

# John R Lister

## List of Publications by Year in descending order

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74  
papers

3,361  
citations

159585  
30  
h-index

144013  
57  
g-index

74  
all docs

74  
docs citations

74  
times ranked

2178  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Particle-driven gravity currents. <i>Journal of Fluid Mechanics</i> , 1993, 250, 339-369.  | 3.4  | 300       |
| 2  | Buoyancy-driven fluid fracture: the effects of material toughness and of low-viscosity precursors. <i>Journal of Fluid Mechanics</i> , 1990, 210, 263-280.                       | 3.4  | 204       |
| 3  | Plethora of transitions during breakup of liquid filaments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 4582-4587.       | 7.1  | 161       |
| 4  | Similarity solutions for van der Waals rupture of a thin film on a solid substrate. <i>Physics of Fluids</i> , 1999, 11, 2454-2462.  | 4.0  | 152       |
| 5  | Axisymmetric particle-driven gravity currents. <i>Journal of Fluid Mechanics</i> , 1995, 294, 93-121.  | 3.4  | 142       |
| 6  | Viscous flows down an inclined plane from point and line sources. <i>Journal of Fluid Mechanics</i> , 1992, 242, 631-653.  | 3.4  | 130       |
| 7  | Analytical model for solidification of the Earth's core. <i>Nature</i> , 1992, 356, 329-331.   | 27.8 | 125       |
| 8  | Buoyancy-driven fluid fracture: similarity solutions for the horizontal and vertical propagation of fluid-filled cracks. <i>Journal of Fluid Mechanics</i> , 1990, 217, 213-239. | 3.4  | 117       |
| 9  | Capillary pinch-off in inviscid fluids. <i>Physics of Fluids</i> , 2003, 15, 568-578.  | 4.0  | 98        |
| 10 | Convective shutdown in a porous medium at high Rayleigh number. <i>Journal of Fluid Mechanics</i> , 2013, 719, 551-586.  | 3.4  | 98        |
| 11 | Viscous Control of Peeling an Elastic Sheet by Bending and Pulling. <i>Physical Review Letters</i> , 2013, 111, 154501.  | 7.8  | 93        |
| 12 | The effect of surfactant on the stability of a liquid thread. <i>Journal of Fluid Mechanics</i> , 2002, 459, 289-306.  | 3.4  | 87        |
| 13 | Similarity Solutions for Capillary Pinch-Off in Fluids of Differing Viscosity. <i>Physical Review Letters</i> , 1999, 83, 1151-1154.   | 7.8  | 82        |
| 14 | Ultimate Regime of High Rayleigh Number Convection in a Porous Medium. <i>Physical Review Letters</i> , 2012, 108, 224503.   | 7.8  | 81        |
| 15 | Flow localization in fissure eruptions. <i>Bulletin of Volcanology</i> , 1999, 60, 432-440.  | 3.0  | 78        |
| 16 | Liquid Ropes: A Geometrical Model for Thin Viscous Jet Instabilities. <i>Physical Review Letters</i> , 2015, 114, 174501.  | 7.8  | 71        |
| 17 | The propagation of two-dimensional and axisymmetric viscous gravity currents at a fluid interface. <i>Journal of Fluid Mechanics</i> , 1989, 203, 215-249.                       | 3.4  | 66        |
| 18 | High Rayleigh number convection in a three-dimensional porous medium. <i>Journal of Fluid Mechanics</i> , 2014, 748, 879-895.  | 3.4  | 61        |

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|----|--|-----|-----------|
| 19 | Self-similar solutions for viscous capillary pinch-off. <i>Journal of Fluid Mechanics</i> , 2003, 497, 381-403.  | 3.4 | 56        |
| 20 | Stability of a dragged viscous thread: Onset of "stitching" in a fluid-mechanical "sewing machine". <i>Physics of Fluids</i> , 2006, 18, 124105.                                   | 4.0 | 55        |
| 21 | Viscous fingering in a radial elastic-walled Hele-Shaw cell. <i>Journal of Fluid Mechanics</i> , 2018, 849, 163-191.   | 3.4 | 53        |
| 22 | The effect of geometry on the gravitational instability of a buoyant region of viscous fluid. <i>Journal of Fluid Mechanics</i> , 1989, 202, 577-594.                              | 3.4 | 48        |
| 23 | Convection and particle entrainment driven by differential sedimentation. <i>Journal of Fluid Mechanics</i> , 1991, 226, 349-369.  | 3.4 | 48        |
| 24 | Nondecaying Hydrodynamic Interactions along Narrow Channels. <i>Physical Review Letters</i> , 2015, 115, 038301.   | 7.8 | 47        |
| 25 | Calculation of dike trajectories from volcanic centers. <i>Journal of Geophysical Research</i> , 2002, 107, ETG 10-1-ETG 10-10.  | 3.3 | 46        |
| 26 | Particle-driven gravity currents down planar slopes. <i>Journal of Fluid Mechanics</i> , 1999, 390, 75-91.   | 3.4 | 41        |
| 27 | Scaling laws and dynamics of bubble coalescence. <i>Physical Review Fluids</i> , 2017, 2, .  | 2.5 | 37        |
| 28 | The nonlinear dynamics of pendent drops on a thin film coating the underside of a ceiling. <i>Journal of Fluid Mechanics</i> , 2010, 647, 239-264.                                 | 3.4 | 36        |
| 29 | Displacement flows under elastic membranes. Part 2. Analysis of interfacial effects. <i>Journal of Fluid Mechanics</i> , 2015, 784, 512-547.                                       | 3.4 | 35        |
| 30 | Displacement flows under elastic membranes. Part 1. Experiments and direct numerical simulations. <i>Journal of Fluid Mechanics</i> , 2015, 784, 487-511.                          | 3.4 | 34        |
| 31 | Solidification of pressure-driven flow in a finite rigid channel with application to volcanic eruptions. <i>Journal of Fluid Mechanics</i> , 1996, 323, 267-283.                   | 3.4 | 32        |
| 32 | The effects of temperature-dependent viscosity on flow in a cooled channel with application to basaltic fissure eruptions. <i>Journal of Fluid Mechanics</i> , 1995, 305, 239-261. | 3.4 | 31        |
| 33 | The solidification of buoyancy-driven flow in a flexible-walled channel. Part 1. Constant-volume release. <i>Journal of Fluid Mechanics</i> , 1994, 272, 21-44.                    | 3.4 | 30        |
| 34 | Leakage from gravity currents in a porous medium. Part 1. A localized sink. <i>Journal of Fluid Mechanics</i> , 2011, 666, 391-413.  | 3.4 | 29        |
| 35 | Self-similar recoil of inviscid drops. <i>Physics of Fluids</i> , 2004, 16, 1379-1394.   | 4.0 | 27        |
| 36 | Stability of columnar convection in a porous medium. <i>Journal of Fluid Mechanics</i> , 2013, 737, 205-231.   | 3.4 | 27        |

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|----|---|-----|-----------|
| 37 | The spread of subducted lithospheric material along the mid-mantle boundary. <i>Earth and Planetary Science Letters</i> , 1987, 85, 241-247.              | 4.4 | 26        |
| 38 | On the hydrodynamic interaction between a particle and a permeable surface. <i>Physics of Fluids</i> , 2013, 25, 073103.                                  | 4.0 | 26        |
| 39 | A fluid-mechanical model of elastocapillary coalescence. <i>Journal of Fluid Mechanics</i> , 2014, 745, 621-646.  | 3.4 | 24        |
| 40 | Thin-sheet flow between coalescing bubbles. <i>Journal of Fluid Mechanics</i> , 2015, 773, .  | 3.4 | 23        |
| 41 | Long-wavelength instability of a line plume. <i>Journal of Fluid Mechanics</i> , 1987, 175, 413.  | 3.4 | 22        |
| 42 | The solidification of buoyancy-driven flow in a flexible-walled channel. Part 2. Continual release. <i>Journal of Fluid Mechanics</i> , 1994, 272, 45-66. | 3.4 | 22        |
| 43 | Steady axisymmetric creeping plumes above a planar boundary. Part 2. A distributed source. <i>Journal of Fluid Mechanics</i> , 2006, 567, 379.            | 3.4 | 22        |
| 44 | Leakage from gravity currents in a porous medium. Part 2. A line sink. <i>Journal of Fluid Mechanics</i> , 2011, 666, 414-427.                            | 3.4 | 22        |
| 45 | The asymptotic structure of a slender dragged viscous thread. <i>Journal of Fluid Mechanics</i> , 2011, 674, 489-521.                                     | 3.4 | 20        |
| 46 | High Rayleigh number convection in a porous medium containing a thin low-permeability layer. <i>Journal of Fluid Mechanics</i> , 2014, 756, 844-869.      | 3.4 | 20        |
| 47 | Symmetry and self-similarity in rupture and pinchoff: a geometric bifurcation. <i>European Journal of Applied Mathematics</i> , 2001, 12, 209-232.        | 2.9 | 19        |
| 48 | Early-time free-surface flow driven by a deforming boundary. <i>Journal of Fluid Mechanics</i> , 2015, 767, 811-841.                                      | 3.4 | 19        |
| 49 | Shape and stability of axisymmetric levitated viscous drops. <i>Journal of Fluid Mechanics</i> , 2008, 617, 167-185.                                      | 3.4 | 18        |
| 50 | Further results for convection driven by the differential sedimentation of particles. <i>Journal of Fluid Mechanics</i> , 1992, 243, 227.                 | 3.4 | 17        |
| 51 | Steady axisymmetric creeping plumes above a planar boundary. Part 1. A point source. <i>Journal of Fluid Mechanics</i> , 2006, 567, 361.                  | 3.4 | 17        |
| 52 | Evaporation effects in elastocapillary aggregation. <i>Journal of Fluid Mechanics</i> , 2016, 792, 168-185.   | 3.4 | 16        |
| 53 | Viscous flow under an elastic sheet. <i>Journal of Fluid Mechanics</i> , 2020, 905, .   | 3.4 | 16        |
| 54 | Rayleigh-Taylor instability of an inclined buoyant viscous cylinder. <i>Journal of Fluid Mechanics</i> , 2011, 671, 313-338.                              | 3.4 | 15        |

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|----|---|-----|-----------|
| 55 | The self-similar rise of a buoyant thermal in very viscous flow. <i>Journal of Fluid Mechanics</i> , 2008, 606, 295-324.  | 3.4 | 13        |
| 56 | Motion of a non-axisymmetric particle in viscous shear flow. <i>Journal of Fluid Mechanics</i> , 2019, 872, 532-559.  | 3.4 | 13        |
| 57 | On penetrative convection at low Péclet number. <i>Journal of Fluid Mechanics</i> , 1995, 292, 229-248.   | 3.4 | 11        |
| 58 | Thermal winds forced by inhomogeneous boundary conditions in rotating, stratified, hydromagnetic fluid. <i>Journal of Fluid Mechanics</i> , 2004, 505, 163-178. | 3.4 | 11        |
| 59 | Release of a viscous power-law fluid over an inviscid ocean. <i>Journal of Fluid Mechanics</i> , 2012, 700, 63-76.  | 3.4 | 11        |
| 60 | Viscous control of shallow elastic fracture: peeling without precursors. <i>Journal of Fluid Mechanics</i> , 2019, 868, 119-140.                                | 3.4 | 11        |
| 61 | Stability of three-dimensional columnar convection in a porous medium. <i>Journal of Fluid Mechanics</i> , 2017, 829, 89-111.                                   | 3.4 | 10        |
| 62 | Compressible particle-driven gravity currents. <i>Journal of Fluid Mechanics</i> , 2001, 445, 305-325.  | 3.4 | 9         |
| 63 | Shock formation in two-layer equal-density viscous gravity currents. <i>Journal of Fluid Mechanics</i> , 2019, 863, 730-756.                                    | 3.4 | 9         |
| 64 | Rise and deflection of mantle plume tails. <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .   | 2.5 | 8         |
| 65 | Stability of straining flow with surface cooling and temperature-dependent viscosity. <i>Journal of Fluid Mechanics</i> , 1998, 365, 369-381.                   | 3.4 | 6         |
| 66 | The relaxation time for viscous and porous gravity currents following a change in flux. <i>Journal of Fluid Mechanics</i> , 2017, 821, 330-342.                 | 3.4 | 6         |
| 67 | Buoyancy-driven plumes in a layered porous medium. <i>Journal of Fluid Mechanics</i> , 2020, 883, .   | 3.4 | 6         |
| 68 | Slender-body theory for steady sheared plumes in very viscous fluid. <i>Journal of Fluid Mechanics</i> , 2008, 612, 21-44.                                      | 3.4 | 3         |
| 69 | The initial transient and approach to self-similarity of a very viscous buoyant thermal. <i>Journal of Fluid Mechanics</i> , 2014, 744, 352-375.                | 3.4 | 3         |
| 70 | Capillary retraction of the edge of a stretched viscous sheet. <i>Journal of Fluid Mechanics</i> , 2018, 844, .   | 3.4 | 3         |
| 71 | Viscous-fingering mechanisms under a peeling elastic sheet. <i>Journal of Fluid Mechanics</i> , 2019, 864, 1177-1207.   | 3.4 | 3         |
| 72 | Creeping axisymmetric plumes with strongly temperature-dependent viscosity. <i>Journal of Fluid Mechanics</i> , 2014, 745, .                                    | 3.4 | 2         |

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|----|---|-----|-----------|
| 73 | Hydrodynamic diffusion of sedimenting point particles in a vertical shear flow. <i>Journal of Fluid Mechanics</i> , 2013, 730, 699-732. | 3.4 | 1         |
| 74 | Free convection beneath a heated horizontal plate in a rapidly rotating system. <i>Journal of Fluid Mechanics</i> , 2007, 586, 491-506. | 3.4 | 0         |