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MIHÁLY HORÁNYI - VITA & LIST OF PUBLICATIONS

OFFICE ADDRESS:

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PERSONAL:

Born September 16, 1955, Budapest, Hungary
US citizen
Married, three children

EDUCATION:

Ph.D. (Space Physics) Loránd Eötvös University, Budapest, 1982
M.S. (Nuclear Physics) Loránd Eötvös University, Budapest, 1980

PROFESSIONAL EXPERIENCE:

Director, NASA Lunar Science Institute: Colorado Center for Lunar Dust and Atmospheric Studies, 2009 -

Associate Chair for Graduate Studies
Physics Department, University of Colorado, 2005–2006

Professor
Physics Department, University of Colorado, 2003–

Associate Professor
Physics Department, University of Colorado, 1999–2003

Research Associate
Laboratory for Atmospheric and Space Physics, University of Colorado, 1992–

Research Associate
Lunar and Planetary Laboratory, University of Arizona, 1989–1992

Visiting Scientist
Center for Space Research and Radio Astronomy, Cornell University, 1989

Research Scientist
Supercomputer Computational Research Institute, Florida State University, 1985–1989

Visiting Research Associate
Space Physics Research Laboratory, University of Michigan, 1984–1985

Research Associate

Central Research Institute for Physics, Budapest, 1980–1984

RESEARCH INTEREST:

Space and laboratory plasmas. Electrodynamic processes and their role in the origin and evolution of the solar system. Comets, planetary rings, plasma surface interactions at moons and asteroids. Aerosol charging, in situ and remote observations of dust. Dusty plasma laboratory experiments and space hardware development.

MEMBERSHIP:

American Physical Society

American Geophysical Union

Elected Member, URSI (Commission H)

American Astronomical Society, Division of Planetary Sciences

American Association for the Advancement of Science

PROFESSIONAL ACTIVITIES:

Organizer: Second Workshop on the Physics of Dusty Plasmas, Tallahassee, FL 1987

Organizer: Supercomputers for High Schools Competition, ETS, Princeton, NJ 1988

Organizer: Seventh Workshop on the Physics of Dusty Plasmas, Boulder, CO 1998

Co-Investigator: ‘Rosetta Plasma Consortium’ (PI: K. Glaßmeier, Germany) 1997

Co-Investigator: ‘Galileo Dust Detector System’ (PI: E. Grün, Germany), 1998-

Co-Investigator: ‘Cassini Cosmic Dust Analyzer’ (PI: E. Grün, Germany), 2000-

Principal Investigator: ‘AIM Mission Cosmic Dust Experiment (NASA SMEX)’, 2002-

Principal Investigator: ‘New Horizons Pluto Mission Student Dust Counter’, 2002-

Principal Investigator: ‘Lunar Dust EXperiment (LDEX)’, 2009 -

Principal Investigator: ‘Colorado Center for Lunar Dust and Atmospheric Studies (CCLDAS)’, 2009 -

Associate editor: JGR - Space Physics 1997–2001

Member: NASA Discovery Program Science Review Panel, 1996

Member: NASA Advisory Committee on Solar System Exploration, 1999

Member: NASA Micro-Gravity Fluids Science Review Panel, 2000

Member: NASA Planetary Atmospheres Program Science Review Panel, 2000

Member: NASA Planetary Geology and Geophysics Program Science Review Panel, 2000

Member: NSF Planetary Astronomy Program Science Review Panel, 2003

Member: NASA Micro-Gravity Fluids Science Review Panel, 2004

Member: National Academy of Sciences Review ‘Plasma Physics of the Local Cosmos’, 2004

Member: Lunar Dust Toxicity Project Review Board, 2007–2008

Member: Lunar Atmosphere and Dust Explorer (LADEE) Science Definition Team, 2008

Member: Lunar Advanced Science and Exploration Research (LASER) Review Panel, 2009

AWARDS:

Fellow, American Physical Society, 2003

CU Boulder, ΣΠΣ Physics Professor of the Year, 2005

CU Boulder, Award for Excellence in Research, Scholarly, and Creative Work, 2006
Humboldt Research Award, 2006
Fellow, American Geophysical Union, 2008

INVITED TALKS (since 1996):

‘Dusty Plasmas in the Early/Present Solar System’, Workshop on the Formation of Stars and Planetary Systems, Munich, Germany (2/96)
‘Charged dust dynamics in the Jovian Magnetosphere’, Int. Conf. on the Physics of Dusty Plasmas, Goa, India (10/96)
‘Dust in the Earth’s magnetosphere’, AGU, Baltimore (5/97)
‘Dusty Plasmas in Space’, Strongly Coupled Coulomb Systems, Boston, Mass. (8/97)
‘Dusty Plasmas in the Early Solar System’, AGU, San Francisco, CA (12/97)
‘Dusty Plasmas in Magnetospheres’, Plasma Astrophysics Meeting, Lindau, Germany (5/98)
‘Dust Input into the Earth’s Atmosphere’, CEDAR, Boulder (6/98)
‘Dusty Plasmas in Space’, Latin American Space Geophysics, San Jose, Costa Rica (11/98)
‘Dusty Plasmas in the Mesosphere’, URSI, Boulder, CO (1/99)
‘Dusty Plasma Simulations at Jupiter’, URSI, Boulder, CO (1/99)
‘Jovian Dust Streams’, Int. Conf. on the Physics of Dusty Plasmas, Hakone, Japan (5/99)
‘Dusty Plasmas’, Int. Conf. on the Physics of Dusty Plasmas, Hakone, Japan (5/99)
‘Dusty Plasmas in Magnetospheres’, IAGA, Birmingham, UK (7/99)
‘Dust Plasma Interaction in Planetary Magnetospheres’, MOP, Paris, France (8/99)
‘Dusty Plasmas in Space’, APS Div. Plasma Science, Seattle, WA (11/99)
‘Charged Dust Dynamics’, Colloidal Plasmas, Trieste, Italy (7/00)
‘Dust Plasma Interactions in Planetary Magnetospheres’, Symposium for E. Grün’s 60th birthday, Heidelberg, Germany (4/2002)
‘Dusty Plasmas in the Solar System’, Int. Conf. on the Physics of Dusty Plasmas, Durban, South Africa (5/2002)
‘Dusty Plasma Effects at Jupiter and Saturn’, EGS, Nice, France (4/2003)
‘Dust Plasma Interaction in Saturn’s Magnetosphere’, Saturn Universe: Cassini Workshop, Capri, Italy, 2004
‘Dusty Plasma Effects in Saturn’s Rings’, APS, U. of Colorado, Colloquium, 2004
‘Dusty Plasmas’, HAO/NCAR Colloquium, Boulder, 2004
‘Dusty Plasma Effects on the surfaces of the Moon and Mars’, AGU, San Francisco (12/2004)
‘Dusty Plasmas in the Solar System’, EGU, Vienna, Austria (4/2005)
‘Dusty Plasmas in Saturn’s magnetosphere: Cassini observations’, Int.Conf. on the Physics of Dusty Plasmas, Orleans, France (6/2005)
‘Dusty Plasmas in Space’, IPELS, Tromso, Norway (8/2005)
‘Dusty Plasmas at Saturn’, Symposium for G.E. Morfill’s 60th birthday, Munich, Germany (8/2005)
‘Planetary Rings’, Dust in Planetary Systems, Hawaii (9/2005)
‘The Student Dust Counter’, AGU (12/2005)
‘Cosmic Dust Input into the Atmosphere of the Earth’, AGU (12/2005)
‘Dusty Plasma Effects on Surfaces in Space’, COSPAR, Beijing, China (7/2006)
‘The AIM Mission’, COSPAR, Beijing, China (7/2006)

‘Dusty Plasmas in Planetary Rings’, European Planetary Science Congress, Berlin, Germany (9/2006)
‘Dusty Plasmas on the Lunar Surface’, AGU (12/2006)
‘Dusty Plasmas on the Lunar Surface’, Lunar Exploration Architecture Workshop, Tempe, AZ (2/2007)
‘Dusty Plasmas in the Solar System’, Max Planck Institute for Physics, München, Germany (4/2007)
‘Dusty Plasmas in Planetary Rings’, University of Jena, Germany (6/2007)
‘Dusty Plasma Effects in Saturn’s Rings’, University of Kiel, Germany (6/2007)
‘Surface Plasma Interactions on the Moon’, ICPDP-5, Azores, Portugal (5/2008)
‘Dusty Plasmas on the Lunar Surface’, University of Kansas, Lawrence, KS (11/2008)
‘Dusty Plasmas in the Solar System’, Rice University, Houston, TX (11/2008)
‘Charging of Planetary Rings’, AGU (12/2008)

REFEREED PUBLICATIONS:

- 1, T.I. Gombosi, M. Horányi, T.E. Cravens, A.F. Nagy, C.T. Russell, The role of charge exchange in the solar wind absorption by Venus, *Geophys. Res. Lett.* 8, 1265, 1981
- 2, M. Horányi, K. Kecskemety, Percolation theory and the origin of comets, in: *Cometary Exploration*, ed: T.I. Gombosi, 1, 21, 1983
- 3, M. Horányi, T.I. Gombosi, T.E. Cravens, K. Kecskemety, A.F. Nagy, The friable sponge model of a cometary nucleus I in: *Cometary Exploration*, ed: T.I. Gombosi, 1, 59, 1983
- 4, T.I. Gombosi, M. Horányi, K. Kecskemety, T.E. Cravens, A.F. Nagy, Charge exchange in the solar wind cometary interaction, *Astrophys. J.* 268, 889, 1983
- 5, C.T. Russell, T.I. Gombosi, M. Horányi, T.E. Cravens, A.F. Nagy, Charge exchange in the magneto-sheaths of Venus and Mars, *Geophys. Res. Lett.* 10, 163, 1983
- 6, M. Horányi, K. Kecskemety, Cometary dust, *Asteroids, Comets, Meteors*, Uppsala 269, 1983
- 7, M. Horányi, T.I. Gombosi, T.E. Cravens, K. Kecskemety, A.F. Nagy, Korosmezey, The friable sponge model of a cometary nucleus, *Astrophys. J.* 278, 449, 1984
- 8, M. Horányi, D.A. Mendis, Trajectories of charged dust grains in the cometary environment, *Astrophys. J.* 294, 357, 1985
- 9, M. Horányi, D.A. Mendis, The dynamics of charged dust grains in the tail of comet Giacobini-Zinner, *J. Geophys. Res.* 355, 91, 1986
- 10, M. Horányi, D.A. Mendis, Space debris: Electrodynamic effects, *Adv. in Space Res.* 6, 127, 1986
- 11, T.I. Gombosi, M. Horányi, Modeling of dust halo formation following comet outbursts, *Geophys. Res. Lett.* 13, 299, 1986
- 12, M. Horányi, D.A. Mendis, The effects of electrostatic charging on the dust distribution at Halley’s comet, *Astrophys. J.* 307, 800, 1986
- 13, T.I. Gombosi, M. Horányi, Time-dependent numerical modeling of dust halo formation at comets, *Astrophys. J.* 311, 491, 1986

- 14**, M. Horányi, D.A. Mendis, The effect of a sector boundary crossing on the cometary dust-tail, *Earth, Moon and Planets* 37, 71, 1987
- 15**, M. Horányi, T.E. Cravens, J.H. Waite, Jr., Jovian ion precipitation and related aeronomy, *J. Geophys. Res.* 93, 7251, 1988
- 16**, M. Horányi, H.L.F. Houpis, D.A. Mendis, Charged dust in the Earth's magnetosphere, *Astronomy and Space Sci.* 144, 215, 1988
- 17**, M. Horányi, The distribution of charged dust in the Earth's magnetosphere, in: Outstanding problems in Solar System Exploration, *AGU Geophysical Monograph* 54, 457, 1989
- 18**, M. Horányi, C.K. Goertz, The coagulation of dust particles in a plasma, *Astrophys. J.* 361, 155, 1990
- 19**, M. Horányi, J.A. Burns, M. Tatrallyay, J.G. Luhmann, Towards Understanding the Fate of Dust Lost from the Martian Satellites, *Geophys. Res. Lett.* 17, 853, 1990
- 20**, Lu Gan, T.E. Cravens and M.Horányi, Electrons in the Ionopause Boundary Layer of Venus, *J. Geophys. Res.* 95, 19023, 1990
- 21**, M. Horányi, The spatial distribution of sub-micron sized debris in the terrestrial magnetosphere, *Adv. in Space Res.* 10, 403, 1990
- 22**, D.A. Mendis, M.Horányi, Dust-Plasma Interaction in the Cometary Environment, in: Cometary Plasma Processes, *AGU Monograph* 61, 17, 1991
- 23**, M.Horányi, D.A.Mendis, The Electrodynamics of Charged dust in the Cometary Environment, in: COMETS, eds: R.Newburn, M. Neugebauer, J. Rahe, Kluwer Academic Publishers, 1991
- 24**, M. Horányi, M.Tatrallyay, A. Juhasz, J.G. Luhmann, The Dynamics of Sub-micron-sized Dust Particles Lost from Phobos, *J. Geophys. Res.* 96, 11283, 1991
- 25**, M.Horányi, J.A. Burns, Charged Dust Dynamics: Orbital Resonances Due to Planetary Shadows, *J. Geophys. Res.* 96, 19283, 1991
- 26**, L.L. Hood and M. Horányi, Gas Dynamic Heating of Chondrule Precursor Grains in the Solar Nebula, *Icarus* 93, 259, 1991
- 27**, J.L. Lunine, S. Engel, B. Rizk and M.Horányi, Sublimation and Reformation of Icy Grains in the Primitive Solar Nebula, *Icarus* 94, 333, 1991
- 28**, M. Horányi, J.A. Burns, D. Hamilton, The Dynamics and Origin of Saturn's E ring, *Icarus* 97, 248, 1992
- 29**, M.Tatrallyay, M.Horányi, A. Juhasz, J.G. Luhmann, Sub-micron Sized Dust Grains in the Martian Environment, *Adv. in Space Res.* 12, (9)27, 1992
- 30**, A. Juhasz, M. Tatrallyay, G. Gevai and M. Horányi, The Density of Dust Halo Around Mars, *J. Geophys. Res.* 98, 1205, 1993
- 31**, E.Grün, H.A. Zook, M. Baguhl, A. Balogh, S.J. Bame, H. Fechtig, R. Forsyth, M.S. Hanner, M. Horányi, J. Kissel, B.-A. Lindblad, D. Linkert, G. Linkert, I. Mann, J.A.M. McDonnell, G.E. Morfill, J.L. Phillips, C. Polanskey, G. Schwehm, N. Siddique, P. Staubach, J. Svetska and A. Taylor, Ulysses discovers dust emissions from Jupiter and probable interstellar grains, *Nature* 362, 428, 1993

- 32**, M. Horányi, E. Grün, G. Morfill, Mechanism for the acceleration and ejection of dust grains from Jupiter's magnetosphere, *Nature* *363*, 144, 1993
- 33**, M. Horányi, E. Grün, G. Morfill, The dusty ballerina skirt of Jupiter, *J. Geophys. Res.* *98*, 21245, 1993
- 34**, L.L. Hood and M. Horányi, The Nebular Shock Wave Model for Chondrule Formation: One-Dimensional Calculations, *Icarus* *106*, 179, 1993
- 35**, R.M. Canup, J.E. Colwell and M. Horányi, Size distributions of Satellite Dust Ejecta: Effects of Radiation Pressure and Planetary Oblateness, *Icarus* *105*, 363, 1993
- 36**, M. Horányi and C.C. Porco, Where exactly are the arcs of Neptune?, *Icarus* *106*, 525, 1993
- 37**, M. Horányi, Dust in Planetary Magnetospheres, *Adv. Space. Res.* *13*, (10)231, 1993
- 38**, D.A. Mendis and M. Horányi, Dust-Plasma Interaction in the Environment of Solar System Bodies of Negligible Intrinsic Magnetization, *COSPAR Colloquia Series 4*, 187, 1993
- 39**, B. Walch, M. Horányi and S. Robertson, Measurement of the charging of individual dust grains in a plasma, *IEEE Trans. Plasma Science* *22*, 97, 1994
- 40**, E. Grün, D.P. Hamilton, M. Baguhl, R. Riemann, M. Horányi and C. Polanskey, Dust streams from comet Shoemaker-Levy 9, *Geophys. Res. Lett.* *21*, 1035, 1994
- 41**, M. Horányi, New Jovian ring?, *Geophys. Res. Lett.* *21*, 1039, 1994
- 42**, M. Horányi, G. Morfill, C.K. Goertz and E.H. Levy, Chondrule formation in lightning discharges, *Icarus* *114*, 174, 1994
- 43**, J.T. Clarke, R. Prange, G. Ballester, J. Trauger, D. Rego, R. Evans, K. Stapelfeldt, W.-H. Ip, F. Paresce, J.-C. Gerard, H. Hammel, M. Ballav, L. B. Jaffel, J.-L. Bertaux, D. Crisp, C. Emerich, W. Harris, M. Horányi, S. Miller, A. Storrs, H. Weaver, Hubble Space Telescope Far-Ultraviolet Imaging of Jupiter During the Impacts of Comet Shoemaker-Levy 9, *Science* *267*, 1302, 1994
- 44**, M. Horányi, B. Walch and S. Robertson, Electrostatic charging properties of lunar dust simulants JSC-1 and MLS-1, *Geophys. Res. Lett.* *22*, 2079, 1995
- 45**, B. Walch, M. Horányi and S. Robertson, Charging of Dust Grains in Plasma with Energetic Electrons, *Phys. Rev. Lett.* *75*, 838, 1995
- 46**, A. Juhasz and M. Horányi, The dust torus around Mars, *J. Geophys. Res.* *100*, 3277, 1995
- 47**, M. Horányi and S. Robertson, Chondrule Formation in Lightning Discharges: Status of Theory and Experiments, in: *Chondrules and the Protoplanetary Disk*, eds: R.H. Hewins, R.H. Jones and E.R.D. Scott, Cambridge University Press, New York, 1996
- 48**, J.E. Colwell and M. Horányi, Magnetospheric effects on micro-meteoroid fluxes, *J. Geophys. Res.* *101*, 2169, 1996
- 49**, E. Grün, M. Baguhl, D.P. Hamilton, R. Riemann, H.A. Zook, S. Dermott, H. Fechtig, B.A. Gustafson, M.S. Hanner, M. Horányi, K.K. Khurana, J. Kissel, M. Kivelson, B.A. Lindblad, D. Linkert, G. Linkert, I. Mann, J.A.M. McDonnell, G.E. Morfill, C. Polanskey, G.

Schwehm and R. Srama, Constrains from Galileo observations on the origin of Jovian dust streams, *Nature* 381, 395, 1996

50, M. Horányi, Charged Dust Dynamics in the Solar System, *Ann. Rev. Astron. Astrophys.* 34, 383, 1996

51, M. Horányi and T.E. Cravens, The Structure of the Jovian Ring, *Nature* 381, 293, 1996

52, E. Grün, D. Hamilton, R. Riemann, S. Dermott, H. Fechtig, B.A. Gustafson, M.S. Hanner, A. Heck, M. Horányi, J. Kissel, H. Kruger, B.A. Lindblad, D. Linkert, G. Linkert, I. Mann, J.A.M. McDonnell, G.E. Morfill, C. Polanskey, G. Schwehm, R. Srama, H.A. Zook, Dust Measurements During Galileo's Approach to Jupiter and Io encounter, *Science* 274, 399, 1996

53, M. Horányi, Unusual Dynamics of Circumplanetary Dust, in: *Inventory of the Solar System*, ed: T.W. Rettig and J.M. Hahn, Astronomical Society of the Pacific, 107, 129, 1996

54, E. Grün, P. Staubach, M. Baguhl, D.P. Hamilton, H.A. Zook, S. Dermott, B.A. Gustafson, H. Fechtig, J. Kissel, D. Linkert, G. Linkert, R. Srama, M. Hanner, C. Polanskey, M. Horányi, B.A. Lindblad, I. Mann, J.A.M. McDonnell, G.E. Morfill and G. Schwehm, South-North and Radial Traverses Through the Zodiacal Cloud, *Icarus* 129, 270, 1997

55, A. Juhasz and M. Horányi, Dynamics of charged space debris in the Earth's plasma environment, *J. Geophys. Res.* 102, 7237, 1997

56, E. Grün, H. Krüger, S. Dermott, H. Fechtig, A. L. Graps, B. A. Gustafson, D. P. Hamilton, M. S. Hanner, A. Heck, M. Horányi, J. Kissel, B. A. Lindblad, D. Linkert, G. Linkert, I. Mann, J. A. M. McDonnell, G. E. Morfill, C. Polanskey, G. Schwehm, R. Srama, H. A. Zook, Dust measurements in the Jovian magnetosphere, *Geophys. Res. Lett.* 24, 2171, 1997

57, M. Horányi, E. Grün, A. Heck, Modeling the Galileo dust measurements at Jupiter, *Geophys. Res. Lett.* 24, 2175, 1997

58, D.W. Rusch, C.E. Randall, M.T. Callan, M. Horányi, R.T. Clancy, S.C. Solomon, S.J. Oltmans, B.J. Johnson, U. Koehler, H. Claude and D. De Muer, A New Inversion for SAGE II Data, *J. Geophys. Res.* 103, 8465, 1998

59, M. Horányi, B. Walch, S. Robertson and D. Alexander, Electrostatic charging properties of Apollo-17 lunar dust, *J. Geophys. Res.* 103, 8575, 1998

60, J. Colwell, M. Horányi and E. Grün, Jupiter's Exogenic Dust Ring, *J. Geophys. Res.* 103, 20023, 1998

61, E. Grün, H. Kruger, A. L. Graps, D. P. Hamilton, A. Heck, G. Linkert, H. A. Zook, S. Dermott, H. Fechtig, B. A. Gustafson, M. S. Hanner, M. Horányi, J. Kissel, B. A. Lindblad, D. Linkert, I. Mann, J. A. M. McDonnell, G. E. Morfill, C. Polanskey, G. Schwehm, R. Srama, Galileo Observers Electro-magnetically Coupled Dust in the Jovian Magnetosphere, *J. Geophys. Res.* 103, 20011, 1998

62, J. Colwell, M. Horányi, E. Grün, Capture of Interplanetary and Interstellar Dust by the Jovian Magnetosphere, *Science* 280, 88, 1998

63, H. Krüger, E. Grün, M. Landgraf, M. Baguhl, S. Dermott, H. Fechtig, B. A. Gustafson, D. P. Hamilton, M. S. Hanner, M. Horányi, J. Kissel, B. A. Lindblad, D. Linkert, G. Linkert,

- I. Mann, J. A. M. McDonnell, G. E. Morfill, C. Polanskey, G. Schwehm, R. Srama, H. A. Zook, Three years of Ulysses dust data: 1993 to 1995, *Planetary and Space Science* 47, 363, 1999
- 64**, H. Krüger, E. Grün, P. Hamilton, M. Baguhl, S. Dermott, H. Fechtig, B. A. Gustafson, M. S. Hanner, M. Horányi, J. Kissel, B. A. Lindblad, D. Linkert, G. Linkert, I. Mann, J. A. M. McDonnell, G. E. Morfill, C. Polanskey, R. Riemann, G. Schwehm, R. Srama, H. A. Zook, Three years of Galileo dust data: II. 1993 to 1995, *Planetary and Space Science* 47, 85, 1999
- 65**, A. Juhasz , M. Horányi, Magnetospheric screening of cosmic dust, *J. Geophys. Res.* 104, 12577, 1999
- 66**, M. Horányi, S. Robertson, J. Gumbel, G. Witt, Simulation of rocket-born aerosol measurements, *Geophys. Res. Lett.* 26, 1537, 1999
- 67**, J.E. Howard, M. Horányi and G.R. Stewart, Global Dynamics of Charged Dust Particles in Planetary Magnetospheres, *Phys. Rev. Lett.* 83, 3 993, 1999
- 68**, E. Grün, M. Landgraf, M. Horányi, J. Kissel, H. Krüger, R. Srama, H. Svedhem and P. Withnell, Techniques for galactic dust measurements in the heliosphere, *J. Geophys. Res.* 105, 10403, 2000
- 69**, M. Horányi, Magnetospheres: Plasma-Ring/Dust Interactions, in: *Encyclopedia of Astronomy*, eds: E. Priest *et al.*, Institute of Physics and Macmillan Publishing, 2000
- 70**, J. E. Howard, H. R. Dullin, and M. Horányi, Stability of Halo Orbits, *Phys. Rev. Lett.* 84, 3244, 2000
- 71**, A. Graps, E. Grün, H. Svedhem, H. Krüger, M. Horányi, A. Heck and S. Lammers, Io as a source of the Jovian dust streams, *Nature* 405, 48, 2000
- 72**, M. Horányi, Dust Streams from Jupiter and Saturn, *Physics of Plasmas* 7, 3847, 2000
- 73**, A. A. Sickafoose, J. E. Colwell, M. Horányi and S. Robertson, Photo-electric Charging of Dust Particles in Vacuum, *Phys. Rev. Lett.* 84, 6034, 2000
- 74**, M. Horányi, S. Robertson, B. Smiley, J. Gumbel, G. Witt and B. Walch, Rocket-borne mesospheric measurement of heavy ($m \gg 10$ amu) charge carriers, *Geophys. Res. Lett.* 27, 3821, 2000
- 75**, M. Horányi, Dusty Plasmas in the Solar System, *Magyar Fizikai Szemle (Hungarian Physical Review)* 8, 285, 2000
- 76**, O. Kalashnikova, M. Horányi, G.E. Thomas and O.B. Toon, Meteoric smoke production in the atmosphere, *Geophys. Res. Lett.* 27, 3293, 2000
- 77**, M. Horányi and G. Lawrence, Charged dust currents on the surface of Mars, *Physica Scripta T89*, 130, 2001
- 78**, A.A. Sickafoose, J.E. Colwell, M. Horányi and S. Robertson, Experimental investigations on photoelectric and triboelectric charging of dust, *J. Geophys. Res.*, 106, 8343, 2001
- 79**, A. Fábian, C. Krauss, A. Sickafoose, M. Horányi, S. Robertson, Measurements of electrical discharges in Martian regolith simulant, *IEEE Trans. Plasma Sci.* 29, 288, 2001

- 80**, Z. Sternovsky, M. Horányi, S. Robertson, Charging of dust particles on surfaces, *J. Vac. Sci. Technol.* A19(5), 2533, 2001
- 81**, Z. Sternovsky, M. Horányi, S. Robertson, Collision cross section of small water clusters, *Phys.Rev. A*, 64, 023203, 2001
- 82**, H. Krüger, E. Grün, A. Graps, D. Bindschadler, S. Dermott, H. Fechtig, B.A. Gustafson, D.P. Hamilton, M.S. Hanner, M. Horányi, J. Kissel, B.A. Lindblad, D. Linkert, G. Linkert, I. Mann, J.A.M. McDonnell, G. Morfill, C. Polanskey, G. Schwehm, R. Srama, H.A. Zook, One year of Galileo dust data from the Jovian system: 1996, *Planetary and Space Sci.* 49, 1285, 2001
- 83**, A. Juhász and M. Horányi, Magnetospheric Effects on the Cosmic Dust Input into the Earth's Atmosphere, in: *Accretion of Extraterrestrial Matter Throughout Earth's History*, eds: B. Peucker-Ehrenbrink and B. Schmitz, Kluwer Academic/Plenum Publishers, 93, 2001
- 84**, H. Krüger, E. Grün, M. Landgraf, S. Dermott, H. Fechtig, B.A. Gustafson, D.P. Hamilton, M.S. Hanner, M. Horányi, J. Kissel, B.A. Lindblad, D. Linkert, I. Mann, J.A.M. McDonnell, G.E. Morfill, C. Polanskey, G. Schwehm, R. Srama and H. Zook, Four Years of Ulysses Dust Data 1996-1999, *Planetary and Space Sci.* 49, 1303, 2001
- 85**, J.E. Howard, M. Horányi, Nonkeplerian Dust Dynamics at Saturn, *Geophys. Res. Lett.* 28, 1907, 2001
- 86**, A. Juhász and M. Horányi, Saturn's E ring: A dynamical approach, *J. Geophys. Res.*, 107 (A6), 1066, 2002
- 87**, A.A. Sickafoose, J.E. Colwell, M. Horányi, S. Robertson, Experimental Levitation of Dust Grains in a Plasma Sheath, *J. Geophys. Res.*, 107 (A11), 1408. 2002
- 88**, Z. Sternovsky, A.A. Sickafoose, J.E. Colwell, S. Robertson, M. Horányi, Contact Charging of Lunar and Martian dust simulants, *J. Geophys. Res.*, 107 (E11), 5105, 2002
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