Duncan Hewitt

List of Publications by Year
in descending order

37 papers	771 citations	471509 17 h-index	526287 27 g-index
42 all docs	42 docs citations	42 times ranked	535 citing authors

#	Article	IF	Citations
1	Convective shutdown in a porous medium at high Rayleigh number. Journal of Fluid Mechanics, 2013, 719, 551-586.	3.4	98
2	Ultimate Regime of High Rayleigh Number Convection in a Porous Medium. Physical Review Letters, 2012, 108, 224503.	7.8	81
3	High Rayleigh number convection in a three-dimensional porous medium. Journal of Fluid Mechanics, 2014, 748, 879-895.	3.4	61
4	The dynamics of miscible viscous fingering from onset to shutdown. Journal of Fluid Mechanics, 2018, 837, 520-545.	3.4	40
5	Viscoplastic slender-body theory. Journal of Fluid Mechanics, 2018, 856, 870-897.	3.4	38
6	Twoâ€"dimensional viscoplastic dambreaks. Journal of Non-Newtonian Fluid Mechanics, 2016, 238, 65-79.	2.4	37
7	Taylorâ€™s swimming sheet in a yield-stressÂfluid. Journal of Fluid Mechanics, 2017, 828, 33-56.	3.4	36
8	Thixotropic gravity currents. Journal of Fluid Mechanics, 2013, 727, 56-82.	3.4	28
9	Flow-induced compaction of a deformable porous medium. Physical Review E, 2016, 93, 023116.	2.1	28
10	Viscoplastic boundary layers. Journal of Fluid Mechanics, 2017, 813, 929-954.	3.4	28
11	Stability of columnar convection in a porous medium. Journal of Fluid Mechanics, 2013, 737, 205-231.	3.4	27
12	Vigorous convection in porous media. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200111.	2.1	24
13	Obstructed and channelized viscoplastic flow in a Hele-Shaw cell. Journal of Fluid Mechanics, 2016, 790, 173-204.	3.4	22
14	Imbibition with swelling: Capillary rise in thin deformable porous media. Physical Review Fluids, 2017, 2, .	2.5	21
15	High Rayleigh number convection in a porous medium containing a thin low-permeability layer. Journal of Fluid Mechanics, 2014, 756, 844-869.	3.4	20
16	Tidal Groundingâ€Line Migration Modulated by Subglacial Hydrology. Geophysical Research Letters, 2020, 47, e2020GL089088.	4.0	20
17	Stable and unstable miscible displacements in layered porous media. Journal of Fluid Mechanics, 2019, 869, 468-499.	3.4	19
18	Shallow, gravity-driven flow in a poro-elastic layer. Journal of Fluid Mechanics, 2015, 778, 335-360.	3.4	17

#	ARTICLE	IF	CITATIONS
19	Dewatering of fibre suspensions by pressure filtration. Physics of Fluids, 2016, 28, 063304.	4.0	17
20	Obstructed viscoplastic flow in a Hele-Shaw cell. Physical Review Fluids, 2020, 5, .	2.5	13
21	Stability of three-dimensional columnar convection in a porous medium. Journal of Fluid Mechanics, 2017, 829, 89-111.	3.4	10
22	Internally Heated Porous Convection: An Idealized Model for Enceladus' Hydrothermal Activity. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006451.	3.6	10
23	The influence of a poroelastic till on rapid subglacial flooding and cavity formation. Journal of Fluid Mechanics, 2018, 855, 1170-1207.	3.4	9
24	High-Rayleigh-number convection in porousâ€"fluid layers. Journal of Fluid Mechanics, 2021, 920, .	3.4	9
25	Flow-driven compaction of a fibrous porous medium. Physical Review Fluids, 2019, 4, .	2.5	9
26	Building on Oldroydâ€™s viscoplastic legacy: Perspectives and new developments. Journal of Non-Newtonian Fluid Mechanics, 2021, 294, 104580.	2.4	8
27	Horizontal miscible displacements through porous media: the interplay between viscous fingering and gravity segregation. Journal of Fluid Mechanics, 2022, 935, .	3.4	8
28	Buoyancy-driven plumes in a layered porous medium. Journal of Fluid Mechanics, 2020, 883, .	3.4	6
29	Dewatering saturated, networked suspensions with a screw press. Journal of Engineering Mathematics, 2020, 120, 1-28.	1.2	5
30	The elastic Landauâ€"Levich problem on a slope. Journal of Fluid Mechanics, 2020, 883, .	3.4	5
31	Translating and squirming cylinders in a viscoplastic fluid. Journal of Fluid Mechanics, 2020, 882, .	3.4	3
32	On twoâ€phase modeling of dewatering pulp suspensions. AICHE Journal, 2021, 67, e17277.	3.6	3
33	Water flow through sediments and at the ice-sediment interface beneath Sermeq Kujalleq (Store) Tj ETQq1 1 0.784314 rgBT /Overloc	2.2	3
34	Evolution of convection in a layered porous medium. Journal of Fluid Mechanics, 2022, 941, .	3.4	3
35	Locomotion with a wavy cylindrical filament in a yield-stress fluid. Journal of Fluid Mechanics, 2022, 936, .	3.4	2
36	Mud swimming: Locomotion through a viscoplastic fluid. , 2022, 3, 100029.		1

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37	One-dimensional compression of a saturated elastoviscoplastic medium. Physical Review Fluids, 2022, 7, .	2.5	1