

# Kjartan M Kinch

## List of Publications by Year in descending order

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Version: 2024-02-01

60  
papers

7,003  
citations

109137

35  
h-index

143772

57  
g-index

61  
all docs

61  
docs citations

61  
times ranked

4263  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Pre-Flight Calibration of the Mars 2020 Rover Mastcam Zoom (Mastcam-Z) Multispectral, Stereoscopic Imager. <i>Space Science Reviews</i> , 2021, 217, 29.  | 3.7 | 31        |
| 2  | The Mars 2020 Perseverance Rover Mast Camera Zoom (Mastcam-Z) Multispectral, Stereoscopic Imaging Investigation. <i>Space Science Reviews</i> , 2021, 217, 24.  | 3.7 | 76        |
| 3  | Stratigraphic Relationships in Jezero Crater, Mars: Constraints on the Timing of Fluvial-Lacustrine Activity From Orbital Observations. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006840.                             | 1.5 | 20        |
| 4  | Radiometric Calibration Targets for the Mastcam-Z Camera on the Mars 2020 Rover Mission. <i>Space Science Reviews</i> , 2020, 216, 1.   | 3.7 | 27        |
| 5  | An Instrument Anomaly in the Mars Exploration Rover Pancam 1,009-nm Filter (R7): Characterization, Simulation, Correction, and Preliminary Verification. <i>Earth and Space Science</i> , 2019, 6, 96-115.  | 1.1 | 0         |
| 6  | Crater Statistics on the Dark-Toned, Mafic Floor Unit in Jezero Crater, Mars. <i>Geophysical Research Letters</i> , 2019, 46, 2408-2416.  | 1.5 | 40        |
| 7  | Compositional and Mineralogic Analyses of Mars Using Multispectral Imaging on the Mars Exploration Rover, Phoenix, and Mars Science Laboratory Missions. , 2019, , 513-537.   |     | 3         |
| 8  | Photometric characterization of Lucideon and Avian Technologies color standards including application for calibration of the Mastcam-Z instrument on the Mars 2020 rover. <i>Optical Engineering</i> , 2019, 58, 1.                               | 0.5 | 8         |
| 9  | Low crater frequencies and low model ages in lunar maria: Recent endogenic activity or degradation effects?. <i>Meteoritics and Planetary Science</i> , 2018, 53, 826-838.  | 0.7 | 8         |
| 10 | CASTAway: An asteroid main belt tour and survey. <i>Advances in Space Research</i> , 2018, 62, 1998-2025.   | 1.2 | 18        |
| 11 | The albedo of Mars: Six Mars years of observations from Pancam on the Mars Exploration Rovers and comparisons to MOC, CTX and HiRISE. <i>Icarus</i> , 2018, 314, 159-174.   | 1.1 | 10        |
| 12 | Visible to near-infrared MSL/Mastcam multispectral imaging: Initial results from select high-interest science targets within Gale Crater, Mars. <i>American Mineralogist</i> , 2017, 102, 1202-1217.  | 0.9 | 43        |
| 13 | Diagenetic silica enrichment and late-stage groundwater activity in Gale crater, Mars. <i>Geophysical Research Letters</i> , 2017, 44, 4716-4724.   | 1.5 | 87        |
| 14 | The Mars Science Laboratory <i>Curiosity</i> rover Mastcam instruments: Preflight and in-flight calibration, validation, and data archiving. <i>Earth and Space Science</i> , 2017, 4, 396-452.   | 1.1 | 113       |
| 15 | Constraints on iron sulfate and iron oxide mineralogy from ChemCam visible/near-infrared reflectance spectroscopy of Mt. Sharp basal units, Gale Crater, Mars. <i>American Mineralogist</i> , 2016, 101, 1501-1514.                               | 0.9 | 31        |
| 16 | The sustainability of habitability on terrestrial planets: Insights, questions, and needed measurements from Mars for understanding the evolution of Earth-like worlds. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 1927-1961. | 1.5 | 72        |
| 17 | Dust deposition on the decks of the Mars Exploration Rovers: 10-years of dust dynamics on the Panoramic Camera calibration targets. <i>Earth and Space Science</i> , 2015, 2, 144-172.  | 1.1 | 49        |
| 18 | ChemCam passive reflectance spectroscopy of surface materials at the Curiosity landing site, Mars. <i>Icarus</i> , 2015, 249, 74-92.  | 1.1 | 70        |

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|----|--|-----|-----------|
| 19 | Volatile and Organic Compositions of Sedimentary Rocks in Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1245267.                                 | 6.0 | 323       |
| 20 | A Habitable Fluvio-Lacustrine Environment at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1242777.  | 6.0 | 687       |
| 21 | Mineralogy of a Mudstone at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1243480.   | 6.0 | 508       |
| 22 | Mars's Surface Radiation Environment Measured with the Mars Science Laboratory's Curiosity Rover. Science, 2014, 343, 1244797.                             | 6.0 | 475       |
| 23 | In Situ Radiometric and Exposure Age Dating of the Martian Surface. Science, 2014, 343, 1247166.   | 6.0 | 224       |
| 24 | Elemental Geochemistry of Sedimentary Rocks at Yellowknife Bay, Gale Crater, Mars. Science, 2014, 343, 1244734.  | 6.0 | 246       |
| 25 | Interference from terrestrial sources and its impact on the GRAS GPS radio occultation receiver. Radio Science, 2014, 49, 1-6.                             | 0.8 | 5         |
| 26 | X-ray Diffraction Results from Mars Science Laboratory: Mineralogy of Rocknest at Gale Crater. Science, 2013, 341, 1238932.                                | 6.0 | 327       |
| 27 | Curiosity at Gale Crater, Mars: Characterization and Analysis of the Rocknest Sand Shadow. Science, 2013, 341, 1239505.                                    | 6.0 | 280       |
| 28 | Abundance and Isotopic Composition of Gases in the Martian Atmosphere from the Curiosity Rover. Science, 2013, 341, 263-266.                               | 6.0 | 327       |
| 29 | Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars Curiosity Rover. Science, 2013, 341, 1238937.                                       | 6.0 | 367       |
| 30 | 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       |
| 31 | Martian Fluvial Conglomerates at Gale Crater. Science, 2013, 340, 1068-1072.   | 6.0 | 326       |
| 32 | An Optimized Calibration Procedure for Determining Elemental Ratios Using Laser-Induced Breakdown Spectroscopy. Analytical Chemistry, 2013, 85, 1492-1500. | 3.2 | 18        |
| 33 | The Petrochemistry of Jake_M: A Martian Mugearite. Science, 2013, 341, 1239463.  | 6.0 | 134       |
| 34 | Soil Diversity and Hydration as Observed by ChemCam at Gale Crater, Mars. Science, 2013, 341, 1238670.   | 6.0 | 215       |
| 35 | Low Upper Limit to Methane Abundance on Mars. Science, 2013, 342, 355-357.   | 6.0 | 103       |
| 36 | Overview of the magnetic properties experiments on the Mars Exploration Rovers. Journal of Geophysical Research, 2009, 114, .                              | 3.3 | 31        |

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|----|--|------|-----------|
| 37 | An environmental simulation wind tunnel for studying Aeolian transport on mars. Planetary and Space Science, 2008, 56, 426-437.  | 0.9  | 54        |
| 38 | Search for magnetic minerals in Martian rocks: Overview of the Rock Abrasion Tool (RAT) magnet investigation on Spirit and Opportunity. Journal of Geophysical Research, 2008, 113, .    | 3.3  | 10        |
| 39 | Magnetic properties of Martian surface materials. , 2008, , 366-380.   |      | 6         |
| 40 | Dust deposition on the Mars Exploration Rover Panoramic Camera (Pancam) calibration targets. Journal of Geophysical Research, 2007, 112, .   | 3.3  | 67        |
| 41 | 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        |
| 42 | 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        |
| 43 | Preliminary analysis of the MER magnetic properties experiment using a computational fluid dynamics model. Planetary and Space Science, 2006, 54, 28-44.                                 | 0.9  | 23        |
| 44 | An integrated laser anemometer and dust accumulator for studying wind-induced dust transport on Mars. Planetary and Space Science, 2006, 54, 1065-1072.                                  | 0.9  | 18        |
| 45 | Backscattering Mössbauer spectroscopy of Martian dust. Hyperfine Interactions, 2006, 166, 523-527.   | 0.2  | 4         |
| 46 | Simulations of the magnetic properties experiment on Mars Exploration Rovers. Hyperfine Interactions, 2006, 166, 555-560.  | 0.2  | 1         |
| 47 | Backscattering Mössbauer spectroscopy of Martian dust. , 2006, , 523-527.  |      | 0         |
| 48 | Indication of drier periods on Mars from the chemistry and mineralogy of atmospheric dust. Nature, 2005, 436, 62-65.   | 13.7 | 125       |
| 49 | Analysis of magnetic dust layers on Mars by PIXE and XRF. X-Ray Spectrometry, 2005, 34, 359-362.   | 0.9  | 3         |
| 50 | Textures of the Soils and Rocks at Gusev Crater from Spirit's Microscopic Imager. Science, 2004, 305, 824-826.   | 6.0  | 130       |
| 51 | Evidence from Opportunity's Microscopic Imager for Water on Meridiani Planum. Science, 2004, 306, 1727-1730.   | 6.0  | 146       |
| 52 | Pancam Multispectral Imaging Results from the Spirit Rover at Gusev Crater. Science, 2004, 305, 800-806.   | 6.0  | 153       |
| 53 | Pancam Multispectral Imaging Results from the Opportunity Rover at Meridiani Planum. Science, 2004, 306, 1703-1709.  | 6.0  | 135       |
| 54 | Magnetic Properties Experiments on the Mars Exploration Rover Spirit at Gusev Crater. Science, 2004, 305, 827-829.   | 6.0  | 77        |

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|----|---|-----|-----------|
| 55 | The electrical properties of Mars analogue dust. <i>Planetary and Space Science</i> , 2004, 52, 279-290.  | 0.9 | 79        |
| 56 | Device for measuring surface accumulation of dust: applications for future magnetic properties experiments on Mars. <i>Planetary and Space Science</i> , 2004, 52, 693-698. | 0.9 | 5         |
| 57 | A miniature laser anemometer for measurement of wind speed and dust suspension on Mars. <i>Planetary and Space Science</i> , 2004, 52, 1177-1186.                           | 0.9 | 17        |
| 58 | Textures of the soils and rocks at Gusev Crater from Spirit's Microscopic Imager. <i>Science</i> , 2004, 305, 824-6.  | 6.0 | 7         |
| 59 | Magnetic Properties Experiments on the Mars Exploration Rover mission. <i>Journal of Geophysical Research</i> , 2003, 108, .  | 3.3 | 55        |
| 60 | Mars Exploration Rover Athena Panoramic Camera (Pancam) investigation. <i>Journal of Geophysical Research</i> , 2003, 108, .  | 3.3 | 247       |