# Catherine A Meriaux

List of Publications by Year
in descending order



| 34 | 923 | 471509 17 | 454955 30 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 34 | 34 | 34 | 1009 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Computational approaches to studying non-linear dynamics of the crust and mantle. Physics of the Earth and Planetary Interiors, 2007, 163, 69-82. | 1.9 | 214 |
| 2 | Cork oak physiological responses to manipulated water availability in a Mediterranean woodland. Agricultural and Forest Meteorology, 2014, 184, 230-242. | 4.8 | 72 |
| 3 | Structure and dynamics of sheared mantle plumes. Geochemistry, Geophysics, Geosystems, 2004, 5, n/a-n/a. | 2.5 | 60 |
| 4 | Benchmarking analogue models of brittle thrust wedges. Journal of Structural Geology, 2016, 92, 116-139. | 2.3 | 58 |
| 5 | Calculation of dike trajectories from volcanic centers. Journal of Geophysical Research, 2002, 107, ETG 10-1-ETG 10-10. | 3.3 | 46 |
| 6 | Dyke propagation with distributed damage of the host rock. Earth and Planetary Science Letters, 1999, 165, 177-185. | 4.4 | 45 |
| 7 | Dike propagation through an elastic plate. Journal of Geophysical Research, 1998, 103, 18295-18314. | 3.3 | 35 |
| 8 | Quasi-static fall of planar granular columns: comparison of 2D and 3D discrete element modelling with laboratory experiments. Geomechanics and Geoengineering, 2009, 4, 55-77. | 1.8 | 35 |
| 9 | Effects of Recent Minimum Temperature and Water Deficit Increases on Pinus pinaster Radial Growth and Wood Density in Southern Portugal. Frontiers in Plant Science, 2016, 7, 1170. | 3.6 | 35 |
| 10 | Simple fluid dynamic models of volcanic rift zones. Earth and Planetary Science Letters, 1995, 136, 223-240. | 4.4 | 30 |
| 11 | Two dimensional fall of granular columns controlled by slow horizontal withdrawal of a retaining wall. Physics of Fluids, 2006, 18, 093301. | 4.0 | 26 |
| 12 | High Reynolds number gravity currents along V-shaped valleys. European Journal of Mechanics, B/Fluids, 2009, 28, 651-659. | 2.5 | 25 |
| 13 | Palaeomagnetic study of a subaerial volcanic ridge (SÃ£o Jorge Island, Azores) for the past 1.3 Myr: evidence for the Cobb Mountain Subchron, volcano flank instability and tectonomagmatic implications. Geophysical Journal International, 2012, 188, 959-978. | 2.4 | 24 |
| 14 | Capture of the Canary mantle plume material by the Gibraltar arc mantle wedge during slab rollback. Geophysical Journal International, 2015, 201, 1717-1721. | 2.4 | 24 |
| 15 | Mantle plumes in the vicinity of subduction zones. Earth and Planetary Science Letters, 2016, 454, 166-177. | 4.4 | 24 |
| 16 | Particulate gravity currents along V-shaped valleys. Journal of Fluid Mechanics, 2009, 631, 419-440. | 3.4 | 21 |
| 17 | The propagation of gravity currents in a V-shaped triangular cross-section channel: experiments and theory. Journal of Fluid Mechanics, 2014, 754, 232-249. | 3.4 | 21 |
| 18 | Scaling the final deposits of dry cohesive granular columns after collapse and quasi-static fall. Physics of Fluids, 2008, 20, . | 4.0 | 17 |

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|---|---|---|---|
| 19 | A twoâ€way interaction between the Hainan plume and the Manila subduction zone. Geophysical Research Letters, 2015, 42, 5796-5802. | 4.0 | 17 |
| 20 | Effect of thermal diffusion on the stability of strongly tilted mantle plume tails. Journal of Geophysical Research, 2008, 113, . | 3.3 | 16 |
| 21 | Sedimentation from binary suspensions in a turbulent gravity current along a V-shaped valley. Journal of Fluid Mechanics, 2012, 712, 624-645. | 3.4 | 12 |
| 22 | An SPH study of driven turbulence near a free surface in a tank under gravity. European Journal of Mechanics, B/Fluids, 2018, 68, 201-210. | 2.5 | 12 |
| 23 | 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. | 4.0 | 10 |
| 24 | Rate effects in dense granular materials: Linear stability analysis and the fall of granular columns. International Journal for Numerical and Analytical Methods in Geomechanics, 2011, 35, 293-308. | 3.3 | 7 |
| 25 | A study of gravity currents carrying polydisperse particles along a V-shaped valley. European Journal of Mechanics, B/Fluids, 2017, 63, 52-65. | 2.5 | 7 |
| 26 | On the rise of strongly tilted mantle plume tails. Physics of the Earth and Planetary Interiors, 2011, 184, 63-79. | 1.9 | 6 |
| 27 | The thermal signature of subducted lithospheric slabs at the coreâ€“mantle boundary. Earth and Planetary Science Letters, 1998, 160, 551-562. | 4.4 | 5 |
| 28 | Benchmark of three-dimensional numerical models of subduction against a laboratory experiment. Physics of the Earth and Planetary Interiors, 2018, 283, 110-121. | 1.9 | 5 |
| 29 | The impact of vent geometry on the growth of lava domes. Geophysical Journal International, 0, , . | 2.4 | 5 |
| 30 | What can we learn from large bodies moving in a turbulent fluid?. European Journal of Mechanics, B/Fluids, 2018, 72, 519-530. | 2.5 | 3 |
| 31 | Mantle plume dynamics at the rear of a retreating slab. Geophysical Journal International, 2020, 222, 1146-1163. | 2.4 | 2 |
| 32 | Dispersion of finite-size particles probing inhomogeneous and anisotropic turbulence. European Journal of Mechanics, B/Fluids, 2020, 84, 93-109. | 2.5 | 2 |
| 33 | Particulate gravity currents along V-shaped valleys â€“ ERRATUM. Journal of Fluid Mechanics, 2009, 637, 475-475. | 3.4 | 1 |
| 34 | Estimating the filtering of turbulence properties by finite-sized particles using analytical energy spectra. Physics of Fluids, 2022, 34, 045117. | 4.0 | 1 |