

# Paul D Brooks

## List of Publications by Year in descending order

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65  
papers

4,743  
citations

87888

38  
h-index

106344

65  
g-index

65  
all docs

65  
docs citations

65  
times ranked

5098  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Strontium isotope dynamics reveal streamflow contributions from shallow flow paths during snowmelt in a montane watershed, Provo River, Utah, USA. <i>Hydrological Processes</i> , 2022, 36, .                                | 2.6  | 3         |
| 2  | Increasing plant water stress and decreasing summer streamflow in response to a warmer and wetter climate in seasonally snow-covered forests. <i>Ecohydrology</i> , 2021, 14, .   | 2.4  | 7         |
| 3  | Lateral subsurface flow modulates forest mortality risk to future climate and elevated CO <sub>2</sub> . <i>Environmental Research Letters</i> , 2021, 16, 084015.  | 5.2  | 10        |
| 4  | Groundwater-Mediated Memory of Past Climate Controls Water Yield in Snowmelt-Dominated Catchments. <i>Water Resources Research</i> , 2021, 57, e2021WR030605.   | 4.2  | 14        |
| 5  | The Wasatch Environmental Observatory: A mountain to urban research network in the semi-arid western US. <i>Hydrological Processes</i> , 2021, 35, e14352.  | 2.6  | 2         |
| 6  | Hillslope Hydrology Influences the Spatial and Temporal Patterns of Remotely Sensed Ecosystem Productivity. <i>Water Resources Research</i> , 2020, 56, e2020WR027630.  | 4.2  | 21        |
| 7  | Plant Hydraulic Stress Explained Tree Mortality and Tree Size Explained Beetle Attack in a Mixed Conifer Forest. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 3555-3568.                             | 3.0  | 16        |
| 8  | A net ecosystem carbon budget for snow dominated forested headwater catchments: linking water and carbon fluxes to critical zone carbon storage. <i>Biogeochemistry</i> , 2018, 138, 225-243.                                 | 3.5  | 17        |
| 9  | Interactive Effects of Vegetation Type and Topographic Position on Nitrogen Availability and Loss in a Temperate Montane Ecosystem. <i>Ecosystems</i> , 2017, 20, 1073-1088.  | 3.4  | 15        |
| 10 | Geochemical evolution of the critical zone across variable time scales informs concentration-discharge relationships: the Jemez River Basin critical zone Observatory. <i>Water Resources Research</i> , 2017, 53, 4169-4196. | 4.2  | 57        |
| 11 | Persistent Urban Influence on Surface Water Quality via Impacted Groundwater. <i>Environmental Science &amp; Technology</i> , 2017, 51, 9477-9487.  | 10.0 | 34        |
| 12 | Topographically driven differences in energy and water constrain climatic control on forest carbon sequestration. <i>Ecosphere</i> , 2017, 8, e01797.   | 2.2  | 61        |
| 13 | Plant hydraulics improves and topography mediates prediction of aspen mortality in southwestern USA. <i>New Phytologist</i> , 2017, 213, 113-127.   | 7.3  | 77        |
| 14 | Regional sensitivities of seasonal snowpack to elevation, aspect, and vegetation cover in western North America. <i>Water Resources Research</i> , 2017, 53, 6908-6926.   | 4.2  | 54        |
| 15 | Influence of climate variability on water partitioning and effective energy and mass transfer in a semi-arid critical zone. <i>Hydrology and Earth System Sciences</i> , 2016, 20, 1103-1115.                                 | 4.9  | 8         |
| 16 | Influence of terrain aspect on water partitioning, vegetation structure and vegetation greening in high-elevation catchments in northern New Mexico. <i>Ecohydrology</i> , 2016, 9, 782-795.                                  | 2.4  | 55        |
| 17 | Dissolved organic matter transport reflects hillslope to stream connectivity during snowmelt in a montane catchment. <i>Water Resources Research</i> , 2016, 52, 4905-4923.   | 4.2  | 38        |
| 18 | Riparian zones attenuate nitrogen loss following bark beetle-induced lodgepole pine mortality. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 933-948.   | 3.0  | 9         |

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|----|--|------|-----------|
| 19 | Stream Nitrogen Inputs Reflect Groundwater Across a Snowmelt-Dominated Montane to Urban Watershed. <i>Environmental Science &amp; Technology</i> , 2016, 50, 1137-1146.  | 10.0 | 31        |
| 20 | Recent tree die-off has little effect on streamflow in contrast to expected increases from historical studies. <i>Water Resources Research</i> , 2015, 51, 9775-9789.  | 4.2  | 97        |
| 21 | Climatic and landscape controls on water transit times and silicate mineral weathering in the critical zone. <i>Water Resources Research</i> , 2015, 51, 6036-6051.  | 4.2  | 43        |
| 22 | Critical Zone Services: Expanding Context, Constraints, and Currency beyond Ecosystem Services. <i>Vadose Zone Journal</i> , 2015, 14, vj2014.10.0142.   | 2.2  | 60        |
| 23 | Soil moisture response to snowmelt timing in mixed-conifer subalpine forests. <i>Hydrological Processes</i> , 2015, 29, 2782-2798.   | 2.6  | 92        |
| 24 | Combined impact of catchment size, land cover, and precipitation on streamflow and total dissolved nitrogen: A global comparative analysis. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1109-1121.                                   | 4.9  | 27        |
| 25 | Hydrological partitioning in the critical zone: Recent advances and opportunities for developing transferable understanding of water cycle dynamics. <i>Water Resources Research</i> , 2015, 51, 6973-6987.                              | 4.2  | 189       |
| 26 | The Landscape Evolution Observatory: A large-scale controllable infrastructure to study coupled Earth-surface processes. <i>Geomorphology</i> , 2015, 244, 190-203.  | 2.6  | 47        |
| 27 | Climatic and landscape influences on soil moisture are primary determinants of soil carbon fluxes in seasonally snow-covered forest ecosystems. <i>Biogeochemistry</i> , 2015, 123, 447-465.   | 3.5  | 50        |
| 28 | Rare earth elements as reactive tracers of biogeochemical weathering in forested rhyolitic terrain. <i>Chemical Geology</i> , 2015, 391, 19-32.  | 3.3  | 67        |
| 29 | High Atmospheric Nitrate Inputs and Nitrogen Turnover in Semi-arid Urban Catchments. <i>Ecosystems</i> , 2014, 17, 1309-1325.  | 3.4  | 46        |
| 30 | Stream water carbon controls in seasonally snow-covered mountain catchments: impact of inter-annual variability of water fluxes, catchment aspect and seasonal processes. <i>Biogeochemistry</i> , 2014, 118, 273-290.                   | 3.5  | 60        |
| 31 | Physical and biological controls on trace gas fluxes in semi-arid urban ephemeral waterways. <i>Biogeochemistry</i> , 2014, 121, 189-207.  | 3.5  | 58        |
| 32 | Changes in snow accumulation and ablation following the Las Conchas Forest Fire, New Mexico, USA. <i>Ecohydrology</i> , 2014, 7, 440-452.  | 2.4  | 108       |
| 33 | Temporal patterns and controls on runoff magnitude and solution chemistry of urban catchments in the semiarid southwestern United States. <i>Hydrological Processes</i> , 2013, 27, 995-1010.  | 2.6  | 21        |
| 34 | Land cover controls on summer discharge and runoff solution chemistry of semi-arid urban catchments. <i>Journal of Hydrology</i> , 2013, 485, 37-53.   | 5.4  | 35        |
| 35 | Coevolution of nonlinear trends in vegetation, soils, and topography with elevation and slope aspect: A case study in the sky islands of southern Arizona. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 741-758. | 2.8  | 76        |
| 36 | Cascading impacts of bark beetle-caused tree mortality on coupled biogeophysical and biogeochemical processes. <i>Frontiers in Ecology and the Environment</i> , 2012, 10, 416-424.  | 4.0  | 215       |

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|----|--|------|-----------|
| 37 | Unraveling the mysteries of the large watershed black box: Implications for the streamflow response to climate and landscape perturbations. <i>Geophysical Research Letters</i> , 2012, 39, .        | 4.0  | 34        |
| 38 | Quantifying the effects of stream channels on storm water quality in a semi-arid urban environment. <i>Journal of Hydrology</i> , 2012, 470-471, 98-110.   | 5.4  | 13        |
| 39 | Quantifying regional scale ecosystem response to changes in precipitation: Not all rain is created equal. <i>Water Resources Research</i> , 2011, 47, .  | 4.2  | 69        |
| 40 | Spatial scale dependence of ecohydrologically mediated water balance partitioning: A synthesis framework for catchment ecohydrology. <i>Water Resources Research</i> , 2011, 47, .                   | 4.2  | 133       |
| 41 | Influence of groundwater flowpaths, residence times and nutrients on the extent of microbial methanogenesis in coal beds: Powder River Basin, USA. <i>Chemical Geology</i> , 2011, 284, 45-61.       | 3.3  | 102       |
| 42 | Carbon and Nitrogen Cycling in Snow-Covered Environments. <i>Geography Compass</i> , 2011, 5, 682-699.   | 2.7  | 177       |
| 43 | How Water, Carbon, and Energy Drive Critical Zone Evolution: The Jemezâ€“Santa Catalina Critical Zone Observatory. <i>Vadose Zone Journal</i> , 2011, 10, 884-899.                                   | 2.2  | 111       |
| 44 | Ecohydrological controls on snowmelt partitioning in mixedâ€“conifer subâ€“alpine forests. <i>Ecohydrology</i> , 2009, 2, 129-142.   | 2.4  | 137       |
| 45 | Interactions Between Biogeochemistry and Hydrologic Systems. <i>Annual Review of Environment and Resources</i> , 2009, 34, 65-96.  | 13.4 | 138       |
| 46 | Monitoring the timing of snowmelt and the initiation of streamflow using a distributed network of temperature/light sensors. <i>Ecohydrology</i> , 2008, 1, 215-224.                                 | 2.4  | 22        |
| 47 | Seasonal and interannual variation of streamflow pathways and biogeochemical implications in semiâ€“arid, forested catchments in Valles Caldera, New Mexico. <i>Ecohydrology</i> , 2008, 1, 239-252. | 2.4  | 64        |
| 48 | Effects of vegetation, albedo, and solar radiation sheltering on the distribution of snow in the Valles Caldera, New Mexico. <i>Ecohydrology</i> , 2008, 1, 253-270.                                 | 2.4  | 50        |
| 49 | Spatial variability in dissolved organic matter and inorganic nitrogen concentrations in a semiarid stream, San Pedro River, Arizona. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.   | 3.3  | 29        |
| 50 | Seasonal variability in the concentration and flux of organic matter and inorganic nitrogen in a semiarid catchment, San Pedro River, Arizona. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3  | 18        |
| 51 | Nitrogen Sources and Sinks Within the Middle Rio Grande, New Mexico. <i>Journal of the American Water Resources Association</i> , 2007, 43, 850-863.   | 2.4  | 25        |
| 52 | Carbon limitation of soil respiration under winter snowpacks: potential feedbacks between growing season and winter carbon fluxes. <i>Global Change Biology</i> , 2005, 11, 231-238.                 | 9.5  | 185       |
| 53 | Estimated Ultraviolet Radiation Doses in Wetlands in Six National Parks. <i>Ecosystems</i> , 2005, 8, 462-477.   | 3.4  | 23        |
| 54 | Spatial and Temporal Variability in the Amount and Source of Dissolved Organic Carbon: Implications for Ultraviolet Exposure in Amphibian Habitats. <i>Ecosystems</i> , 2005, 8, 478-487.            | 3.4  | 13        |

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|----|--|-----|-----------|
| 55 | Controls on nitrogen flux in alpine/subalpine watersheds of Colorado. <i>Water Resources Research</i> , 2000, 36, 37-47.   | 4.2 | 113       |
| 56 | Snowpack controls on nitrogen cycling and export in seasonally snow-covered catchments. <i>Hydrological Processes</i> , 1999, 13, 2177-2190.   | 2.6 | 244       |
| 57 | Natural variability in N export from headwater catchments: snow cover controls on ecosystem N retention. <i>Hydrological Processes</i> , 1999, 13, 2191-2201.                                | 2.6 | 76        |
| 58 | Nitrogen dynamics in two high elevation catchments during spring snowmelt 1996, Rocky Mountains, Colorado. <i>Hydrological Processes</i> , 1999, 13, 2203-2214.                              | 2.6 | 23        |
| 59 | Inorganic nitrogen and microbial biomass dynamics before and during spring snowmelt. <i>Biogeochemistry</i> , 1998, 43, 1-15.  | 3.5 | 312       |
| 60 | Nitrogen and Carbon Soil Dynamics in Response to Climate Change in a High-Elevation Ecosystem in the Rocky Mountains, U.S.A.. <i>Arctic and Alpine Research</i> , 1998, 30, 26.              | 1.3 | 100       |
| 61 | Winter production of CO. <i>Oecologia</i> , 1997, 110, 403.  | 2.0 | 12        |
| 62 | Winter production of CO <sub>2</sub> and N <sub>2</sub> O from alpine tundra: environmental controls and relationship to inter-system C and N fluxes. <i>Oecologia</i> , 1997, 110, 403-413. | 2.0 | 253       |
| 63 | Organic and inorganic nitrogen pools in talus fields and subtalus water, Green Lakes Valley, Colorado Front Range. <i>Hydrological Processes</i> , 1997, 11, 1747-1760.                      | 2.6 | 50        |
| 64 | Mineral nitrogen transformations in and under seasonal snow in a high-elevation catchment in the Rocky Mountains, United States. <i>Water Resources Research</i> , 1996, 32, 3161-3171.      | 4.2 | 114       |
| 65 | Microbial activity under alpine snowpacks, Niwot Ridge, Colorado. <i>Biogeochemistry</i> , 1996, 32, 93.   | 3.5 | 283       |