MEENAKSHI WADHWA
CURRICULUM VITAE

Director, School of Earth and Space Exploration
Foundation and Regents Professor
Arizona State University
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BIOGRAPHICAL SUMMARY

Meenakshi Wadhwa is a planetary scientist and isotope cosmochemist interested in the time scales and processes involved in the formation and evolution of the Solar System and planets. Her research group is known for developing novel methodologies for high precision isotope analyses and for the application of high-resolution chronometers to understand the time scales of accretion and differentiation of planetesimals and the terrestrial planets; the processes in the solar protoplanetary disk and on planetesimals; and the abundance and origin of water and other volatiles on rocky bodies in the Solar System. She is director of the School of Earth and Space at Arizona State University, where she is also Foundation and Regents Professor. She is also appointed as a Distinguished Visiting Scientist at the Jet Propulsion Laboratory and serves as NASA's Principal Scientist for the Mars Sample Return Program. She was awarded the NASA Exceptional Public Service Medal for her leadership of the Science Committee of the NASA Advisory Council. She is a recipient of the J. Lawrence Smith medal of the National Academy of Sciences, the Fulbright-Nehru Academic and Professional Excellence Award, the Guggenheim Fellowship, and the Nier Prize of the Meteoritical Society. She is a member of the National Academy of Sciences, a Fellow of the American Geophysical Union and the Meteoritical Society, and a Geochemistry Fellow of the Geochemical Society and the European Association of Geochemistry. Asteroid 8356 has been named 8356 Wadhwa in recognition of her contributions to meteoritics and planetary science.

EDUCATION

Ph.D. in Earth and Planetary Sciences, Washington University, St. Louis, 1994
M.S. (with Honors) in Geology, Panjab University, 1989
B.S. (with Honors) in Geology, minors in Physics and Chemistry, Panjab University, 1988

ACADEMIC APPOINTMENTS

Regents Professor for the State of Arizona, Nov 2023 – present
Foundation Professor, School of Earth and Space Exploration, Arizona State University, Mar 2021 – present
Principal Scientist, Mars Sample Return Program, Apr 2021 – present
Distinguished Visiting Scientist, Jet Propulsion Laboratory, Apr 2021 – present
Professor, School of Earth and Space Exploration, Arizona State University, Oct 2006 – Mar 2021
Visiting Scientist (sabbatical), Lunar and Planetary Institute, Houston, Jan – July 2013
Visiting Faculty (sabbatical), Department of Earth, Environmental and Planetary Sciences, Rice University, Aug – Dec 2012
Curator, Department of Geology, The Field Museum, Chicago, March 2005 – Sept 2006
Visiting Scholar (sabbatical), Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, Dec 2005 – March 2006
Lecturer and Senior Research Associate, Department of Geophysical Sciences, University of Chicago, Dec 2003 – Sept 2006
Associate Curator, Department of Geology, The Field Museum, Chicago, July 1999 – March 2005

Lecturer and Research Scientist, Department of Geophysical Sciences, University of Chicago, Jan 1997 – Dec 2003
Assistant Curator, Department of Geology, The Field Museum, Chicago, June 1995 – June 1999
Visiting Scholar, Department of Geophysical Sciences, University of Chicago, June 1995 – Dec 1996
Postdoctoral Research Geochemist, Geosciences Research Division, University of California at San Diego, June 1994 – May 1995

ADMINISTRATIVE LEADERSHIP APPOINTMENTS AND EXPERIENCE

Director, School of Earth and Space Exploration, Arizona State University, 2019 – present
Director, Center for Meteorite Studies, Arizona State University, 2006 – 2019
American Council on Education Fellows Program, 2018 – 2019
Higher Education Resource Services (HERS) Leadership Institute, University of Denver, June 2017
President's Women-in-Leadership Council, ASU, 2015 – 2016
Provost's Faculty Fellow, Office of Provost, ASU, 2013 – 2014

HONORS AND AWARDS

NASA Group Achievement Award, Mars 2020 Sample Depot Development Team, 2024
AGU College of Fellows Distinguished Lecturer, 2024-2025
Appointed Regents Professor by the Arizona Board of Regents, 2023
Elected member of the National Academy of Sciences, 2023
Robert M. Walker Distinguished Lecturer, McDonnell Center for the Space Sciences, Washington University in St. Louis, 2023
Yervant Terzian Lecturer, Department of Astronomy, Cornell University, 2023
James Arnold Endowed Lecturer, Department of Chemistry and Biochemistry, University of California at San Diego, 2023
NASA Exceptional Public Service Medal, 2022
J. Lawrence Smith Medal, The National Academy of Sciences, 2021
Geochemistry Fellow, Geochemical Society and European Association of Geochemistry, 2021
Foundation Professor, Arizona State University, 2021
Baldwin Frontiers in Geology Lecturer, Miami University, 2020
Northrup Distinguished Lecturer, Department of Earth and Planetary Sciences, University of New Mexico, 2019
Fellow, American Geophysical Union, 2019
American Council on Education Fellowship, 2018-2019
Shoemaker Lecturer, American Geophysical Union Fall Meeting, 2016
Prof. Sukheswala Memorial – TERRA Lecturer, St. Xavier's College, Mumbai, India, 2016
Fulbright-Nehru Academic and Professional Excellence Award, 2015 – 2016
Shoemaker Lecturer, Beyond Center, Arizona State University, 2014
Visiting Scientist, Lunar and Planetary Institute, 2013
Visiting Faculty, Rice University, 2012
Fellow, Explorers Club, 2012
Fellow, Wings WorldQuest, 2007
Fellow, Meteoritical Society, 2006
Guggenheim Fellowship, 2005 – 2006
Visiting Scholar, California Institute of Technology, 2005 – 2006
Wings WorldQuest Women of Discovery Award (Air and Space), 2003
Nier Prize of the Meteoritical Society, 2000
Asteroid 8356 named (*8356) Wadhwa* by International Astronomical Union, 1999
Antarctica Service Medal, 1993
McDonnell Center Graduate Fellowship, 1990 – 1992
University Fellowship, Washington University, 1989 – 1990

University Grants Commission Fellowship, Panjab University, 1988 – 1989

PROFESSIONAL SOCIETIES

American Association for the Advancement of Science
American Geophysical Union (Fellow)
European Association of Geochemistry (Geochemistry Fellow)
Geochemical Society (Geochemistry Fellow)
Meteoritical Society (Fellow)
The Explorers Club (Fellow)

FEDERAL GRANTS

PI, NASA Future Investigators in Earth and Space Science and Technology (A. Distel), $150,000 (12/23/24-12/22/27)
PI, NASA JPL Mars Sample Return Program Subcontract, $1,845,769 (4/7/2021 – 9/28/2025)
PI, NASA Science Activation Integration Program, $5,635,465 (1/1/2021-12/31/2025)
PI, NASA Solar System Workings Program, $446,573 (1/1/21-12/31/25)
PI, NASA Emerging Worlds Program, $1,953,008 (7/1/15-6/30/22)
PI, NASA Solar System Workings Program, $444,408 (1/1/17-12/31/22)
PI, NASA Earth and Space Science Fellowship (S. Ray), $122,682 (9/1/18-2/28/22)
PI, NASA Future Investigators in Earth and Space Science and Technology (Z. Torrano), $40,795 (9/1/19-8/31/20)
PI, NASA Earth and Space Science Fellowship (D. Dunlap), $74,431 (9/1/17-8/31/20)
PI, NASA Earth and Space Science Fellowship (E. Dunham), $104,226 (9/1/16-8/31/20)
Co-I, NASA Science Education CAN (PI: A. Anbar), $10,183,479 (1/21/2016-1/20/2021)
Co-I, NASA Nexus for Exoplanet System Science (PI: S. Desch), $6,097,436 (12/31/2014-12/30/2019)
PI, NASA Lunar Advanced Science & Exploration Research Program, $122,659 (9/3/14-9/4/17)
PI, NASA Earth and Space Science Fellowship (P. Mane), $90,000 (9/1/13-8/31/16)
PI, NASA Cosmochemistry Program, $1,060,651 (6/23/11-6/22/16)
PI, NASA Origins of Solar Systems Program, $318,140 (6/22/11-6/21/15)
Co-I, NASA Lunar Advanced Science & Exploration Research Program (PI: A. Bouvier), $18,511 (5/5/12-9/2/14)
PI, NASA Earth and Space Science Fellowship (C. Williams), $60,000 (9/1/12-8/31/14)
Co-I, NASA Education and Outreach in Earth & Space Science (PI: A. Anbar), $302,377 (4/6/11-4/5/14)
Co-I, NASA Astrobiology Institute (PI: A. Anbar), $7,008,810 (1/15/09-1/14/14)
PI, NASA JPL subcontract, $16,954 (6/27/13-9/29/13)
Co-PI, NSF Major Research Instrumentation (PI: P. Williams), $3,267,586 (1/1/10-12/31/2012)
PI, NASA Earth and Space Science Fellowship, $30,000 (L. Spivak-Birndorf) (9/1/11-8/31/12)
PI, NASA Earth and Space Science Fellowship, $89,570 (M. Sanborn) (9/1/09-8/31/12)
Co-I, NASA Mars Fundamental Research Program (PI: D. Bell), $315,497 (4/24/08-4/23/12)
PI, NASA Cosmochemistry Program, $1,245,000 (4/1/08-3/31/12)
PI, NASA Earth and Space Science Fellowship, $30,000 (G. Brennecka) (9/1/10-8/31/11)
PI, NASA Origins of Solar Systems Program, $211,677 (1/8/07-5/7/10)
PI, NASA Discovery Program (Genesis mission) subcontract through JSC, $342,000 (8/1/05-9/30/09)
PI, NASA Cosmochemistry Program, $426,000 (5/1/05-3/31/08)
Co-PI, NSF Major Research Instrumentation Program (PI: R. Williams), $494,295 (9/1/03-8/31/06)
PI, NASA Cosmochemistry Program, $345,000 (5/1/02-4/30/05)
PI, NSF EAR Geochemistry and Petrology Program, $130,356 (1/1/98-6/30/03)
PI, NASA Cosmochemistry Program, $225,000 (4/1/99-3/31/02)
PI, NSF Major Research Instrumentation Program, $255,000 (9/15/98-9/14/01)
PI, NASA Cosmochemistry Program (major equipment grant), $255,000 (4/15/98-10/14/99)
Co-PI, NSF Major Research Instrumentation Program (PI: M. Humayun), $410,000 (9/1/97-8/31/99)
PI, NASA Cosmochemistry Program, $80,000 (4/1/97-3/31/99)

SPACECRAFT MISSION ENGAGEMENT

Principal Scientist, Mars Sample Return Program, 2021 – present
Science team member, Mars 2020 NASA mission (Returned Sample Science Working Group), 2021 – present
Collaborator, Mars Science Laboratory NASA mission (SAM instrument suite), 2011 – present
Initial Analysis Chemistry Team member, Hayabusa2 JAXA mission, 2020 – 2023
Co-Investigator, Genesis NASA Discovery mission, 2005 – 2009

SPACECRAFT MISSION PROPOSALS

Lunar Dawn Science Council, Lunar Dawn rover (Feasibility Study, NASA Lunar Terrain Vehicle Services Contract program), 2024 – present
Deputy Principal Investigator, CONDOR Comet Surface Sample Return, NASA New Frontiers mission proposal (PI, C. Raymond), 2017
Co-Investigator, Martian moon, Exploration, Reconnaissance, and Landing INvestigation (MERLIN), NASA Discovery mission proposal (PI, D. Britt), 2015
Principal Investigator, Sample Collection for Investigation of Mars (SCIM), NASA Discovery mission proposal, 2010
Co-Investigator, Martian moon, Exploration, Reconnaissance, and Landing INvestigation (MERLIN), NASA Discovery mission proposal (PI, D. Britt), 2010
Co-Investigator, Sample Collection for Investigation of Mars (SCIM), NASA Mars Scout mission proposal selected for Phase A studies (PI, L. Leshin), 2006
Co-Investigator, Sampling Ancient Mars (SAM), NASA Mars Scout mission proposal (PI, D. Britt), 2006
Co-Investigator, Gulliver Deimos Sample Return, NASA Discovery mission proposal (PI, D. Britt), 2005
Co-Investigator, Sample Collection for Investigation of Mars (SCIM), NASA Mars Scout mission proposal (PI, L. Leshin), 2002

INVITED LECTURES AND COLLOQUIA

"Wonders of the Universe" series lecture at Fromm Institute, University of San Francisco, February 2025 (virtual)
Department of Physics, Loyola University of Chicago, November 2024 (virtual)
Planetary Science and Exploration Seminar, Stanford University, September 2024
Public Lecture, COSPAR 2024, Busan, South Korea, July 2024
Exploring Space Lecture, Smithsonian National Air and Space Museum, June 2024
Plenary lecture, Arizona Astrobiology Symposium, March 2024
Department of Earth and Planetary Sciences, Yale University, November 2023
Robert N. Walker Distinguished Lectures, McDonnell Center for the Space Sciences, Washington University in St. Louis, October 2023
Yervant Terzian Lecture, Department of Astronomy, Cornell University, October 2023
Plenary lecture, Symposium on Sample Return Missions, 86th Annual Meeting of the Meteoritical Society (Los Angeles, CA), August 2023
Plenary lecture, 242nd Meeting of the American Astronomical Society (Albuquerque, NM), June 2023
James Arnold Endowed Lecture, Department of Chemistry and Biochemistry, University of California at San Diego, May 2023
Lunar and Planetary Laboratory, University of Arizona, October 2022
Plenary lecture, Astrobiology Science Conference (Atlanta, GA), May 2022
Space Center Houston, October 2021
Universidad Nacional Autónoma de México, April 2021 (virtual)
Department of Geology, University of Maryland at College Park, October 2020 (virtual)
UCLA Meteorite Gallery Lecture Series, August 2020 (virtual)
Baldwin Frontiers in Geology Lecture, Miami University, February 2020

Department of Geology and Environmental Earth Science, Miami University, February 2020
Department of Earth and Atmospheric Sciences, University of Houston, February 2020
Department of Geological Sciences, University of North Carolina at Chapel Hill, February 2020
Documentary Filmmakers Retreat, National Academies Science and Entertainment Exchange Program, October 2019
Northrup Distinguished Lecture, Department of Earth and Planetary Sciences, University of New Mexico, April 2019
Lunar and Planetary Laboratory, University of Arizona, April 2018
Shoemaker Lecture, American Geophysical Union Fall Meeting, December 2016
PLANEX Division, Physical Research Laboratory, Ahmedabad, India, April 2016
Geological Survey of India, Kolkata, India, April 2016
Department of Geology and Geophysics, Indian Institute of Technology, Kharagpur, India, April 2016
Department of Earth Sciences, Indian Institute of Technology, Kanpur, India, March 2016
Department of Geology, University of Delhi, Delhi, India, March 2016
Department of Physics, Panjab University, Chandigarh, India, February 2016
Department of Geology, Panjab University, Chandigarh, India, February 2016
Professor Sukheswala Memorial – TERRA Lecture, St. Xavier's College, Mumbai, India, February 2016
Indian Institute of Technology Bombay, Mumbai, India, February 2016
Indian Institute of Science Education and Research, Pune, India, February 2016
Physical Research Laboratory, Ahmedabad, India, January 2016
25th Anniversary Invited Lecture, Planetary Chemistry Theme, Annual Goldschmidt Conference, Prague, July 2015
Shoemaker Lecture, Beyond Center, Arizona State University, November 2014
Lamont Doherty Earth Observatory, Columbia University, October 2014
Department of Earth and Planetary Science, American Museum of Natural History, October 2014
Annual Goldschmidt Conference, Sacramento, June 2014
Department of Earth and Atmospheric Sciences, MIT, May 2013
Department of Geophysical Sciences, University of Chicago, April 2013
Department of Geological Sciences, University of Tennessee, February 2013
Department of Earth Science, Rice University, October 2012
Workshop on the Mantle of Mars, Houston, TX, September 2012
Nuclei in the Cosmos Conference, Cairns, Australia, August 2012
Workshop on Formation of the First Solar System Solids, Kauai, Hawaii, November 2011
International Primitive Body Exploration Working Group Workshop, Jet Propulsion Laboratory, Pasadena, CA, August 2011
Department of Earth and Space Sciences, University of California at Los Angeles, March 2011
Department of Geology and Planetary Science, University of Pittsburgh, April 2010
Annual Lunar Exploration and Analysis Group Meeting, Houston, TX, November 2009
School of Earth and Space Exploration, Arizona State University, October 2009
American Geophysical Union Fall Meeting, San Francisco, CA, December 2007
Workshop on Chronology of Meteorites and the Early Solar System, Kauai, Hawaii, November 2007
Gordon Research Conference on Origins of Solar Systems, Mt. Holyoke College, July 2007
Zinner Impact Symposium, Washington University, February 2007
Department of Earth and Planetary Sciences, University of New Mexico, December 2006
Department of Earth Sciences, ETH, Zurich, November 2006
Division of Geological Sciences, California Institute of Technology, April 2006
Department of Earth and Space Sciences, UCLA, April 2006
Department of Earth and Planetary Sciences, Washington University, March 2006
Department of Earth and Atmospheric Sciences, MIT, February 2006
Protostars and Planets V Conference, October 2005
15th Annual Goldschmidt Conference, May 2005
Woods Hole Oceanographic Institution Geodynamics Seminar, WHOI, April 2005
Max Planck Institut für Chemie, Mainz, Germany, April 2005

Department of Geophysical Sciences, University of Chicago, February 2005
Department of Earth and Environmental Sciences, University of Illinois at Chicago, February 2005
Department of Biological Sciences, Loyola University, September 2004
Oxygen in the Terrestrial Planets Workshop, July 2004
Harvard-Smithsonian Astrophysics of Planetary Systems Conference, Harvard University, May 2004
Iota Sigma Pi (National Honor Society of Women in Chemistry), Chicago Chapter, May 2004
Division of Geological and Planetary Sciences, California Institute of Technology, October 2003
Gordon Research Conference on Origins of Solar Systems, July 2003
Advanced Photon Source Colloquium, Argonne National Laboratory, May 2003
Robert M. Walker Symposium, Washington University, February 2003
Department of Geological Sciences, University of Illinois at Urbana-Champaign, September 2002
American Geophysical Union Spring Meeting, May 2002
Department of Geology, Northern Illinois University, March 2002
American Geophysical Union Fall Meeting, December 2001
Department of Mineral Sciences, American Museum of Natural History, November 2001
Department of Geological Sciences, Rutgers University, November 2001
Department of Earth and Atmospheric Sciences, MIT, October 2001
Department of Geological Sciences, Indiana University, Bloomington, October 2001
Department of Geology, Southern Illinois University, Carbondale, September 2001
Department of Astronomy, Cornell University, May 2001
Earth Science Club of Northern Illinois, September 2000
Max Planck Institut für Chemie, Mainz, Germany, February 2000
Department of Geophysical Sciences, University of Chicago, January 2000
Department of Chemistry, University of California at San Diego, December 1999
State Microscopical Society of Illinois, Chicago, October 1999
Department of Planetary Sciences, University of Arizona, Tucson, May 1999
Department of Geophysical Sciences, University of Chicago, December 1998
Department of Terrestrial Magnetism, Carnegie Inst. of Washington, Washington DC, June 1998
Sigma Xi Chapter at University of Illinois at Chicago, March 1998
Department of Geological Sciences, University of Michigan, Ann Arbor, July 1997
State Microscopical Society of Illinois, Chicago, July 1997
Department of Astronomy, Northwestern University, Evanston, May 1997
Department of Chemistry, University of California at San Diego, December 1996
Department of Geology, Calvin College, Grand Rapids, October 1996
Department of Geophysical Sciences, University of Chicago, October 1996
Department of Geological Sciences, University of Illinois, Chicago, September 1996
Department of Geology, Northwestern University, Evanston, March 1996

PROFESSIONAL SERVICE

Member, Science Advisory Board, SETI Institute, 2024 – present
Member, Washington University McDonnell Center for the Space Sciences Advisory Council, 2024 – present
Member, Universities Space Research Association (USRA) Lunar and Planetary Institute Science Council, 2022 – present
Mentor, Brooke Owens Fellowship Program, 2016 – present
Member, The National Academies of Sciences, Engineering, and Medicine, Intelligence Science and Technology Experts Group (ISTEG), 2015 – 2024 (program close)
Member, Academic Program Review Committee, Department of Earth and Planetary Sciences, University of California at Santa Cruz, 2024
Member, Initial Analysis Chemistry Team for Chemistry, JAXA's Hayabusa2 sample return mission to asteroid Ryugu, 2018 – 2023
Member, Editorial Board for *Scientific Reports*, a Nature Research journal, 2018 – 2023

Member, Academic Program Review Committee, Department of Earth, Environmental and Planetary Sciences, Rice University, 2022
Member, NASA Advisory Council, 2018 – 2022
Chair, NASA Advisory Council Science Committee, 2018 – 2022 (member, 2017 – 2018)
Member, Academic Program Review Committee, Morton K. Blaustein Department of Earth and Planetary Sciences, Johns Hopkins University, 2021
Member, Academic Program Review Committee, School of Earth and Atmospheric Sciences, Georgia Institute of Technology, 2021
Member, Academic Program Review Committee, Department of Earth and Planetary Sciences, University of New Mexico, 2021
Member, NASA-ESA Mars Sample Return Caching Strategy Steering Committee, 2020
Member, NASA-ESA Mars Sample Planning Group 2 (MSPG-2), 2020
Member, NASA Mars Sample Return Independent Review Board, 2020
President, The Meteoritical Society, 2019 – 2020 (President Elect, 2017 – 2018; Past President, 2021 – 2022)
Member, Review panel for NASA Science Mission Directorate Research and Analysis program, 2019
Member, NASA-ESA Mars Sample Planning Group 1 (MSPG1), 2018 – 2019
Member, AGU Robert Cowen Award for Sustained Achievement in Science Journalism selection committee, 2017 – 2019
Member, Astronaut Scholarship Foundation's Neil Armstrong Award of Excellence selection committee, 2017 – 2019
Member, International Mars Sample Return Objectives and Samples Team (iMOST), 2018
Convener, Workshop on Role of Sample Return in Addressing Major Scientific Questions in Planetary Sciences, International Space Science Institute, Bern, Switzerland, 2018
Vice-President, Meteoritical Society, 2017 – 2018
Member, The National Academies of Sciences, Engineering, and Medicine, Space Studies Board Executive Committee, 2016 – 2017
Member, The National Academies of Sciences, Engineering, and Medicine, Space Studies Board, 2012 – 2017
Member, NASA Advisory Council's Planetary Protection Subcommittee, 2015 – 2016
Member, Review panels for NASA Science Mission Directorate Research and Analysis programs, 2015 – 2016
Member, AGU David Perlman Award for Excellence in Science Journalism selection committee, 2015 – 2016
Member, Elements Magazine Advisory Board, 2009 – 2016
Member, Ad hoc panel of experts (Planetary Protection) convened by The National Academies NRC, 2014 – 2015
Member, The National Academies NRC Committee on the Assessment of NASA Science Mission Directorate 2014 Science Plan, 2013
Chair, Audit Committee of the Meteoritical Society, 2013; member, 2011 – 2013
Co-Convener, Lunar Highlands Workshop, 2012
Chair, NASA Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM), 2009 – 2012
Member, Planetary Science Subcommittee of the NASA Advisory Council, 2009 – 2012
Theme Chair (Cosmochemistry, Planet Formation), Goldschmidt Conference, 2011
Member, Organizing Committee, Workshop on Formation of the First Solids in the Solar System, 2011
Invited Nominator, MacArthur Foundation Fellows Program, 2011, 2005
Invited External Member, Faculty Search Committee, ETH Zurich, 2010 – 2011
Invited External Member, Faculty Search Committee, Center for Star and Planet Formation, University of Copenhagen, 2010
Chair, Planetary Conditions for Life sub-panel, NASA Exobiology Review Panel, 2009
Chair, McKay Award Committee of the Meteoritical Society, 2009

Member, National Academies NRC Committee on Planetary Protection Requirements for Mars Sample Return Missions, 2008 – 2009
Member, NASA Cosmochemistry Review Panel, 2008
Member, NASA Discovery and Scout Mission Capabilities Expansion Review Panel, 2008
Chair, Meteoritical Society Pellas-Ryder Committee, 2008; member, 2006 – 2008
Member, Science Steering Committee, 5th Astrobiology Science Conference, 2007 – 2008
Member, National Academies NRC Committee on Astrobiology Strategy for the Exploration of Mars, 2006 – 2008
Member, National Academies NRC Committee on Origins and Evolution of Life, 2005 – 2008
Member, NASA Cosmochemistry Program Management Operations Working Group, 2005 – 2008
Member, Universities Space Research Association (USRA) Lunar and Planetary Institute Science Council, 2002 – 2008
Member, NASA Origins of Solar Systems Review Panel, 2007
Co-Chair, Planetary Conditions for Life sub-panel, NASA Exobiology Review Panel, 2007
Member, Program Committee, 70th Annual Meteoritical Society Meeting, 2007
Member, Nominations Committee of the Meteoritical Society, 2007
Member, Organizing Committee, Early Planetary Differentiation Workshop, 2006
Member, NASA Solar System Exploration Strategic Roadmap Committee, 2005
Member, Program Committee, 68th Annual Meteoritical Society Meeting, 2005
Member, Solar System Exploration Subcommittee of NASA's Space Sciences Advisory Committee, 2004 – 2005
Member, Editorial Committee, *Meteorites & the Early Solar System II* (U. Arizona Press), 2004 – 2005
Member, NASA Curation and Planning Team for Extraterrestrial Materials (CAPTEM), 2002 – 2005
Member, NASA Mars-Moon Science Linkages (MMSL) Science Steering Group, 2004
Member, Organizing Committee, Oxygen in the Terrestrial Planets Workshop, 2004
Member, Meteoritical Society Council, 2001 – 2004
Panel Chief, NASA Cosmochemistry Review Panel, 2002 – 2003
Member, Organizing Committee, Workshop on Mercury: Space Environment, Surface, and Interior, 2001
Member, NASA Cosmochemistry Management Operations Working Group/Ad Hoc Advisory Group, 1998 – 2001
Co-Chair, Organizing Committee, 63rd Annual Meteoritical Society Meeting, 2000
Chair, Meteorite Nomenclature Committee, 1998; member, 1996 – 2000
Panel Chief, NASA Planetary Instrument Definition and Development Program (PIDDP) Surface Instrumentation Review Panel, 1999
Member, Program Committee, Lunar and Planetary Science Conference, 1998 – 1999
Group Chief, Experimental and Analytical Geochemistry Group, 1999; member, NASA Cosmochemistry Review Panel, 1997 – 1999
Member, NASA-NSF-Smithsonian Meteorite Working Group, 1996 – 1999
Member, NASA Laboratory Instrumentation for the Analysis of Returned Samples (LIFARS) Program Definition Group, 1997 – 1998
Member, NASA Planetary Instrument Definition and Development Program (PIDDP) Surface Instrumentation Review Panel, 1996

DEPARTMENT AND UNIVERSITY SERVICE

Member, Space Strategy Committee, ASU, 2020 – present (chair, 2020-2021)
Member, Regents Professors selection committee, ASU, 2024
Member, Faculty Women's Association Board, ASU, 2012 – present
Mentor, Alumni Mentoring Program of ASU Launching Leaders Program, Spring 2022
Member, Search Committee for Provost, ASU, 2020
Chair, Promotion and Tenure Committee, SESE, ASU, 2018 – 2019; member, 2016 – 2019
Member, Exploration Postdoctoral Fellowship evaluation committee, SESE, ASU, 2019
Member, Origins Project Internal Advisory Committee, ASU, 2013 – 2018

Member, Senators Council, College of Liberal Arts and Sciences, ASU, 2014 – 2018
Member, Search Committee for Small Satellites faculty member, SESE, ASU, 2016 – 2017
Member, President's Women-in-Leadership Council, ASU, 2015 – 2016
Member, Regents Professors selection committee, ASU, 2015 – 2016
Member, Exploration Postdoctoral Fellowship evaluation committee, SESE, ASU, 2015
Member, Search Committee for Electron Microprobe Lab Manager, Center for Solid State Science, ASU, 2015
Member, Search Committee for Planetary Science faculty member, SESE, ASU, 2014 – 2015
Member, Search Committee for Provost, ASU, 2013
Co-Chair, International Student Experience Strategic Plan Committee, ASU, 2013
Member, Promotion and Tenure Committee, SESE, ASU, 2007 – 2011
Member, Undergraduate and Graduate Curriculum Committee, SESE, ASU, 2008 – 2009
Member, Graduate Qualification Requirements (Ad Hoc) Committee, SESE, ASU, 2007 – 2008
Member, Interdisciplinary Science and Technology Building-4 Planning (Ad Hoc) Committee, SESE, ASU, 2007 – 2008
Member, Search Committee for the Dean of the Sandra Day O'Connor School of Law, ASU, 2007 – 2008
Member, Graduate Recruitment Committee, SESE, ASU, 2007

TEACHING EXPERIENCE

SES591/494 Advancing Solar System Exploration with Sample Return Missions, Spring 2023, Spring 2025
SES591/494 Leadership Pathways in Earth and Space Exploration, Spring 2024
GLG598/485 & CHM598/485 Cosmochemistry and Meteorites, ASU, Spring 2021, Fall 2018, Fall 2016, Spring 2014, 2012, 2010, Fall 2007
SES591/494 Sample Return Missions, Spring 2018
GLG598/490 Analytical Instruments, ASU, Spring 2017, 2011, Fall 2008
GLG581/494 & CHM598/494 Isotope Geochemistry (co-taught with A. Anbar), ASU, Spring 2015
GLG598/494 Trace Element Geochemistry (co-taught with R. Hervig), ASU, Fall 2014
GeoSci220 Magmatism in the Early Solar System, University of Chicago, Spring Quarter, scheduled alternate years, 1998-2006
PhySci110 Environmental History of Earth, University of Chicago, Winter Quarter, 2001

ACADEMIC MENTORING

Graduate Student Advisees

Rishant Prakash (doctoral student, ASU, 2023 – present)
Andrea Distel (doctoral student, ASU, 2021 – present)
Nicole Phelan (ASU, MS, 2023, currently Mission Operations Specialist, Malin Space Science Systems Inc., San Diego, CA)
Soumya Ray (ASU, PhD 2021, currently postdoctoral researcher at Los Alamos National Laboratory, Los Alamos, NM)
Zachary Torrano (ASU, PhD 2020, currently Staff Scientist at Los Alamos National Laboratory, Los Alamos, NM)
Emilie Dunham (ASU, PhD 2020, currently Postdoctoral Research Fellow at Lawrence Livermore National Laboratory, Livermore, CA)
Daniel Dunlap (ASU, PhD 2020, currently Analytical Chemist at Oak Ridge National Laboratory, Oak Ridge, TN)
Gabriel Franco (ASU, MNS 2019)
Prajkta Mane (ASU, PhD 2016, currently Staff Scientist at Lunar and Planetary Institute, Houston, TX)
Kera Tucker (ASU, MS 2015; currently Senior Systems Engineer at Lockheed Martin, Denver, CO)
Curtis Williams (ASU, PhD 2014; currently Program Scientist, Planetary Science Division, NASA Headquarters, Washington DC)

Matthew Sanborn (ASU, PhD 2012; currently Staff Scientist, Los Alamos National Laboratory, Los Alamos, NM)
Lev Spivak-Birndorf (ASU, PhD 2012; currently Chief Science Officer and Co-Founder at PSI Labs, Ann Arbor, MI)
Greg Brennecka (ASU, PhD 2011; currently Staff Scientist, Lawrence Livermore National Laboratory, Livermore, CA)

Postdoctoral and Other Advisees

Philip Reger (Postdoctoral Researcher, 2025 – present)
Michole Washington (Postdoctoral Researcher, 2025 – present)
Ren Marquez (BCMS Meteorite Studies Postdoctoral Fellow, co-advised with L. Nittler, 2024 – present)
Michelle Aigner (Laboratory Manager, ASU, 2024 – present)
Jeffrey Osterhaut (Postdoctoral Researcher, Jet Propulsion Laboratory, Pasadena, CA, 2021 – present)
Vinai Rai (Associate Research Scientist and Laboratory Manager, ASU, 2016 – 2023; Research Scientist and Laboratory Manager, ASU, 2023 – present)
Rebekah Hines (Research Professional, ASU, 2011 – 2024)
Jemma Davidson (Assistant Research Scientist, ASU, 2018 – 2023; Associate Research Scientist, ASU, 2023 – 2024; currently Branch Chief of Curation at NASA ARES, Johnson Space Center, Houston, TX)
Stephen Romaniello (Assistant Research Scientist, 25% appointment in Center for Meteorite Studies, ASU, 2014 – 2019; Assistant Research Scientist and Laboratory Manager, Center for Meteorite Studies, ASU, 2012 – 2014; currently Director of Research, Project Vesta, Knoxville, TN)
Alice Stephant (Postdoctoral Researcher, Center for Meteorite Studies, ASU, 2015 – 2017; currently Postdoctoral Scholar, University of Florence, Florence, Italy)
Julia Cartwright (Postdoctoral Researcher, Center for Meteorite Studies, ASU, 2014 – 2017; currently Independent Research Fellow, University of Leicester, Leicester, UK)
Kate Sounders (Assistant Research Professor and Laboratory Manager, Center for Meteorite Studies, ASU, 2014 – 2015; currently Research Geologist, United States Geological Survey, Denver, CO)
Gregory Brennecka (Postdoctoral Researcher, Center for Meteorite Studies, ASU, 2011 – 2013; currently Staff Scientist, Lawrence Livermore National Laboratory, Livermore, CA)
Philip Janney (Laboratory Manager, The Field Museum, 2000 – 2006; Associate Research Scientist and Laboratory Manager, Center for Meteorite Studies, ASU, 2006 – 2012; currently Professor, University of Cape Town, South Africa)
Melissa Morris (SESE Exploration Postdoctoral Fellow co-advised with S. Desch, ASU, 2010 – 2011; currently Discipline Scientist/Program Officer, NASA Headquarters, Washington DC)
Audrey Bouvier (Postdoctoral Researcher, Center for Meteorite Studies, ASU, 2007 – 2010; currently Research Scientist at Bayerisches Geoinstitut, University of Bayreuth, Bayreuth, Germany)
Fang Zhen Teng (Postdoctoral Researcher, The Field Museum, 2006 – 2007; currently Professor, University of Washington, Seattle, WA)
Nicolas Dauphas (Postdoctoral Researcher, The Field Museum and University of Chicago, co-advised with A. M. Davis, 2002 – 2004; currently Louis Block Professor, University of Chicago, Chicago, IL)
Nicole Foley (Postdoctoral Researcher, The Field Museum, 2002 – 2004)

Graduate Student Committees

Christian Kroemer (ASU, PhD candidate)
Chadlin Ostrander (ASU, PhD 2020)
Hannah Bercovici (ASU, MS 2020)
Huawei Chen (ASU, PhD 2019)
Feifei Zhang (ASU, PhD 2018)
Cameron Mercer (ASU, PhD 2017)
Jinping Hu (ASU, PhD 2016)
Karen Rieck (ASU, PhD 2015)

Stephen Romaniello (ASU, PhD 2012)
Melissa Morris (ASU, PhD 2009)
Nicolas Ouellette (ASU, PhD 2008)
Karen Rieck (ASU, MS 2008)
Liping Qin (U. Chicago, PhD 2007)
David Cook (U. Chicago, PhD 2007)
Agnes Markowski (ETH, Zurich, PhD 2006)

Undergraduate Student Advisees
Nidhi Nirwan (ASU, 2024 – present)
Jonathan Rabinowitz (ASU, 2024 – present)
Christian Kroemer (ASU, Honors Thesis 2022)
Max Kulak (ASU, Honors Thesis 2022)
Ivy Ettenborough (ASU, 2019)
Karen Leung (ASU, 2016)
Elizabeth Dybal (ASU, 2014 – 2016)
Ya-Jui Ku (National Taiwan University, 2014)
Jasmine Parker (ASU, 2012 – 2013)
Tyler Farina (ASU, 2012)
Brian De Hoog (ASU, 2009 – 2012)
Melissa Anderson (ASU, 2009)
Michael Stuart (ASU, 2009)
Ashley Dancer (ASU, 2008 – 2009)
Jesse Hannah (ASU, 2008 – 2009)
Ashley Stanfil (ASU, 2008)
Susheel Koushik (ASU, 2007 – 2008)
Melanie Channon (ASU, 2007)
Elizabeth Meith (ASU 2007)
Matthew Sanborn (ASU, 2007)
Lev Spivak-Birndorf (U. Chicago, 2003 – 2005)
Nicolas Beecher (U. Chicago, 2002)
Josef Dufek (U. Chicago, 2001)
Noel Heim (U. Chicago, 1999 – 2000)
Shelley Erickson (Field Museum Intern, 1998 – 1999)
Emily Lakdawalla (Field Museum Intern, 1998)

Brooke Owens Fellowship Mentees
Brenna Wells (University of Alabama, 2024)
Kylie Schmidt (University of Kentucky, 2023)
Sarah Fry (Princeton University, 2022)
Isabel Hunt (Temple University, 2021)
Sanjana Tewathia (Georgia Institute of Technology, 2020)
Kira Altman (University of Colorado at Boulder, 2019)
Carson Brumley (University of Colorado at Boulder, 2018)
Justine Walker (College of Wooster, 2017)

Honors and Awards (As Mentor)
NASA Future Investigators in Earth and Space Science and Technology, Andrea Distel (as graduate student at ASU), 2024-present
NASA Earth and Space Science Fellowship, Soumya Ray (as graduate student at ASU), 2018-2021
NASA Future Investigators in Earth and Space Science and Technology, Zachary Torrano (as graduate student at ASU), 2019-2020
NASA Earth and Space Science Fellowship, Daniel Dunlap (as graduate student at ASU), 2017-2020

NASA Earth and Space Science Fellowship, Emilie Dunham (as graduate student at ASU), 2016-2020
Stephen E. Dwornik Award (Geological Society of America) for best poster presentation, Daniel Dunlap (as graduate student at ASU), 2018-2019
Wiley Award (The Meteoritical Society) for oral presentation, Daniel Dunlap (as graduate student at ASU), 2017
Nier Prize (The Meteoritical Society), Greg Brennecka (for work conducted as a graduate student and postdoctoral researcher at ASU), 2016
Nier Prize (The Meteoritical Society), Audrey Bouvier (for work conducted as a postdoctoral researcher at ASU), 2013
NASA Earth and Space Science Fellowship, Prajkta Mane (as graduate student at ASU), 2013-2015
NASA Earth and Space Science Fellowship, Curtis Williams (as graduate student at ASU), 2012-2014
NASA Earth and Space Science Fellowship, Lev Spivak-Birndorf (as graduate student at ASU), 2011-2012
NASA Earth and Space Science Fellowship, Greg Brennecka (as graduate student at ASU), 2010-2011
Nininger Meteorite Award, Greg Brennecka (as graduate student at ASU), 2010
NASA Earth and Space Science Fellowship, Matthew Sanborn (as graduate student at ASU), 2009-2012
Brian Mason Award of the Meteoritical Society, Greg Brennecka (as graduate student at ASU), 2009
Nier Prize (The Meteoritical Society), Nicolas Dauphas (for work conducted as a postdoctoral researcher at The Field Museum/University of Chicago), 2005

MEDIA AND PUBLIC ENGAGEMENT

Delivered numerous public talks; featured in news media (television, radio and print) outlets, including documentaries on the Discovery Channel (How the Universe Works), History Channel (The Universe; How the Earth was Made), PBS (Nova ScienceNow), and Science Channel (Space's Deepest Secrets; Meteorite Men); and involved in the development of public outreach, educational programs and exhibits. Highlights include the following:

- Featured in "Fireball: Visitors from Darker Worlds" directed by Werner Herzog and Clive Oppenheimer, 2020
- On CBS Sunday Morning, September 13, 2020
- New Discoveries Lecture ("Exploring the Solar System Through Meteorites"), School of Earth and Space Exploration, October 2018
- On NPR Science Friday, June 2018; https://www.sciencefriday.com/segments/science-friday-presents-two-wrongs-dont-make-a-meteorite/
- On NPR Science Friday, November 2017; https://www.sciencefriday.com/segments/a-space-rock-makes-an-interstellar-visit/
- TEDxASU: Innovation Worth Sharing, 2017; https://www.youtube.com/watch?v=iukJJ2u0vlo
- Arizona State University KEDTalks: Conversations for the Curious, 2016; https://www.youtube.com/watch?v=i-JmdMYOEII&t=43s
- In documentary "Meteorites – Visitors from Another Planet" by Petra Haffter, 2015
- On Australian Broadcasting Corporation's "The Science Show", May 2014; http://www.abc.net.au/radionational/programs/scienceshow/meteorites-bring-the-history-of-the-solar-system-to-earth-and-m/5427388
- On NPR Science Friday, March 2013; https://www.sciencefriday.com/segments/studying-rocks-found-on-earth-for-clues-about-space/
- In PBS Channel's NOVA ScienceNOW show "Where did we come from?", 2011
- In History Channel's "United Stats of America", 2012
- Oversight of the design and content for "Meteorite Gallery" exhibit in Interdisciplinary Science Technology Building 4 on ASU's Tempe campus, 2011 – 2012
- In Science Channel's "Meteorite Men", aired 2009 – 2012
- In Discovery Channel documentary "Inside Planet Earth", aired 2009
- In History Channel documentary "How the Earth was Made: Asteroids", aired 2009
- Oversight of the development, production and distribution of loanable classroom modules on "Origin of Meteorites" for K-12 and informal educators, 2008 – 2019

- Featured in "Faces of Exploration" by Joanna Vestey, Wigwam Press, London, 2006
- Content development for "Evolving Planet" permanent exhibit, The Field Museum, 2005 – 2006
- Featured in (and contributed content to) article in Discover magazine, March 2004; http://discovermagazine.com/2004/mar/meteoriticist-in-her-own-words
- On "Seeking Solutions with Suzanne"; aired on CNN Headline News, Oct 6, 2003
- Featured in "Women of Discovery" by Milbry Polk and Mary Tiegreen, Clarkson Potter Publishers, New York, 2001
- Content Specialist for temporary exhibit of a Moon rock to commemorate 30th Anniversary of first Moon landing, The Field Museum, 1999
- Content development for (and featured in) "Women in Science" on-line exhibit, The Field Museum, 1998 – 1999
- Content Specialist for "Grainger Gallery of Meteorites" permanent exhibit, The Field Museum, 1998

POPULAR SCIENCE ARTICLES, REVIEWS, AND EDITORIALS

1. Wadhwa M. (2023) Bringing space rocks back to Earth could answer some of life's biggest questions. *Nature* 621, 445.
2. Wadhwa M. (2021) Meteorites: A story written across light years down the barrel of a microscope. Review of "Meteorite: The stones from outer space that made our world" by Tim Gregory. *Nature* 589, 510-511.
3. Anand M., Russell S., Lin Y., Wadhwa M., Marhas K.K., and Tachibana S. (2020) Editorial to the topical collection: Role of sample return in addressing major questions in planetary sciences. *Space Science Reviews* 216, 101. https://doi.org/10.1007/s11214-020-00724-4
4. Wadhwa M. (2014) What are we learning from cosmic dust? *Astronomy*, February 2014 issue, 56-59.
5. Wadhwa M. (2013) Exploring the Solar System from the ends of the Earth. *Slate*, Future Tense project (http://www.slate.com/articles/technology/future_tense/2013/09/the_best_meteorites_are_found_in_antarctica.html)
6. Wadhwa M. (2013) What are we learning from Moon rocks? *Astronomy*, June 2013 issue, 54-57.
7. Wadhwa M. (2013) Order from chaos – Genesis samples the solar wind. *Astronomy*, Oct 2013 issue, 54-57.
8. Fussman C. and Wadhwa M. (2004) In her own words: Meenakshi Wadhwa. *Discover Magazine,* March 2004 issue (http://discovermagazine.com/2004/mar/meteoriticist-in-her-own-words).
9. Wadhwa M. (2004) Searching for treasure to the ends of the Earth. Review of "Meteorites, ice and Antarctica: A personal account" by William A. Cassidy. *Science* 303, 41-42.
10. Wadhwa M. (2001) Review of "From Mountains to Meteorites" by Brian Mason and Simon Nathan. *Meteoritics and Planetary Science* 36, 1413-1414.
11. Robinson M. and Wadhwa M. (1995) Messengers from Mars. *Astronomy* 23, 44-48.

PUBLICATIONS

Total Citations (Google Scholar, March 15, 2025): 16265
h-index (Google Scholar, March 15, 2025): 60
i10-index (Google Scholar, March 15, 2025): 144
ORCID ID: orcid.org/0000-0001-9187-1255

PEER-REVIEWED ARTICLES

(†Students or postdoctoral researchers supervised by M. Wadhwa)

2025

1. †Dunlap D.R., †Cartwright J.A., Koefoed P., Krestianinov E., †Romaniello S.J., Agee C., Amelin Y., and Wadhwa M. (2025) Chronology of ungrouped achondrite Northwest Africa 11119 and 7325/8486: Implications for early evolution of a heterogeneous crust on a differentiated planetesimal. *Geochimica Cosmochimica Acta*, submitted.
2. Herd C.D.K., Bosak T., Hausrath E.M., Hickman-Lewis K., Mayhew L.E., Shuster D.L., Siljestrom S., Simon J.I., Weiss B.P., Wadhwa M., Zorzano M.-P., Maki J.N., Farley K.A., and Stack K.M. (2025) Sampling Mars: Geologic context and preliminary characterization of samples collected by the NASA Mars 2020 Perseverance Rover Mission. *Proceedings of the National Academy of Sciences* 122(2), e2404255121.
3. Iizuka T., +87 co-authors, including Wadhwa M. (2025) Late fluid flow in a primitive asteroid revealed by excess ^{176}Hf in Ryugu. *Nature,* submitted.
4. †Osterhaut J.T., Farley K.A., Wadhwa M., Treffkorn J., and Kulczycki E. (2025) Desorption of terrestrial noble gases in Mars 2020 sample tubes: Implications for Mars Sample Return. *Astrobiology*, submitted.
5. Schmidt M.E., +32 co-authors, including Wadhwa M. (2025) Diverse and highly differentiated lava suite in Jezero crater, Mars: Constraints on intracrustal magmatism revealed by Mars 2020 PIXL. *Science Advances* 11, eadr2613.
6. Wittmann A., †Kroemer C.R., Wadhwa M., Sharp T.G., Van Soest M., Martin T., and Goepfert T. (2025) Tissintite-II in lunar meteorite Northwest Africa 13967: Implications for the high-pressure/temperature mineralogy of the lunar regolith. *Meteoritics and Planetary Science*, in press.

2024

7. Aléon J., +89 co-authors, including Wadhwa M. (2024) Hydrogen in magnetite from asteroid Ryugu. *Meteoritics and Planetary Science* 59, 2058-2072.
8. Hu Y., +91 co-authors, including Wadhwa M. (2024) Pervasive aqueous alteration in the early Solar System revealed by potassium isotope variations in Ryugu samples and carbonaceous chondrites. *Icarus* 409, 115884.
9. Kita N., +88 co-authors, including Wadhwa M. (2024) Disequilibrium oxygen isotope distribution among aqueously altered minerals in Ryugu asteroid returned samples. *Meteoritics and Planetary Science*, DOI 10.1111/maps.14163.
10. †Osterhaut J.T., Farley K.A., Wadhwa M., Treffkorn J., and Kulczycki E. (2024) Helium leak rate measurements of flight-like Mars 2020 sample tubes. *Astrobiology* 1, 36-43.
11. Schönbächler M., +89 co-authors, including Wadhwa M. (2024) Zirconium isotope composition indicates s-process depletion in samples returned from asteroid Ryugu. *Meteoritics and Planetary Science,* DOI 10.1111/maps.14279.
12. Spitzer F., +88 co-authors, including Wadhwa M. (2024) The nickel isotopic composition of Ryugu reveals a common accretion region for carbonaceous chondrites. *Science Advances* 10, eadp2426.
13. Torrano Z.A., +91 co-authors, including Wadhwa M. (2024) Neodymium-142 deficits and samarium neutron stratigraphy of C-type asteroid (162173) Ryugu. *Meteoritics and Planetary Science* 59, 1966-1982.

14. Yui H., +87 co-authors, including Wadhwa M. (2024) Pyrrhotites in asteroid 162173 Ryugu: Records of the initial changes on their surfaces with aqueous alteration. *Geochimica Cosmochimica Acta* 379, 172-183.

2023

15. Bizzarro M., +88 co-authors, including Wadhwa M. (2023) The magnesium isotope composition of samples returned from asteroid Ryugu. *The Astrophysical Journal Letters* 958, L25.
16. Yokoyama T., Wadhwa M., +88 co-authors (2023) Water circulation in Ryugu asteroid affected the distribution of nucleosynthetic isotope anomalies in returned sample. *Science Advances* 9, eadi7048.
17. Fujiya W., +88 co-authors, including Wadhwa M. (2023) Carbonate record of temporal change in oxygen fugacity and gaseous species in asteroid Ryugu. *Nature Geoscience* 16, 675-682.
18. Horgan B.H.N., +44 co-authors, including Wadhwa M. (2023) Mineralogy, morphology, and emplacement history of the Maaz formation on the Jezero crater floor from orbital and rover observations. *Journal of Geophysical Research: Planets*, DOI 10.1029/2022JE007612.
19. †Mane P., Bose M., Wadhwa M., and Defouilloy C. (2023) Protracted timescales for nebular processing of first-formed solids in the solar system. *The Astrophysical Journal* 946, DOI 10.3847/1538-4357/acb156.
20. Morita M., +96 co-authors, including Wadhwa M. (2023) Analysis of cation composition in dolomites on the intact particles sampled from asteroid Ryugu. *Analytical Chemistry* 96, 170-178.
21. Nakanishi N., +87 co-authors, including Wadhwa M. (2023) Nucleosynthetic s-process depletion in Mo from Ryugu samples returned by Hayabusa2. *Geochemical Perspectives Letters* 28, 31-36.
22. Nguyen A.N., +91 co-authors, including Wadhwa M. (2023) Abundant presolar grains and primordial organics preserved in carbon-rich exogenous clasts in asteroid Ryugu. Science Advances 9, eadh1003.
23. Paquet M., +93 co-authors, including Wadhwa M. (2023) Contribution of Ryugu-like material to Earth's volatile inventory by Cu and Zn isotopic analysis. *Nature Astronomy* 7, 182-189.
24. Piani L., +87 co-authors, including Wadhwa M. (2023) Hydrogen isotopic composition of hydrous minerals in asteroid Ryugu. The Astrophysical Journal Letters 946, **L43**.
25. Simon J.I., +67 co-authors, including Wadhwa M. (2023) Samples collected from the floor of Jezero crater with the Mars 2020 Perseverance rover. *Journal of Geophysical Research: Planets*, DOI 10.1029/2022JE007474.
26. Tang H.A., +89 co-authors, including Wadhwa M. (2023) The oxygen isotopic composition of samples from asteroid Ryugu with implications for the nature of the parent planetesimal. *The Planetary Science Journal* 4, 144.
27. †Torrano Z.A., †Brennecka G.A., †Mercer C.M., †Romaniello S.J., †Rai V.R., †Hines R.R., and Wadhwa M. (2023) Titanium and chromium isotopic compositions of calcium-aluminum-rich inclusions: Implications for the sources of isotopic anomalies and the formation of distinct isotopic reservoirs in the early Solar System. *Geochimica Cosmochimica Acta* 324, 194-220.
28. Yokoyama T., Wadhwa M., +88 co-authors (2023) Water circulation in Ryugu asteroid affected the distribution of nucleosynthetic isotope anomalies in returned sample. *Science Advances* 9, eadi7048.
29. Zhang B., Yangting L., Jialong H., Schrader D.L., Wadhwa M., Korotev R.L., Hartmann W.K., and Bouvier A. (2023) SIMS U-Pb dating of micro-zircons in the lunar meteorites Dhofar 1528 and Dhofar 1627. *Meteoritics and Planetary Science* 10, 1540-1551.

2022

30. Barosch J., +124 co-authors, including Wadhwa M. (2022) Presolar stardust in asteroid Ryugu. *The Astrophysical Journal Letters* 935, L3 (**DOI** 10.3847/2041-8213/ac83bd).
31. †Cartwright J.A., Hodges K.V., and Wadhwa M. (2022) Evidence against a late heavy bombardment on Vesta. *Earth and Planetary Science Letters* 590, 117576.
32. †Dunham E. T., Wadhwa M., Desch S. J., Liu M.-C., Fukuda K., Kita N., Hertwig A. T., Hervig R.L., Defouilloy C., Simon S.B., †Davidson J., Schrader D., and Fujimoto Y. (2022) Uniform initial $^{10}Be/^{9}Be$ inferred from refractory inclusions in CV3, CO3, CR2, and CH/CB chondrites. *Geochimica Cosmochimica Acta* 324, 194-220.

33. Farley K.A., +114 co-authors, including Wadhwa M. (2022) Aqueously altered igneous rocks sampled on the floor of the Jezero crater, Mars. *Science* 377, DOI 10.1126/science.abo2196.
34. Hopp T., + 91 co-authors, including Wadhwa M. (2022) Ryugu's nucleosynthetic heritage from the outskirts of the Solar System. *Science Advances* 8, DOI 10.1126/sciadv.add8141.
35. Kawasaki N., +93 co-authors, including Wadhwa M. (2022) Oxygen isotopes of anhydrous primary minerals show kinship between asteroid Ryugu and comet 81P/Wild2. *Science Advances* 8, DOI 10.1126/sciadv.ade2067.
36. †Mane P., Wallace S., Bose M., Wallace P., Wadhwa M., Weber J., and Zega T. (2022) Earliest evidence of nebular shock waves recorded in a calcium-aluminum-rich inclusion. *Earth and Planetary Science Letters* 332, 369-388.
37. Moynier F., +93 co-authors, including Wadhwa M. (2022) The Solar System calcium isotope composition inferred from Ryugu samples. *Geochemical Perspectives Letters* 24, 1-6.
38. Yokoyama T., +149 co-authors, including Wadhwa M. (2022) Samples returned from the asteroid Ryugu are similar to Ivuna-type carbonaceous meteorites. *Science*, DOI 10.1126/science.abn7850.

2021

39. Garvie A. J. L., Chi M., †Ray S., Domanik K., Wittmann A., and Wadhwa M. (2021) Carletonmooreite, Ni_3Si, a new silicide from the Norton County aubrite meteorite. *American Mineralogist* 106*,* 1828-1834.
40. †Ray S., Garvie L. A. J., †Rai V. K., and Wadhwa M. (2021) Correlated iron isotopes and silicon contents in aubrite metals reveal structure of their asteroidal parent body. *Scientific Reports* 11, 1-13.
41. †Sanborn M. and Wadhwa M. (2021) Trace element geochemistry of coarse-grained angrites from Northwest Africa: Implications for their petrogenesis on the angrite parent body. *Meteoritics and Planetary Science* 56, 482-499.
42. †Stephant A., Wadhwa M., Hervig R., Bose M., Zhao X., Barrett T.J., Anand M., and Franchi I.A. (2021) A deuterium-poor water reservoir in the asteroid 4 Vesta and the inner Solar System. *Geochimica Cosmochimica Acta* 297, 203-219.
43. †Torrano Z. A., Schrader D.L., †Davidson J., Greenwood R.C., †Dunlap D., and Wadhwa M. (2021) The relationship between CM and CO chondrites: Insights from combined analyses of titanium, chromium, and oxygen isotopes in CM, CO, and ungrouped chondrites. *Geochimica Cosmochimica Acta* 301, 70-90.

2020

44. †Davidson J., Wadhwa M., Hervig R. L., and †Stephant A. (2020) Water on Mars: Insights from apatite in regolith breccia Northwest Africa 7034. *Earth and Planetary Science Letters* 552, 116597.
45. †Dunham E.T., Wadhwa M., Desch S.J., and Hervig R.L. (2020) Best practices for determination of initial $^{10}Be/^{9}Be$ in early solar system materials by secondary ion mass spectrometry. *Geostandards and Geoanalytical Research* 44, 695-710.
46. Fukuda K., Beard B.L., †Dunlap D.R., Spicuzza M.J., Fournelle J.H., Wadhwa M., and Kita N. (2020) Magnesium isotope analysis of olivine and pyroxene by SIMS: Evaluation of matrix effects. *Chemical Geology* 540, 119482.
47. Jurewicz A.J.G., †Reick K.D., Hervig R., Burnett D.S., Wadhwa M., Olinger C.T., Wiens R., Laming J. M., Guan Y., Huss G.R., Reisenfeld D.B., and Williams P. (2020) Magnesium isotopes of the bulk solar wind from Genesis diamond-like carbon films. *Meteoritics and Planetary Science* 55, 352-375.
48. †Torrano Z. A., †Davidson J., and Wadhwa M. (2020) A reclassification of Northwest Africa 299 from CV3 to CK3.8 chondrite. *Meteoritics and Planetary Science* 55, 2539-2550.
49. Wadhwa M., Schrader D., and McCoy T. (2020) Advances in cosmochemistry enabled by Antarctic meteorites. *Annual Review of Earth and Planetary Sciences* 48, 233-258.

2019

50. †Dunham E., Balta J. B., Wadhwa M., and McSween H. Y., Jr. (2019) Petrology and geochemistry of olivine-phyric shergottites LAR 12095 and LAR 12240: Implications for their petrogenetic

history on Mars. *Meteoritics and Planetary Science* 54, 811-835.

51. Shollenberger Q. A., Wittke A., Render J., †Mane P., Schuth S., Weyer S., Gussone N., Wadhwa M., and Brennecka G. (2019) Combined mass-dependent and nucleosynthetic isotope variations in refractory inclusions and their mineral separates to determine their original Fe isotope compositions. *Geochimica Cosmochimica Acta* 263, 215-234.
52. †Torrano Z. A., Brennecka G. A., †Williams C. D., †Romaniello S. J., †Rai V. K., and Wadhwa M. (2019) Titanium isotope signatures of calcium-aluminum-rich inclusions from CV and CK chondrites: Implications for early Solar System reservoirs and mixing. *Geochimica Cosmochimica Acta* 263, 13-30.

2018

53. Srinivasan P., †Dunlap D. R., Agee C. B., Wadhwa M., Coleff D., Ziegler K., Zeigler R., and McCubbin F. M. (2018) Earliest dated silica-rich volcanism in the Solar System. *Nature Communications* 9, 3036.
54. †Stephant A., Garvie L. A. J., †Mane P., Hervig R., and Wadhwa M. (2018) Terrestrial exposure of a fresh martian meteorite causes rapid changes in hydrogen isotopes and concentrations. *Scientific Reports Scientific Reports* 8, DOI 10.1038/s41598-018-30807-w.

2017

55. Balta J. B., †Sanborn M. E., Mayne R. G., Wadhwa M., McSween H. Y., Jr., and Crossley S. D. (2017) Northwest Africa 5790: A previously unsampled portion of the upper part of the nakhlites pile. *Meteoritics and Planetary Science* 52, 36-59.
56. Brennecka G. A., Borg L. E., †Romaniello S. J., †Souders A. K., Shollenberger Q. R., Marks N. E., and Wadhwa M. (2017) A renewed search for short-lived ^{126}Sn in the early solar system: Hydride generation MC-ICPMS for high sensitivity Te isotopic analysis. *Geochimica Cosmochimica Acta* 201, 331-344.
57. Kleine T. and Wadhwa M. (2017) Chronology of planetesimal differentiation. *Planetesimals: Early Differentiation and Consequences for Planets* (Eds. Elkins-Tanton L. T. and Weiss B. P.), Cambridge Univ. Press, 224-245.
58. Mendybaev R., †Williams C. D., Spicuzza M. J., Richter F. M., Valley J. W., and Wadhwa M. (2017) Thermal and chemical evolution of the early Solar System materials as recorded by FUN CAIs: Part II – Laboratory evaporation of potential CMS-1 precursor material. *Geochimica Cosmochimica Acta* 201, 49-64.
59. †Williams C. D., Ushikubo T., Mendybaev R. A., †Janney P. E., Kita N. T., Bullock E. S., †Hines R. R., MacPherson G. J., Hervig R. L., Richter F. M., and Wadhwa M. (2017) Thermal and chemical evolution of the early Solar System materials as recorded by FUN CAIs: Part I – Petrology, mineral chemistry, and isotopic composition of Allende FUN CAI CMS-1. *Geochimica Cosmochimica Acta* 201, 25-48.

2016

60. †Mane P., Hervig R., Wadhwa M., Garvie L. A. J., Balta J. B., and McSween H. Y., Jr. (2016) Hydrogen isotopic composition of the martian mantle inferred from the newest martian meteorite fall Tissint. *Meteoritics and Planetary Science* 51, 2073-2091.
61. †Williams C. D., †Janney P. E., †Hines R. R., and Wadhwa M. (2016) Precise titanium isotope compositions of refractory inclusions in the Allende CV3 chondrite by LA-MC-ICPMS. *Chemical Geology* 436, 1-10.

2015

62. Balta J. B., †Sanborn M., Udry A., McSween H. Y., Jr., and Wadhwa M. (2015) Petrology and trace-element geochemistry of Tissint, the newest shergottite fall. *Meteoritics and Planetary Science* 50, 63-85.
63. Davis A. M., Richter F. M., Mendybaev R. A., †Janney P. E., Wadhwa M., and McKeegan K. D. (2015) Isotopic mass fractionation laws for magnesium and their effects on ^{26}Al-^{26}Mg systematics in Solar System materials. *Geochimica Cosmochimica Acta* 158, 245-261.
64. Ding S., Dasgupta R., Lee C. T., and Wadhwa M. (2015) New bulk sulfur measurements of martian

meteorites and modeling the fate of sulfur during melting and crystallization – implications for sulfur transfer from martian mantle to crust-atmosphere system. *Earth and Planetary Science Letters* 409, 157-167.

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REPORTS AND WHITE PAPERS

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CONFERENCE PRESENTATIONS

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