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List of Publications by Year in descending order

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86 papers	1,329 citations	430754 18 h-index	477173 29 g-index
90 all docs	90 docs citations	90 times ranked	419 citing authors

#	Article	IF	Citations
1	Experimental study on radial gravity currents flowing in a vegetated channel. Journal of Fluid Mechanics, 2022, 933, .	1.4	1
2	A simple model for the reflection by a vertical barrier of a dambreak flow over a dry or pre-wetted bottom. Journal of Fluid Mechanics, 2022, 942, .	1.4	1
3	On the spinup and spreadout of a Cartesian gravity current on a slope in a rotating system. Journal of Fluid Mechanics, 2022, 943, .	1.4	1
4	Development of supercritical motion and internal jumps within lock-release radial currents and draining flows. Physical Review Fluids, 2021, 6, .	1.0	2
5	Experimental verification of theoretical approaches for radial gravity currents draining from an edge. Acta Mechanica, 2021, 232, 4461-4483.	1.1	1
6	Gravity currents with internal stratification in channels of non-rectangular cross-section. European Journal of Mechanics, B/Fluids, 2021, 89, 83-92.	1.2	2
7	On symmetric intrusions in a linearly stratified ambient: a revisit of Benjamin's steady-state propagation results. Journal of Fluid Mechanics, 2021, 929, .	1.4	1
8	A model for the propagation of inertial gravity currents released from a two-layer stratified lock. Journal of Fluid Mechanics, 2020, 903, .	1.4	2
9	Tailwater gravity currents and their connection to perfectly subcritical flow: laboratory experiments and shallow-water and direct numerical solutions. Environmental Fluid Mechanics, 2020, 20, 1141-1171.	0.7	1
10	Rotating planar gravity currents at moderate Rossby numbers: fully resolved simulations and shallow-water modelling â€“ ERRATUM. Journal of Fluid Mechanics, 2020, 891, .	1.4	1
11	Propagation of a continuously supplied gravity current head down bottom slopes. Physical Review Fluids, 2020, 5, .	1.0	7
12	Inertial gravity current produced by the drainage of a cylindrical reservoir from an outer orÂinnerÂedge. Journal of Fluid Mechanics, 2019, 874, 185-209.	1.4	6
13	On gravity currents of fixed volume that encounter a down-slope or up-slope bottom. Physics of Fluids, 2019, 31, .	1.6	10
14	Non-Boussinesq gravity currents and surface waves generated by lock release in a circular-section channel: theoretical and experimental investigation. Journal of Fluid Mechanics, 2019, 869, 610-633.	1.4	5
15	Rotating planar gravity currents at moderate Rossby numbers: fully resolved simulations and shallow-water modelling. Journal of Fluid Mechanics, 2019, 867, 114-145.	1.4	6
16	Benjaminâ€™s gravity current into an ambient fluidÂwith an open surface in a channel of general cross-section. Journal of Fluid Mechanics, 2019, 859, 972-991.	1.4	2
17	Critical regime of gravity currents flowing in non-rectangular channels with densityÂstratification. Journal of Fluid Mechanics, 2018, 840, 579-612.	1.4	5
18	Thin-layer models for gravity currents in channels of general cross-section area, a review. Environmental Fluid Mechanics, 2018, 18, 283-333.	0.7	7

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19	Gravity currents produced by lock-release: Theory and experiments concerning the effect of a free top in non-Boussinesq systems. Advances in Water Resources, 2018, 121, 456-471.	1.7	12
20	Models of internal jumps and the fronts of gravity currents: unifying two-layer theories and deriving new results. Journal of Fluid Mechanics, 2018, 846, 654-685.	1.4	15
21	Benjaminâ€™s gravity current into an ambient fluid with an open surface. Journal of Fluid Mechanics, 2017, 825, .	1.4	7
22	On the propagation of particulate gravity currents in circular and semi-circular channels partially filled with homogeneous or stratified ambient fluid. Physics of Fluids, 2017, 29, 106605.	1.6	8
23	Sustained gravity currents in a channel. Journal of Fluid Mechanics, 2016, 798, 853-888.	1.4	26
24	Gravity currents in a linearly stratified ambient fluid created by lock release and influx in semi-circular and rectangular channels. Physics of Fluids, 2016, 28, .	1.6	15
25	The propagation of particulate gravity currents in a V-shaped triangular cross section channel: Lock-release experiments and shallow-water numerical simulations. Physics of Fluids, 2016, 28, 036601.	1.6	10
26	Sustained axisymmetric intrusions in a rotating system. European Journal of Mechanics, B/Fluids, 2016, 56, 110-119.	1.2	3
27	On the self-similar propagation of gravity currents through an array of emergent vegetation-like obstacles. Physics of Fluids, 2016, 28, 056605.	1.6	7
28	Gravity currents produced by constant and time varying inflow in a circular cross-section channel: Experiments and theory. Advances in Water Resources, 2016, 90, 10-23.	1.7	13
29	On the front conditions for gravity currents in channels of general cross-section. Environmental Fluid Mechanics, 2016, 16, 747-775.	0.7	3
30	The propagation of gravity currents in a circular cross-section channel: experiments and theory. Journal of Fluid Mechanics, 2015, 764, 513-537.	1.4	17
31	On the coupling between spin-up and aspect ratio of vortices in rotating stratified flows: aÂpredictiveÂmodel. Journal of Fluid Mechanics, 2015, 777, 461-481.	1.4	3
32	Shallow-water solutions for gravity currents in non-rectangular cross-area channels with stratified ambient. Environmental Fluid Mechanics, 2015, 15, 793-820.	0.7	4
33	Axisymmetric gravity currents in two-layer density-stratified media. Environmental Fluid Mechanics, 2015, 15, 1035-1051.	0.7	5
34	A novel hybrid model for the motion of sustained axisymmetric gravity currents and intrusions. European Journal of Mechanics, B/Fluids, 2015, 49, 108-120.	1.2	3
35	Gravity currents with tailwaters in Boussinesq and non-Boussinesq systems: two-layer shallow-water dam-break solutions and Navierâ€“Stokes simulations. Environmental Fluid Mechanics, 2014, 14, 451-470.	0.7	3
36	Gravity currents with double stratification: a numerical and analytical investigation. Environmental Fluid Mechanics, 2014, 14, 471-499.	0.7	5

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37	The propagation of gravity currents in a V-shaped triangular cross-section channel: experiments and theory. Journal of Fluid Mechanics, 2014, 754, 232-249.	1.4	21
38	On the axisymmetric spreading of non-Newtonian power-law gravity currents of time-dependent volume: An experimental and theoretical investigation focused on the inference of rheological parameters. Journal of Non-Newtonian Fluid Mechanics, 2013, 201, 69-79.	1.0	37
39	Two-layer shallow-water dam-break solutions for gravity currents in non-rectangular cross-area channels. Journal of Fluid Mechanics, 2013, 732, 537-570.	1.4	18
40	The flow of an axisymmetric stratified gravity current into a stratified ambient in a rotating system. Environmental Fluid Mechanics, 2013, 13, 337-351.	0.7	1
41	Front conditions of high-Re gravity currents produced by constant and time-dependent influx: An analytical and numerical study. European Journal of Mechanics, B/Fluids, 2013, 41, 109-122.	1.2	11
42	Gravity currents in non-rectangular cross-section channels: Analytical and numerical solutions of the one-layer shallow-water model for high-Reynolds-number propagation. Physics of Fluids, 2013, 25, 026601.	1.6	14
43	An analogy of Taylorâ€™s instability criterion in Couette and rotating-magnetic-field-driven flows. Physics of Fluids, 2012, 24, 011704.	1.6	1
44	Draining of a thin film on the wall of a conical container set into rapid rotation about its vertical axis. Physics of Fluids, 2012, 24, 023602.	1.6	4
45	Gravity currents and intrusions of stratified fluids into a stratified ambient. Environmental Fluid Mechanics, 2012, 12, 115-132.	0.7	12
46	Gravity currents in a two-layer stratified ambient: The theory for the steady-state (front condition) and lock-released flows, and experimental confirmations. Physics of Fluids, 2012, 24, .	1.6	14
47	A general solution of Benjamin-type gravity current in a channel of non-rectangular cross-section. Environmental Fluid Mechanics, 2012, 12, 251-263.	0.7	24
48	The flow of high-Reynolds axisymmetric gravity currents of a stratified fluid into a stratified ambient: shallow-water and box model solutions. Environmental Fluid Mechanics, 2012, 12, 347-359.	0.7	3
49	A non-dissipative solution of Benjamin-type gravity current for a wide range of depth ratios. Journal of Fluid Mechanics, 2011, 682, 54-65.	1.4	5
50	A numerical investigation of high-Reynolds-number constant-volume non-Boussinesq density currents in deep ambient. Journal of Fluid Mechanics, 2011, 673, 574-602.	1.4	16
51	A steady-state model for asymmetric intrusive gravity currents in a linearly stratified ambient. Environmental Fluid Mechanics, 2011, 11, 231-246.	0.7	0
52	Two-layer shallow-water dam-break solutions for non-Boussinesq gravity currents in a wide range of fractional depth. Journal of Fluid Mechanics, 2011, 675, 27-59.	1.4	25
53	The propagation of high-Reynolds-number non-Boussinesq gravity currents in axisymmetric geometry. Journal of Fluid Mechanics, 2010, 643, 267-277.	1.4	6
54	Energy balances for gravity currents with a jump at the interface produced by lock release. Acta Mechanica, 2010, 211, 1-21.	1.1	15

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55	Energy balances and front speed conditions of two-layer models for gravity currents produced by lock release. Acta Mechanica, 2008, 201, 63-81.	1.1	18
56	Energy balances for axisymmetric gravity currents in homogeneous and linearly stratified ambients. Journal of Fluid Mechanics, 2008, 616, 303-326.	1.4	9
57	On gravity currents in stratified ambients. Physics of Fluids, 2007, 19, .	1.6	24
58	Axisymmetric gravity currents at high Reynolds number: On the quality of shallow-water modeling of experimental observations. Physics of Fluids, 2007, 19, 036602.	1.6	18
59	A shallow-water model for high-Reynolds-number gravity currents for a wide range of density differences and fractional depths. Journal of Fluid Mechanics, 2007, 579, 373-382.	1.4	31
60	On axisymmetric intrusive gravity currents in a stratified ambient â€“ shallow-water theory and numerical results. European Journal of Mechanics, B/Fluids, 2007, 26, 220-235.	1.2	12
61	Energy balances for propagating gravity currents: homogeneous and stratified ambients. Journal of Fluid Mechanics, 2006, 565, 363.	1.4	26
62	On gravity currents in a linearly stratified ambient: a generalization of Benjamin's steady-state propagation results. Journal of Fluid Mechanics, 2006, 548, 49.	1.4	60
63	Intrusive gravity currents in a stratified ambient: shallow-water theory and numerical results. Journal of Fluid Mechanics, 2005, 535, 287-323.	1.4	43
64	An experimental investigation of spin-up from rest of a stratified fluid. Geophysical and Astrophysical Fluid Dynamics, 2004, 98, 277-296.	0.4	10
65	On gravity currents propagating at the base of a stratified ambient: effects of geometrical constraints and rotation. Journal of Fluid Mechanics, 2004, 521, 69-104.	1.4	26
66	On inwardly propagating high-Reynolds-number axisymmetric gravity currents. Journal of Fluid Mechanics, 2003, 494, 255-274.	1.4	12
67	On axisymmetric rotating gravity currents: two-layer shallow-water and numerical solutions. Journal of Fluid Mechanics, 2003, 481, 37-66.	1.4	15
68	The flow field and bare-spot formation in spin-up from rest of a two-layer fluid about a vertical axis. Journal of Fluid Mechanics, 2003, 474, 117-145.	1.4	8
69	On the separation of a suspension in a tube centrifuge: critical comments on theoretical models and experimental verifications. Archive of Applied Mechanics, 2003, 73, 399-408.	1.2	5
70	Spin-up from rest in a stratified fluid: boundary flows. Journal of Fluid Mechanics, 2002, 472, 51-82.	1.4	30
71	On gravity currents propagating at the base of a stratified ambient. Journal of Fluid Mechanics, 2002, 458, 283-301.	1.4	63
72	The motion generated by a rising particle in a rotating fluid â€“ numerical solutions. Part 2. The long container case. Journal of Fluid Mechanics, 2002, 454, 345-364.	1.4	10

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73	Axisymmetric gravity currents in a rotating system: experimental and numerical investigations. Journal of Fluid Mechanics, 2001, 447, 1-29.	1.4	57
74	Numerical investigation of the spin-up of a two-layer fluid. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2001, 81, 479-480.	0.9	0
75	High-Reynolds-number gravity currents over a porous boundary: shallow-water solutions and box-model approximations. Journal of Fluid Mechanics, 2000, 418, 1-23.	1.4	29
76	The motion generated by a rising particle in a rotating fluid â€“ numerical solutions. Part 1. A short container. Journal of Fluid Mechanics, 2000, 413, 111-148.	1.4	9
77	Particle-driven gravity currents: asymptotic and box model solutions. European Journal of Mechanics, B/Fluids, 2000, 19, 139-165.	1.2	51
78	Particle Entrainment in a Bounded Rotating Flow With a Drain. Journal of Fluids Engineering, Transactions of the ASME, 1998, 120, 676-679.	0.8	10
79	The effects of rotation on axisymmetric gravity currents. Journal of Fluid Mechanics, 1998, 362, 17-51.	1.4	47
80	Some shear-layer and inertial modifications to the geostrophic drag on a slowly rising particle or drop in a rotating fluid. Journal of Fluid Mechanics, 1996, 319, 219.	1.4	6
81	The motion of a rising disk in a rotating axially bounded fluid for large Taylor number. Journal of Fluid Mechanics, 1995, 291, 1-32.	1.4	15
82	The motion generated by a slowly rising disk in an unbounded rotating fluid for arbitrary Taylor number. Journal of Fluid Mechanics, 1994, 262, 1-26.	1.4	17
83	Spinâ€up from rest of a mixture. Physics of Fluids A, Fluid Dynamics, 1990, 2, 160-166.	1.6	5
84	Side wall effects in centrifugal separation of mixtures. Physics of Fluids A, Fluid Dynamics, 1989, 1, 810-818.	1.6	5
85	On shear layers in mixture separation in rotating containers with inclined walls. Journal of Fluid Mechanics, 1988, 193, 27.	1.4	5
86	Axisymmetric compressible flow in a rotating cylinder with axial convection. Journal of Fluid Mechanics, 1985, 154, 121-144.	1.4	7