
38	Interface roughening in Hele-Shaw flows with quenched disorder: Experimental and theoretical results. Europhysics Letters, 2001, 55, 194-200.	0.7	50
39	Systematic weakly nonlinear analysis of interfacial instabilities in Hele-Shaw flows. Physical Review E, 2001, 64, 016302.	0.8	20
40	Interfacial instabilities of a fluid annulus in a rotating Heleâ€“Shaw cell. Physics of Fluids, 2000, 12, 1685-1698.	1.6	42
41	Efficient Algorithm for Finding Ground-States in the Random Field Ising Model with an External Field. Journal of Computational Physics, 2000, 160, 117-125.	1.9	20
42	Radial displacement of a fluid annulus in a rotating Heleâ€“Shaw cell. Physics of Fluids, 1999, 11, 778-785.	1.6	39
43	Experimental Evidence for Universality of Acoustic Emission Avalanche Distributions during Structural Transitions. Physical Review Letters, 1998, 81, 1889-1892.	2.9	93
44	Dissipation in quasistatically driven disordered systems. Physical Review B, 1998, 58, 5628-5631.	1.1	11
45	Avalanches in the growth of stress-induced martensites. Physical Review B, 1997, 56, 11508-11517.	1.1	40
46	Recent Viewpoints on the Thermodynamics of Fluctuationless First-Order Phase Transitions. European Physical Journal Special Topics, 1997, 07, C5-13-C5-22.	0.2	2
47	Experiments in a rotating Hele-Shaw cell. Physical Review E, 1996, 54, 6260-6267.	0.8	91
48	Experiments and Models of Avalanches in Martensites. European Physical Journal Special Topics, 1995, 05, C8-209-C8-214.	0.2	7
49	Universality in models for disorder-induced phase transitions. Physical Review E, 1995, 52, R5-R8.	0.8	57
50	Statistics of avalanches in martensitic transformations. I. Acoustic emission experiments. Physical Review B, 1995, 52, 12644-12650.	1.1	39
51	A Random Field 3-State Spin Model to Simulate Hysteresis and Avalanches in Martensitic Transformations. European Physical Journal Special Topics, 1995, 05, C2-71-C2-76.	0.2	8
52	Distribution of Acoustic Emission Avalanches in Martensitic Transformations. European Physical Journal Special Topics, 1995, 05, C2-59-C2-64.	0.2	0
53	Hysteresis and return-point memory in deterministic cellular automata. Physical Review Letters, 1994, 72, 2203-2206.	2.9	15
54	Distributions of avalanches in martensitic transformations. Physical Review Letters, 1994, 72, 1694-1697.	2.9	205

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55	Entropy change of martensitic transformations in Cu-based shape-memory alloys. Physical Review B, 1993, 48, 3611-3619.	1.1	43
56	Calorimetric and ultrasonic investigation of the R-phase formation in a TiNi:Fe alloy. Journal of Physics Condensed Matter, 1992, 4, 7059-7066.	0.7	5
57	Heat conduction in a metallic rod with Newtonian losses. American Journal of Physics, 1992, 60, 846-852.	0.3	9
58	Study of thermoelastic growth during martensitic transformations. Journal of Applied Physics, 1992, 71, 950-957.	1.1	12
59	Martensitic transformation of Cu-based shape-memory alloys: Elastic anisotropy and entropy change. Physical Review B, 1992, 45, 7633-7639.	1.1	60
60	Preisach modeling of hysteresis for a pseudoelastic Cuâ€Znâ€Al single crystal. Journal of Applied Physics, 1992, 71, 1454-1461.	1.1	123
61	Calorimetric measurements on the Î²â‡Œ Î³' and Î²â‡Œ Î²' martensitic transformations in a cu-al-ni single crystal subjected to uniaxial tensile stress. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1992, 65, 461-475.	0.8	25
62	PARTIAL HYSTERESIS CYCLES IN SHAPE-MEMORY ALLOYS : EXPERIMENTS AND MODELLING. European Physical Journal Special Topics, 1991, 01, C4-65-C4-70.	0.2	4
63	A CALORIMETRIC INVESTIGATION OF MARTENSITIC TRANSFORMATION UNDER APPLIED STRESS IN SINGLE-CRYSTAL Cu-AL-Ni ALLOYS. European Physical Journal Special Topics, 1991, 01, C4-71-C4-76.	0.2	2
64	THERMODYNAMICS AND HYSTERESIS BEHAVIOUR OF THERMOELASTIC MARTENSITIC TRANSFORMATIONS. European Physical Journal Special Topics, 1991, 01, C4-13-C4-23.	0.2	7
65	MARTENSITIC TRANSITION ENTROPY CHANGE AND ELASTIC CONSTANTS OF Cu-Al-Be ALLOYS. European Physical Journal Special Topics, 1991, 01, C4-283-C5-288.	0.2	3
66	A calorimetric investigation of the Î²â‡Œ Î³1 and Î²â‡Œ Î²1 martensitic transformations in Cuî—¸Alî—¸Ni single crystals. Scripta Metallurgica Et Materialia, 1990, 24, 1641-1645.	1.0	20
67	Thermodynamics of thermoelastic martensitic transformations. Acta Metallurgica, 1989, 37, 1433-1441.	2.1	143
68	State equation for shapeâ€memory alloys: Application to Cuâ€Znâ€Al. Journal of Applied Physics, 1989, 66, 2342-2348.	1.1	20
69	Thermodynamic analysis of thermal measurements in thermoelastic martensitic transformations. Acta Metallurgica, 1988, 36, 1873-1889.	2.1	304
70	A model-based study of deconvolution in time-varying or injection calorimeters. Thermochimica Acta, 1988, 126, 171-179.	1.2	3
71	Energy contributions in the martensitic transformation of shape-memory alloys. Philosophical Magazine Letters, 1988, 57, 291-298.	0.5	46
72	Hysteretic transformation behaviour of shape memory alloys. Revue De Physique AppliquÃ©e, 1988, 23, 557-564.	0.4	13

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73	Thermal power measurements in a differential-heat-conduction-scanning calorimeter at low temperature-scanning rates. Thermochimica Acta, 1987, 121, 333-342.	1.2	7
74	Thermally induced martensitic transformations: theoretical analysis of a complete calorimetric run. Thermochimica Acta, 1987, 121, 397-412.	1.2	12
75	Acoustic emission during the martensitic transformation of small microplates in a CuZnAl alloy. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 121, 352-356.	0.9	18
76	Signal processing in time-varying calorimeters for the study of continuous liquid mixtures. Thermochimica Acta, 1986, 107, 149-162.	1.2	7
77	A frequential analysis of the numerical algorithms used for inverse filtering in calorimetry. Thermochimica Acta, 1986, 102, 173-178.	1.2	7
78	Identification and deconvolution in time-varying calorimetric systems by an optimal tracking approach. Thermochimica Acta, 1986, 97, 203-213.	1.2	1
79	Thermogenesis: Identification and deconvolution in the unipan microcalorimeter. Thermochimica Acta, 1985, 87, 177-182.	1.2	1
80	Thermogenesis: Comparative study of several deconvolution methods in time-invariant calorimetry. Thermochimica Acta, 1985, 89, 315-324.	1.2	4
81	Deconvolution in microcalorimetry and an application to mass-varying systems. Thermochimica Acta, 1985, 96, 37-47.	1.2	11
82	Thermogenesis: An approach to nearly exact deconvolution in time-varying systems. Thermochimica Acta, 1985, 84, 255-262.	1.2	16
83	Thermogenesis: Deconvolution in non time-invariant calorimetric systems. Thermochimica Acta, 1984, 75, 173-181.	1.2	12
84	Thermogenesis: Identification and deconvolution in microcalorimetric systems with continuous injection for the study of liquid mixtures. Thermochimica Acta, 1984, 81, 97-103.	1.2	15
85	Thermogenesis: Determination of thermokinetic parameters. Thermochimica Acta, 1984, 76, 325-332.	1.2	7
86	Thermogenesis: Identification by means of pade approximants. Thermochimica Acta, 1983, 70, 113-122.	1.2	19
87	Thermogenesis: Identification by means of modulating functions. Thermochimica Acta, 1983, 70, 123-131.	1.2	16
88	Verification of calorimetric models based on physical parameters by frequential characteristics. Thermochimica Acta, 1983, 71, 351-357.	1.2	6
89	Thermogenesis: Comparative efficiency of deconvolution based on optimal control and inverse filters. Thermochimica Acta, 1983, 67, 213-222.	1.2	9
90	Thermogenesis: Smoothing techniques in Z-transform and harmonic analysis. Thermochimica Acta, 1983, 63, 331-339.	1.2	12

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91	Thermogenesis: Relative kinetic limits. Thermochimica Acta, 1982, 53, 29-37.	1.2	15
92	Thermogenesis: Harmonic analysis and universal transference function. Thermochimica Acta, 1981, 48, 367-374.	1.2	14
93	Thermogenesis: universal transference function. Thermochimica Acta, 1981, 43, 305-311.	1.2	5
94	Thermogenesis: experimental approach to a reduced transference function. Thermochimica Acta, 1980, 40, 269-274.	1.2	12
95	Elastically-mediated collective organisation of magnetic microparticles. Soft Matter, 0, , .	1.2	3