

William Bruce Banerdt – Résumé – May, 2022

Education:

University of Southern California (1971-1975), B.S. in Physics (cum laude)
Pennsylvania State University (1975-1977)
University of Southern California (1977-1983), Ph.D. in Geological Sciences

Employment:

1977-83: APT Research Assistant, Jet Propulsion Laboratory, Pasadena
1983-85: National Research Council Resident Research Associate at the Jet Propulsion Laboratory, Pasadena
1985-2001: Research Scientist, Jet Propulsion Laboratory, Pasadena
2001-present: Principal Research Scientist, Jet Propulsion Laboratory, Pasadena

Expertise:

Planetary geophysics, particularly relating to the evolution and internal processes and tectonics of Mars, Venus and the Moon
Lithospheric mechanics and deep interior structure
Gravity, altimetry and seismic data analysis
Planetary flight instrumentation, particularly seismometers
Science flight mission development and operations
Science management

Activities, Positions, and Responsibilities:

JPL Positions

2011-present: Principal Investigator, InSight Project
2006-2012: Project Scientist: Mars Exploration Rovers Project
1993-2012: JPL Discipline Program Manager: Planetary Geology and Geophysics, Mars Data Analysis, Cosmochemistry
1986-2006: Mars Observer/Mars Global Surveyor: Experiment Representative, MOLA (Mars Orbiter Laser Altimeter) Investigation
1994-2005: Lead Scientist: Geophysics and Planetary Geology Element, JPL
2001-2002: Acting Project Scientist: NASA/CNES Mars '07 Orbiter Mission
1993-1994: Group Supervisor: Geophysics and Planetary Dynamics Group, JPL
1990-1992: Study Scientist: Mars Global Network/MESUR Mission

Academic Positions

2002: Professeur Invité, Institut de Physique du Globe de Paris (4 months)
1997: Professeur Invité, Institut de Physique du Globe de Paris (3 months)
1994-1998: Adjunct Instructor, Department of Mathematics, Antelope Valley College

Professional Activities and Positions

2019: Science Organizing Committee, 9th International Mars Conference
2013-2014: Science Organizing Committee, 8th International Mars Conference
2012: Science Organizing Committee, Mantle of Mars Workshop
2008-2011: Program Committee, Fall AGU
2008-2010: Secretary, AGU Planetary Sciences Section
2009: Program Committee, Spring AGU General Assembly
2007: Convener, Spring 2007 AGU Special Session, Recent Spacecraft Results from Mars
2007: Organizing Committee, Seventh International Conference on Mars

- 2006: Convener, Fall 2006 AGU Special Session, Latest Results from Spirit and Opportunity
 2002-2003: Lunar and Planetary Science Conference Program Committee

Mission Investigations

- 2011-present: InSight Principal Investigator
 2007-2009: ExoMars SEIS Co-Investigator
 1992-2006: Mars Observer/Mars Global Surveyor Participating Scientist, MOLA (Mars Orbiter Laser Altimeter) Investigation
 2001-2003: Discovery Mars NetLander Project Principal Investigator
 1998-2003: NetLander Co-Principal Investigator, Short-Period Seismometer
 1995-2003: Rosetta Co-Investigator, SESAME (Surface Electrical, Seismic and Acoustic Monitoring Experiment) Team
 1990-1994: Magellan Guest Investigator, Radar Investigation Team

NASA Advisory Groups

- 2008-2010: International Lunar Network Core Instrument Working Group
 2004-2011: NASA Lunar Exploration Analysis Group (LEAG)
 1999-present: NASA Mars Exploration Program Analysis Group (MEPAG)
 2010, 2011: Geophysics Group Chair, Lunar Advanced Science and Exploration Research (LASER) Proposal Review Panel
 2008-2009: Chair, MEPAG Network Mission Special Analysis Group (NetSAG)
 2009: Planetary Geology and Geophysics Proposal Review Panel
 2008: International Lunar Network Science Definition Team
 2008: Lunar Advanced Science and Exploration Research (LASER) Proposal Review Panel
 2001-2007: MEPAG Goals, Objectives and Investigations Document Revision Group
 2007: Mars Fundamental Research Program Proposal Review Panel
 2006: LEAG Special Action Team (LEAG-SAT) for review of Second Robotic Lunar Exploration Mission (RLEP-2) Science Plan
 2005-2006: Mars Advanced Planning Group (MAPG)
 2005: LEAG-SAT for RLEP-2 Objectives Definition
 2004-2005: Mars Human Precursor Science Steering Group
 2004-2005: Chair, NASA Mars Data Analysis Program Proposal Review Panel
 2004: NASA Mars-Moon Science Steering Group (MMSSG)
 2004: NASA Mars Human Precursor Science Steering Group (MHPSSG)
 2004: Lunar Reconnaissance Orbiter Objectives and Requirements Definition Team (LRO ORDT)
 2002-2004: Mars Data Analysis Program Proposal Review Panel
 2003-2004: Mars Fundamental Research Program Proposal Review Panel
 2001-2002: NASA Mars Exploration Program Analysis Group (MEPAG) Pathways Science Steering Group
 2000: NASA Mars Exploration Program Synthesis Group
 2000: NASA Mars 2003 Rover and Orbiter Preliminary Mission System Design and Cost Review Board
 2000: NASA Mars 2003 Orbiter and Scout Science Instrument Definition Team
 1994-1996: NASA Planetary Geosciences Review Panel
 1993-1994: MESUR Seismometer Instrument Development Science Team
 1990-1993: MESUR Science Definition Team, Mars Science Working Group
 1986-1988: NASA Topographic Science Working Group

Other Scientific Advisory Groups

2005-2009:	National Research Council Space Science Board Committee for Planetary and Lunar Exploration (COMPLEX)
2001-2008:	Deutsche Forschungsgemeinschaft (DFG) Mars Priority Program Review Board
2007	Deutsches Zentrum für Luft- und Raumfahrt (DLR) Institute for Planetology External Review Committee
2006-2007:	National Research Council Committee on Lunar Science Priorities and Goals
1998-2000:	National Research Council Campaign Strategy Working Group: Formation and Dynamics of Earth-like Planets
1995-1996:	ESA InterMarsnet Science Definition Team

Awards and Honors:

2022:	NASA Group Achievement Award, InSight HP ³ Mole Penetration Anomaly Response Team
2022:	NASA Group Achievement Award, InSight Extended Mission Support Team
2020:	NASA Group Achievement Award, InSight USM Anomaly Response Team
2020:	AIAA Space Systems Award, InSight Flight Team
2019:	Emmy, Best Original Interactive Programming for the InSight Landing
2019:	NASA Outstanding Public Leadership Medal
2019:	NASA Group Achievement Award, InSight Project Management Team
2019:	NASA Group Achievement Award, InSight Formulation Teams
2018:	JPL Magellan Award
2018:	Popular Science Best of What's New Award (Aerospace), InSight Mission
2018:	NASA Group Achievement Award, InSight SEIS Delivery Team
2016:	JPL People Leadership Award
2014:	JPL Magellan Award
2014:	NASA Group Achievement Award, MER Rover Science and Operations Team
2009:	ACLU Standing Up for Civil Liberties Award
2008:	NASA Group Achievement Award, MER Extended Missions 3 and 4 Team
2006:	NASA Group Achievement Award, MGS Extended Mission Operations Team
2002:	JPL Award for Excellence
2000:	NASA Group Achievement Award, MGS Science Operations Team
2000:	NASA Group Achievement Award, MGS MOLA Team
1997:	NASA Group Achievement Award, MGS GDS Development Team
1997:	NASA Group Achievement Award, MGS Payload Development Team
1993:	NASA Group Achievement Award, Mars Observer MOS Design
1992:	NASA Group Achievement Award, Magellan Science Group
1990:	Editor's Award for Excellence, Journal of Geophysical Research

PUBLICATIONS

Papers

2022

- Compaire, N., L. Margerin, M. Monnereau, R. F. Garcia, L. Lange, M. Calvet, N. Dahmen, S. C. Stähler, N. Müller, M. Grott, P. Lognonné, T. Spohn, and W. B. Banerdt, Seasonal variations of subsurface seismic velocities monitored by the SEIS-InSight seismometer on Mars, *Geophys. J. Int.*, ggab499, 2022. <https://doi.org/10.1093/gji/ggab499>
- Delage, P., J.-P. Castillo-Betancourt, B. Caicedo-Hormaza, F. Karakostas, E. De Laure, P. Lognonné, D. Antonangeli, and B. Banerdt, The interaction between the SEIS seismometer of the InSight Martian mission and a regolith simulant, *Géotechnique*, 2022. <https://doi.org/10.1680/jgeot.21.00171>
- Horleston, A., J. F. Clinton, S. Ceylan, D. Giardini, C. Charalambous, J. Irving, P. Lognonné, S. C. Stähler, G. Zenhäusern, N. L. Dahmen, C. Duran, T. Kawamura, A. Khan, D. Kim, M. Plasman, F. Euchner, C. Beghein, É. Beucler, Q. Huang, M. Knapmeyer, B. Knapmeyer-Endrun, V. Lekić, J. Li, C. Perrin, M. Schimmel, N. C. Schmerr, A. E. Stott, E. Stutzmann, N. A. Teanby, Z. Xu, M. Panning, and W. B. Banerdt, The Far Side of Mars: Two Distant Marsquakes Detected by InSight, *Seis. Rec.* **2(2)**, 88–99, 2022. <https://doi.org/10.1785/0320220007>
- Kawamura, T. R. Garcia, M. Wiecezorek, S. de Raucourt, P. Lognonné, F. Bernauer, D. Breuer, J. Clinton, P. Delage, M. Drilleau, L. Ferraioli, N. Fuji, M. Grott, A. Horleston, G. Kletetschka, M. Knapmeyer, B. Knapmeyer-Endrun, S. Padovan, A.-C. Plesa, A. Rivoldini, J. Robertsson, S. Rodriguez, S. C. Stähler, E. Stutzmann, N. Teanby, N. Tosi, C. Vrettos, B. Banerdt, W. Fa, Q. Huang, J. Irving, Y. Ishihara, K. Miljkovic, A. Mittelholz, S. Nagihara, C. Neal, S. Qu, N. Schmerr, and T. Tsuji, An Autonomous Lunar Geophysical Experiment Package (ALGEP) for future space missions, *Exper. Astron.*, 2020. <https://doi.org/10.1007/s10686-022-09857-6>
- Lange, L., F. Forget, D. Banfield, M. Wolff, A. Spiga, E. Millour, D. Viúdez-Moreiras, A. Bierjon, S. Piqueux, C. Newman, J. Pla-García, and W. B. Banerdt, InSight Pressure Data Recalibration, and its Application to the Study of Long-Term Pressure Changes on Mars, *J. Geophys. Res. Planets* **127**, e2022JE007190, 2022. <https://doi.org/10.1029/2022JE007190>
- Thorne, S. N., C. L. Johnson, A. Mittelholz, B. Langlais, R. Lorenz, N. Murdoch, A. Spiga, S. E. Smrekar, and W. B. Banerdt, Investigation of Magnetic Field Signals During Vortex-Induced Pressure Drops at InSight, *Planet. Space Sci.* **217**, 105487, 2022. <https://doi.org/10.1016/j.pss.2022.105487>
- Wiecezorek, M., A. Broquet, S. M. McLennan, A. Rivoldini, M. Golombek, D. Antonangeli, C. Beghein, D. Giardini, T. Gudkova, S. Gyalay, C. L. Johnson, R. Joshi, D. Kim, S. D. King, B. Knapmeyer-Endrun, P. Lognonné, C. Michaut, A. Mittelholz, F. Nimmo, L. Ojha, M. P. Panning, A.-C. Plesa, M. A. Siegler, T. Spohn, and W. B. Banerdt, InSight constraints on the global character of the Martian crust, *J. Geophys. Res. Planets* **127**, e2022JE007298, 2022. <https://doi.org/10.1029/2022JE007298>

2021

- Barkaoui, S., P. Lognonné, T. Kawamura, É. Stutzmann, L. Seydoux, M. De Hoop, R. Balestrieri, J.-R. Scholz, G. Sainton, M. Plasman, S. Ceylan, J. Clinton, A. Spiga, R. Widmer-Schmidrig, F. Civilini, and W. B. Banerdt, Anatomy of continuous Mars SEIS and Pressure data from unsupervised learning, *Bull. Seismol. Soc. Am.*, **111**, 2964–2981, 2021. <https://doi.org/10.1785/0120210095>
- Böse, M., S. Stähler, N. Deichmann, D. Giardini, J. Clinton, P. Lognonné, S. Ceylan, M. van Driel, C. Charalambous, N. Dahmen, A. Horleston, T. Kawamura, A. Khan, M. Knapmeyer, G. Orhand-Mainsant, J.-R. Scholz, F. Euchner, W. B. Banerdt, Magnitude Scales for Marsquakes Calibrated from InSight Data, *Bull. Seismol. Soc. Am.* **111**, 3003–3015, 2021. <https://doi.org/10.1785/0120210045>

- Brinkman, N., S. C. Stähler, D. Giardini, C. Schmelzbach, A. Jacob, N. Fuji, C. Perrin, P. Lognonné, M. Böse, B. Knapmeyer-Endrun, E. Beucler, S. Ceylan, J. F. Clinton, C. Charalambous, M. van Driel, F. Euchner, A. Horleston, T. Kawamura, A. Khan, G. Mainsant, M. P. Panning, W. T. Pike, J.-R. Scholz, J. O. A. Robertsson, and W. B. Banerdt, Focal mechanisms of marsquakes, *J. Geophys. Res. Planets* **126**, e2020JE006546, 2021. <https://doi.org/10.1029/2020JE006546>
- Ceylan, S., J. F. Clinton, D. Giardini, M. Böse, M. van Driel, F. Euchner, A. Horleston, T. Kawamura, A. Khan, G. Orhand-Mainsant, J. R. Scholtz, S. C. Stähler, C. Charalambous, N. L. Dahmen, A. Stott, W. B. Banerdt, D. Banfield, E. Beucler, R. F. Garcia, K. Hurst, S. Kedar, P. Lognonné, M. P. Panning, W. T. Pike, S. E. Smrekar, A. Spiga, E. Stutzmann, M. Schimmel, J. ten Pierick, and R. D. Lorenz, InSight SEIS data content: A guide to non-seismic observations, *Phys. Earth Planet. Int.* **310**, 106597, 2021. <https://doi.org/10.1016/j.pepi.2020.106597>
- Charalambous, C., J. B. McClean, M. Baker, W. T. Pike, M. Golombek, M. Lemmon, V. Ansan, C. Perrin, A. Spiga, R. Lorenz, M. E. Banks, S. Rodriguez, N. Murdoch, C. M. Weitz, J. A. Grant, N. H. Warner, I. J. Daubar, E. Hauber, A. E. Stott, C. L. Johnson, A. Mittelholz, T. Warren, S. Navarro, L. M. Sotomayor, J. Maki, A. Lucas, D. Banfield, C. Newman, D. Viúdez-Moreiras, J. Pla-García, P. Lognonné, and W. B. Banerdt, Vortex-dominated aeolian activity at InSight's landing site, Part 1: Multi-instrument observations, analysis and implications, *J. Geophys. Res. Planets* **126**, e2020JE006757, 2021. <https://doi.org/10.1029/2020JE006757>
- Charalambous, C., A. E. Stott, W. T. Pike, J. B. McClean, T. Warren, A. Spiga, D. Banfield, R. F. Garcia, J. Clinton, S. Stähler, S. Navarro, P. Lognonné, J.-R. Scholz, T. Kawamura, M. van Driel, M. Böse, S. Ceylan, A. Khan, A. Horleston, G. Orhand-Mainsant, L. M. Sotomayor, N. Murdoch, D. Giardini, W. B. Banerdt, A Comodulation Analysis of Atmospheric Energy Injection into the Ground Motion at InSight, Mars, *J. Geophys. Res. Planets* **126**, e2020JE006538, 2021. <https://doi.org/10.1029/2020JE006538>
- Clinton, J., S. Ceylan, M. van Driel, D. Giardini, S. C. Stähler, M. Böse, C. Charalambous, N. L. Dahmen, A. Horleston, T. Kawamura, A. Khan, G. Orhand-Mainsant, J.-R. Scholz, F. Euchner, W. B. Banerdt, P. Lognonné, D. Banfield, E. Beucler, R. F. Garcia, S. Kedar, M. P. Panning, C. Perrin, W. T. Pike, S. E. Smrekar, A. Spiga, and A. E. Stott, The Marsquake Catalogue from InSight, Sols 0-478, *Phys. Earth Planet. Int.* **310**, 106595, 2021. <https://doi.org/10.1016/j.pepi.2020.106595>
- Compaire, N., L. Margerin, R. F. Garcia, B. Pinot, M. Calvet, G. Orhand-Mainsant, D. Kim, V. Lekic, B. Tauzin, M. Schimmel, E. Stutzmann, B. Knapmeyer-Endrun, P. Lognonné, W. T. Pike, N. Schmerr, L. Gizon, and W. B. Banerdt, Autocorrelation of the ground vibrations recorded by the SEIS-InSight seismometer on Mars, *J. Geophys. Res. Planets* **126**, e2020JE006498, 2021. <https://doi.org/10.1029/2020JE006498>
- Dahmen, N., J. Clinton, S. Ceylan, M. van Driel, D. Giardini, A. Khan, S. C. Stähler, M. Böse, C. Charalambous, A. Horleston, T. Kawamura, G. Orhand-Mainsant, J.-R. Scholz, F. Euchner, W. T. Pike, R. C. Weber, P. Lognonné, and W. B. Banerdt, Super high frequency events: A new class of events recorded by the InSight seismometers on Mars, *J. Geophys. Res. Planets* **125**, e2020JE006599, 2021. <https://doi.org/10.1029/2020JE006599>
- Dahmen, N., G. Zenhäusern, J. F. Clinton, D. Giardini, S. C. Stähler, S. Ceylan, C. Charalambous, M. van Driel, K. J. Hurst, S. Kedar, P. Lognonné, N. Murdoch, R. Myhill, M. P. Panning, W. T. Pike, C. Schmelzbach, J.-R. Scholz, A. E. Stott, and W. B. Banerdt, Resonances and Lander Modes observed by InSight on Mars (1-9 Hz), *Bull. Seis. Soc. Amer.* **111**, 2924–2950, 2-21. <https://doi.org/10.1785/0120210056>
- Fernando, B., N. Wójcicka, M. Froment, R. Maguire, S. Stähler, L. Rolland, G. Collins, O. Karatekin, C. Larmat, E. Sansom, N. Teanby, A. Spiga, F. Karakostas, K. Leng, T. Nissen-Meyer, T. Kawamura, D. Giardini, P. Lognonne, W. B. Banerdt, and I. Daubar, Listening for the Landing: Estimating the seismic detectability of Perseverance's arrival at Mars with InSight, *Earth Space Sci.* **8**, e2020EA001585, 2021. <https://doi.org/10.1029/2020EA001585>

- Fernando, B., N. Wójcicka, S. Ceylan, C. Charalambous, J. Clinton, G. S. Collins, N. Dahmen, M. Froment, M. Golombek, A. Horleston, O. Karatekin, T. Kawamura, R. Maguire, T. Nissen-Meyer, M. Patel, M. Plasman, L. Posiolova, L. Rolland, A. Spiga, S. C. Stähler, A. E. Stott, N. A. Teanby, G. Zenhäusern, D. Giardini, P. Lognonné, B. Banerdt, and I. J. Daubar, First seismic constraints from a Mars impact experiment using InSight and Perseverance, *Nat. Astron.*, 2021. <https://doi.org/10.1038/s41550-021-01502-0>
- Garcia, R. F., N. Murdoch, R. Lorenz, A. Spiga, D. Bowman, P. Lognonné, D. Banfield, and W. B. Banerdt, Search for infrasound signals in InSight data using coupled pressure/ground deformation methods, *Bull. Seis. Soc. Amer.*, **111**, 3055–3064, 2021. <https://doi.org/10.1785/0120210079>
- Grott, M., T. Spohn, J. Knollenberg, C. Krause, T. L. Hudson, S. Piqueux, N. Müller, M. Golombek, C. Vrettos, E. Marteau, S. Nagihara, P. Morgan, J. Murphy, M. Siegler, S. King, S. E. Smrekar, and W. B. Banerdt, Thermal Conductivity of the Martian Regolith at the InSight Landing site from HP³ Active Heating Experiments, *J. Geophys. Res. Planets* **126**, e2021JE006861, 2021. <https://doi.org/10.1029/2021JE006861>
- Hobiger, M., M. Hallo, C. Schmelzbach, S. Stähler, D. Fäh, D. Giardini, M. Golombek, J. Clinton, N. Dahmen, G. Zenhäusern, B. Knapmeyer-Endrun, A. Carrasco, C. Charalambous, K. Hurst, S. Kedar, P. Lognonné, and W. B. Banerdt, The shallow structure of Mars from inversion of high-frequency ambient seismic vibrations Rayleigh wave ellipticity at the InSight landing site, *Nat. Comm.* **12**, 6756, 2021. <https://doi.org/10.1038/s41467-021-26957-7>
- Hurst, K., L. Fayon, B. Knapmeyer-Endrun, C. Schmelzbach, M. van Driel, J. Ervin, S. Kedar, W. Pike, M. Bierwirth, P. Lognonné, S. Ceylan, M. Böse, J. Clinton, D. Giardini, A. Horleston, T. Kawamura, A. Khan, G. Orhand-Mainsant, J.-R. Scholz, S. Stähler, J. Stevanović, and W. Banerdt, Resonances of the InSight Seismometer on Mars, *Bull. Seismol. Soc. Am.*, **111**, 2951–2963, 2021. <https://doi.org/10.1785/0120210137>
- Karakostas, F., N. Schmerr, R. Maguire, Q. Huang, D. Kim, V. Lekic, C. Nunn, S. Menina, T. Kawamura, P. Lognonné, D. Giardini, and B. Banerdt, Scattering Attenuation of the Martian Interior through Coda Wave Analysis, *Bull. Seis. Soc. Amer.* **111**, 3035–3054, 2021. <https://doi.org/10.1785/0120210253>
- Kedar, S., M. P. Panning, S. E. Smrekar, S. C. Stähler, S. D. King, M. P. Golombek, M. Manga, B. R. Julian, B. Shiro, C. Perrin, J. A. Power, C. Michaut, S. Ceylan, D. Giardini, P. Lognonné, and W. B. Banerdt, Analyzing Low Frequency Seismic Events at Cerberus Fossae as Long Period Volcanic Quakes, *J. Geophys. Res. Planets* **126**, e2020JE006518, 2021. <https://doi.org/10.1029/2020JE006518>
- Khan, A., S. Ceylan, M. van Driel, D. Giardini, P. Lognonné, H. Samuel, N. C. Schmerr, S. C. Stähler, A. C. Duran, Q. Huang, D. Kim, A. Broquet, C. Charalambous, J. F. Clinton, P. M. Davis, M. Drilleau, F. Karakostas, V. Lekic, R. R. Maguire, C. Michaut, M. P. Panning, W. T. Pike, B. Pinot, M. Plasman, J.-R. Scholz, R. Widmer-Schmidrig, T. Spohn, S. E. Smrekar, and W. B. Banerdt, Upper mantle structure of Mars from InSight seismic data, *Science* **373**, 434–438, 2021. <https://doi.org/10.1126/science.abf2966>
- Kim, D., P. Davis, V. Lekić, R. Maguire, N. Compaire, M. Schimmel, E. Stutzmann, J. C. E. Irving, P. Lognonné, J.-R. Scholz, J. Clinton, G. Zenhäusern, N. Dahmen, S. Deng, A. Levander, M. Panning, R. Garcia, D. Giardini, K. Hurst, B. Knapmeyer-Endrun, F. Nimmo, W. T. Pike, L. Pou, N. Schmerr, S. Stähler, B. Tauzin, R. Widmer-Schmidrig, and W. B. Banerdt, Potential Pitfalls in the Analysis and Structural Interpretation of Seismic Data from the Mars InSight Mission, *Bull. Seis. Soc. Amer.* **111**, 2982–3002, 2021. <https://doi.org/10.1785/0120210123>
- Kim, D., V. Lekić, J. C. E. Irving, N. Schmerr, B. Knapmeyer-Endrun, R. Joshi, M. Panning, B. Tauzin, F. Karakostas, R. Maguire, Q. Huang, A. Khan, D. Giardini, M. A. Wieczorek, P. Lognonné, and W. B. Banerdt, Improving constraints on Planetary Interiors with PPs Receiver Functions, *J. Geophys. Res. Planets* **126**, e2021JE006983, 2021. <https://doi.org/10.1029/2021JE006983>

- Knapmeyer-Endrun, B., M. P. Panning, F. Bissig, R. Joshi, A. Khan, D. Kim, V. Lekić, B. Tauzin, S. Tharimena, M. Plasman, N. Compaire, R. F. Garcia, L. Margerin, M. Schimmel, É. Stutzmann, N. Schmerr, E. Bozdağ, A.-C. Plesa, M. A. Wieczorek, A. Broquet, D. Antonangeli, S. M. McLennan, H. Samuel, C. Michaut, L. Pan, S. E. Smrekar, C. L. Johnson, N. Brinkman, A. Mittelholz, A. Rivoldini, P. M. Davis, P. Lognonné, B. Pinot, J.-R. Scholz, S. Stähler, M. Knapmeyer, M. van Driel, D. Giardini, W. B. Banerdt, Thickness and structure of the martian crust from InSight seismic data, *Science* **373**, 438-443, 2021. <https://doi.org/10.1126/science.abf8966>
- Knapmeyer, M., S. C. Stähler, I. Daubar, F. Forget, A. Spiga, T. Pierron, M. van Driel, D. Banfield, E. Hauber, M. Grott, N. Müller, C. Perrin, A. Jacob, A. Lucas, B. Knapmeyer-Endrun, C. Newman, M. P. Panning, R. C. Weber, F. J. Calef, M. Böse, S. Ceylan, C. Charalambous, J. Clinton, D. Giardini, A. Horleston, T. Kawamura, A. Khan, W. T. Pike, J.-R. Scholz, P. Lognonné, and B. Banerdt, Seasonal Seismic Activity on Mars, *Earth Planet Sci. Lett.* **576**, 117171, 2021. <https://doi.org/10.1016/j.epsl.2021.117171>
- Maki, J., M. Golombek, W. Banerdt, S. Smrekar, R. Deen, H. Abarca, S. Lu, and J. Hall, Color properties at the InSight landing site, *Earth Space Sci.* **8**, e2020EA001336, 2021. <https://doi.org/10.1029/2020EA001336>
- Menina, S., L. Margerin, T. Kawamura, P. Lognonné, J. Marti, M. Drilleau, M. Calvet, N. Compaire, R. Garcia, F. Karakostas, N. Schmerr, M. van Driel, S. Stähler, M. Plasman, D. Giardini, S. Carrasco, B. Knapmeyer-Endrun, and W. B. Banerdt, Energy envelope and attenuation characteristics of High Frequency (HF) and Very High Frequency (VF) Martian events, *Bull. Seis. Soc. Amer.* **111**, 3016–3034, 2021. <http://doi.org/10.1785/0120210127>
- Mittelholz, A., C. L. Johnson, M. Fillingim, S. Joy, J. Espley, J. Halekas, S. Smrekar, and W. B. Banerdt, Space weather observations with InSight, *Geophys. Res. Lett.* **48**, e2021GL095432, 2021. <https://doi.org/10.1029/2021GL095432>
- Müller, N., S. Piqueux, M. Lemmon, J. Maki, R. Lorenz, M. Grott, T. Spohn, S. E. Smrekar, J. Knollenberg, T. L. Hudson, C. Krause, E. Millour, F. Forget, M. Golombek, A. Hagermann, N. Attree, M. Siegler, and W. B. Banerdt, Near surface properties of Martian regolith derived from InSight HP³-RAD temperature observations during Phobos transits, Mars, *Geophys. Res. Lett.* **48**, e2021GL093542, 2021. <https://doi.org/10.1029/2021GL093542>
- Murdoch, N., A. Spiga, R. Lorenz, R. Garcia, C. Perrin, R. Widmer-Schmidrig, S. Rodriguez, N. Compaire, N. H. Warner, D. Mimoun, D. Banfield, P. Lognonné, and W. B. Banerdt, Constraining Martian regolith and vortex parameters from combined seismic and meteorological measurements, *J. Geophys. Res. Planets* **126**, e2020JE006410, 2021. <https://doi.org/10.1029/2020JE006410>
- Piqueux, S., N. Müller, M. Grott, M. Siegler, E. Millour, F. Forget, M. Lemmon, M. Golombek, N. Williams, J. Grant, N. Warner, V. Ansan, I. Dauber, J. Knollenberg, J. Maki, A. Spiga, D. Banfield, T. Spohn, S. Smrekar, and B. Banerdt, Regolith Properties near the InSight Lander Derived from 50 Sols of Radiometer Measurements, *J. Geophys. Res. Planets* **126**, e2021JE006859, 2021. <https://doi.org/10.1029/2021JE006859>
- Pou, L., F. Nimmo, P. Lognonné, D. Mimoun, R. F. Garcia, A. Rivoldini, B. Pinot, D. Banfield, and W. B. Banerdt, Forward modeling of the Phobos tides and applications to the first Martian year of the InSight mission, *Earth Space Sci.* **8**, e2021EA001669, 2021. <https://doi.org/10.1029/2021EA001669>
- Savoie, D., A. Richard, M. Goutaudier, P. Lognonné, K. Hurst, J. N. Maki, M. Golombek, M. Van Driel, J. Clinton, E. Stutzmann, D. Mimoun, W. B. Banerdt, and N. R. Williams, Finding SEIS north on Mars: Comparisons between SEIS sundial, inertial and imaging measurements and consequences for seismic analysis, *Earth Space Sci.* **8**, e2020EA001286, 2021. <https://doi.org/10.1029/2020EA001286>
- Schimmel, M., E. Stutzmann, P. Lognonné, N. Compaire, P. Davis, M. Drilleau, R. Garcia, D. Kim, B. Knapmeyer-Endrun, V. Lekic, L. Margerin, M. Panning, N. Schmerr, J.-R. Scholz, A. Spiga, B. Tauzin, and B. Banerdt, Seismic noise autocorrelations on Mars, *Earth Space Sci.* **8**, e2021EA001755, 2021. <https://doi.org/10.1029/2021EA001755>

- Sollberger, D., C. Schmelzbach, F. Andersson, J. O. A. Robertsson, S. Kedar, W. B. Banerdt, N. Brinkman, J. Clinton, M. van Driel, R. Garcia, D. Giardini, M. Grott, T. Haag, T. L. Hudson, P. Lognonné, J. ten Pierick, W. Pike, T. Spohn, S. Stähler, and P. Zweifel, A reconstruction algorithm for temporally aliased seismic signals recorded by the InSight Mars lander, *Earth Space Sci.* **8**, e2020EA001234, 2021. <https://doi.org/10.1029/2020EA001234>
- Spiga, A., N. Murdoch, R. Lorenz, F. Forget, C. Newman, S. Rodriguez, J. Pla-Garcia, D. Viúdez-Moreiras, D. Banfield, C. Perrin, N. Mueller, E. Millour, and W. B. Banerdt, A study of daytime convective vortices and turbulence in the martian Planetary Boundary Layer based on half-a-year of InSight atmospheric measurements and Large-Eddy Simulations, *J. Geophys. Res. Planets* **126**, e2020JE006511, 2021. <https://doi.org/10.1029/2020JE006511>
- Stähler, S., A. Khan, N. Schmerr, W. B. Banerdt, P. Lognonné, D. Giardini, S. Ceylan, M. Drilleau, A. C. Duran, R. Garcia, Q. Huang, D. Kim, V. Lekic, H. Samuel, M. Schimmel, N. Schmerr, D. Sollberger, É. Stutzmann, Z. Xu, D. Antonangeli, P. Davis, J. C. E. Irving, T. Kawamura, M. Knapmeyer, R. Maguire, A. G. Marusiak, M. P. Panning, C. Perrin, A.-C. Plesa, A. Rivoldini, C. Schmelzbach, G. Zenhäusern, É. Beucler, C. Charalambous, J. Clinton, N. Dahmen, M. van Driel, T. Gudkova, A. Horleston, W. T. Pike, M. Plasman, and S. E. Smrekar, Seismic detection of the Martian core, *Science* **373**, 443–448, 2021. <https://doi.org/10.1126/science.abi7730>
- Stott, A., C. Charalambous, T. Warren, W. T. Pike, R. Myhill, N. Murdoch, J. B. McClean, A. Trebi-Ollennu, G. Lim, R. F. Garcia, D. Mimoun, S. Kedar, K. Hurst, M. Bierwirth, P. Lognonné, N. A. Teanby, A. Horleston, and W. B. Banerdt, The site tilt and lander transfer function from the short period seismometer of InSight on Mars, *Bull. Seis. Soc. Amer.* **111**, 2889–2908, 2021. <https://doi.org/10.1785/0120210058>
- Stutzmann, É., M. Schimmel, A. Horleston, S. Ceylan, M. van Driel, S. Stähler, P. Lognonné, B. Banerdt, M. Calvet, J. Clinton, M. Drilleau, L. Fayon, A. Jacob, T. Kawamura, L. Margerin, M. Panning, T. Pike, and J. Scholtz, The Polarization of Ambient Noise on Mars, *J. Geophys. Res. Planets* **126**, e2020JE006545, 2021. <https://doi.org/10.1029/2020JE006545>
- van Driel, M., S. Ceylan, J. F. Clinton, D. Giardini, A. Horleston, L. Margerin, S. C. Stähler, M. Böse, C. Charalambous, T. Kawamura, A. Khan, G. Orhand-Mainsant, J.-R. Scholz, F. Euchner, M. Knapmeyer, W. T. Pike, P. Lognonné, and W. B. Banerdt, High frequency seismic events on Mars observed by InSight, *J. Geophys. Res. Planets* **126**, e2020JE006670, 2021. <https://doi.org/10.1029/2020JE006670>
- Zweifel, P., D. Mance, J. ten Pierick, D. Giardini, C. Schmelzbach, T. Haag, T. Nicollier, S. Ceylan, J. F. Clinton, P. Lognonné, W. T. Pike, and B. Banerdt, Seismic High-Resolution Acquisition Electronics for the NASA InSight mission on Mars, *Bull. Seis. Soc. Amer.* **111**, 2909–2923, 2021. <https://doi.org/10.1785/0120210071>
- 2020**
- Banerdt, W. B., S. Smrekar, D. Banfield, D. Giardini, M. Golombek, C. Johnson, P. Lognonné, A. Spiga, T. Spohn, C. Perrin, S. Stähler, D. Antonangeli, S. Asmar, C. Beghein, N. Bowles, E. Bozdağ, P. Chi, U. Christensen, J. Clinton, G. Collins, I. Daubar, V. Dehant, M. Drilleau, M. Fillingim, B. Folkner, R. Garcia, J. Garvin, J. Grant, M. Grott, J. Grygorczuk, T. Hudson, J. Irving, G. Kargl, T. Kawamura, S. Kedar, S. King, B. Knapmeyer-Endrun, M. Knapmeyer, M. Lemmon, R. Lorenz, J. Maki, L. Margerin, S. McLennan, C. Michaut, D. Mimoun, A. Mittelholz, A. Mocquet, P. Morgan, N. Mueller, S. N. Murdoch, Nagihara, C. Newman, F. Nimmo, M. Panning, T. Pike, A.-C. Plesa, S. Rodriguez, J.-A. Rodriguez-Manfredi, C. Russell, N. Schmerr, M. Siegler, S. Stanley, E. Stutzmann, N. Teanby, J. Tromp, M. van Driel, N. Warner, R. Weber, and M. Wiczorek, Initial results from the InSight mission on Mars. *Nat. Geosci.* **13**, 183–189 (2020). <https://doi.org/10.1038/s41561-020-0544-y>

- Banfield, D., C. Newman, F. Forget, M. Lemmon, R. Lorenz, N. Murdoch, D. Viudez-Moreiras, J. Pla-Garcia, R. F. Garcia, P. Lognonné, O. Karatekin, C. Perrin, L. Martire, N. Teanby, B. Van Hove, J. N. Maki, B. Kenda, N. T. Mueller, S. Rodriguez, T. Kawamura, J. B. McClean, A. E. Stott, C. Charalambous, E. Millour, C. L. Johnson, A. Mittelholz, A. Määtänen, S. R. Lewis, J. Clinton, S. C. Stähler, S. Ceylan, D. Giardini, T. Warren, W. T. Pike, I. Daubar, M. Golombek, L. Rolland, R. Widmer-Schmidrig, D. Mimoun, Beucier, A. Jacob, A. Lucas, M. Baker, V. Ansan, K. Hurst, L. Mora-Sotomayor, S. Navarro, J. Torres, A. Lepinette, A. Molina, M. Marin-Jimenez, J. Gomez-Elvira, V. Peinado, J.-A. Rodriguez-Manfredi, B. T. Carcich, S. Sackett, C. T. Russell, T. Spohn, S. Smrekar, W. B. Banerdt, The atmosphere of Mars as observed by InSight. *Nat. Geosci.* **13**, 190–198 (2020). <https://doi.org/10.1038/s41561-020-0534-0>
- Daubar, I., P. Lognonné, N. A. Teanby, G. S. Collins, J. Clinton, S. Stähler, A. Spiga, F. Karakostas, S. Ceylan, M. Malin, A. S. McEwen, R. Maguire, C. Charalambous, K. Onodera, A. Lucas, L. Rolland, J. Vaubaillon, T. Kawamura, M. Böse, A. Horleston, M. van Driel, J. Stevanović, K. Miljkovic, B. Fernando, Q. Huang, C. S. Larmat, K. Leng, A. Rajsic, N. Schmerr, N. Wojcicka, T. Pike, J. Wookey, S. Rodriguez, R. Garcia, M. E. Banks, L. Margerin, L. Posiolova, and B. Banerdt, A New Crater Near InSight: Implications for Seismic Impact Detectability on Mars, *J. Geophys. Res. Planets* **125**, e2020JE006382, 2020. <https://doi.org/10.1029/2020JE006382>
- Drilleau, M., E. Beucier, P. Lognonné, M. P. Panning, B. Knapmeyer-Endrun, W. B. Banerdt, C. Beghein, S. Ceylan, M. van Driel, R. Joshi, T. Kawamura, A. Khan, S. Menina, A. Rivoldini, H. Samuel, S. Stähler, H. Xu, M. Bonnín, J. Clinton, D. Giardini, B. Kenda, V. Lekic, A. Mocquet, N. Murdoch, M. Schimmel, S. E. Smrekar, E. Stutzmann, B. Tauzin, and S. Tharimena, MSS/1: Single-station and single-event marsquake inversion, *Earth Space Sci.* **7**, e2020EA001118, 2020. <https://doi.org/10.1029/2020EA001118>
- Garcia, R. F., B. Kenda, T. Kawamura, A. Spiga, N. Murdoch, P. Lognonné, R. Widmer-Schmidrig, N. Compaire, G. Orhand-Mainsant, D. Banfield, and W. B. Banerdt, Pressure effects on SEIS-InSight instrument, improvement of seismic records and characterization of long period atmospheric waves from ground displacements, *J. Geophys. Res. Planets*, **125**, e2019JE006278, 2020. <https://doi.org/10.1029/2019JE006278>
- Giardini, D., P. Lognonné, W. Banerdt, W. Pike, U. Christensen, S. Ceylan, J. Clinton, M. van Driel, S. Stähler, M. Böse, R. Garcia, A. Khan, M. Panning, C. Perrin, D. Banfield, E. Beucier, C. Charalambous, F. Euchner, A. Horleston, A. Jacob, T. Kawamura, S. Kedar, G. Mainsant, J.-R. Scholz, S. Smrekar, A. Spiga, C. Agard, D. Antonangeli, S. Barkaoui, E. Barrett, P. Combes, V. Conejero, I. Daubar, M. Drilleau, C. Ferrier, T. Gabsi, T. Gudkova, K. Hurst, F. Karakostas, S. King, M. Knapmeyer, B. Knapmeyer-Endrun, R. Ljorca-Cejudo, A. Lucas, L. Luno, L. Margerin, J. McClean, D. Mimoun, N. Murdoch, F. Nimmo, M. Nonon, C. Pardo, A. Rivoldini, J. A. Rodriguez Manfredi, H. Samuel, M. Schimmel, A. E. Stott, E. Stutzman, N. Teanby, T. Warren, R. Weber, M. Wiczorek, and C. Yana, The seismicity of Mars. *Nat. Geosci.* **13**, 205–212 (2020). <https://doi.org/10.1038/s41561-020-0539-8>
- Golombek, M., N. H. Warner, J. Grant, E. Hauber, V. Ansan, C. Weitz, N. Williams, C. Charalambous, S. Wilson, A. DeMott, M. Kopp, H. Lethcoe-Wilson, L. Berger, R. Hausmann, E. Marteau, C. Vrettos, A. Trussell, W. Folkner, S. Le Maistre, N. Mueller, M. Grott, T. Spohn, S. Piqueux, E. Millour, F. Forget, I. Daubar, N. Murdoch, P. Lognonné, C. Perrin, S. Rodriguez, W. T. Pike, T. Parker, J. Maki, H. Abarca, R. Deen, J. Hall, P. Andres, N. Ruoff, F. Calef, S. Smrekar, M. M. Baker, M. Banks, A. Spiga, D. Banfield, J. Garvin, C. E. Newman, W. B. Banerdt, Geology of the InSight landing site on Mars. *Nat. Commun.* **11**, 1014 (2020). <https://doi.org/10.1038/s41467-020-14679-1>
- Johnson, C., A. Mittelholz, B. Langlais, C. T. Russell, V. Ansan, D. Banfield, P. J. Chi, M. O. Fillingim, F. Forget, H. F. Haviland, S. Joy, P. Lognonné, X. Liu, C. Michaut, C. Quantin-Nataf, L. Pan, A. Spiga, S. Stanley, S. N. Thorne, M. A. Wiczorek, Y. Yu, S. E. Smrekar, and W. B. Banerdt, Crustal and time-varying magnetic fields at the InSight landing site on Mars. *Nat. Geosci.* **13**, 199–204 (2020). <https://doi.org/10.1038/s41561-020-0537-x>

- Kenda, B., M. Drilleau, R. F. Garcia, T. Kawamura, N. Murdoch, N. Compaire, P. Lognonné, A. Spiga, R. Widmer-Schmidrig, P. Delage, V. Ansan, C. Vrettos, S. Rodriguez, W. B. Banerdt, D. Banfield, D. Antonangeli, U. Christensen, D. Mimoun, A. Mocquet, and T. Spohn, Subsurface structure at the InSight landing site from compliance measurements by seismic and meteorological experiments, *J. Geophys. Res. Planets* **125**, 6, e2020JE006387, 2020. <https://doi.org/10.1029/2020JE006387>.
- Lognonné, P., W. B. Banerdt, W. T. Pike, D. Giardini, U. Christensen, R. F. Garcia, T. Kawamura, S. Kedar, B. Knapmeyer-Endrun, L. Margerin, F. Nimmo, M. Panning, B. Tauzin, J. R. Scholz, D. Antonangeli, S. Barkaoui, E. Beucler, F. Bissig, N. Brinkman, M. Calvet, S. Ceylan, C. Charalambous, P. Davis, M. van Driel, M. Drilleau, L. Fayon, R. Joshi, B. Kenda, A. Khan, M. Knapmeyer, V. Lekic, J. McClean, D. Mimoun, N. Murdoch, L. Pan, C. Perrin, B. Pinot, L. Pou, S. Menina, S. Rodriguez, C. Schmelzbach, N. Schmerr, D. Sollberger, A. Spiga, S. Stähler, A. Stott, E. Stutzmann, S. Tharimena, R. Widmer-Schmidrig, F. Andersson, V. Ansan, C. Beghein, M. Böse, E. Bozdağ, J. Clinton, I. Daubar, P. Delage, N. Fuji, M. Golombek, M. Grott, A. Horleston, K. Hurst, J. Irving, A. Jacob, J. Knollenberg, S. Krasner, C. Krause, R. Lorenz, C. Michaut, B. Myhill, T. Nissen-Meyer, J. ten Pierick, A.-C. Plesa, C. Quantin-Nataf, J. Robertsson, L. Rochas, M. Schimmel, S. Smrekar, T. Spohn, N. Teanby, J. Tromp, J. Vallade, N. Verdier, C. Vrettos, R. Weber, D. Banfield, E. Barrett, M. Bierwirth, S. Calcutt, N. Compaire, C. Johnson, D. Mance, F. Euchner, L. Kerjean, G. Mainsant, J. A. Rodriguez Manfredi, G. Pont, P. Laudet, T. Nebut, S. de Raucourt, O. Robert, C. Russell, A. Sylvestre-Baron, S. Tillier, T. Warren, M. Wiczorek, C. Yana, P. Zweifel, Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. *Nat. Geosci.* **13**, 213–220 (2020). <https://doi.org/10.1038/s41561-020-0536-y>
- Lorenz, R. D., M. T. Lemmon, J. Maki, D. Banfield, A. Spiga, C. Charalambous, E. Barrett, J. A. Herman, B. T. White, S. Pasco, and W. B. Banerdt, Scientific Observations with the InSight Solar Arrays: Dust, Clouds and Eclipses on Mars, *Earth Space Sci.* **7**, e2019EA000992, 2020. <https://doi.org/10.1029/2019EA000992>
- Martire, L., R. Garcia, L. Rolland, A. Spiga, P. Lognonné, D. Banfield, W. B. Banerdt, and R. Martin, Martian Infrasound: Numerical Modeling and Analysis of InSight's Data, *J. Geophys. Res. Planets*, **125**, e2020JE006376, 2020. <https://doi.org/10.1029/2020JE006376>
- Mittleholz, A., C. L. Johnson, S. N. Thorne, S. Joy, E. Barrett, M. Fillingim, F. Forget, B. Langlais, C. T. Russell, A. Spiga, S. Smrekar, and B. Banerdt, The origin of observed magnetic variability for a sol on Mars from InSight, *J. Geophys. Res. Planets* **125**, e2020JE006505, 2020. <https://doi.org/10.1029/2020JE006505>
- Panning, M., W. T. Pike, P. Lognonné, W. B. Banerdt, N. Murdoch, D. Banfield, C. Charalambous, S. Kedar, R. D. Lorenz, A. G. Marusiak, J. B. McClean, C. Nunn, S. C. Stähler, A. E. Stott, T. Warren, On-deck seismology: Lessons from InSight for future planetary seismology, *J. Geophys. Res. Planets* **125**, e2019JE006353, 2020. <https://doi.org/10.1029/2019JE006353>
- Perrin, C., S. Rodriguez, A. Jacob, A. Lucas, A. Spiga, N. Murdoch, R. D. Lorenz, I. J. Daubar, L. Pan, T. Kawamura, P. Lognonné, D. Banfield, M. E. Banks, R. F. Garcia, C. E. Newman, L. Ohja, R. Widmer-Schmidrig, A. S. McEwen, and W. B. Banerdt, Monitoring of Dust-Devil Tracks Around the InSight Landing Site, Mars, and Comparison with in-situ Atmospheric Data, *Geophys. Res. Lett.* **47**, 10, e2020GL087234, 2020. <https://doi.org/10.1029/2020GL087234>
- Scholz, J.-R., R. Widmer-Schmidrig, P. Davis, P. Lognonné, R. F. Garcia, F. Nimmo, K. Hurst, S. Barkaoui, S. de Raucourt, L. Pou, B. Pinot, G. Mainsant, N. Compaire, A. Horleston, M. Böse, S. Ceylan, J. Clinton, M. van Driel, T. Kawamura, A. Khan, S. C. Stähler, D. Giardini, C. Charalambous, A. E. Stott, W. T. Pike, U. Christensen, and W. B. Banerdt, Detection, analysis and removal of glitches from InSight's seismic data from Mars, *Earth Space Sci.* **7**, e2020EA001317, 2020. <https://doi.org/10.1029/2020EA001317>

Stähler, S., R. Widmer-Schmidrig, J.-R. Scholz, M. van Driel, A. Mittelholz, K. Hurst, C. L. Johnson, M. T. Lemmon, R. D. Lorenz, P. Lognonné, N. T. Müller, L. Pou, A. Spiga, D. Banfield, S. Ceylan, C. Charalambous, D. Giardini, F. Nimmo, M. Panning, W. Zürn, and W. B. Banerdt, Geophysical observations of Phobos transits by InSight, *Geophys. Res. Lett.* **47**, e2020GL089099, 2020. <https://doi.org/10.1029/2020GL089099>

2019

Banfield, D., J. A. Rodriguez-Manfredi, C. Russell, K. M. Rowe, D. Leneman, H. Lai, P. R. Cruce, J. Means, C. L. Johnson, A. Mittelholz, S. P. Joy, P.-J. Ch, I. G. Mikellides, S. Carpenter, S. Navarro, E. Sebastian, J. Gomez-Elvira, J. Torres, L. Mora, V. Peinado, A. Lepinette, The TWINS Team, K. Hurst, P. Lognonné, S. Smrekar, and W. B. Banerdt, InSight Auxiliary Payload Sensor Suite (APSS), *Space Sci. Rev.*, **215**:4, 2019. <https://doi.org/10.1007/s11214-018-0570-x>

Grott, M., T. Spohn, J. Knollenberg, C. Krause, M. Scharringhausen, T. Wippermann, S. E. Smrekar, T. L. Hudson, and W. B. Banerdt, Calibration of the heat flow and physical properties package (HP³) for the InSight Mars mission. *Earth Space Sci.*, **6**, 2019. <https://doi.org/10.1029/2019EA00067>

Lognonné, P., W. B. Banerdt, D. Giardini, W. T. Pike, U. Christensen, P. Laudet, S. de Raucourt, P. Zweifel, S. Calcutt, M. Bierwirth, K. J. Hurst, F. Ijpelaan, J. W. Umland, R. Llorca-Cejudo, S. A. Larson, R. Garcia, S. Kedar, B. Knapmeyer-Endrun, D. Mimoun, A. Mocquet, M. P. Panning, R. C. Weber, A. Sylvestre-Baron, G. Pont, N. Verdier, L. Kerjean, L. J. Facto, V. Gharakanian, J. E. Feldman, T. L. Hoffman, D. B. Klein, K. J. Klein, N. P. Onufer, J. Paredes Garcia, M. P. Petkov, J. R. Willis, S. Smrekar, M. Drilleau, T. Gabsi, T. Nebut, O. Robert, S. Tillier, C. Moreau, M. Parise, G. Aveni, S. Bencharef, Y. Bennour, T. Camus, P.-A. Dandonneau, C. Desfoux, B. Lecomte, O. Pot, P. Revuz, D. Mance, J. ten Pierick, N. E. Bowles, C. Charalambous, A. Delahunty, J. Hurley, R. Irshad, H. Liu, A. Mukherjee, I. Standley, A. E. Stott, J. Temple, T. Warren, M. Eberhardt, A. Kramer, W. Kuhne, E.-P. Miettinen, M. Monecke, C. Aicardi, M. André, J. Baroukh, A. Borrien, A. Bouisset, P. Boutte, K. Brethome, C. Brysbaert, T. Carlier, M. Deleuze, J.-M. Desmarres, D. Dilhan, C. Doucet, D. Faye, N. Faye-Refalo, R. Gonzalez, C. Imbert, C. Larigauderie, E. Locatelli, L. Luno, J.-R. Meyer, F. Mialhe, J.-M. Mouret, M. Nonon, Y. Panh, A. Paillet, P. Pasquier, G. Perez, R. Perez, L. Perrin, B. Pouilloux, A. Rosak, I. Savin De Larclause, J. Sicre, M. Sodki, N. Toulemont, B. Vella, C. Yana, F. Alibay, O. M. Avalos, M. A. Balzer, P. Bhandari, E. Blanco, B. D. Bone, J. C. Bousman, P. Bruneau, F. J. Calef, R. J. Calvet, S. A. D'Agostino, G. A. De Los Santos, R. G. Deen, R. W. Denise, J. Ervin, N. W. Ferraro, H. E. Gengl, J. F. Grinblat, D. Hernandez, M. M. Hetzel, M. E. Johnson, L. Khachikyan, J. Y. Lin, S. M. Madzunkov, S. L. Marshall, I. G. Mikellides, E. A. Miller, W. Raff, J. E. Singer, C. M. Sunday, J. F. Villalvazo, M. C. Wallace, D. Banfield, J. A. Rodriguez-Manfredi, C. T. Russell, A. Trebi-Ollennu, J. N. Maki, E. Beucler, M. Böse, C. Bonjour, J.-L. Berenguer, S. Ceylan, J. Clinton, V. Conajero, I. Daubar, V. Dehant, P. Delage, F. Euchner, I. Estève, L. Fayon, L. Ferraioli, C. Johnson, J. Gagnepain-Beyneix, M. P. Golombek, A. Khan, T. Kawamura, B. Kenda, P. Labrot, N. Murdoch, C. Pardo, C. Perrin, L. Pou, A. Sauron, D. Savoie, S. Stähler, E. Stutzman, N. A. Teanby, J. Tromp, M. van Driel, M. Wiczorek, R. Widmer-Schmidrig, and J. Wookey, SEIS: The Seismic Experiment for Internal Structure of InSight, *Space Sci. Rev.*, **215**:12, 2019. <https://doi.org/10.1007/s11214-018-0574-6>

Smrekar, S., P. Lognonné, T. Spohn, W. B. Banerdt, D. Breuer, U. Christensen, V. Dehant, M. Drilleau, W. Folkner, N. Fuji, R. Garcia, D. Giardini, M. Golombek, M. Grott, T. Gudkova, C. Johnson, A. Khan, B. Langlais, A. Mittelholz, A. Mocquet, R. Myhill, M. Panning, C. Perrin, W. T. Pike, A.-C. Plesa, A. Rivoldini, H. Samuel, S. C. Stähler, M. van Driel, T. Van Hoolst, O. Verhoeven, R. Weber, and M. Wiczorek, Pre-Mission InSights on the Interior of Mars, *Space Sci. Rev.*, **215**:3, 2019. <https://doi.org/10.1007/s11214-018-0563-9>

van Driel, M., S. Ceylan, J. F. Clinton, D. Giardini, H. Alemany, A. Allam, D. Ambrois, J. Balestra, B. Banerdt, D. Becker, M. Böse, M. S. Boxberg, N. Brinkman, T. Casademont, J. Chèze, I. Daubar, A. Deschamps, F. Dethof, M. Ditz, M. Drilleau, D. Essing, F. Euchner, B. Fernando, R. Garcia, T. Garth, H. Godwin, M. P. Golombek, K. Grunert, C. Hadziioannou, C. Haindl, C. Hammer, I. Hochfeld, K. Hosseini, H. Hu, S. Kedar, B. Kenda, A. Khan, T. Kilchling, B. Knapmeyer-Endrun, A. Lamert, J. Li, P. Lognonné, S. Mader, L. Marten, F. Mehrkens, D. Mercerat, D. Mimoun, T. Möller, N. Murdoch, P. Neumann, R. Neurath, M. Paffrath, M. P. Panning, F. Peix, L. Perrin, L. Rolland, M. Schimmel, C. Schröer, A. Spiga, S. C. Stähler, R. Steinmann, E. Stutzmann, A. Szenicer, N. Trumpik, M. Tsekhmistrenko, C. Twardzik, R. Weber, P. Werdenbach-Jarklowski, S. Zhang, and Y. Zheng, Preparing for InSight: Evaluation of the Blind Test for Martian Seismicity, *Seismol. Res. Lett.*, **90**:4, 1518-1534, 2019. <https://doi.org/10.1785/0220180379>

2018

- Bissig, F., A. Khan, M. van Driel, S. Stähler, D. Giardini, M. Panning, M. Drilleau, P. Lognonné, T. V. Gudkova, V. N. Zharkov, A.-C. Plesa, and W. B. Banerdt, On the detectability and use of normal modes for determining interior structure of Mars, *Space Sci. Rev.*, **214**:114, 2018. <https://doi.org/10.1007/s11214-018-0547-9>.
- Böse, M., D. Giardini, S. Stähler, S. Ceylan, J. Clinton, M. van Driel, A. Khan, F. Euchner, P. Lognonné, and W. B. Banerdt, Magnitude scales for marsquakes, *Bull. Seismol. Soc. Am.*, **108**, 2764–2777, 2018, <https://doi.org/10.1785/0120180037>.
- Clinton, J., D. Giardini, M. Böse, S. Ceylan, M. van Driel, F. Euchner, R. Garcia, S. Kedar, A. Khan, S. C. Stähler, B. Banerdt, P. Lognonné, E. Beucler, I. Daubar, M. Drilleau, M. Golombek, T. Kawamura, M. Knapmeyer, B. Knapmeyer-Endrun, D. Mimoun, A. Mocquet, M. Panning, C. Perrin, and N. A. Teanby, The Marsquake Service: Securing daily analysis of SEIS data and building the Martian seismicity catalogue for InSight, *Space Sci. Rev.*, **214**:133, 2018. <https://doi.org/10.1007/s11214-018-0567-5>
- Daubar, I., P. Lognonné, N. A. Teanby, K. Miljkovic, J. Stevanović, J. Vaubaillon, B. Kenda, T. Kawamura, J. Clinton, A. Lucas, M. Drilleau, C. Yana, G. S. Collins, D. Banfield, M. Golombek, S. Kedar, N. Schmerr, R. Garcia, S. Rodriguez, T. Gudkova, S. May, M. Banks, J. Maki, E. Sansom, F. Karakostas, M. Panning, N. Fuji, J. Wookey, M. van Driel, M. Lemmon, V. Ansan, M. Böse, S. Stähler, H. Kanamori, J. Richardson, S. Smrekar, and W. B. Banerdt, Impact-Seismic Investigations of the InSight Mission, *Space Sci. Rev.*, **214**:132, 2018. <https://doi.org/10.1007/s11214-018-0562-x>
- Fayon, L., B. Knapmeyer-Endrun, P. Lognonné, M. Bierwirth, A. Kramer, P. Delage, F. Karakostas, S. Kedar, N. Murdoch, R. Garcia, N. Verdier, S. Tillier, W. T. Pike, K. Hurst, C. Schmelzbach, and W. B. Banerdt, A numerical model of the SEIS leveling system transfer matrix and resonances: Application to SEIS rotational seismology and dynamic ground interaction, *Space Sci. Rev.*, **214**:119, 2018. <https://doi.org/10.1007/s11214-018-0555-9>
- Golombek, M., M. Grott, G. Kargl, J. Andrade, J. Marshall, N. Warner, N. A. Teanby, V. Ansan, E. Hauber, J. Voigt, R. Lichtenheldt, B. Knapmeyer-Endrun, I. J. Daubar, D. Kipp, N. Muller, P. Lognonné, C. Schmelzbach, D. Banfield, A. Trebi-Ollennu, J. Maki, S. Kedar, D. Mimoun, N. Murdoch, S. Piqueux, P. Delage, W. T. Pike, C. Charalambous, R. Lorenz, L. Fayon, S. Smrekar, T. Gudkova, R. Garcia, D. Giardini, U. Christensen, T. Nicollier, D. Sollberger, J. Robertsson, K. Ali, B. Kenda, and W. B. Banerdt, Geology and Physical Properties Investigations by the InSight Lander, *Space Sci. Rev.*, **214**:84, 2018. <https://doi.org/10.1007/s11214-018-0512-7>
- Knapmeyer-Endrun, B., N. Murdoch, B. Kenda, M. Golombek, M. Knapmeyer, L. Witte, N. Verdier, S. Kedar, P. Lognonné, and W. B. Banerdt, Influence of body waves, instrumentation resonances, and prior assumptions on Rayleigh wave ellipticity inversion for shallow structure at the InSight landing site, *Space Sci. Rev.*, **214**:94, 2018. <https://doi.org/10.1007/s11214-018-0529-y>
- Lognonné, P., I. W. Huen, Y. Nakamura, M. Wiczorek, W. Yanbin, T. Kawamura, J. Harms, P. Gaulme, M. Knapmeyer, H. Igel, S. Qu, R. Garcia, W. B. Banerdt, and B. Knapmeyer-Endrun, Lunar and Planetary Seismology, Taikong (ISSI-BJ Magazine), 2018.

- Maki, J., M. Golombek, R. Deen, H. Abarca, C. Sorice, T. Goodsall, M. Schwochert, M. Lemmon, A. Trebi-Ollennu, and W. B. Banerdt, The Color Cameras on the InSight Lander, *Space Sci. Rev.*, **214:105**, 2018. <https://doi.org/10.1007/s11214-018-0536-z>
- Petkov, M., S. M. Jones, G. E. Voecks, K. J. Hurst, O. Grosjean, D. Faye, G. Rioland, C. M. Sunday, E. M. Bradford, W. N. Warner, J. M. Mennella, N. W. Ferraro, M. Gallegos, D. M. Soules, P. Lognonné, W. B. Banerdt, and J. W. Umland, Development of the primary sorption pump for the SEIS seismometer of the InSight mission to Mars, *Space Sci. Rev.*, **214:112**, 2018. <https://doi.org/10.1007/s11214-018-0548-8>.
- Plesa, A. C., S. Padovan, N. Tosi, D. Breuer, M. Grott, M. A. Wieczorek, T. Spohn, S. E. Smrekar, and W. B. Banerdt, The thermal state and interior structure of Mars, *Geophys. Res. Lett.*, **45**, 12,198–12,209, 2018. <https://doi.org/10.1029/2018GL080728>
- Savioe, D., A. Richard, M. Goutaudier, N. Onufer, M. C. Wallace, D. Mimoun, K. Hurst, N. Verdier, P. Lognonné, J. N. Maki, and B. Banerdt, Determining true North on Mars by using a sundial on InSight, *Space Sci. Rev.*, **215:2**, 2018. <https://doi.org/10.1007/s11214-018-0568-4>.
- Spiga, A., D. Banfield, N. A. Teanby, F. Forget, A. Lucas, B. Kenda, J. A. Rodriguez Manfredi, R. Widmer-Schmidrig, N. Murdoch, M. T. Lemmon, R. Garcia, L. Martire, O. Karatekin, S. LeMaistre, B. Van Hove, V. Dehant, P. Lognonné, N. Mueller, R. Lorenz, D. Mimoun, S. Rodriguez, E. Beucler, I. Daubar, M. P. Golombek, T. Bertrand, Y. Nishikawa, E. Millour, L. Rolland, Q. Brissaud, T. Kawamura, A. Mocquet, R. Martin, J. Clinton, E. Stutzmann, T. Spohn, S. Smrekar, and W. B. Banerdt, Atmospheric Science with InSight, *Space Sci. Rev.*, **214:109**, 2018. <https://doi.org/10.1007/s11214-018-0543-0>
- Spohn, T., M. Grott, S. E. Smrekar, J. Knollenberg, T. L. Hudson, C. Krause, N. Müller, J. Jänchen, A. Börner, T. Wippermann, O. Krömer, R. Lichtenheldt, L. Wisniewski, J. Grygorczuk, M. Fittock, S. Reershemius, T. Spröwitz, E. Kopp, I. Walter, A.-C. Plesa, D. Breuer, P. Morgan, and W. B. Banerdt, The Heat Flow and Physical Properties Package (HP³) for the InSight Mission, *Space Sci. Rev.*, **214:96**, 2018. <https://doi.org/10.1007/s11214-018-0531-4>
- Vance, S. D., M. P. Panning, S. Stähler, F. Cammarano, B. G. Bills, S. Kedar, C. Sotin, W. T. Pike, R. Lorenz, V. Tsai, H.-H. Huang, J. M. Jackson, and B. Banerdt, Geophysical investigations of habitability in ice-covered ocean worlds, *J. Geophys. Res. Planets*, **122**, 2018, <https://doi.org/10.1002/2017JE005341>
- 2017**
- Banerdt, W. B., and C. Russell, Editorial on: Topical collection on InSight mission to Mars, *Space Sci. Rev.*, **211**, 1-3, 2017. <https://doi.org/10.1007/s11214-017-0414-0>
- Böse, M., J. F. Clinton, S. Ceylan, F. Euchner, M. van Driel, A. Khan, D. Giardini, P. Lognonné and W. B. Banerdt, A probabilistic framework for single-station location of seismicity on Earth and Mars, *Phys. Earth Planet. Int.*, **262**, 48–65, 2017, <https://doi.org/10.1016/j.pepi.2016.11.003>
- Bozdağ, E., Y. Ruan, N. Mettetz, A. Khan, K. Leng, M. van Driel, M. Wieczorek, A. Rivoldini, C. Larmat, D. Giardini, J. Tromp, P. Lognonné, and B. Banerdt, Simulations of seismic wave propagation on Mars, *Space Sci. Rev.*, **211**, 571-594, 2017. <https://doi.org/10.1007/s11214-017-0350-z>
- Clinton, J., D. Giardini, P. Lognonné, B. Banerdt, M. van Driel, M. Drilleau, N. Murdoch, M. Panning, R. Garcia, D. Mimoun, M. Golombek, J. Tromp, R. Weber, M. Böse, S. Ceylan, I. Daubar, B. Kenda, A. Khan, L. Perrin, A. Spiga, Preparing for InSight: An invitation to participate in a blind test for Martian seismicity, *Seis. Res. Lett.*, **88** (5): 1290–1302, 2017, <https://doi.org/10.1785/0220170094>
- Delage, P., F. Karakostas, A. Dhemaied, M. Belmokhtar, E. De Laure, J.-C. Dupla, Y. J. Cui, P. Lognonné, K. Hurst, M. Golombek, B. Banerdt, and S. Kedar, An investigation of the geotechnical properties of some Martian regolith simulants with respect to the surface properties at the InSight mission landing site, *Space Sci. Rev.*, **211**, 191-213, 2017. <https://doi.org/10.1007/s11214-017-0339-7>

- Dell'Agnello, S., G. Delle Monache, E. Ciocci, S. Contessa, M. Martini, C. Mondaini, L. Porcelli, L. Salvatori, M. Tibuzzi, R. Vittori, M. Maiello, E. Flamini, E. Marchetti, G. Bianco, B. Banerdt, J. F. Grinblat, and M. Kokorowski, LaRRI: Laser retro-reflector for InSight Mars lander, *Space Res. Today*, **200**, 25-32, 2017.
- Garcia, R. F., Q. Brissaud, L. Rolland, R. Martin, D. Komatitsch, A. Spiga, B. Banerdt, D. Banfield, I. Daubar, and P. Lognonné, Finite-difference modeling of acoustic and gravity wave propagation in Mars atmosphere: Application to infrasounds emitted by meteor impacts, *Space Sci. Rev.*, **211**, 547-570, 2017. <https://doi.org/10.1007/s11214-016-0324-6>
- Golombek, M., D. Kipp, N. Warner, I. J. Daubar, R. Fergason, R. Kirk, R. Beyer, A. Huertas, S. Piqueux, N. Putzig, B. A. Campbell, G. A. Morgan, C. Charalambous, W. T. Pike, K. Gwinner, F. Calef, D. Kass, M. Mischna, J. Ashley, C. Bloom, N. Wigton, C. Schwartz, H. Gengl, L. Redmond, J. Sweeney, E. Sklyanskiy, M. Lisano, J. Benardini, P. Lognonné, S. Smrekar, and W. B. Banerdt, Selection of the InSight landing site, *Space Sci. Rev.*, **211**, 5-95, 2017. <https://doi.org/10.1007/s11214-016-0321-9>
- Kedar, S., J. Andrade, B. Banerdt, P. Delage, M. Golombek, M. Grott, T. Hudson, A. Kiely, M. Knapmeyer, B. Knapmeyer-Endrun, C. Krause, T. Kawamura, P. Lognonné, T. Pike, Y. Ruan, T. Spohn, N. Teanby, J. Tromp, and J. Wookey, Analysis of regolith properties using seismic signals generated by InSight's HP³ penetrator, *Space Sci. Rev.*, **211**, 315-337, 2017. <https://doi.org/10.1007/s11214-017-0391-3>
- Kenda, B., P. Lognonné, A. Spiga, T. Kawamura, S. Kedar, W. B. Banerdt, R. D. Lorenz, D. Banfield, and M. Golombek, Modeling of ground deformation and shallow surface waves generated by Martian dust devils and perspectives for near-surface structure inversion, *Space Sci. Rev.*, **211**, 501-524, 2017. <https://doi.org/10.1007/s11214-017-0378-0>
- Mimoun, D., N. Murdoch, P. Lognonné, K. Hurst, T. Pike, J. Hurley, T. Nebut, and B. Banerdt, The Noise Model of the SEIS Seismometer of the InSight Mission to Mars, *Space Sci. Rev.*, **211**, 277-313, 2017. <https://doi.org/10.1007/s11214-017-0388-y>
- Murdoch, N., B. Kenda, T. Kawamura, A. Spiga, P. Lognonné, D. Mimoun, and W. B. Banerdt, Estimations of the seismic pressure noise on Mars determined from Large Eddy Simulations and demonstration of pressure decorrelation techniques for the InSight mission, *Space Sci. Rev.*, **211**, 457-483, 2017. <https://doi.org/10.1007/s11214-017-0343-y>
- Murdoch, N., D. Mimoun, R. F. Garcia, W. Rapin, T. Kawamura, P. Lognonné, D. Banfield, and W. B. Banerdt, Evaluating the wind-induced mechanical noise on the InSight seismometers, *Space Sci. Rev.*, **211**, 429-455, 2017. <https://doi.org/10.1007/s11214-016-0311-y>
- Panning, M. P., P. Lognonné, W. B. Banerdt, R. Garcia, M. Golombek, S. Kedar, B. Knapmeyer-Endrun, A. Mocquet, N. A. Teanby, J. Tromp, R. Weber, E. Beucler, J.-F. Blanchette-Guertin, E. Bozdağ, M. Drilleau, T. Gudkova, S. Hempel, A. Khan, V. Lekić, N. Murdoch, A.-C. Plesa, A. Rivoldini, N. Schmerr, Y. Ruan, O. Verhoeven, C. Gao, U. Christensen, J. Clinton, V. Dehant, D. Giardini, D. Mimoun, W. T. Pike, S. Smrekar, M. Wiczorek, M. Knapmeyer, and J. Wookey, Planned products of the Mars Structure Service for the InSight mission to Mars, *Space Sci. Rev.*, **211**, 611-650 (2017). <https://doi.org/10.1007/s11214-016-0317-5>
- 2016**
- Khan, A., M. van Driel, M. Böse, D. Giardini, S. Ceylan, J. Yan, J. Clinton, F. Euchner, P. Lognonné, M. Panning, M. Knapmeyer, and W. B. Banerdt, Single-station and single-event marsquake location and inversion for structure using synthetic Martian waveforms, *Phys. Earth Planet. Int.*, **258**, 28-42, 2016. <http://dx.doi.org/10.1016/j.pepi.2016.05.017>.
- 2015**
- Lorenz, R. D., S. Kedar, N. Murdoch, P. Lognonné, T. Kawamura, D. Mimoun, and W. B. Banerdt, Seismometer Detection of Dust Devil Vortices by Ground Tilt, *Bull. Seis. Soc. Am.*, **105**, 3015-3023, 2015. DOI: 10.1785/0120150133
- Panning, M., E. Beucler, M. Drilleau, A. Mocquet, P. Lognonné, and W. B. Banerdt, Verifying single-station seismic approaches using Earth-based data: Preparation for data return from the InSight mission to Mars, *Icarus*, **248**, 230-242, 2015.

2014

Banerdt, W. B., V. Dehant, R. Grimm, M. Grott, P. Lognonné, and S. Smrekar, Probing the Interiors of Planets with Geophysical Tools, in *Encyclopedia of the Solar System*, 3rd ed., T. Spohn editor, Elsevier, 2014.

2012

Dehant, V., B. Banerdt, P. Lognonné, M. Grott, J. Biele, D. Breuer, F. Forget, R. Jaumann, C. Johnson, M. Knapmeyer, M. Lefevre, D. Mimoun, A. Mocquet, P. Read, A. Rivoldini, O. Romberg, T. Spohn, P. Tortora, S. Ulamec, and S. Vennerstrøm, Mars future geophysical observatories for understanding its internal structure, rotation, and evolution, *Planet. Space Sci.*, **68**, 123-145, 2012, <https://doi.org/10.1016/j.pss.2011.10.016>.

Mimoun, D., M. Wieczorek, D. Baratoux, R. Grimm, R. Jaumann, P. Lognonné, C. Neal, J. Oberst, T. Spohn, S. Vennerstrøm, P. Zarka, L. Alkalai, B. Banerdt, J.-L. Bougeret, A. Breen, B. Cecconi, G. Delory, J. Flohrer, R. Garcia, O. Gasnault, M. Grott, L. Gurvits, C. Johnson, M. Knapmeyer, N. Kobayashi, A. Konovalenko, M. Le Feuvre, N. Olsen, J. L. Ortiz, H. Röttgering, B. Thidé, and G. Woan, The Farside Explorer Mission: Unique Science from the Farside of the Moon, *Exper. Astron.*, **33**, 529-585, 2012, <https://doi.org/10.1007/s10686-011-9252-3>.

Smith, A., I. A. Crawford, R. A. Gowen, A. J. Coates, A. Griffiths, V. Tong, A. Jones, Y. Gao, L. Wilson, N. Bowles, T. Cook, M. Grande, M. Anand, A. Hagermann, S. Sheridan, I. Wright, G. Collins, P. Brown, W. T. Pike, K. Milojevic, C. Braithwaite, A. Phipps, M. Sweeting, P. Church, R. Scott, S. McKenna-Lawlor, M. Sims, D. Pullan, D. Talboys, G. Fraser, R. Ambrosi, N. Bannister, J. Grygorczuk, K. Seweryn, W. Marczewski, R. Wawrzaszek, E. Palomba, J. Chela-Flores, G. Klingelhofer, M. Wieczorek, M. Knapmeyer, S. Ulamec, O. Khavroshkin, O. Khavroshkin, M. Shyama, K. C. Narendranath, T. Cholinser, J. Rask, T. Colaprete, D. Lawrence, T. Glotch, T. Swindle, R. Denis, R. Elphic, J. Heldmann, L. Taylor, E. Gibson, L. L. Hood, M. Gudipati, B. Banerdt, K. Joy, and G. Kramer, LunarNet – A proposal in response to an ESA call in 2010 for a medium sized mission, *Exper. Astron.*, **33**, 587-644, 2012. <https://doi.org/10.1007/s10686-011-9250-5>

2010

Johnson, J. B., G. S. Mungas, K. Zacny, D. G. Albert, B. Banerdt, M. Buehler, R. C. Elphic, J. Lambert, K. Johnson, and M. Sturm, Lunar Suitcase Science: A Lunar Regolith Characterization Kit (LROCK), *Earth and Space 2010*, 1211-1234, 2010, [https://doi.org/10.1061/41096\(366\)111](https://doi.org/10.1061/41096(366)111).

2009

Jones, M. A., L. Herrell, W. B. Banerdt, D. Hansen, R. Miyake, S. Kondos, P. Timmerman, and V. Randolph, Next generation autonomous lunar geophysical experiment package (ALGEP), *Aerospace Conf. 2009 IEEE*, 7-14 March 2009, <https://doi.org/10.1109/AERO.2009.4839321>.

2008

Andrews-Hanna, J. C., M. T. Zuber, and W. B. Banerdt, The Borealis Basin and the Martian crustal dichotomy, *Nature*, **453**, 1212-1215, 2008.

Larmat, C. M., J.-P. Montagner, Y. Capdeville, B. Banerdt, P. Lognonné, and J.-P. Vilotte, Numerical assessment of the effects of the topography and the crustal thickness on the Martian seismograms using the coupled modal solution-spectral elements method, *Icarus*, **196**, 78-89, 2008, <https://doi.org/10.1016/j.icarus.2007.12.030>.

2007

Banerdt, W. B., T. Chui, C. E. Griggs, E. T. Herrin, Y. Nakamura, H. J. Paik, K. Penanen, D. Rosenbaum, V. L. Teplitz, J. Young, Using the Moon as a low-noise seismic detector for strange quark nuggets, *Nuc. Phys. B (Proc. Suppl.)* **166**, 203-208, 2007, <https://doi.org/10.1016/j.nuclphysbps.2006.12.045>.

Banerdt, W. B., Scientific results from the Mars Explorations Rovers, Spirit and Opportunity, *Highlights of Astronomy*, **14**, 336-337, 2007, <https://doi.org/10.1017/S1743921307010915>.

2006

Albert, D. G., and W. B. Banerdt, A Seismic Profiler for the Construction and Resource Utilization Explorer (CRUX), *Aerospace Conf. 2006 IEEE*, 2006, <https://doi.org/10.1109/AERO.2006.1655753>.

Banerdt, W. B., T. Chui, E. T. Herrin, D. Rosenbaum, V. L. Teplitz, Lunar seismic search for strange quark matter, *Adv. Space Res.*, **37**, 1889-1893, 2006.

Searls, M. L., W. B. Banerdt, and R. J. Phillips, Utopia and Hellas basins, Mars: Twins separated at birth, *J. Geophys. Res.*, **111**, E08005, 2006, <https://doi.org/10.1029/2005JE002666>.

2005

Solomon, S. C., O. Aharonson, J. M. Aurnou, W. B. Banerdt, M. H. Carr, A. J. Dombard, H. V. Frey, M. P. Golombek, S. A. Hauck, II, J. W. Head, III, B. M. Jakosky, C. L. Johnson, P. J. McGovern, G. A. Neumann, R. J. Phillips, D. E. Smith, M. T. Zuber, New Perspectives on Ancient Mars, *Science*, **307**, 1214-1220, 2005.

2004

Banerdt, W. B., T. Chui, E. T. Herrin, D. Rosenbaum, V. L. Teplitz, Seismic Moon search for strange quark matter, *Proc. 5th Int. Wkshp. on the Identification of Dark Matter*, Eds. N. J. C. Spooner and V. Kudryavtsev, World Scientific Ltd., Singapore, p.581, 2004.

2002

Crisp, D., M. A. Allen, V. G. Anicich, R. E. Arvidson, S. K. Atreya, K. H. Baines, W. B. Banerdt, G. L. Bjoraker, S. W. Bougher, B. A. Campbell, R. W. Carlson, G. Chin, A. Chutjian, R. T. Clancy, B. C. Clark, T. E. Cravens, A. D. Del Genio, L. W. Esposito, B., Fegley, M. Flasar, J. L. Fox, P. J. Gierasch, R. M. Goody, D. H. Grinspoon, S. Gulkis, V. L. Hansen, R. R. Herrick, D. L. Huestis, D. M. Hunten, M. A. Janssen, J. Jenkins, C. L. Johnson, G. M. Keating, A. J. Kliore, S. S. Limaye, J. G. Luhmann, J. I. Lunine, P. Mahaffy, P. J. McGovern, V. S. Meadows, F. P. Mills, H. B. Niemann, T. C. Owen, K. I. Oyama, R. O. Pepin, J. J. Plaut, D. C. Reuter, M. I. Richardson, C. T. Russell, R. S. Saunders, J. T. Schofield, G. Schubert, D. A. Senske, M. K. Shepard, T. G. Slinger, S. E. Smrekar, D. J. Stevenson, D. V. Titov, E. A. Ustinov, R. E. Young, Y. L. Yung, Divergent evolution among Earth-like planets: The case for Venus exploration, in *The Future of Solar System Exploration, 2003-2013*, ed. M. V. Sykes, Aston. Soc. Pacific, 5-34, 2002.

2001

Phillips, R. J., M. T. Zuber, S. C. Solomon, M. P. Golombek, B. M. Jakosky, W. B. Banerdt, D. E. Smith, R. M. E. Williams, B. M. Hynek, O. Aharonson, and S. A. Hauck, II, Ancient geodynamics and global-scale hydrology on Mars, *Science*, **291**, 2587-2591, 2001.

Smith, D. E., M. T. Zuber, H. V. Frey, J. B. Garvin, J. W. Head, D. O. Muhleman, G. H. Pettengill, R. J. Phillips, S. C. Solomon, H. J. Zwally, W. B. Banerdt, T. C. Duxbury, M. P. Golombek, F. G. Lemoine, G. A. Neumann, D. D. Rowlands, O. Aharonson, P. G. Ford, A. B. Ivanov, P. J. McGovern, J. B. Abshire, R. S. Afzal, and X. Sun, Mars Orbiter Laser Altimeter (MOLA): Experiment summary after the first year of global mapping of Mars, *J. Geophys. Res.*, **106**, 23,689-23,722, 2001.

Tanaka, K. L., W. B. Banerdt, J. S. Kargel, and N. Hoffman, A huge CO₂-charged debris-flow deposit and tectonic sagging in the northern plains of Mars, *Geology*, **29**, 427-430, 2001.

2000

Lognonné, P., D. Giardini, B. Banerdt, J. Gagnepain-Beyneix, A. Mocquet, T. Spohn, J.-F. Karczewski, P. Schibler, S. Cacho, W. T. Pike, C. Cavoit, A. Desauter, M. Favède, T. Gabsi, L. Simoulin, N. Striebig, M. Campillo, A. Deschamp, J. Hinderer, J.-J. Lévêque, J.-P. Montagner, L. Rivéra, W. Benz, D. Breuer, P. Defraigne, V. Dehant, A. Fujimura, H. Mizutani, and J. Oberst, The NetLander very broad band seismometer, *Planet. Space Sci.*, **48**, 1289-1302, 2000.

- Lognonné, P., D. Giardini, B. Banerdt, J. Gagnepain-Beyneix, A. Mocquet, T. Spohn, J.-F. Karczewski, P. Schibler, S. Cacho, W. T. Pike, C. Cavoit, A. Desauter, M. Favède, T. Gabsi, M. Campillo, A. Deschamp, J. Hinderer, J.-J. Lévêque, J.-P. Montagner, L. Rivéra, W. Benz, D. Breuer, P. Defraigne, V. Dehant, A. Fujimura, H. Mizutani, and J. Oberst, An European seismic network on Mars with NETLANDER, *ORFEUS Newsletter*, **2**, no. 2, p. 12, <http://www.orfeus-eu.org/Organization/Newsletter/vol2no2/netlander.html>, 2000.
- Zuber, M. T., S. C. Solomon, R. J. Phillips, D. E. Smith, G. L. Tyler, O. Aharonson, G. Balmino, W. B. Banerdt, J. W. Head, C. L. Johnson, F. G. Lemoine, P. J. McGovern, G. A. Neumann, D. D. Rowlands, and S. Zhong, Internal structure and early thermal evolution of Mars from Mars Global Surveyor topography and gravity, *Science*, **287**, 1788-1793, 2000.
- Before 2000**
- Banerdt, W. B., and C. G. Sammis, An evaluation of finite strain equations of state using a lattice model, *Phys. Earth Planet. Int.*, **23**, 31-38, 1980.
- Fanale, F. P., W. B. Banerdt, and D. P. Cruikshank, Io: Could sulfur dioxide condensation/sublimation cause the sometimes reported post-eclipse brightening?, *Geophys. Res. Lett.*, **8**, 625-628, 1981.
- Fanale, F. P., W. B. Banerdt, L. S. Elson, T. V. Johnson, and R. W. Zurek, Io's surface: Its phase composition and influence on Io's atmosphere and Jupiter's magnetosphere, in *Satellites of Jupiter*, D. Morrison, ed., University of Arizona Press, Tucson, Arizona, 756-781, 1982.
- Banerdt, W. B., R. J. Phillips, N. H. Sleep, and R. S. Saunders, Thick shell tectonics on one-plate planets: Applications to Mars, *J. Geophys. Res.*, **87**, 9723-9733, 1982.
- Fanale, F. P., W. B. Banerdt, R. S. Saunders, L. A. Johansen, and J. R. Salvail, Seasonal carbon dioxide exchange between the regolith and atmosphere of Mars: Experimental and theoretical studies, *J. Geophys. Res.*, **87**, 10215-10225, 1982.
- Fanale, F. P., J. R. Salvail, W. B. Banerdt, and R. S. Saunders, Mars: The regolith-atmosphere-cap system and climate change, *Icarus*, **50**, 381-407, 1982.
- Banerdt, W. B., and C. G. Sammis, Low stress high temperature creep in single crystal NaCl, *Phys. Earth Planet. Int.*, **41**, 108-124, 1985.
- Banerdt, W. B., Support of long wavelength loads on Venus and implications for internal structure, *J. Geophys. Res.*, **91**, 403-419, 1986.
- Golombek, M. P., and W. B. Banerdt, Early thermal profiles and lithospheric strength of Ganymede from extensional tectonic features, *Icarus*, **68**, 252-265, 1986.
- Banerdt, W. B., and M. P. Golombek, Deformational models of rifting and folding on Venus, *J. Geophys. Res.*, **93**, 4759-4772, 1988.
- Finnerty, A. A., R. J. Phillips, and W. B. Banerdt, Igneous processes and the closed system evolution of the Tharsis region of Mars, *J. Geophys. Res.*, **93**, 10225-10235, 1988.
- Golombek, M. P., and W. B. Banerdt, Constraints on the subsurface structure of Europa, *Icarus*, **83**, 441-452, 1990.
- Phillips, R. J., N. H. Sleep, and W. B. Banerdt, Permanent uplift in magmatic systems with application to the Tharsis region of Mars, *J. Geophys. Res.*, **95**, 5089-5100, 1990.
- Tanaka, K. L., M. P. Golombek, and W. B. Banerdt, Reconciliation of stress and structural histories of the Tharsis region of Mars, *J. Geophys. Res.*, **96**, 15,617-15,633, 1991.
- Banerdt, W. B., and M. P. Golombek, Constraints on the structure and evolution of the Tharsis region of Mars, in *Planetary Geosciences — 1989-90*, M. T. Zuber, O. B. James, J. I. Lunine, G. J. MacPherson, and R. J. Phillips, eds., NASA SP-508, 4-6, 1992.
- Banerdt, W. B., M. P. Golombek, and K. L. Tanaka, Stress and Tectonics on Mars, in *Mars*, H. Kieffer, B. Jakosky, and C. Snyder, eds., University of Arizona Press, Tucson, Arizona, 249-297, 1992.
- Esposito, P. B., G. Balmino, W. B. Banerdt, B. G. Bills, G. F. Lindal, W. L. Sjogren, M. A. Slade, and D. E. Smith, Gravity and Topography, in *Mars*, H. Kieffer, B. Jakosky, and C. Snyder, eds., University of Arizona Press, Tucson, Arizona, 209-248, 1992.
- Golombek, M. P., W. B. Banerdt, K. L. Tanaka, and D. M. Tralli, A prediction of Mars seismicity from surface faulting, *Science*, **258**, 979-981, 1992.

- Banerdt, W. B., and C. G. Sammis, Small-scale fracture patterns on the volcanic plains of Venus, *J. Geophys. Res.*, **97**, 16,149-16,166, 1992.
- Varsi G., M. Crisp, R. Jones, T. Van Zandt, T. Kenny, W. Kaiser, W. Banerdt, E. Hui, and D. Crisp, Microinstruments and microsensors for space science, *Acta Astronautica*, **32**, 705-713, 1994.
- Banerdt, W. B., A. S. Konopliv, N. J. Rappaport, W. L. Sjogren, R. E. Grimm, and P. G. Ford, The isostatic state of Mead crater, *Icarus*, **112**, 117-129, 1994.
- Lognonné, P., J. Gagnepain-Beyneix, W. B. Banerdt, S. Cacho, J. F. Karczewski, and M. Morand, Ultra broad band seismology on InterMarsnet, *Planet. Space Sci.*, **44**, 1237-1249, 1996.
- Banerdt, W. B., G. E. McGill, and M. T. Zuber, Plains tectonics on Venus, in *Venus II*, S. W. Bouguer, D. M. Hunten, and R. J. Phillips, eds., University of Arizona Press, Tucson, Arizona, 901-930, 1997.
- Sjogren, W. L., W. B. Banerdt, P. W. Chodas, A. S. Konopliv, G. Balmino, J. P. Barriot, T. R. Colvin, M. E. Davies, and J. Arkani-Hamed, The Venus gravity field and other geodetic parameters, in *Venus II*, S. W. Bouguer, D. M. Hunten, and R. J. Phillips, eds., University of Arizona Press, Tucson, Arizona, 1125-1162, 1997.
- Hansen, V., J. Willis, and W. B. Banerdt, An Overview of Venus Tectonics, in *Venus II*, S. W. Bouguer, D. M. Hunten, and R. J. Phillips, eds., University of Arizona Press, Tucson, Arizona, 797-844, 1997.
- Smith, D. E., M. T. Zuber, H. V. Frey, J. B. Garvin, J. W. Head, D. O. Muhleman, G. H. Pettengill, R. J. Phillips, S. C. Solomon, H. J. Zwally, W. B. Banerdt, and T. C. Duxbury, Topography of the northern hemisphere of Mars from the Mars Orbiter Laser Altimeter, *Science*, **279**, 1686-1692, 1998.
- Zuber, M. T., D. E. Smith, R. J. Phillips, S. C. Solomon, W. B. Banerdt, G. A. Neumann, and O. Aharonson, Shape of the northern hemisphere of Mars from the Mars Orbiter Laser Altimeter (MOLA), *Geophys. Res. Lett.*, **25**, 4393-4396, 1998.
- Zuber, M. T., D. E. Smith, J. B. Abshire, R. S. Afzal, O. Aharonson, K. Fishbaugh, P. G. Ford, H. V. Frey, J. B. Garvin, J. W. Head, A. B. Ivanov, C. L. Johnson, D. O. Muhleman, G. A. Neumann, G. H. Pettengill, R. J. Phillips, S. C. Solomon, X. Sun, H. J. Zwally, W. B. Banerdt, and T. C. Duxbury, Observations of the north polar region of Mars from the Mars Orbiter Laser Altimeter, *Science*, **282**, 2053-2060, 1998.
- Smith, D. E., M. T. Zuber, S. C. Solomon, R. J. Phillips, J. W. Head, J. B. Garvin, W. B. Banerdt, D. O. Muhleman, G. H. Pettengill, G. A. Neumann, F. G. Lemoine, J. B. Abshire, O. Aharonson, C. D. Brown, S. A. Hauck, A. B. Ivanov, P. J. McGovern, H. J. Zwally, and T. C. Duxbury, The global topography of Mars and implications for surface evolution, *Science*, **284**, 1495-1503, 1999.
- Konopliv, A. S., W. B. Banerdt, and W. L. Sjogren, Venus Gravity: 180th degree and order model, *Icarus*, **139**, 3-18, 1999.
- Harri, A.-M., O. Marsal, G. W. Leppelmeier, P. Lognonné, K.-H. Glassmeier, F. Angrilli, W. B. Banerdt, J.-P. Barriot, J.-L. Bertaux, J.-J. Berthelier, S. Calcutt, J. C. Cerisier, D. Crisp, V. Déhant, S. DiPippo, D. Giardini, D. Guerrier, R. Jaumann, K. Kumpulainen, Y. Langevin, M. Menvielle, G. Musmann, J. Polkko, J.-P. Pommereau, J. Runavot, W. Schumacher, T. Siili, J. Simola, and J. E. Tillman, Network science landers for Mars, *Adv. Space Res.*, **23**, 1915-1924, 1999.

Other Publications

- Topographic Science Working Group, Topographic Science Working Group Report to the Land Processes Branch, Earth Science and Applications Division, NASA Headquarters, Lunar and Planetary Inst., Houston, 64 pp., 1988.
- Solomon, S. C., D. L. Anderson, W. B. Banerdt, R. G. Butler, P. M. Davis, F. K. Duennebier, Y. Nakamura, E. A. Okal, and R. J. Phillips, Scientific Rationale and Requirements for a Global Seismic Network on Mars, LPI Tech. Rept. 91-02, Lunar and Planetary Inst., Houston, 1991.

- Banerdt, W. B., R. Abercrombie, S. Keddle, M. Menvielle, H. Mizutani, S. Nagihara, Y. Nakamura, W. T. Pike, Planetary interiors, in *Planetary Surface Instrument Workshop*, eds. C. Meyer, A. H. Treiman, and T. Kostiuik, LPI Tech. Rept. 95-05, Lunar and Planetary Inst., Houston, 41-50, 1995.
- Banerdt, B., A. F. Chicarro, M. Coradini, C. Federico, R. Greeley, M. Hechler, J. M. Knudsen, C. Leovy, P. Lognonné, L. Lowry, D. McCleese, C. McKay, R. Pellinen, R. Phillips, G. E. N. Scoon, T. Spohn, S. Squyres, F. Taylor, and H. Wänke, *INTERMARSNET Phase-A Study Report*, ESA Publ. D/SCI(96)2, 1996.
- Shearer, C., D. W. Beaty, A. D. Anbar, B Banerdt, D. Bogard, B. A. Campbell, M. Duke, L. Gaddis, B. Jolliff, R. C. F. Lentz, D. McKay, G. Neumann, D. Papanastassiou, R. Phillips, J. Plescia, and M. Wadhwa, Findings of the Moon–Mars Science Linkage Science Steering Group, 29 pp, posted by the Mars Exploration Program Analysis Group (MEPAG) at <http://mepag/reports/index.html>, 2004.
- Paulikas, G. A., C. M. Pieters, W. B. Banerdt, J. L. Burch, A. Chaikin, B. A. Cohen, M. Duke, A. W. England, H. Hiesinger, N. W. Hinners, A. M. Howard, D. J. Lawrence, D. F. Lester, P. G. Lucey, S. A. Stern, S. Tompkins, F. P. Valero, J. W. Valley, C. Walker, and N. J. Woolf, *The Scientific Context for Exploration of the Moon*, National Academies Press, 2007.
- Banerdt, W. B., Heavenly Rinds (book review of “Planetary Crusts: Their Composition, Origin and Evolution, by S. R. Taylor and S McLennan), *Nat. Geosci.*, **2**, 237-238, 2009.
- Banerdt, W. B., Rotational riddles - Planetary magnetic fields, *Astronomy* **44**, no. 1, 34, 2016
- Lognonné, P., W. B. Banerdt, and A. Spiga, InSight va sonder les profondeurs de Mars, *La Recherche*, May 2018, No. 535, 44-47, 2018.