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DATE AND PLACE OF BIRTH: January 8, 1957. Rio de Janeiro, Brazil

NATIONALITIES: U.S., U.K., and Brazil

EDUCATION:

Ph.D.: Planetary Science, 1986, University College (University of London, UK).
"Comparative Studies of Volcanic Features on Earth and Mars".

B.Sc. (Hons): Astronomy, 1978, University College (University of London, UK).

PRESENT POSITION:

Principal Scientist, JPL, Earth and Planetary Sciences Division

Major current roles:

*Lead Scientist and Group Supervisor, Geophysics and Planetary Geosciences
Investigation Scientist, Cassini Radar Team
Co-Lead, Cassini Satellites Orbiter Science Team
Principal Investigator, Planetary Geology and Geophysics Program*

Main current responsibilities:

Represent Cassini Titan Radar Mapper instrument to the Cassini Project. Plan science observations of Saturn, its moons, and rings using the Radar instrument. Co-Chair Cassini's Satellites Orbiter Science Team. Geologic interpretation of Titan data from the Cassini Radar Mapper.

Leadership and management of Geophysics and Planetary Geosciences research group

Research Advisor to two National Research Council Postdoctoral Research Fellows (Flora Paganelli and Karl Mitchell)

Research on Io's volcanic activity using Galileo NIMS data and integration of science results with those from other Galileo investigations.

Main fields of expertise: Planetary geology and volcanology, with particular expertise on Io and Titan. Flight projects (Galileo, Cassini, collaborator on New Horizons).

Approach to research: Use of remote sensing data collected from spacecraft to further develop theoretical models of surface processes, in close collaboration with instrument investigations. Recent research efforts have been directed towards:

- (i) Analysis of Io's infrared spectra obtained by Galileo's Near-Infrared Mapping Spectrometer (NIMS) and
- (ii) Analysis of geologic features on Titan using the Cassini Radar Mapper, with particular emphasis on cryovolcanic features.

COMMITTEES AND RELATED EXPERIENCE:

Chair, Nominating Committee, American Astronomical Society's Division for Planetary Sciences, 2005-present (Member 2003-2005).

Member, Outer Solar System Task Group (IAU Working Group for Planetary System Nomenclature), 2005-present

Member, Program Committee, Demeter International Symposium, Toulouse, 14-16 June, 2006.

Advisor to Local Organizing Committee, American Astronomical Society's Division for Planetary Sciences Annual Meeting, 2006.

Member, Editorial Board, Praxis-Springer Publishing Company, 2004-present.

Member, Subcommittee on Diversity, American Geophysical Union, 2001-2003

Member, Steering Committee of the Commission for Large-Volume Basaltic Provinces, International Association of Volcanology and Chemistry of the Earth's Interior, 2000-present.

Member, NASA Review Panel (Mars Data Analysis Program, 1998-2001)

Member, Committee for Minorities and Women in Geosciences, Geological Society of America (1996-1999).

Co-chair for Local Organizing Committee, American Astronomical Society Division for Planetary Sciences 2000 meeting

Research Advisor for the National Research Council's postdoctoral NASA Research Associateship Program 1994-present (currently has two postdocs).

Chief organizer for Cassini-Huygens session at the American Association for the Advancement of Science meeting, Washington, DC, February 2005.

Co-organizer, United Nations/European Space Agency workshops on Basic Space Science, 1992 (San Jose, Costa Rica) and 1994 (Cairo, Egypt).

Convener of meeting sessions, including American Geophysical Union (2000, 2002, 2005) and International Geological Congress (2000)

Member, JPL Director's Advisory Committee for Women, 1992-1994.

CAREER HISTORY:

Sept. 2004-present Principal Scientist, Earth and Space Sciences Division, JPL

Sept. 2002-Sept. 2004: Research Scientist, Senior A, Earth and Space Sciences Division, JPL.

Sept. 1995-2002: Research Scientist, Earth and Space Sciences Division, JPL.

July 1991-Sept. 1995: Scientist, Earth and Space Sciences Division, JPL.

July 1989-July 1991: National Research Council Resident Research Associate, JPL.

Feb. 1989-July 1989: Visiting Researcher, Osservatorio Vesuviano, Naples, Italy.

March 1988-Jan. 1989: Acting Curator of Astronomy and Acting Head of the Astronomy Section, Old Royal Observatory, Greenwich, U.K.

June 1985-March 1988: Curator of Modern Astronomy and Deputy Head of Astronomy Section, Old Royal Observatory, Greenwich, U.K.

Oct. 1978-Dec. 1984: Teaching and Research Assistant: University College London; teaching Planetary Geology, Observational Astronomy and Introductory Astronomy courses.

Lecturer, University of London Extra-Mural Department (from 1980), teaching Astronomy.

PRIZES AND AWARDS:

From the American Astronomical Society, Division for Planetary Sciences:
Carl Sagan Medal, 2005

From the Guinness Book of World Records (2006 edition):
Discoverer of the greatest number of active volcanoes

From GEMS Television, Miami:

GEMS Woman of the Year in Science and Technology, 1997

From the Comision Feminil Mexicana Nacional:

Latinas in Science Award, 1990

From the Jet Propulsion Laboratory:

Bonus Award for Outstanding Accomplishment, Level B, 1999

Bonus Award for Outstanding Accomplishment, Level C, 2001

Bonus Award for Outstanding Accomplishment, Level C, 2002

Exceptional Technical Excellence, Galileo Science Planning and Operations Team, 2002

SPOT Award, Discovery Core Review Panel, 2004

Bonus Award, Cassini Science Planning Tour Integration Team, 2004

Team Bonus Award, Cassini Science Team, 2005

From NASA:

Group Achievement Award, Galileo Gaspra Encounter Team, 1993

Group Achievement Award, Project Galileo Team, 1996

Group Achievement Award, Galileo Ida Encounter/Dactyl Discovery Team, 1995

Group Achievement Award, Galileo Orbital Operations Recovery Team, 1997

Group Achievement Award, Galileo Project Team, 1998

Group Achievement Award, Galileo Orbital Operations Recovery Team, 2000

Group Achievement Award, Galileo Millenium Mission Operations Team, 2003

Group Achievement Award, Cassini Flight Team, 2005

MEMBERSHIP OF PROFESSIONAL SOCIETIES:

International Astronomical Union

American Geophysical Union

American Astronomical Society, Division for Planetary Sciences

International Association of Volcanology and Chemistry of the Earth's Interior

American Association for the Advancement of Science

Fellow (member), Royal Geographical Society

Fellow (elected), Explorers Club

SELECTED INVITED TALKS:

Geological Society of America annual meeting, Pardee Symposium, October 2005

European Geosciences Union meeting, April 2005

Jupiter After Galileo and Cassini, A Euroconference about the Giant Planets, Lisbon, June 2002

American Geophysical Union Fall Meeting, December 2001

Jupiter: Planet, Satellite & Magnetosphere Conference, Boulder, Colorado, June 2001

American Geophysical Union Fall Meeting, December 2000

Division for Planetary Sciences of the American Astronomical Society, October 2000

International Geological Congress, August 2000

American Geophysical Union Fall Meeting, December 1999
International Union of Geodesy and Geophysics, XXI General Assembly, July 1995

SELECTED SEMINARS:

University of California, Santa Cruz (IGPP), April 2006
Walgreen Lecture, University of Illinois, March 2006
University of Nevada, Las Vegas, October 2005
University of California at Los Angeles (IGPP), June 2005
Jet Propulsion Laboratory, Division 31, Science System Engineering Group March 2005
Cassini Tour Science Talk, JPL, December 2004
California State University, Los Angeles, May 2004
California State University, Northridge, April 2004
Foothill College, San Francisco, December 2003
University of Southern California, November 2002
University of Coimbra, Portugal, June 2002
University of California at Berkeley, April 2002
Jet Propulsion Laboratory, Division 32, July 2001
University of Arizona, February 2001
Sonoma State University, January 2000

SELECTED OUTREACH ACTIVITIES:

Public lectures: Over 100 (U.S., England, Brazil, Italy, Portugal, Mexico, and Morocco).

Media Interviews: Over 450 (U.S., England, Brazil, Portugal, Mexico, France, Italy), including press (e.g. New York Times, Los Angeles Times), radio (e.g. NPR's Science Friday), and TV (e.g. Nightline, evening news, talk shows, documentaries).

TV Documentaries:

Discovery Channel's "Planet Storm" (2001)
Discovery Channel's "96 Worlds and Counting" (2001)
Nightline's "Galileo" (September 2003)
National Geographic Television's "Hollywood Science: Forces of Nature" (April 2006).

Films/software:

IEE (Institute of Electrical Engineers, UK) film, 2006
"Starry Night" Astronomy software, 2003
JPL/NASA's film "40 Years of Space Exploration", 2002
KCET Television in *Hispanic Heritage Month*, 1990-1992

Profiled in the following books:

"Women of Space" by Laura S. Woodmansee (Apogee Books, 2003)
"Spotlight on Scientists", Curriculum Guide for Science Enrichment (grades 5-6) by J. Sinsal

(Carson-Dellosa, due out in 2006)
“*Extreme Science Jobs*” (Scholastic Books, 2004)
“*What do you Want to be?*” (The Sally Ride Science Club, 2004)
NASA/Sally Ride Science poster (2005)
“*Adventurous Dreams, Adventurous Lives: Today’s Explorers Recall the Youthful Dream
Launching their Remarkable Lives*” (Explorers Club, due out in 2006)

Profiled in numerous websites, including:

Women of NASA: <http://quest.arc.nasa.gov/women/bios/rlg.html>
NASA Solar System Exploration: <http://sse.jpl.nasa.gov/features/lopes.html>
JPL: http://www.jpl.nasa.gov/news/profiles/lopes/lopes_index.html
Clypper Espacio (Argentina): <http://webs.satlink.com/usuarios/l/lujanbl/cielo.htm>
Space Science Institute: <http://ssibroker.colorado.edu/broker/PROFILES/Rosaly.pdf>

Selected Outreach Talks:

National Science Teachers’ Association National Convention, Anaheim, April 2006, “*Planetary
Volcanism Through the Eyes of a Scientist*”.
Speaker, Bright STaRS Symposium, American Geophysical Union Fall Meeting, Dec 2005.
Public talks in Morocco, sponsored by *Grove of Hope*, “*Volcanism in the Solar System*”, November
2005
Keynote speaker, Festival of Flight, California Science Center, October 2005.
Speaker in public forum “*Saturn and its Moons: A Ring-side View from Cassini Huygens*”.
Geological Society of America, October 2005
Los Angeles Astronomical Society, July 2005
Explorers Club, Southern California Chapter, “*Volcanoes on Earth, Io, and Titan*”, May 2005
Caltech Prefreshmen Weekend, “*Cassini at Titan*”, April 2005
Los Angeles Adventurers Club, “*Volcano Adventures on Earth and the Planets*”, April 2005
National Science Teachers’ Association National Convention, “*The Cassini Mission to Saturn and
Titan*” April 2005
JPL Advisory Council for Women, Science Career Panel Discussion, March 2005
Math-Science Conference for Eight Grade Young Women, University of Redlands, January 2005.
Air Adventurers Club, January 2005
Society of Women Adventurers, Los Angeles, January 2005
Brenner Club lecture, Caltech, “*Volcanoes on Earth and the Solar System*”, November 2004
Panel Discussion: Making a Difference at JPL, the Hispanic Contribution on MER and Cassini.
JPL, September 2004
Earth to Sky NASA Explorer Institute (Professional Development for Park Service Rangers),
NASA AMES, October 2004
Adventurers Club of Los Angeles, June 2004
California Association for the Gifted Conference, February 2004, Anaheim, California
Von Karman Lecture Series, “*The Worlds of Jupiter*”, JPL, September 2003
NASA TV’s “*Goodbye Galileo*” science panel (with T.V. Johnson and A. Ingersoll), Sept. 2003
CSU-NASA Teacher-Scholar Summer Institute (TSSI) in Long Beach June 17-18, 2003
Mount Wilson Observatory Association, March 2003
Dinner Speaker, American Institute of Aeronautics and Astronautics, April 2004
Paul Revere Middle School, Brentwood, June 2004

Public Lecture in Coimbra, Portugal, June 2002
Von Karman Lecture Series, “*Io, a World of Great Volcanoes*”, JPL, July 2002
Santa Monica College's John Drescher Planetarium, February 2002
Keynote Speaker, “*Expanding your Horizons Conference*”, Visalia, California, 2002
Adventurers Club, Los Angeles, keynote speaker at Night of High Adventure, October 2001
Adventurers Club, Los Angeles, August 2001
Speaker at Adelante Mujer Latina conference, Pasadena, April 1995
Speaker for the Society of Women Engineers, USC, April 1995
Speaker at the Colima Astronomical Society, January 1994, Colima Mexico.
Keynote speaker at the Escuela Normal Superior de Jalisco, April 1994
Speaker at the Colima Astronomical Society, January 1992, Colima Mexico.

Press conferences:

Press Conference, Division for Planetary Sciences meeting, September 2005
Press Conference, European Geosciences Union Meeting, May 2005
Press Conference at DPS meeting, November 2001
Galileo Press Conference at AGU, December 2001
NASA Space Science Update (press conference), November 1999
Galileo Press Conference at AGU, December 1999
Galileo Press Conference at AGU, December 1996
Galileo Press Conference at AGU, May 2000
Press Conference at DPS meeting, October 2000

Other activities:

Co-convenor for American Geophysical Union session “Earth and Planetary Sciences Education and Public Outreach in Developing Countries: Local and International Initiatives”, 2005

E/PO proposal PI, “Exploring Io”, under the Jupiter System Data Analysis Program, 1999-2001, produced video with students of the College of the Sequoias, Tulare County, California.

Co-producer, “Solar System Explorers Wanted” video, NASA’s Solar System Exploration E/PO Forum, 2000

Science Leader, Galileo Educator Fellow Training Workshop at Yellowstone, September 1999

Science Judge for National Science Bowl, L.A. County Regional Competition, 1990-1992

Popular-level writing: articles, two books (see publications list)

Lecturer in several Girl Scout Leader training workshops. Featured on cover of Girl Scout/NASA collaboration brochure.

Mentor/project advisor for Sarah Barker, sophomore at Oregon Episcopal School, Portland, 2003.

MAIN PUBLICATIONS:

1. Books:

Lopes, R.: *The Volcano Adventure Guide*. Cambridge University Press (published January 2005). A popular-level book about volcanoes on Earth and how best to visit and learn about them. The book includes an introduction to volcanology.

Lopes, R. and T.K. Gregg (Eds): *Volcanic Worlds: Exploring the Solar System Volcanoes*. Foreword by Sally Ride. Praxis Publishing Company (Springer-Verlag, published September 2004). Undergraduate-level book reviewing volcanism in the Solar System in terms of bodies (e.g. Moon, Venus, Io) and processes (e.g. cryovolcanism, volcano/ice interactions). Authors of individual chapters are Rosaly Lopes, Tracy Gregg, Ellen Stofan, Joy Crisp, Susan Sakimoto, Mary Chapman, Gudrun Larsen, Kathy Cashman, Susan Kieffer, Lisa Gaddis, and Louise Prockter.

Lopes, R. and J.R. Spencer (Eds): *Io After Galileo*. Praxis Publishing Company (Springer-Verlag), *in press*. Research-level book on Io focusing on results from the Galileo mission.

Carroll, Michael and Rosaly Lopes: *Alien Volcanoes*. John Hopkins University Press, *in press*. Popular-level book about volcanoes on Earth and in the Solar System.

Lopes, R. "Volcanoes: A Beginner's Guide". OneWorld Publications, Oxford, England. In preparation. Undergraduate-level book about volcanoes on Earth and the solar system.

Fagents, S.A., T.K.P. Gregg, and R.M.C. Lopes (Editors). *Modeling Volcanic Processes: The Physics and Mathematics of Volcanism*. Cambridge University Press, in preparation. Graduate-level book on physical volcanology.

2. Referred papers, book chapters, and encyclopedia articles

2006:

Lopes, R.M.C., K.L. Mitchell, E.R. Stofan, J. I. Lunine, R. Lorenz, F. Paganelli, R. L. Kirk, C.A. Wood, S.D. Wall, L.E. Robshaw, A.D. Fortes, C.D. Neish, J. Radebaugh, E. Reffet, S. J. Ostro, C. Elachi, M. D. Allison, Y. Anderson, R. Boehmer, G. Boubin, P. Callahan, P. Encrenaz, E. Flamini, G. Francescetti, Y. Gim, G. Hamilton, S. Hensley, M. A. Janssen, W. T. K. Johnson, K. Kelleher, D. O. Muhleman, G. Ori, R. Orosei, G. Picardi, F. Posa, L. E. Roth, R. Seu, S. Shaffer, L. A. Soderblom, B. Stiles, S. Vetrella, R.D. West, L. Wye, and H. A. Zebker (2006). Cryovolcanic Features on Titan's Surface as Revealed by the Cassini Titan Radar Mapper. Submitted to *Icarus*.

Howell, R.R., and R.M.C. Lopes (2006). The Nature of the Volcanic Activity at Loki: Insights from Galileo NIMS and PPR Data. Submitted to *Icarus*.

Lopes, R. (2006). Titan: Cassini Reveals a New World. In: "Space Exploration 2007", edited by B. Harvey, Praxis-Springer, *in press*.

Stofan E.R., J.I. Lunine, R. Lopes, F. Paganelli, R.D. Lorenz, C.A. Wood, R. Kirk, S. Wall, C. Elachi, L.A. Soderblom, S. Ostro, M. Janssen, J. Radebaugh, L. Wye, H. Zebker, Y. Anderson, M. Allison, R. Boehmer, P. Callahan, P. Encrenaz, E. Flamini, G. Francescetti, Y. Gim, G. Hamilton, S. Hensley, W.T.K. Johnson, K. Kelleher, D. Muhleman, G. Picardi, F. Posa, L. Roth, R. Seu, S. Shaffer, B. Stiles, S. Vetrella, and R. West (2006). Mapping of Titan: Results from the First Two Titan Radar Passes. Submitted to *Icarus*.

Lorenz, R.D., S. Wall, J. Radebaugh, G. Boubin, E. Reffet, M. Janssen, E. Stofan, R. Lopes, R. Kirk, C. Elachi, J. Lunine, F. Paganelli, L. Soderblom, C. Wood, L. Wye, H. Zebker, Y. Anderson, S. Ostro, M. Allison, R. Boehmer, P. Callahan, P. Encrenaz, G.G. Ori, G. Francescetti, Y. Gim, G. Hamilton, S. Hensley, W. Johnson, K. Kelleher, K. Mitchell, D. Muhleman, G. Picardi, F. Posa, L. Roth, R. Seu, S. Shaffer, B. Stiles, S. Vetrella, E. Flamini, and R. West. The Sand Seas of Titan: Cassini RADAR Observations of Equatorial Fields of Longitudinal Dunes. *Science*, *in press*.

Ostro, S.J., R. D. West, M.A. Janssen, R.D. Lorenz, H.A. Zebker, G.J. Black, J.I. Lunine, L.C. Wye, R. M. Lopes-Gautier, S.D. Wall, C. Elachi, S. Hensley, K. Kelleher, G. A. Hamilton, Y. Gim, Y.Z. Anderson, R.A. Boehmer, W. T. K. Johnson, and the Cassini RADAR Team. Cassini RADAR Observations of Enceladus, Tethys, Dione, Rhea, Iapetus, Hyperion, and Phoebe. *Icarus*, *in press*.

Lopes, R.M.C. (2005). Io, the Volcanic Moon. Submitted to *Encyclopedia of the Solar System*, (Editors: L. McFadden, P. Weissman, and T. Johnson), Academic Press.

Elachi, C.; S. Wall, M. Janssen, E. Stofan, R. Lopes, R. Kirk, R. Lorenz, J. Lunine, F. Paganelli, L. Soderblom, C. Wood, L. Wye, H. Zebker, Y. Anderson, S. Ostro, M. Allison, R. Boehmer, P. Callahan, P. Encrenaz, E. Flamini, G. Francescetti, Y. Gim, G. Hamilton, S. Hensley, W. Johnson, K. Kelleher, D. Muhleman, G. Picardi, F. Posa, L. Roth, R. Seu, S. Schaffer, B. Stiles, S. Vetrella, and R. West. Titan Radar Mapper Observations from Cassini's Ta and T3 Fly-bys. *Nature*, *in press*.

Spencer, J.R., J.C. Pearl, M. Segura, F.M. Flasar, A. Mamoutkine, P. Romani, B.J. Buratti, A.R. Hendrix, L.J. Spilker, R.M.C. Lopes. Cassini Finds Enceladus is Active: Background, and Composite Infrared Spectrometer (CIRS) Observations of a South Polar Hot Spot. *Science*, vol. 311, pp. 1401-1405.

Mitri, G., J.I. Lunine, A.P. Showman, and R. Lopes (2005). Resurfacing of Titan by Ammonia-water Cryomagma. Submitted to *Icarus*.

2005:

Elachi, C., M. Allison, Y. Anderson, R. Boehmer, P. Callahan, P. Encrenaz, E. Flamini, G. Francescetti, Y. Gim, G. Hamilton, S. Hensley, M. Janssen, W. Johnson, K. Kelleher, R. Kirk, R. Lopes, R. Lorenz, J. Lunine, D. Muhleman, S. Ostro, F. Paganelli, G. Picardi, F.

Posa, L. Roth, R. Seu, S. Shaffer, L. Soderblom, B. Stiles, E. Stofan, S. Vetrella, S. Wall, R. West, C. Wood, L. Wye, and H. Zebker (2005): Cassini RADAR's First View of the Surface of Titan. *Science*, 13, 970-974.

Lopes, R. and D. Williams: Io after Galileo. Invited review for *Reports on Progress in Physics*, Institute of Physics Publishing, 68, 303-340.

Williams, D.A., L.P. Kezthelyi, P.M. Schenk, M.P. Milazzo, R.M.C. Lopes, J.A. Rathbun, and R. Greeley. The Zamama-Thor Region of Io: Insights from a Synthesis of Mapping, Topography, & Galileo Spacecraft Data. *Icarus*, 177, 69-88.

2004:

Lopes, R., L. W. Kamp, W.D. Smythe, P. Mouginis-Mark, J. Kargel, J. Radebaugh, E. P. Turtle, J. Perry, D.A. Williams, R.W. Carlson, S. Douté (2004). "Lava Lakes on Io. Observations of Io's Volcanic Activity from Galileo during the 2001 Fly-bys. *Icarus*, 169/1, pp. 140-174.

McEwen, A.S. L. Kezthelyi, R. Lopes, P. Schenk, J. Spencer (2004). "The Lithosphere and Surface of Io". In: "*Jupiter: Planet, Satellites and Magnetosphere*" (Eds. F. Bagenal, W. McKinnon, T. Dowling), Cambridge University Press.

Douté, S., R. Lopes, L.W. Kamp, R.W. Carlson, B. Schmitt, and the Galileo NIMS Team (2004). Geology and Activity around Volcanoes on Io from the analysis of NIMS Spectral Images. *Icarus*, 169/1, 175-196.

Williams, D.A., E.P. Turtle, L.P. Kezthelyi, W.L. Jaeger, J. Radebaugh, M.P. Milazzo, A.S. McEwen, J.M. Moore, R.M.C. Lopes, and R. Greeley (2004). Geologic Mapping of the Culann-Tohil Region of Io from Galileo Imaging Data. *Icarus*, 169/1, pp. 80-97.

2003

Kargel, J.S., Carlson, R.W., Davies, A., Fegley Jr.B., Gillespie, A., Greeley, R., Howell, R.R., Jessup, K.L., Kamp, L., Keszthelyi, L., Lopes, R.M., MacIntyre, T.J., Marchis, F., McEwen, A.S., Milazzo, M., Perry, J., Radebaugh, J., Schaefer, L., Schmerr, N., Smythe, W.D., Spencer, J.R., Williams, D.A., Zhang, J., Zolotov, M.Y.: "Extreme Volcanism on Io: Latest Insights at the End of the *Galileo* Era". *EOS*, 84, no. 33, 2003.

2002:

Lopes, R.: Io. In: International Astronomical Union Triennial Report, Commission 16 (Physical Studies of the Planets and Satellites), published by the *International Astronomical Union*, 2002.

Douté S., R. Lopes, L.W. Kamp, R. Carlson. Dynamics and Evolution of SO₂ Gas Condensation around Prometheus-like Volcanic Plumes on Io as seen by the Near-Infrared Mapping Spectrometer. *Icarus*, 158, 460-482, 2002.

Williams, D., J. Radebaugh, L. Kezthelyi, A. McEwen, R. M.C. Lopes, S. Douté, R. Greeley. Geological Mapping of the Chaac-Camaxtli Region of Io from Galileo Imaging Data. *Journal Geophys. Res.* 107 (E9), 5068, doi:10.1029/2001JE001821, 2002

Lopes, R. (2002) Jupiter. In: Planetary Science and Astronomy, Space Sciences, *The Macmillan Science Library* (Ed: P. Dasch), Macmillan reference USA, pp. 76-81.

2001:

Lopes, R., L.W. Kamp, S. Douté, W.D. Smythe, R.W. Carlson, A.S. McEwen, P.E. Geissler, S.W. Kieffer, F.E. Leader, E. Barbinis, R. Mehlman, M. Segura, J. Shirley, L.A. Soderblom (2001). Io in the Near-Infrared: NIMS results from the Galileo fly-bys in 1999 and 2000. *J. Geophys. Res.*, vol. 106, no. E12, 33,053-33,078.

Douté, S., R. Lopes-Gautier, R. Carlson, B. Schmitt, L. Soderblom, Galileo NIMS Team: Mapping the SO₂ Frost on Io by the Modeling of NIMS Hyperspectral Images. *Icarus*, 149, 107-132, 2001.

Geissler, P., A. McEwen, C. Phillips, D. Simonelli, R. Lopes-Gautier, S. Doute' (2001). Galileo Imaging of SO₂ frosts on Io. *Journal Geophys. Res.*, vol. 106, no. E12, 33,053-33,078.

Williams, D.A., R. Greeley, R. Lopes-Gautier, S. Douté (2001): Evaluation of Sulfur Flow Emplacement on Io from Galileo data and numerical modeling. *Journal Geophys. Res.*, vol. 106, no. E12, 33,161-33,174.

Davies, A., L. Keszthelyi, D. Williams, C. Phillips, A. McEwen, R. Lopes, W. Smythe, L. Kamp, L. Soderblom, R. Carlson. Thermal signature, eruption style and eruption evolution at Pele and Pillan on Io. *Journal Geophys. Res.*, 33,079-33,104, 2001.

2000:

Lopes-Gautier, R., S. Douté, W.D. Smythe, L.W. Kamp, R.W. Carlson, A.G. Davies, F.E. Leader, A.S. McEwen, P.E. Geissler, S.W. Kieffer, L. Keszthelyi, E. Barbinis, R. Mehlman, M. Segura, J. Shirley, L.A. Soderblom: A Close-Up Look at Io in the Infrared: Results from Galileo's Near-Infrared Mapping Spectrometer. *Science*, 288, 1201-1204, 2000.

Kieffer, S.W., R. Lopes-Gautier, A.S. McEwen, L. Keszthelyi, R. Carlson: Prometheus, the Wanderer. *Science*, 288, 1204-1208, 2000.

McEwen, A.S., M.J.S. Belton, H.H. Breneman, S.A. Fagents, P. Geissler, R. Greeley, J.W. Head, W.L. Jaeger, T.V. Johnson, L. Keszthelyi, K.P. Klaasen, R. Lopes-Gautier, K.P. Magee, M.P. Milazzo, J.M. Moore, R.T. Pappalardo, C.B. Phillips, J. Radebaugh, G. Schubert, P. Schuster, D.P. Simonelli, R. Sullivan, P.C. Thomas, E.P. Turtle, D.A. Williams. High-Resolution Views of Jupiter's Moon Io. *Science*, 1193-1198, 2000.

McEwen, A.S., R. Lopes-Gautier, L. Keszthelyi, and S.W. Kieffer. Extreme volcanism on Jupiter's moon Io. In: *Environmental Effects on Volcanic Eruptions: From Deep Oceans to Deep*

Space, Eds: J. Zimbelman and T. Gregg. Plenum, pp.179-204, 2000.

Davies, A.G.; R. Lopes-Gautier, W. Smythe, and R. Carlson. Silicate cooling model fits to Galileo NIMS data of volcanism on Io. *Icarus*, 148, 211-225, 2000.

1999:

Lopes-Gautier, R.; A.S. McEwen, W. Smythe, P. Geissler, L. Kamp, A.G. Davies, J. R. Spencer, R. Carlson, F.E. Leader, R. Mehlman, L. Soderblom, and the Galileo NIMS and SSI Teams. Hot Spots on Io: Global Distribution and Variations in Activity. *Icarus*, vol.140, no. 2, pp. 243-264, 1999.

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