# Richard M Iverson

## List of Publications by Year
## in descending order

Source: https://exaly.com/author-pdf/11552658/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 53<br>papers | 10,689<br>citations | 136885<br>32<br>h-index | 233338<br>45<br>g-index |
| 55<br>all docs | 55<br>docs citations | 55<br>times ranked | 5289<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The physics of debris flows. Reviews of Geophysics, 1997, 35, 245-296. | 9.0 | 2,273 |
| 2 | Landslide triggering by rain infiltration. Water Resources Research, 2000, 36, 1897-1910. | 1.7 | 1,443 |
| 3 | Flow of variably fluidized granular masses across three-dimensional terrain: 1. Coulomb mixture theory. Journal of Geophysical Research, 2001, 106, 537-552. | 3.3 | 723 |
| 4 | DEBRIS-FLOW MOBILIZATION FROM LANDSLIDES. Annual Review of Earth and Planetary Sciences, 1997, 25, 85-138. | 4.6 | 680 |
| 5 | Positive feedback and momentum growth during debris-flow entrainment of wet bed sediment. Nature Geoscience, 2011, 4, 116-121. | 5.4 | 432 |
| 6 | Objective delineation of lahar-inundation hazard zones. Bulletin of the Geological Society of America, 1998, 110, 972-984. | 1.6 | 401 |
| 7 | Flow of variably fluidized granular masses across three-dimensional terrain: 2. Numerical predictions and experimental tests. Journal of Geophysical Research, 2001, 106, 553-566. | 3.3 | 338 |
| 8 | The perfect debris flow? Aggregated results from 28 largeâ€scale experiments. Journal of Geophysical Research, 2010, 115, . | 3.3 | 326 |
| 9 | Debris-flow deposition: Effects of pore-fluid pressure and friction concentrated at flow margins. Bulletin of the Geological Society of America, 1999, 111, 1424-1434. | 1.6 | 283 |
| 10 | New views of granular mass flows. Geology, 2001, 29, 115. | 2.0 | 255 |
| 11 | Scaling and design of landslide and debris-flow experiments. Geomorphology, 2015, 244, 9-20. | 1.1 | 249 |
| 12 | Geomorphic Transport Laws for Predicting Landscape form and Dynamics. Geophysical Monograph Series, 0, , 103-132. | 0.1 | 234 |
| 13 | Entrainment of bed material by Earthâ€surface mass flows: Review and reformulation of depthâ€integrated theory. Reviews of Geophysics, 2015, 53, 27-58. | 9.0 | 218 |
| 14 | A depth-averaged debris-flow model that includes the effects of evolving dilatancy. I. Physical basis. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130819. | 1.0 | 216 |
| 15 | Regulation of landslide motion by dilatancy and pore pressure feedback. Journal of Geophysical Research, 2005, 110, . | 3.3 | 198 |
| 16 | Granular avalanches across irregular three-dimensional terrain: 1. Theory and computation. Journal of Geophysical Research, 2004, 109, . | 3.3 | 196 |
| 17 | Elementary theory of bedâ€sediment entrainment by debris flows and avalanches. Journal of Geophysical Research, 2012, 117, . | 3.3 | 196 |
| 18 | Rainfall, ground-water flow, and seasonal movement at Minor Creek landslide, northwestern California: Physical interpretation of empirical relations. Bulletin of the Geological Society of America, 1987, 99, 579. | 1.6 | 193 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Dynamics of seismogenic volcanic extrusion at Mount St Helens in 2004â€“05. Nature, 2006, 444, 439-443. | 13.7 | 191 |
| 20 | Groundwater Seepage Vectors and the Potential for Hillslope Failure and Debris Flow Mobilization. Water Resources Research, 1986, 22, 1543-1548. | 1.7 | 141 |
| 21 | Granular avalanches across irregular three-dimensional terrain: 2. Experimental tests. Journal of Geophysical Research, 2004, 109, . | 3.3 | 133 |
| 22 | Can magma-injection and groundwater forces cause massive landslides on Hawaiian volcanoes?. Journal of Volcanology and Geothermal Research, 1995, 66, 295-308. | 0.8 | 130 |
| 23 | Distributed shear of subglacial till due to Coulomb slip. Journal of Glaciology, 2001, 47, 481-488. | 1.1 | 120 |
| 24 | A depth-averaged debris-flow model that includes the effects of evolving dilatancy. II. Numerical predictions and experimental tests. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130820. | 1.0 | 120 |
| 25 | Gravity-driven groundwater flow and slope failure potential: 1. Elastic Effective-Stress Model. Water Resources Research, 1992, 28, 925-938. | 1.7 | 105 |
| 26 | Gravity-driven groundwater flow and slope failure potential: 2. Effects of slope morphology, material properties, and hydraulic heterogeneity. Water Resources Research, 1992, 28, 939-950. | 1.7 | 104 |
| 27 | Debris flow runup on vertical barriers and adverse slopes. Journal of Geophysical Research F: Earth Surface, 2016, 121, 2333-2357. | 1.0 | 102 |
| 28 | Debris flows: behaviour and hazard assessment. Geology Today, 2014, 30, 15-20. | 0.3 | 71 |
| 29 | Debris-flow mechanics. , 2005, , 105-134. |  | 64 |
| 30 | Lahars and Their Deposits. , 2015, , 649-664. |  | 57 |
| 31 | A Constitutive Equation for Mass-Movement Behavior. Journal of Geology, 1985, 93, 143-160. | 0.7 | 55 |
| 32 | Controls on the breach geometry and flood hydrograph during overtopping of noncohesive earthen dams. Water Resources Research, 2015, 51, 6701-6724. | 1.7 | 50 |
| 33 | Processes of accelerated pluvial erosion on desert hillslopes modified by vehicular traffic. Earth Surfaces Processes, 1980, 5, 369-388. | 0.7 | 40 |
| 34 | Effects of soil aggregates on debris-flow mobilization: Results from ring-shear experiments. Engineering Geology, 2010, 114, 84-92. | 2.9 | 40 |
| 35 | Unsteady, Nonuniform Landslide Motion: 1. Theoretical Dynamics and the Steady Datum State. Journal of Geology, 1986, 94, 1-15. | 0.7 | 39 |
| 36 | Steady and Intermittent Slipping in a Model of Landslide Motion Regulated by Pore-Pressure Feedback. SIAM Journal on Applied Mathematics, 2008, 69, 769-786. | 0.8 | 28 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 37 | Measuring Basal Force Fluctuations of Debris Flows Using Seismic Recordings and Empirical Green's Functions. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2020JF005590. | 1.0 | 24 |
| 38 | Unsteady, Nonuniform Landslide Motion: 2. Linearized Theory and the Kinematics of Transient Response. Journal of Geology, 1986, 94, 349-364. | 0.7 | 23 |
| 39 | Differential equations governing slip-induced pore-pressure fluctuations in a water-saturated granular medium. Mathematical Geosciences, 1993, 25, 1027-1048. | 0.9 | 23 |
| 40 | Limiting equilibrium and liquefaction potential in infinite submarine slopes. Marine Geotechnology, 1990, 9, 299-312. | 0.2 | 15 |
| 41 | Comment on â€œThe reduction of friction in longâ€runout landslides as an emergent phenomenonâ€•by Brandon C. Johnson et al.. Journal of Geophysical Research F: Earth Surface, 2016, 121, 2238-2242. | 1.0 | 14 |
| 42 | When Models Meet Managers: Examples from Geomorphology. Geophysical Monograph Series, 0, , 27-40. | 0.1 | 12 |
| 43 | How Should Mathematical Models of Geomorphic Processes be Judged?. Geophysical Monograph Series, 0, , 83-94. | 0.1 | 12 |
| 44 | Accelerated Water Erosion in ORV-Use Areas. Springer Series on Environmental Management, 1983, , 81-96. | 0.3 | 11 |
| 45 | Mount St. Helens: A 30â€Year Legacy of Volcanism. Eos, 2010, 91, 169-170. | 0.1 | 9 |
| 46 | Basal Stress Equations for Granular Debris Masses on Smooth or Discretized Slopes. Journal of Geophysical Research F: Earth Surface, 2019, 124, 1464-1484. | 1.0 | 8 |
| 47 | Comment on â€œPiezometric response in shallow bedrock at CB1: Implications for runoff generation and landslidingâ€•by David R. Montgomery, William E. Dietrich, and John T. Heffner. Water Resources Research, 2004, 40, . | 1.7 | 5 |
| 48 | Discussion and Closure: Slope Instability from Ground-Water Seepage. Journal of Hydraulic Engineering, 1997, 123, 929-931. | 0.7 | 4 |
| 49 | You Want Me to Predict What?. Geophysical Monograph Series, 0, , 41-50. | 0.1 | 4 |
| 50 | Landslide Disparities, Flume Discoveries, and Oso Despair. Perspectives of Earth and Space Scientists, 2020, 1, e2019CN000117. | 0.2 | 3 |
| 51 | When hazard avoidance is not an option: lessons learned from monitoring the postdisaster Oso landslide, USA. Landslides, 2021, 18, 2993-3009. | 2.7 | 3 |
| 52 | Discussion of â€œThe relation between dilatancy, effective stress and dispersive pressure in granular avalanchesâ€•by P. Bartelt and O. Buser (DOI: 10.1007/s11440-016-0463-7). Acta Geotechnica, 2016, 11, 1465-1468. | 2.9 | 0 |
| 53 | Discussion of â€œShallow Water Hydro-Sediment-Morphodynamic Equations for Fluvial Processesâ€•by Zhixian Cao, Chunchen Xia, Gareth Pender, and Qingquan Liu. Journal of Hydraulic Engineering, 2018, 144, 07018009. | 0.7 | 0 |