# Robert A Craddock

List of Publications by Year
in descending order



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|---|---|---|---|
| 32 papers | 2,667 citations | 304743 22 h-index | 414414 32 g-index |
| 33 all docs | 33 docs citations | 33 times ranked | 1844 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The case for rainfall on a warm, wet early Mars. Journal of Geophysical Research, 2002, 107, 21-1-21-36. | 3.3 | 480 |
| 2 | An intense terminal epoch of widespread fluvial activity on early Mars: 2. Increased runoff and paleolake development. Journal of Geophysical Research, 2005, 110, . | 3.3 | 334 |
| 3 | Geomorphic evolution of the Martian highlands through ancient fluvial processes. Journal of Geophysical Research, 1993, 98, 3453-3468. | 3.3 | 221 |
| 4 | Crater morphometry and modification in the Sinus Sabaeus and Margaritifer Sinus regions of Mars. Journal of Geophysical Research, 1997, 102, 13321-13340. | 3.3 | 192 |
| 5 | A Large Paleolake Basin at the Head of Ma'adim Vallis, Mars. Science, 2002, 296, 2209-2212. | 12.6 | 167 |
| 6 | Are Phobos and Deimos the result of a giant impact?. Icarus, 2011, 211, 1150-1161. | 2.5 | 154 |
| 7 | Interior channels in Martian valley networks: Discharge and runoff production. Geology, 2005, 33, 489. | 4.4 | 136 |
| 8 | Crater degradation in the Martian highlands: Morphometric analysis of the Sinus Sabaeus region and simulation modeling suggest fluvial processes. Journal of Geophysical Research, 2004, 109, . | 3.3 | 125 |
| 9 | The geological and climatological case for a warmer and wetter early Mars. Nature Geoscience, 2018, 11, 230-237. | 12.9 | 116 |
| 10 | Minimum estimates of the amount and timing of gases released into the martian atmosphere from volcanic eruptions. Icarus, 2009, 204, 512-526. | 2.5 | 95 |
| 11 | Simulated degradation of lunar impact craters and a new method for age dating farside mare deposits. Journal of Geophysical Research, 2000, 105, 20387-20401. | 3.3 | 81 |
| 12 | Resurfacing of the Martian Highlands in the Amenthes and Tyrrhena region. Journal of Geophysical Research, 1990, 95, 14265-14278. | 3.3 | 65 |
| 13 | Topographic influences on development of Martian valley networks. Journal of Geophysical Research, 2011, 116, . | 3.3 | 57 |
| 14 | Thermal conductivity measurements of particulate materials: 3. Natural samples and mixtures of particle sizes. Journal of Geophysical Research, 2006, 111, . | 3.3 | 45 |
| 15 | Measuring impact crater depth throughout the solar system. Meteoritics and Planetary Science, 2018, 53, 583-637. | 1.6 | 41 |
| 16 | Evidence for geologically recent explosive volcanism in Elysium Planitia, Mars. Icarus, 2021, 365, 114499. | 2.5 | 39 |
| 17 | Climate Simulations of Early Mars With Estimated Precipitation, Runoff, and Erosion Rates. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006160. | 3.6 | 36 |
| 18 | Key Science Questions from the Second Conference on Early Mars: Geologic, Hydrologic, and Climatic Evolution and the Implications for Life. Astrobiology, 2005, 5, 663-689. | 3.0 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Geology of central Chryse Planitia and the Viking 1 landing site: Implications for the Mars Pathfinder mission. Journal of Geophysical Research, 1997, 102, 4161-4183. | 3.3 | 28 |
| 20 | Characterization of fluvial activity in Parana Valles using different age-dating techniques. Icarus, 2010, 207, 686-698. | 2.5 | 26 |
| 21 | Aeolian processes on the terrestrial planets. Progress in Physical Geography, 2012, 36, 110-124. | 3.2 | 24 |
| 22 | The changing nature of rainfall during the early history of Mars. Icarus, 2017, 293, 172-179. | 2.5 | 24 |
| 23 | Age relations of Martian highland drainage basins. Journal of Geophysical Research, 1995, 100, 11765. | 3.3 | 19 |
| 24 | Drainage network development in the KeanakÄkoâ€˜i tephra, KÄ«lauea Volcano, Hawaiâ€˜i: Implications for fluvial erosion and valley network formation on early Mars. Journal of Geophysical Research, 2012, 117, . | 3.3 | 18 |
| 25 | Origin and development of theater-headed valleys in the Atacama Desert, northern Chile: Morphological analogs to martian valley networks. Icarus, 2014, 243, 296-310. | 2.5 | 17 |
| 26 | Characteristics of terrestrial basaltic rock populations: Implications for Mars lander and rover science and safety. Icarus, 2016, 274, 50-72. | 2.5 | 17 |
| 27 | Topographic data reveal a buried fluvial landscape in the Simpson Desert, Australia. Australian Journal of Earth Sciences, 2010, 57, 141-149. | 1.0 | 13 |
| 28 | Temporal observations of a linear sand dune in the Simpson Desert, central Australia: Testing models for dune formation on planetary surfaces. Journal of Geophysical Research E: Planets, 2015, 120, 1736-1750. | 3.6 | 13 |
| 29 | An Assessment of Regional Variations in Martian Modified Impact Crater Morphology. Journal of Geophysical Research E: Planets, 2018, 123, 763-779. | 3.6 | 9 |
| 30 | Assessing the Accuracy of Paleodischarge Estimates for Rivers on Mars. Geophysical Research Letters, 2019, 46, 11738-11746. | 4.0 | 8 |
| 31 | Age dates of valley network drainage basins and subbasins within Sabae and Arabia Terrae, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 1302-1310. | 3.6 | 5 |
| 32 | Depositional processes of alluvial fans along the Hilina Pali fault scarp, Island of Hawaii. Geomorphology, 2017, 296, 104-112. | 2.6 | 2 |