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- 2015– Editor (chief), *Enceladus & the Icy Moons of Saturn*, U. of Ariz. Press, in press.
- 2013– Co-Investigator, New Horizons project
- 2012– Participating Scientist – Cassini Project
- 2010– Participating Scientist – Dawn mission, at Vesta & Ceres
- 2007– Team Member - New Horizons Pluto Encounter Sequencing Team
- 2005–2006 Team Member - New Horizons Jupiter Encounter Sequencing Team
- 1999–2003 Affiliate Team Member - Galileo Solid State Imaging Team
- 2007 Outer Planets Flagship Review Panel
- 2003– Scientific Editor, Lunar and Planetary Institute Bulletin
- 2003–2007 Chair - Planetary Cartography & Geologic Mapping Working Group
- 1999–2000 Pluto-Kuiper Belt Mission Selection Panels
- 1992–99, 2006 Advisor, LPI Summer Intern Program
- 1991– Staff Scientist, Lunar and Planetary Institute, Houston
- 1988 Ph.D., Geology, Washington University, Saint Louis, MO
- Summ. 1979 NASA Planetary Geology Intern, Voyager Flight Science Office, JPL

Book Projects

- Schenk, P., *Atlas of the Galilean Satellites*, Cambridge University Press, 2010.
- Schenk, P., O. White, J. Moore, and P. Byrne, *Geology of Saturn's Other Icy Moons*, in *Enceladus and the Icy Moons of Saturn*, Univ. Arizona Press, in press, 2017.
- Schenk, P., and E. Turtle, *Europa's impact craters: Probes of the interior*, in *Europa*, Univ. Arizona Press, 2009.
- Schenk, P., Chapman, C., Zahnle, K., Moore, J., *Ages and Interiors, The cratering record of the Galilean Satellites*, in *Jupiter*, Cambridge Press, pp. 427-456, 2004.

Refereed Articles

- Moore, J., P. Schenk, and 143 others, The geology of Pluto and Charon through the eyes of New Horizons, *Science*, 351, 1284-1294, 2016.
- Hiesinger, H., P. Schenk, and 47 others, Cratering on Ceres: Implications for its crust and evolution. *Science* 353 (6303); doi: 10.1126/science.aaf4759, 2016.
- Bland, M., W.B. McKinnon, and P. Schenk, Constraining the heat flux between Enceladus' tiger stripes: Numerical modeling of funiscular plains formation, *Icarus*, 260, 232-242, 2015.
- Kirchoff, M., and P. Schenk, Dione's resurfacing history as determined from a global impact crater database, *Icarus*, 256, 78-88, 2015.
- Schenk, P., and 12 others, The geologically recent giant impact basins at Vesta's south pole, *Science*, 336, 694-697, 2012.
- Schmidt, B., Blankenship, D., Patterson, G., Schenk, P., Active formation of 'chaos terrain' over shallow subsurface water on Europa, *Nature*, 479, 502-505 2011.
- Schenk, P., D. Hamilton, R. Johnson, W. McKinnon, J. Schmidt, M Showalter, Plasma, plumes, & rings: Global color patterns on Saturn's midsize icy satellites, *Icarus*, 211, 740-757, 2011.
- Schenk, P., Slope characteristics of Europa: Constraints for landers and radar sounding, *Geophys. Res. Lett.*, 36, CiteID L15204, 2009.

- Schenk, P., and W. McKinnon, One-hundred-km-scale basins on Enceladus: Evidence for an active ice shell, *Geophys. Res. Lett.*, 36, CiteID L16202, 2009.
- Schenk, P., Matsuyama, I., and Nimmo, F., Evidence for true polar wander on Europa from global scale small circle depressions, *Nature*, 453, 368-371, 2008.
- Schenk, P., and Zahnle, K., On the negligible surface age of Triton, *Icarus*, 192, 135-149, 2007.
- Schenk, P., and D. Williams, A Potential Thermal Erosion Lava Channel on Io, *Geophys. Res. Lett.*, L23702, 2004.
- Nimmo, F., P. Schenk, Normal faulting on Europa, *J. Struct. Geol.*, 28, 2194-2203, 2006.
- Prockter, L., and P. Schenk, Origin and evolution of Castalia Macula, an anomalous young depression on Europa, *Icarus*, 177, 305, 2005.
- Schenk, P., and Bussey, B., Galileo Stereo Topography of the Lunar North Polar Region, *Geophys. Res. Lett.*, L23701, 2004.
- Schenk, P. M., Pappalardo, R. T., Topographic variations in chaos on Europa: Implications for diapiric formation, *Geophys. Res. Lett.*, 31, L16703, 2004.
- Schenk, P., R. Wilson, and A. Davies, Shield volcano topography and rheology of lava flows on Io, *Icarus*, 169, 98-110, 2004.
- Zahnle, K., Schenk, P., Levison, H., and Dones, L., Cratering rates in the outer solar system, *Icarus*, 163, 263-289, 2003.
- Schenk, P., Thickness constraints on the icy shells of the Galilean satellites from a comparison of crater shapes, *Nature*, 417, 419-421, 2002.
- Schenk, P., and F. Ridolfi, Morphology and scaling of ejecta deposits on icy satellites, *Geophys. Res. Lett.*, 29, 10.1029/2001GRL013512, 2002.
- Schenk, P., R. Wilson, H. Hargitai, A. McEwen, and P. Thomas, The mountains of Io: Global and geologic perspectives from Voyager and Galileo, *J. Geophys. Res.*, 106, 33201-33222, 2001.
- Zahnle, K., P. Schenk, S. Sobieszczyk, L. Dones, and H. Levison, Differential cratering of synchronously rotating satellites by ecliptic comets, *Icarus*, 153, 111-129, 2001.
- Schenk, P.M., W. McKinnon, D. Gwynn, and J. Moore, Flooding of Ganymede's resurfaced terrains by low-viscosity aqueous lavas, *Nature*, 410, 57-60, 2001.
- Schenk, P.M., and J.M. Moore, Stereo topography of the South Polar region of Mars: Volatile inventory & MPL landing site, *J. Geophys. Res.* 105, 24529-24546, 2000.
- Schenk, P.M., and M. H. Bulmer, Origin of mountains on Io by thrust faulting and large-scale mass movements, *Science* 279, 1514-1518, 1998.
- Schenk, P.M., E. Asphaug, W.B. McKinnon, H.J. Melosh, and P. Weissman, Cometary nuclei and tidal disruption: The geologic record of crater chains on Callisto and Ganymede, *Icarus* 121, 249-274, 1996.
- Schenk, P.M., Central pit and dome craters: Exposing the interiors of Ganymede and Callisto, *J. Geophys. Res.* 98, 7475-7498, 1993.
- Schenk, P.M., Ganymede and Callisto: Complex crater formation and planetary crusts, *J. Geophys. Res.* 96, 15635-15664, 1991b.
- Schenk, P.M., Crater formation and modification on the icy satellites of Uranus & Saturn: Depth/diameter & central peak occurrence, *J. Geophys. Res.* 94, 3812-3832, 1989.
- Schenk, P.M., and W.B. McKinnon, Fault offsets and lateral crustal movement on Europa: Evidence for a mobile ice shell, *Icarus* 79, 75-100, 1989.