# J R Johnson

## List of Publications by Year in descending order

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|---|---|---|---|
| 181 papers | 18,844 citations | 13068 68 h-index | 12233 133 g-index |
| 191 all docs | 191 docs citations | 191 times ranked | 7228 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Heat flow from the Earth's interior: Analysis of the global data set. Reviews of Geophysics, 1993, 31, 267. | 9.0 | 1,286 |
| 2 | In Situ Evidence for an Ancient Aqueous Environment at Meridiani Planum, Mars. Science, 2004, 306, 1709-1714. | 6.0 | 845 |
| 3 | A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777. | 6.0 | 687 |
| 4 | Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480. | 6.0 | 508 |
| 5 | The Opportunity Rover's Athena Science Investigation at Meridiani Planum, Mars. Science, 2004, 306, 1698-1703. | 6.0 | 507 |
| 6 | Provenance and diagenesis of the evaporite-bearing Burns formation, Meridiani Planum, Mars. Earth and Planetary Science Letters, 2005, 240, 95-121. | 1.8 | 506 |
| 7 | The Spirit Rover's Athena Science Investigation at Gusev Crater, Mars. Science, 2004, 305, 794-799. | 6.0 | 404 |
| 8 | Mineralogy at Meridiani Planum from the Mini-TES Experiment on the Opportunity Rover. Science, 2004, 306, 1733-1739. | 6.0 | 370 |
| 9 | Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937. | 6.0 | 367 |
| 10 | An integrated view of the chemistry and mineralogy of martian soils. Nature, 2005, 436, 49-54. | 13.7 | 348 |
| 11 | X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932. | 6.0 | 327 |
| 12 | Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266. | 6.0 | 327 |
| 13 | Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072. | 6.0 | 326 |
| 14 | Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267. | 6.0 | 323 |
| 15 | Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505. | 6.0 | 280 |
| 16 | Mineralogic and compositional properties of Martian soil and dust: Results from Mars Pathfinder. Journal of Geophysical Research, 2000, 105, 1721-1755. | 3.3 | 274 |
| 17 | Windâ€driven particle mobility on Mars: Insights from Mars Exploration Rover observations at â€œEl Doradoâ€•and surroundings at Gusev Crater. Journal of Geophysical Research, 2008, 113, . | 3.3 | 255 |
| 18 | Mars Exploration Rover Athena Panoramic Camera (Pancam) investigation. Journal of Geophysical Research, 2003, 108, . | 3.3 | 247 |

| # | Article | IF | Citations |
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| 19 | Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734. | 6.0 | 246 |
| 20 | Basaltic Rocks Analyzed by the Spirit Rover in Gusev Crater. Science, 2004, 305, 842-845. | 6.0 | 244 |
| 21 | Results from the Mars Pathfinder Camera. Science, 1997, 278, 1758-1765. | 6.0 | 242 |
| 22 | Isotope Ratios of H, C, and O in CO <sub>2</sub> and H <sub>2</sub> O of the Martian Atmosphere. Science, 2013, 341, 260-263. | 6.0 | 241 |
| 23 | Overview of the Spirit Mars Exploration Rover Mission to Gusev Crater: Landing site to Backstay Rock in the Columbia Hills. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 238 |
| 24 | Characterization and petrologic interpretation of olivine-rich basalts at Gusev Crater, Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 227 |
| 25 | Chemical, multispectral, and textural constraints on the composition and origin of rocks at the Mars Pathfinder landing site. Journal of Geophysical Research, 1999, 104, 8679-8715. | 3.3 | 226 |
| 26 | Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670. | 6.0 | 215 |
| 27 | Calcium sulfate veins characterized by ChemCam/Curiosity at Gale crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 1991-2016. | 1.5 | 214 |
| 28 | Two Years at Meridiani Planum: Results from the Opportunity Rover. Science, 2006, 313, 1403-1407. | 6.0 | 188 |
| 29 | Ancient Impact and Aqueous Processes at Endeavour Crater, Mars. Science, 2012, 336, 570-576. | 6.0 | 176 |
| 30 | Pyroclastic Activity at Home Plate in Gusev Crater, Mars. Science, 2007, 316, 738-742. | 6.0 | 174 |
| 31 | Evidence for indigenous nitrogen in sedimentary and aeolian deposits from the Curiosity rover investigations at Gale crater, Mars. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4245-4250. | 3.3 | 172 |
| 32 | Initial Results from the Mini-TES Experiment in Gusev Crater from the Spirit Rover. Science, 2004, 305, 837-842. | 6.0 | 168 |
| 33 | Localization and Physical Properties Experiments Conducted by Spirit at Gusev Crater. Science, 2004, 305, 821-824. | 6.0 | 166 |
| 34 | The SuperCam Instrument Suite on the NASA Mars 2020 Rover: Body Unit and Combined System Tests. Space Science Reviews, 2021, 217, 4. | 3.7 | 160 |
| 35 | Characteristics, distribution, origin, and significance of opaline silica observed by the Spirit rover in Gusev crater, Mars. Journal of Geophysical Research, 2011, 116, . | 3.3 | 155 |
| 36 | Soils of Eagle Crater and Meridiani Planum at the Opportunity Rover Landing Site. Science, 2004, 306, 1723-1726. | 6.0 | 153 |

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| 37 | Pancam Multispectral Imaging Results from the Spirit Rover at Gusev Crater. Science, 2004, 305, 800-806. | 6.0 | 153 |
| 38 | Dust devil vortices seen by the Mars Pathfinder Camera. Geophysical Research Letters, 1999, 26, 2781-2784. | 1.5 | 152 |
| 39 | Overview of the Opportunity Mars Exploration Rover Mission to Meridiani Planum: Eagle Crater to Purgatory Ripple. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 149 |
| 40 | Evidence from Opportunity's Microscopic Imager for Water on Meridiani Planum. Science, 2004, 306, 1727-1730. | 6.0 | 146 |
| 41 | Nature and origin of the hematite-bearing plains of Terra Meridiani based on analyses of orbital and Mars Exploration rover data sets. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 144 |
| 42 | Exploration of Victoria Crater by the Mars Rover Opportunity. Science, 2009, 324, 1058-1061. | 6.0 | 141 |
| 43 | Pancam Multispectral Imaging Results from the Opportunity Rover at Meridiani Planum. Science, 2004, 306, 1703-1709. | 6.0 | 135 |
| 44 | The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463. | 6.0 | 134 |
| 45 | ChemCam activities and discoveries during the nominal mission of the Mars Science Laboratory in Gale crater, Mars. Journal of Analytical Atomic Spectrometry, 2016, 31, 863-889. | 1.6 | 134 |
| 46 | The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. Space Science Reviews, 2021, 217, 1. | 3.7 | 131 |
| 47 | Textures of the Soils and Rocks at Gusev Crater from Spirit's Microscopic Imager. Science, 2004, 305, 824-826. | 6.0 | 130 |
| 48 | Hydrothermal processes at Gusev Crater: An evaluation of Paso Robles class soils. Journal of Geophysical Research, 2008, 113, . | 3.3 | 129 |
| 49 | Spirit Mars Rover Mission: Overview and selected results from the northern Home Plate Winter Haven to the side of Scamander crater. Journal of Geophysical Research, 2010, 115, . | 3.3 | 127 |
| 50 | Overview of the Mars Pathfinder Mission: Launch through landing, surface operations, data sets, and science results. Journal of Geophysical Research, 1999, 104, 8523-8553. | 3.3 | 121 |
| 51 | The rocks of Gusev Crater as viewed by the Mini-TES instrument. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 115 |
| 52 | Oxidation of manganese in an ancient aquifer, Kimberley formation, Gale crater, Mars. Geophysical Research Letters, 2016, 43, 7398-7407. | 1.5 | 110 |
| 53 | Lightâ€toned salty soils and coexisting Siâ€rich species discovered by the Mars Exploration Rover Spirit in Columbia Hills. Journal of Geophysical Research, 2008, 113, . | 3.3 | 108 |
| 54 | Opportunity Mars Rover mission: Overview and selected results from Purgatory ripple to traverses to Endeavour crater. Journal of Geophysical Research, 2011, 116, . | 3.3 | 106 |

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| 55 | Spirit Mars Rover Mission to the Columbia Hills, Gusev Crater: Mission overview and selected results from the Cumberland Ridge to Home Plate. Journal of Geophysical Research, 2008, 113, . | 3.3 | 99 |
| 56 | The ChemCam Remote Micro-Imager at Gale crater: Review of the first year of operations on Mars. Icarus, 2015, 249, 93-107. | 1.1 | 95 |
| 57 | Chemistry, mineralogy, and grain properties at Namib and High dunes, Bagnold dune field, Gale crater, Mars: A synthesis of Curiosity rover observations. Journal of Geophysical Research E: Planets, 2017, 122, 2510-2543. | 1.5 | 95 |
| 58 | Wind-Related Processes Detected by the Spirit Rover at Gusev Crater, Mars. Science, 2004, 305, 810-813. | 6.0 | 94 |
| 59 | Silica-rich deposits and hydrated minerals at Gusev Crater, Mars: Vis-NIR spectral characterization and regional mapping. Icarus, 2010, 205, 375-395. | 1.1 | 93 |
| 60 | Mineralogic constraints on sulfurâ€rich soils from Pancam spectra at Gusev crater, Mars. Geophysical Research Letters, 2007, 34, . | 1.5 | 89 |
| 61 | Diagenetic silica enrichment and lateâ€stage groundwater activity in Gale crater, Mars. Geophysical Research Letters, 2017, 44, 4716-4724. | 1.5 | 87 |
| 62 | Sedimentary textures formed by aqueous processes, Erebus crater, Meridiani Planum, Mars. Geology, 2006, 34, 1085. | 2.0 | 84 |
| 63 | Remote sensing of potential lunar resources: 1. Nearâ€side compositional properties. Journal of Geophysical Research, 1991, 96, 18861-18882. | 3.3 | 77 |
| 64 | The Mars 2020 Perseverance Rover Mast Camera Zoom (Mastcam-Z) Multispectral, Stereoscopic Imaging Investigation. Space Science Reviews, 2021, 217, 24. | 3.7 | 76 |
| 65 | Imager for Mars Pathfinder (IMP) image calibration. Journal of Geophysical Research, 1999, 104, 8907-8925. | 3.3 | 75 |
| 66 | Soil grain analyses at Meridiani Planum, Mars. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 75 |
| 67 | Meteorites on Mars observed with the Mars Exploration Rovers. Journal of Geophysical Research, 2008, 113, . | 3.3 | 75 |
| 68 | The sustainability of habitability on terrestrial planets: Insights, questions, and needed measurements from Mars for understanding the evolution of Earthâ€like worlds. Journal of Geophysical Research E: Planets, 2016, 121, 1927-1961. | 1.5 | 72 |
| 69 | Preliminary results on photometric properties of materials at the Sagan Memorial Station, Mars. Journal of Geophysical Research, 1999, 104, 8809-8830. | 3.3 | 71 |
| 70 | Hydrothermal origin of halogens at Home Plate, Gusev Crater. Journal of Geophysical Research, 2008, 113, . | 3.3 | 71 |
| 71 | ChemCam passive reflectance spectroscopy of surface materials at the Curiosity landing site, Mars. Icarus, 2015, 249, 74-92. | 1.1 | 70 |
| 72 | Evidence for a Diagenetic Origin of Vera Rubin Ridge, Gale Crater, Mars: Summary and Synthesis of Curiosity's Exploration Campaign. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006527. | 1.5 | 69 |

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| 73 | Spectral variability among rocks in visible and near-infrared multispectral Pancam data collected at Gusev crater: Examinations using spectral mixture analysis and related techniques. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 68 |
| 74 | Thermal infrared spectroscopy of experimentally shocked anorthosite and pyroxenite: Implications for remote sensing of Mars. Journal of Geophysical Research, 2002, 107, 3-1. | 3.3 | 67 |
| 75 | Dust deposition on the Mars Exploration Rover Panoramic Camera (Pancam) calibration targets. Journal of Geophysical Research, 2007, 112, . | 3.3 | 67 |
| 76 | Photogeologic Map of the Perseverance Rover Field Site in Jezero Crater Constructed by the Mars 2020 Science Team. Space Science Reviews, 2020, 216, 1. | 3.7 | 67 |
| 77 | Overview of the Microscopic Imager Investigation during Spirit's first 450 sols in Gusev crater. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 64 |
| 78 | Dust deposition at the Mars Pathfinder landing site: observations and modeling of visible/near-infrared spectra. Icarus, 2003, 163, 330-346. | 1.1 | 63 |
| 79 | Hydrogen detection with ChemCam at Gale crater. Icarus, 2015, 249, 43-61. | 1.1 | 58 |
| 80 | Veneers, rinds, and fracture fills: Relatively late alteration of sedimentary rocks at Meridiani Planum, Mars. Journal of Geophysical Research, 2008, 113, . | 3.3 | 57 |
| 81 | Visible and near-infrared multispectral analysis of rocks at Meridiani Planum, Mars, by the Mars Exploration Rover Opportunity. Journal of Geophysical Research, 2007, 112, . | 3.3 | 56 |
| 82 | Mars Oxygen ISRU Experiment (MOXIE). Space Science Reviews, 2021, 217, 1. | 3.7 | 56 |
| 83 | High concentrations of manganese and sulfur in deposits on Murray Ridge, Endeavour Crater, Mars. American Mineralogist, 2016, 101, 1389-1405. | 0.9 | 55 |
| 84 | Infrared Measurements of Pristine and Disturbed Soils 1. Spectral Contrast Differences between Field and Laboratory Data. Remote Sensing of Environment, 1998, 64, 34-46. | 4.6 | 54 |
| 85 | The color of the Martian sky and its influence on the illumination of the Martian surface. Journal of Geophysical Research, 1999, 104, 8795-8808. | 3.3 | 54 |
| 86 | Dust coatings on basaltic rocks and implications for thermal infrared spectroscopy of Mars. Journal of Geophysical Research, 2002, 107, 2-1. | 3.3 | 52 |
| 87 | Visible/near-infrared spectra of experimentally shocked plagioclase feldspars. Journal of Geophysical Research, 2003, 108, . | 3.3 | 52 |
| 88 | Chemical variations in Yellowknife Bay formation sedimentary rocks analyzed by ChemCam on board the Curiosity rover on Mars. Journal of Geophysical Research E: Planets, 2015, 120, 452-482. | 1.5 | 51 |
| 89 | Remote sensing of potential lunar resources: 2. High spatial resolution mapping of spectral reflectance ratios and implications for nearside mare TiO2content. Journal of Geophysical Research, 1994, 99, 5601. | 3.3 | 50 |
| 90 | Spectrophotometric properties of materials observed by Pancam on the Mars Exploration Rovers: 1. Spirit. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 49 |

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| 91 | Dust deposition on the decks of the Mars Exploration Rovers: 10â€‰years of dust dynamics on the Panoramic Camera calibration targets. Earth and Space Science, 2015, 2, 144-172. | 1.1 | 49 |
| 92 | Persistent aeolian activity at Endeavour crater, Meridiani Planum, Mars; new observations from orbit and the surface. Icarus, 2015, 251, 275-290. | 1.1 | 49 |
| 93 | Spectral, mineralogical, and geochemical variations across Home Plate, Gusev Crater, Mars indicate high and low temperature alteration. Earth and Planetary Science Letters, 2009, 281, 258-266. | 1.8 | 48 |
| 94 | Chemistry and texture of the rocks at Rocknest, Gale Crater: Evidence for sedimentary origin and diagenetic alteration. Journal of Geophysical Research E: Planets, 2014, 119, 2109-2131. | 1.5 | 48 |
| 95 | Infrared Measurements of Pristine and Disturbed Soils 2. Environmental Effects and Field Data Reduction. Remote Sensing of Environment, 1998, 64, 47-52. | 4.6 | 46 |
| 96 | Estimated solar wind-implanted helium-3 distribution on the Moon. Geophysical Research Letters, 1999, 26, 385-388. | 1.5 | 46 |
| 97 | Thermal infrared spectroscopy and modeling of experimentally shocked plagioclase feldspars. American Mineralogist, 2003, 88, 1575-1582. | 0.9 | 45 |
| 98 | SuperCam Calibration Targets: Design and Development. Space Science Reviews, 2020, 216, 138. | 3.7 | 44 |
| 99 | Spectrogoniometry and modeling of martian and lunar analog samples and Apollo soils. Icarus, 2013, 223, 383-406. | 1.1 | 43 |
| 100 | Terrain physical properties derived from orbital data and the first 360 sols of Mars Science Laboratory Curiosity rover observations in Gale Crater. Journal of Geophysical Research E: Planets, 2014, 119, 1322-1344. | 1.5 | 43 |
| 101 | Visible to near-infrared MSL/Mastcam multispectral imaging: Initial results from select high-interest science targets within Gale Crater, Mars. American Mineralogist, 2017, 102, 1202-1217. | 0.9 | 43 |
| 102 | A reevaluation of spectral ratios for Lunar Mare TiO<sub>2</sub> mapping. Geophysical Research Letters, 1991, 18, 2153-2156. | 1.5 | 42 |
| 103 | Visible/near-infrared spectra and two-layer modeling of palagonite-coated basalts. Geophysical Research Letters, 2001, 28, 2101-2104. | 1.5 | 42 |
| 104 | First in situ investigation of a dark wind streak on Mars. Journal of Geophysical Research, 2008, 113, . | 3.3 | 42 |
| 105 | Gone with the wind: Eolian erasure of the Mars Rover tracks. Journal of Geophysical Research, 2010, 115, . | 3.3 | 40 |
| 106 | Visible/nearâ€infrared spectral diversity from in situ observations of the Bagnold Dune Field sands in Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2017, 122, 2655-2684. | 1.5 | 40 |
| 107 | Martian Eolian Dust Probed by ChemCam. Geophysical Research Letters, 2018, 45, 10,968. | 1.5 | 40 |
| 108 | Surface processes recorded by rocks and soils on Meridiani Planum, Mars: Microscopic Imager observations during Opportunity's first three extended missions. Journal of Geophysical Research, 2008, 113, . | 3.3 | 39 |

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| 109 | Retrieval of water vapor column abundance and aerosol properties from ChemCam passive sky spectroscopy. Icarus, 2018, 307, 294-326. | 1.1 | 39 |
| 110 | Hematite spherules at Meridiani: Results from MI, Miniâ€TES, and Pancam. Journal of Geophysical Research, 2008, 113, . | 3.3 | 38 |
| 111 | Surface albedo observations at Gusev Crater and Meridiani Planum, Mars. Journal of Geophysical Research, 2008, 113, . | 3.3 | 37 |
| 112 | Rock spectral classes observed by the Spirit Rover's Pancam on the Gusev Crater Plains and in the Columbia Hills. Journal of Geophysical Research, 2008, 113, . | 3.3 | 37 |
| 113 | Context of ancient aqueous environments on Mars from in situ geologic mapping at Endeavour Crater. Journal of Geophysical Research E: Planets, 2015, 120, 538-569. | 1.5 | 37 |
| 114 | Digital photogrammetric analysis of the IMP camera images: Mapping the Mars Pathfinder landing site in three dimensions. Journal of Geophysical Research, 1999, 104, 8869-8887. | 3.3 | 36 |
| 115 | Spectrophotometric properties of materials observed by Pancam on the Mars Exploration Rovers: 2. Opportunity. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 36 |
| 116 | Chemical variability in mineralized veins observed by ChemCam on the lower slopes of Mount Sharp in Gale crater, Mars. Icarus, 2018, 311, 69-86. | 1.1 | 34 |
| 117 | Diagenesis of Vera Rubin Ridge, Gale Crater, Mars, From Mastcam Multispectral Images. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006322. | 1.5 | 33 |
| 118 | Oxalate minerals on Mars?. Earth and Planetary Science Letters, 2015, 420, 127-139. | 1.8 | 32 |
| 119 | Observation of >â€‰5â€‰wt % zinc at the Kimberley outcrop, Gale crater, Mars. Journal of Geophysical Research E: Planets, 2016, 121, 338-352. | 1.5 | 32 |
| 120 | Radiative transfer modeling of dust-coated Pancam calibration target materials: Laboratory visible/near-infrared spectrogoniometry. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 31 |
| 121 | Overview of the magnetic properties experiments on the Mars Exploration Rovers. Journal of Geophysical Research, 2009, 114, . | 3.3 | 31 |
| 122 | Constraints on iron sulfate and iron oxide mineralogy from ChemCam visible/near-infrared reflectance spectroscopy of Mt. Sharp basal units, Gale Crater, Mars. American Mineralogist, 2016, 101, 1501-1514. | 0.9 | 31 |
| 123 | Pre-Flight Calibration of the Mars 2020 Rover Mastcam Zoom (Mastcam-Z) Multispectral, Stereoscopic Imager. Space Science Reviews, 2021, 217, 29. | 3.7 | 31 |
| 124 | The 1999 Marsokhod rover mission simulation at Silver Lake, California: Mission overview, data sets, and summary of results. Journal of Geophysical Research, 2001, 106, 7639-7663. | 3.3 | 30 |
| 125 | Analyses of Highâ€Iron Sedimentary Bedrock and Diagenetic Features Observed With ChemCam at Vera Rubin Ridge, Gale Crater, Mars: Calibration and Characterization. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006314. | 1.5 | 30 |
| 126 | Iron Mobility During Diagenesis at Vera Rubin Ridge, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006299. | 1.5 | 30 |

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| 127 | Coordinated analyses of orbital and Spirit Rover data to characterize surface materials on the cratered plains of Gusev Crater, Mars. Journal of Geophysical Research, 2007, 112, . | 3.3 | 29 |
| 128 | Bedrock formation at Meridiani Planum. Nature, 2006, 443, E1-E2. | 13.7 | 28 |
| 129 | Evidence for mechanical and chemical alteration of iron-nickel meteorites on Mars: Process insights for Meridiani Planum. Journal of Geophysical Research, 2011, 116, . | 3.3 | 28 |
| 130 | Thermal infrared spectra of experimentally shocked andesine anorthosite. Icarus, 2012, 221, 359-364. | 1.1 | 27 |
| 131 | Synergistic Ground and Orbital Observations of Iron Oxides on Mt. Sharp and Vera Rubin Ridge. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006294. | 1.5 | 27 |
| 132 | Radiometric Calibration Targets for the Mastcam-Z Camera on the Mars 2020 Rover Mission. Space Science Reviews, 2020, 216, 1. | 3.7 | 27 |
| 133 | The Spirit Rover's Athena science investigation at Gusev Crater, Mars. Science, 2004, 305, 794-9. | 6.0 | 27 |
| 134 | Low Abundance Materials at the Mars Pathfinder Landing Site: An Investigation Using Spectral Mixture Analysis and Related Techniques. Icarus, 2002, 158, 56-71. | 1.1 | 25 |
| 135 | VNIR multispectral observations of aqueous alteration materials by the Pancams on the Spirit and Opportunity Mars Exploration Rovers. American Mineralogist, 2016, 101, 2005-2019. | 0.9 | 25 |
| 136 | Visible/near-infrared spectrogoniometric observations and modeling of dust-coated rocks. Icarus, 2004, 171, 546-556. | 1.1 | 24 |
| 137 | Field reconnaissance geologic mapping of the Columbia Hills, Mars, based on Mars Exploration Rover Spirit and MRO HiRISE observations. Journal of Geophysical Research, 2011, 116, . | 3.3 | 24 |
| 138 | Microspectroscopic and Petrographic Comparison of Experimentally Shocked Albite, Andesine, and Bytownite. Journal of Geophysical Research E: Planets, 2018, 123, 1701-1722. | 1.5 | 24 |
| 139 | VNIR multispectral observations of rocks at Cape York, Endeavour crater, Mars by the Opportunity roverâ€™s Pancam. Icarus, 2013, 225, 709-725. | 1.1 | 23 |
| 140 | Thermal infrared spectroscopy and modeling of experimentally shocked basalts. American Mineralogist, 2007, 92, 1148-1157. | 0.9 | 21 |
| 141 | Spectral, Compositional, and Physical Properties of the Upper Murray Formation and Vera Rubin Ridge, Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006290. | 1.5 | 20 |
| 142 | Geological characterization of remote field sites using visible and infrared spectroscopy: Results from the 1999 Marsokhod field test. Journal of Geophysical Research, 2001, 106, 7683-7711. | 3.3 | 19 |
| 143 | Shocked plagioclase signatures in Thermal Emission Spectrometer data of Mars. Icarus, 2006, 180, 60-74. | 1.1 | 19 |
| 144 | Properties and distribution of paired candidate stony meteorites at Meridiani Planum, Mars. Journal of Geophysical Research, 2010, 115, . | 3.3 | 19 |

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| 145 | Temporal observations of bright soil exposures at Gusev crater, Mars. Journal of Geophysical Research, 2011, 116, . | 3.3 | 19 |
| 146 | Observations of rock spectral classes by the Opportunity rover's Pancam on northern Cape York and on Matijevic Hill, Endeavour Crater, Mars. Journal of Geophysical Research E: Planets, 2014, 119, 2349-2369. | 1.5 | 19 |
| 147 | New views of the Moon: Improved understanding through data integration. Eos, 2000, 81, 349. | 0.1 | 18 |
| 148 | Bagnold Dunes Campaign Phase 2: Visible/Nearâ€Infrared Reflectance Spectroscopy of Longitudinal Ripple Sands. Geophysical Research Letters, 2018, 45, 9480-9487. | 1.5 | 17 |
| 149 | Overview of the Morphology and Chemistry of Diagenetic Features in the Clayâ€Rich Glen Torridon Unit of Gale Crater, Mars. Journal of Geophysical Research E: Planets, 2022, 127, . | 1.5 | 17 |
| 150 | Lunar Prospector epithermal neutrons from impact craters and landing sites: Implications for surface maturity and hydrogen distribution. Journal of Geophysical Research, 2002, 107, 3-1. | 3.3 | 14 |
| 151 | Mineralogy and chemistry of cobbles at Meridiani Planum, Mars, investigated by the Mars Exploration Rover Opportunity. Journal of Geophysical Research, 2010, 115, . | 3.3 | 14 |
| 152 | Techniques for identifying dust devils in Mars Pathfinder images. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 870-876. | 2.7 | 13 |
| 153 | Search for life on Mars in surface samples: Lessons from the 1999 Marsokhod rover field experiment. Journal of Geophysical Research, 2001, 106, 7713-7720. | 3.3 | 12 |
| 154 | Mars Exploration Rover Navigation Camera inâ€flight calibration. Journal of Geophysical Research, 2008, 113, . | 3.3 | 12 |
| 155 | Spectrophotometric properties of materials observed by Pancam on the Mars Exploration Rovers: 3. Sols 500â€“1525. Icarus, 2015, 248, 25-71. | 1.1 | 12 |
| 156 | Centimeter to decimeter hollow concretions and voids in Gale Crater sediments, Mars. Icarus, 2017, 289, 144-156. | 1.1 | 12 |
| 157 | Surface Property Variations in Venusian Fluidized Ejecta Blanket Craters. Icarus, 1994, 110, 33-70. | 1.1 | 11 |
| 158 | Mars Exploration Rover Pancam multispectral imaging of rocks, soils, and dust at Gusev crater and Meridiani Planum. , 0, , 281-314. | | 11 |
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| 163 | Basaltic rocks analyzed by the Spirit Rover in Gusev Crater. Science, 2004, 305, 842-5. | 6.0 | 9 |
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