Hannu Koskinen
Institutionen för fysik
Hannu Koskinen / Ansvarig forskare

Postadress:
PL 64 (Gustaf Hällströmin katu 2)
C227
HELSINGIN YLIOPISTO
Finland

E-post: Hannu.E.Koskinen@helsinki.fi
Telefon: +358-294150675
http://www.helsinki.fi/~hejkoski/

Curriculum Vitae

Updated January 15, 2017

Hannu Erkki Juhani Koskinen
Born January 7, 1954, Keuruu, Finland

University degrees

- *Masterof Science*, University of Helsinki, Helsinki, Finland, April 5, 1979
- *Licentiate of Philosophy*, University of Helsinki, Helsinki, Finland, May 5, 1983
- *Doctor of Philosophy*, Uppsala University, Uppsala, Sweden, November 20, 1985
- *Docent in Space Physics* at the University of Helsinki, June 14, 1989.

Present position

- *Professor in Space Physics* at the Department of Physics of the University of Helsinki, from August 1, 1997

Director of the Department of Physics, from January 1, 2014

Previous professional positions

- *Director of the Division of Geophysics and Astronomy*, January 1, 2010 –December 31, 2013
- *Director of Kumpula Space Centre*, January 1, 2006 – April 25, 2014
- *Senior Scientist* funded by the Academyof Finland, August 1, 2008 – July 31, 2009.
- *Head of the Space Research Unit* of the Finnish Meteorological Institute,Helsinki, October 1, 2005 – September 30, 2006. (On leave from the Universityof Helsinki)
- *Head of the Space Physics Division / Research Group,* Finnish Meteorological Institute, 1991–1997
- *Senior Research Scientist*, Finnish Meteorological Institute, Helsinki, 1987 –1991.
- *Research Assistant / Associate Scientist*, Uppsala Ionospheric Observatory, Sweden, 1981–1987.

Scientific work at other institutes

- Cornell University, School of Electrical Engineering, Ithaca, NY, U.S.A., June 21 – July 9, 1982
- Massachusetts Institute of Technology, Center for Space Research, Cambridge, MA, U.S.A., as a Visiting Scientist, November 9, 1984 – March 31, 1985
- Laboratory of Atmospheric and Space Physics, University of Colorado, Boulder, CO, USA. Visiting Scholar, September 1 – December 13, 2008.
- International Space Science Institute, Bern, CH. Visiting Scientist, February 2 – April 30, 2009.

Academies

- International Academy of Astronautics, Member of Section 1 (Basic Sciences) of the, 2009– (Corresponding member 2004–2009)
- Finnish Society of Sciences and Letters: Member 2005 –; Member of the Board 2011 –
- Finnish Academy of Sciences and Letters: Member 2006 –; Chair of the Geosciences group 2015

Honors and awards

- 1997 Editors' Citation for Excellence in Refereeing for JGR-Space Physics.
- Teacher of the year 2001, elected by students of the Department of Physical Sciences of the University of Helsinki.
- Theodor Homén's price of the Finnish Society of the Sciences and Letters, 2010.
- Knight, First Class, of the Order of the WhiteRose of Finland, 2015.

Activities within the European Space Agency

- Member of the Solar System Working Group of ESA, 1993–1996.
- Member of the Rosetta SSP Advisory Group of ESA, 1994.
- Member of Assessment Study Science Team for the STORMS mission, Consultant to ESA, 2000.
- Finnish Delegate in the Science Programme Committee, November 2002 – 2016
- Finnish Delegate in the Programme Board of the Space Situational Awareness Preparatory Programme, August 2010 – June 2011; Chair of the Programme Board, July 2011 – June 2014.

National committees

- Finnish Space Committee: Secretary of the Research and Education section 1989 – 1992; Advisor 2004–2010, Chairman of the Scientific support group, 2010–
- Finnish National Committee of COSPAR (1998–; Chair 2000–2011), IUGG (1998–2015), URSI (2000–)
- Member of the Steering Committee of the *Graduate School in Solar-Terrestrial Physics*, 1995–1998 and of the Steering Committee of the *Graduate School in Astronomy and Space Physics,* 1999–2013
- Member of the Board of Metsähovi Radio Observatory, Member 2006–2011
- Memberof the Board of the Finnish Centre for Astrophysics with ESO (FINCA), 2010–
- Memberof the Publications Forum in Finland, 2011–
- Member of the Board of Helsinki Institute of Physics, 2014– (substitute member 2010-2013)
- Member of the Board of the LUMA Centre of University of Helsinki, 2014–
- Member of the Board of Kumpula Space Centre, 2014–

Bi-lateral, international, and foreign committees

- Secretary of the Working Group for Space Activities of the Science and Technology Commission between Finland and Russia,1992–1997.
- Adherent Representative from Finland in the Scientific Committee on Solar-Terrestrial Physics (SCOSTEP), 1994–2012
- Member of S-RAMP Steering Committee of SCOSTEP, 1998–2002
- Representative of Finland in COSPAR, 2000–
- Member of the European Space Science Committee (ESSC) of ESF, 2000–2003
- Member of EISCAT Council, 2001–2003
- Finnish Delegate in the ESA Science Programme Committee, 2002–
- Member of the MOWG of Living With a Star(LWS) program of NASA, 2003–2005
- Finnish Delegate in the Programme Board of the Space Situational Awareness Preparatory Programme, August 2010 – June 2011; Chair of the Programme Board, July 2011 – June 2014
- Chairmanships with the Swedish Research Council
  NT-3: Vice-Chair 2013, 2014; Chair 2015, 2016

Supervisionand other activities with doctoral dissertations

- Main supervisor of 8 PhD theses (co-supervisor or administrative supervisor of 1 theses)
- Faculty opponent of 5 Ph.D. dissertations; Preliminary examiner of 16 Finnish Ph.D. theses

Participation in experimental space projects

- Co-investigator in the wave experiment on the Swedish Viking satellite (launched 1986)
- Co-investigator in particle and wave instruments on the Swedish Freja satellite (launched 1992).
- Co-investigator in the Swedish micro satellite Astrid (launched 1995)
- Co-investigator in the PROMICS-3 plasma instruments on the two Russian Interball spacecraft (launched 1995 and 1996).
- Co-investigator in the ASPERA-C particle instrument on the Russian Mars-96 spacecraft (destroyed in launch failure,1996)
- Positions in the Rosetta Lander project(launched 2004)
  - Member of the Rosetta Lander (Philae) Steering Committee 1995 – 2004 and 2007–, Chairman of the Steering Committee 2009–2013
  - Member of the RoLand Science Advisory Group (for RoLand instrument selection, 1995)
- Co-I in the ion composition analyzer ICA onRosetta (launched March 2, 2004)
- Co-investigator in ASPERA-3 instrument onthe ESA Mars Express mission (launched 2003)
- Lead proposer of the STORMS mission for theESA F2/F3 missions, January 2000.
- Chair of the Finnish Steering Committee of the SPEDE instrument for SMART-1 spacecraft (launched 2003), 2001–2003.
- Co-investigator in ASPERA-4 instrument onthe ESA Venus Express mission (launched 2005)
- Co-investigator in the SIXS X-ray instrument for the ESA BepiColombo spacecraft
- Member of the Science Support Group of the student satellite Aalto-1, 2011–
- Member of the ESA Euclid Steering Committee, 2012–

ESA contracts

- Study manager of “Study of plasma and energetic electron environment and effects”, 1996–1998.
- Manager of the FMI participation in the"ESA Space Weather Study”, 2000–2001
- Study manager of “Magnetospheric Propulsion (eMPii)”, 2002–2004.

EU projects
- Partner in the FP7 study “SPACECAST – Protecting space assets from high energy particles by developing European dynamic modeling and forecasting capabilities”, 2011–2014.

Editorialposition:
- Editor in Chief of Arkhimedes, a Finnish Journal for Physicists and Mathematicians, 6 issues per year, 2005–2007; Editor 2008.

Acted as a scientific referee or evaluator for
- J. Geophys. Res.; Geophys. Res. Lett.;Planet. Space Sci.; Ann. Geophysicae; J. Atmosph. and Solar-Terr. Phys.; J.Geophys. and Geomagn.; EOS; AGU monographs and other refereed conference proceedings; NASA, NSF, NERC, EU, ESF, INTAS, etc. applications; Academy of Finland; Austrian Science Fund, Canadian Space Agency; Chilean Research Fund Council; Research Council of Norway; Royal Swedish Academy of Sciences; Swedish National Space Board; Swedish Research Council; Väisälä Foundation; Magnus Ehrnrooth Foundation; Max-Planck-Gesellschaft, Universities of Helsinki, Oulu,Turku, Umeå, KTH,

Publikationer

Aurinko – tuttu ja tuntematon tähtemme
Kilpua, E. & Koskinen, H., 2023, Helsinki: Gaudeamus. 318 s.

Bifurcations in Scientific Careers
Koskinen, H., 9 nov. 2022, I: Perspectives of Earth and Space Scientists. 3, 5 s., e2022CN000183.

Quantifying the non-linear dependence of energetic electron fluxes in the Earth's radiation belts with radial diffusion drivers
Osmane, A., Savola, M. E., Kilpua, E., Koskinen, H., Borovsky, J. E. & Kalliokoski, M., 25 jan. 2022, I: Annales Geophysicae. 40, 1, s. 37-53 17 s.

Physics of Earth's Radiation Belts: Theory and Observations
Koskinen, H. & Kilpua, E., 2022, Cham: Springer Nature Switzerland AG. 272 s. (Astronomy and Astrophysics Library)

Outer Van Allen Radiation Belt Response to Interacting Interplanetary Coronal Mass Ejections
Kilpua, E. K. J., Turner, D. L., Jaynes, A., Hietala, H., Koskinen, H. E. J., Osmane, A., Palmroth, M., Pulkkinen, T. I., Vainio, R., Baker, D. & Claudepierre, S., 12 mars 2019, I: Journal of geophysical research. Space physics. 124, 3, s. 1927-1947 21 s.

Kaikenlaista rohkeutta
Hetemäki, I. (Redaktör), Koskinen, H. E. J. (Redaktör), Pulkkinen, T. K. (Redaktör) & Väliverronen, E. T. (Redaktör), 8 jan. 2019, Helsinki: Gaudeamus. 323 s.

Achievements and Challenges in the Science of Space Weather
Koskinen, H. E. J., Baker, D. N., Balogh, A., Gombosi, T., Veronig, A. & von Steiger, R., 2017, I: Space Science Reviews. 212, 3-4, s. 1137–1157 21 s.

Coronal mass ejections and their sheath regions in interplanetary space
Kilpua, E., Koskinen, H. E. J. & Pulkkinen, T. I., 2017, I: Living Reviews in Solar Physics. 14, 83 s., 5.

Elektrodynamiikka
Koskinen, H. E. J., 2017, Helsinki: LIMES. 245 s.

Introduction to Plasma Physics
Kilpua, E. K. J. & Koskinen, H. E. J., 2017, 1 red. Helsinki: LIMES. 147 s.

Evolution of the ion environment of comet 67P/Churyumov-Gerasimenko
Nilsson, H., Wieser, G. S., Behar, E., Wedlund, C. S., Kallio, E., Gunell, H., Edberg, N. J. T., Eriksson, A. I., Yamauchi, M., Koenders, C., Wieser, M., Lundin, R., Barabash, S., Mandt, K., Burch, J. L., Goldstein, R., Mokashi, P., Carr, C., Cupido, E. & Fox, P. T. och 11 andra, Szego, K., Nemeth, Z., Fedorovn, A., Sauvaud, J.-A., Koskinen, H., Richter, I., Lebreton, J.-P., Henri, P., Volwerk, M., Vallat, C. & Geiger, B., nov. 2015, I: Astronomy & Astrophysics. 583, 8 s., A20.

Properties and drivers of fast interplanetary shocks near the orbit of the Earth (1995-2013)
Kilpua, E. K. J., Lumme, E., Andreeova, K., Isavnin, A. & Koskinen, H. E. J., juni 2015, I: Journal of geophysical research. Space physics. 120, 6, s. 4112-4125 14 s.

Unraveling the drivers of the storm time radiation belt response
Kilpua, E. K. J., Hietala, H., Turner, D. L., Koskinen, H. E. J., Pulkkinen, T. I., Rodriguez, J. V., Reeves, G. D., Claudepierre, S. G. & Spence, H. E., 16 maj 2015, I: Geophysical Research Letters. 42, 9, s. 3076-3084 9 s.

Birth of a comet magnetosphere: A spring of water ions
Nilsson, H., Wieser, G. S., Behar, E., Wedlund, C. S., Gunell, H., Yamauchi, M., Lundin, R., Barabash, S., Wieser, M., Carr, C., Cupido, E., Burch, J. L., Fedorov, A., Sauvaud, J.-A., Koskinen, H., Kallio, E., Lebreton, J.-P., Eriksson, A., Edberg, N. & Goldstein, R. och 9 andra, Henri, P., Koenders, C., Mokashi, P., Nemeth, Z., Richter, I., Szego, K., Volwerk, M., Vallat, C. & Rubin, M., 23 jan. 2015, I: Science. 347, 6220, 4 s., 0571.

A semi-analytical foreshock model for energetic storm particle events inside 1 AU
Vainio, R., Pönni, A., Battarbee, M., Koskinen, H. E. J., Afanasiev, A. & Laitinen, T., 20 feb. 2014, I: Journal of space weather and space climate . 4, 11 s., A08.

Analysis of double-step response to an interplanetary shock in the dayside magnetosphere
Andreeova, K., Juusola, L., Kilpua, E. K. J. & Koskinen, H. E. J., 2014, I: Annales Geophysicae. 32, 10, s. 1293-1302 10 s.

Wave dispersion in the hybrid-Vlasov model: verification of Vlasiator
Kempf, Y., Pokhotelov, D., von Alfthan, S., Vaivads, A., Palmroth, M. & E. J. Koskinen, H., 26 nov. 2013, I: Physics of Plasmas. 20, 11, 6 s., 112114.

Interpreting Solar EUV Wave Observations from Different Viewing Angles Using an MHD Model
Hoilijoki, S., Pomoell, J., Vainio, R., Palmroth, M. & Koskinen, H. E. J., 1 sep. 2013, I: Solar Physics. 286, 2, s. 493-507 15 s.

Spatial variation of energy conversion at the Earth's magnetopause: Statistics from Cluster observations
Anekallu, C. R., Palmroth, M., Koskinen, H. E. J., Lucek, E. & Dandouras, I., maj 2013, I: Journal of geophysical research. Space physics. 118, 5, s. 1948-1959 12 s.

Analysis of the substructure within a complex magnetic cloud on 3-4 September 2008
Andreeova, K., Kilpua, E. K. J., Hietala, H., Koskinen, H. E. J., Isavnin, A. & Vainio, R., 2013, I: Annales Geophysicae. 31, 3, s. 555-562 8 s.

Forecasting the Earth's radiation belts and modelling solar energetic particle events: Recent results from SPACECAST: Recent results from SPACAST
Horne, R. B., Glauert, S. A., Meredith, N. P., Koskinen, H., Vainio, R., Afanasiev, A., Ganushkina, N. Y., Amariutei, O. A., Boscher, D., Sicard, A., Maget, V., Poedts, S., Jacobs, C., Sanahuja, B., Aran, A., Heynderickx, D. & Pitchford, D., 2013, I: Journal of space weather and space climate . 3, 14 s., A20.

Ion distributions upstream and downstream of the Earth's bow shock: first results from Vlasiator
Pokhotelov, D., von Alfthan, S., Kempf, Y., Vainio, R., Koskinen, H. E. J. & Palmroth, M., 2013, I: Annales Geophysicae. 31, 12, s. 2207-2212 6 s.

Magnetic field and dynamic pressure ULF fluctuations in coronal-mass-ejection-driven sheath regions
Kilpua, E. K. J., Hietala, H., Koskinen, H. E. J., Fontaine, D. & Turc, L., 2013, I: Annales Geophysicae. 31, 9, s. 1559-1567 9 s.

On the relationship between interplanetary coronal mass ejections and magnetic clouds
Kilpua, E. K. J., Isavnin, A., Vourlidas, A., Koskinen, H. E. J. & Rodriguez, L., 2013, I: Annales Geophysicae. 31, 7, s. 1251-1265 15 s.

Space Weather: From Solar Storms to the Technical Challenges of the Space Age
Koskinen, H., 2012, *From the Earth's Core to Outer Space.* Haapala, I. (red.). Springer-Verlag, Vol. 137. s. 265-278 14 s.

Supermagnetosonic subsolar magnetosheath jets and their effects: from the solar wind to the ionospheric convection
Hietala, H., Partamies, N., Laitinen, T. V., Clausen, L. B. N., Facsko, G., Vaivads, A., Koskinen, H. E. J., Dandouras, I., Reme, H. & Lucek, E. A., 2012, I: Annales Geophysicae. 30, 1, s. 33-48 16 s.

Grad-Shafranov reconstruction of magnetic clouds
Isavnin, A., K. J. Kilpua, E. & E. J. Koskinen, H., 8 aug. 2011, I: Solar Physics. 273, 1, s. 205-219 15 s.

Aurinko yllätti jälleen, miksi sen pitäisi meitä kiinnostaa?
Koskinen, H., 2011, I: Sphinx. s. 7-10

Grad–Shafranov Reconstruction of Magnetic Clouds: Overview and Improvements
Isavnin, A., Kilpua, E. & Koskinen, H., 2011, I: Solar Physics. 273, 1, s. 205-219

In situ observations of particle acceleration in shock-shock interaction
Hietala, H., Agueda, N., Andreeova, K., Vainio, R., Nylund, S., Kilpua, E. & Koskinen, H., 2011, I: Journal of Geophysical Research. 116, s. A10105 12 s.

Johdatus plasmafysiikkaan ja sen avaruussovellutuksiin
Koskinen, H., 2011, 2. uudistettu laitos red. LIMES. 267 s.

Physics of Space Storms: From the Solar Surface to the Earth
Koskinen, H. E. J., 2011, Berlin, Heidelberg: Springer-Verlag. 437 s.

Quantifying energy transfer at the magnetopause
Palmroth, M., Koskinen, H., Pulkkinen, T. I., Anekallu, C. R., Laitinen, T., Lucek, E. A. & Dandouras, I., 2011, *The Dynamic Magnetosphere.* Liu, W. & Fujimoto, M. (red.). Springer, s. 27-27 (IAGA Special Publication Series; vol. 3).

Suomalaisen tähtitieteen historiasta englanniksi: Arvio julkaisusta Raimo Lehti and Tapio Markkanen, History of Astronomy in Finland
Koskinen, H., 2011, I: Arkhimedes. 2011, 2-3, s. 33-34 2 s.

Kannen suunnittelu: Klassinen mekaniikka
Koskinen, H., Vainio, R. (Redaktör) & Hietala, H. (Illustratör), 2010

Klassinen mekaniikka
Koskinen, H. & Vainio, R., 2010, Helsinki: LIMES.

Magnetospheric feedback in solar wind energy transfer
Palmroth, M., Koskinen, H. E. J., Pulkkinen, T. I., Toivanen, P. K., Janhunen, P., Milan, S. E. & Lester, M., 2010, I: Journal of geophysical research : Space Physics. 115, 14 s.

Magnetospheric modes and solar wind energy coupling efficiency
Pulkkinen, T. I., Palmroth, M., Koskinen, H. E. J., Laitinen, T. V., Goodrich, C. C., Merkin, V. G. & Lyon, J. G., 2010, I: Journal of Geophysical Research. 115, s. A03207 9 s.

Solar Intensity X-ray and particle Spectrometer (SIXS)
Huovelin, J., Vainio, R., Andersson, H., Valtonen, E., Alha, L., Malkki, A., Grande, M., Fraser, G. W., Kato, M., Koskinen, H., Muinonen, K., Naranen, J., Schmidt, W., Syrjasuo, M., Anttila, M., Vihavainen, T., Kiuru, E., Roos, M., Peltonen, J. & Lehti, J. och 3 andra, Talvioja, M., Portin, P. & Prydderch, M., 2010, I: Planetary and Space Science. 58, 1-2, s. 96-107 12 s.

Space Research in Finland: Report to COSPAR 2010
Koskinen, H. (Redaktör), Merikallio, S. (Redaktör) & Stigell, P. (Redaktör), 2010, Helsinki: Tekes. 106 s.

Timing of changes in the solar wind energy input in relation to ionospheric response
Pulkkinen, T. I., Palmroth, M., Pekka, J., Koskinen, H., McComas, D. J. & Smith, C. W., 2010, I: Journal of geophysical research : Space Physics. 115, 115, s. A00I09 9 s.

Venusian bow shock as seen by the ASPERA-4 ion instrument on Venus Express
Whittaker, I., Guymer, G., Grande, M., Pinter, B., Barabash, S., Federov, A., Mazelle, C., Sauvaud, J. A., Lundin, R., Russell, C. T., Futaana, Y., Fraenz, M., Zhang, T. L., Andersson, H., Grigoriev, A., Holmstrom, M., Yamauchi, M., Asamura, K., Baumjohann, W. & Lammer, H. och 23 andra, Coates, A. J., Kataria, D. O., Linder, D. R., Curtis, C. C., Hsieh, K. C., Koskinen, H. E. J., Kallio, E., Riihela, P., Schmidt, W., Kozyra, J., McKenna-Lawlor, S., Thocaven, J. J., Orsini, S., Cerulli-Irelli, R., Mura, A., Milillo, M., Maggi, M., Roelof, E., Brandt, P., Frahm, R. A., Sharber, J. R., Wurz, P. & Bochsler, P., 2010, I: Journal of geophysical research : Space Physics. 115, s. A09224 13 s.

Avaruussää: Auringon myrskyistä avaruusajan teknologisiin haasteisiin
Koskinen, H., 2009, *Maan ytimestä avaruuteen: toimittaneet Ilmari Haapala ja Tuija Pulkkinen.* Helsinki: Suomen Tiedeseura, s. 197-209 13 s. (Bidrag till kännedom av Finlands natur och folk).

Supermagnetosonic jets behind a collisionless quasiparallel shock
Hietala, H., Laitinen, T. V., Andreeova, K., Vainio, R., Vaivads, A., Palmroth, M., Pulkkinen, T. I., Koskinen, H. E. J., Lucek, E. A. & Rème, H., 2009, I: Physical Review Letters. 103, 24, s. art. 245001 4 s.

Comparative analysis of Venus and Mars magnetotails
Fedorov, A., Ferrier, C., Koskinen, H. & Bochsler, P., 2008, I: Planetary and Space Science. 56, s. 812-817 6 s.

ENA detection in the dayside of Mars: ASPERA-3 NPD statistical study
Mura, A., Orsini, S., Koskinen, H. & Sharber, J. R., 2008, I: Planetary and Space Science. 56, s. 840-845 6 s.

First observation of energic neutral atoms in the Venus environment
Galli, A., Wurz, P., Koskinen, H. E. J. & Sharber, J. R., 2008, I: Planetary and Space Science. 56, s. 807-811 5 s.

Ionospheric photoelectrons at Venus: Initial observations by ASPERA-4 ELS
Coates, A. J., Frahm, R. A., Koskinen, H. & Grande, M., 2008, I: Planetary and Space Science. 56, s. 802-806 5 s.

Jos metsään haluat mennä nyt: kirja-arvostelu
Koskinen, H., 2008, I: Arkhimedes. 2008, 3, s. 25-25 1 s.

Location of the bow shock and ion composition boundaries at Venus - initial determinations from Venus Express ASPERA-4
Martinecz, J., Fränz, A., Woch, J., Krupp, N., Roussos, E., Dubinin, E., Motschmann, U., Barabash, S., Lundin, R., Holmstrom, M., Andersson, H., Yamauchi, M., Grigoriev, A., Futaana, Y., Brinkfeldt, K., Gunell, H., Frahm, R. A., Winningham, J. D., Sharber, J. R. & Scherrer, J. och 35 andra, Coates, A. J., Linder, D. R., Kataria, D. O., Kallio, E., Sales, T., Schmidt, W., Riihela, P., Koskinen, H. E. J., Kozyra, J. U., Luhmann, J., Russell, C. T., Roelof, E. C., Brandt, P., Curtis, C. C., Hsieh, K. C., Sandell, B. R., Grande, M., Sauvaud, J. A., Fedorov, A., Thocaven, J., Mazelle, C., McKenna-Lawler, S., Orsini, S., Cerulli-Irelli, R., Maggi, M., Mura, A., Milillo, A., Wurz, P., Galli, A., Bochsler, P., Asamura, K., Szego, K., Baumjohann, W., Zhang, T. L. & Lammer, H., 2008, I: Planetary and Space Science. 56, s. 780-784 5 s.

Mars Express and Venus Express multi-point observations of geoeffective solar flare events in December 2006
Futaana, Y., Barabash, S., Koskinen, H. E. J. & Bochler, P., 2008, I: Planetary and Space Science. 56, s. 873-880 8 s.

Ruoki päätäsi! kirja-arvostelu
Koskinen, H., 2008, I: Arkhimedes. 2008, 2, s. 30

Space Research in Finland: Report to COSPAR 2008
Koskinen, H. (Redaktör), Merikallio, S. (Redaktör) & Stigell, P. (Redaktör), 2008, Tekes. 90 s.

Sputnikista universiumun alkuhetkiin: 50-vuotta avaruuslentoja
Koskinen, H., 2008, I: Dimensio. 72, 3, s. 25-28 4 s.

The Venusian induced magnetosphere: a case study of plasma and magnetic field measurements on the Venus Express mission
Kallio, E., Zhang, T. L., Koskinen, H. E. J. & Bochler, P., 2008, I: Planetary and Space Science. 56, s. 796-801 6 s.

Vahdinvaihto: pääkirjoitus
Järvenpää, M. & Koskinen, H., 2008, I: Arkhimedes. 20078, 1, s. 3

XLII Fysiikan päivät Turussa 27.-29.3.2008
Koskinen, H., 2008, I: Arkhimedes. 2008, 2, s. 10-12 3 s.

Continuous reconnection line and pressure-dependent energy conversion on the magnetopause in a global MHD model
Laitinen, T. V., Palmroth, M., Pulkkinen, T. I., Janhunen, P. & Koskinen, H. E. J., 2007, I: Journal of geophysical research : Space Physics. 112, A11, 13 s.

Differences in geomagnetic storms driven by magnetic clouds and ICME sheath regions
Pulkkinen, T. I., Partamies, N., Huttunen, K. E. J., Reeves, G. D. & Koskinen, H. E. J., 2007, I: Geophysical Research Letters. 34, 2, s. L02105 4 s.

Ei ihan triviaali yhtälöryhmä: pääkirjoitus
Koskinen, H., 2007, I: Arkhimedes. 2007, 4, s. 3

Ei ole helppo huipulle kavuta: pääkirjoitus
Koskinen, H., 2007, I: Arkhimedes. 2007, 2, s. 3

Energia ratkaisut - haaste fysiikalle
Koskinen, H., 2007, I: Arkhimedes. 2007, 4, s. 7-10 4 s.

Energisation of O+ and O2+ ions at Mars: An analysis of a 3-d quasi-neutral hybrid model simulation
Kallio, E., Fedorov, A., Barabash, S., Janhunen, P., Koskinen, H. & Schmidt, W., 2007, I: Space Science Reviews. 126, 1-4, s. 39-62 24 s.

En muista - en ymmärrä: pääkirjoitus
Koskinen, H., 2007, I: Arkhimedes. 2007, 3, s. 3

Fysiikan rajoja ylittämässä: 41. Fysiikan päivät Tallinnassa 15.-17.3.2007
Koskinen, H., 2007, I: Arkhimedes. 2007, 2, s. 10-15 6 s.

Kansainvälistä liikkuvuutta, kenen kustannuksella ja mihin suuntaan? pääkirjoitus
Koskinen, H., 2007, I: Arkhimedes. 2007, 5-6, s. 3

Pilviä Vilhonvuorenkadun taivaalla: pääkirjoitus
Koskinen, H., 2007, I: Arkhimedes. 2007, 1, s. 3

RPC-ICA: The ion composition analyzer of the Rosetta Plasma Consortium
Nilsson, H., Lundin, R., Lundin, K., Barabash, S., Borg, H., Norberg, O., Fedorov, A., Sauvaud, J.-A., Koskinen, H., Kallio, E., Riihela, P. & Burch, J. L., 2007, I: Space Science Reviews. 128, s. 671-695 25 s.

The analyser of space plasmas and energetic atoms (ASPERA-4) for the Venus Express mission
Barabash, S., Sauvaud, J.-A., Gunell, H., Andersson, H., Grigoriev, A., Brinkfeldt, K., Holmström, M., Lundin, R., Yamauchi, M., Asamura, K. & Koskinen, H. E. J., 2007, I: Planetary and Space Science. 55, s. 1772-1792 21 s.

The analyzer of space plasmas and energetic atoms (ASPERA-3) for the Mars Express mission
Barabash, S., Lundin, R., Andersson, H., Brinkfeldt, K., Grigoriev, A., Gunell, H., Koskinen, H. & Riihelä, P., 2007, I: Space Science Reviews. 126, 1-4, s. 113-164 52 s.

The loss of ions from Venus through the plasma wake
Barabash, S., Fedorov, A., Sauvaud, J. J., Lundin, R., Russell, C. T., Futaana, Y. & Koskinen, H. E. J., 2007, I: Nature. 450, s. 650-653 4 s.

Tieteiden sota?
Koskinen, H., 2007, I: Arkhimedes. 2007, 4, s. 29-30 2 s.

Asymmetric development of magnetospheric storms during magnetic clouds and sheath regions
Huttunen, E., Koskinen, H. E. J., Karinen, A. & Mursula, K., 2006, I: Geophysical Research Letters. 33, s. L06107 4 s.

Auringon näkymätön vaikutus maan ympäristössä
Koskinen, H., 2006, I: Sphinx. 2005, s. 99-108 10 s.

Auroral plasma acceleration above martian magnetic anomalies
Lundin, R., Winningham, D., Barabash, S., Frahm, R., Brain, D., Nilsson, H., Holmstrom, M., Yamauchi, M., Sharber, J. R., Sauvaud, J.-A., Fedorov, A., Asamura, K., Hayakawa, H., Coates, A. J., Soobiah, Y., Curtis, C., Hsieh, K. C., Grande, M., Koskinen, H. & Kallio, E. och 8 andra, Kozyra, J., Woch, J., Fraenz, M., Luhmann, J., Mckenna-Lawler, S., Orsini, S., Brandt, P. & Wurz, P., 2006, I: Space Science Reviews. 126, s. 333-354 22 s.

Carbon dioxide photoelectron energy peaks at Mars
Frahm, R. A., Winningham, J. D., Sharper, J. R., Scherrer, J. R., Jeffers, S. J., Coates, A. J. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 371-382 12 s.

Einsteinista fyysikkona eikä myyttinä: kirja-arvostelu
Koskinen, H., 2006, I: Arkhimedes. 2006, 5, s. 29-30 2 s.

Electric fields within the martian magnetosphere and ion extraction: ASPERA-3 observations
Dubinin, E., Lundin, R., Fränz, M., Woch, J., Barabash, S., Fedorov, A. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 337-342 6 s.

Electron oscillations in the induced martian magnetosphere
Winningham, J. D., Frahm, R. A., Sharper, J. R., Coates, A. J., Linder, D. R., Soobian, Y. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 360-370 11 s.

Energetic neutral atoms (ENA) at Mars: properties of the hydrogen atoms produced upstream of the martian bow shock and implications for ENA sounding technique around non-magnetized planets
Kallio, E., Barabash, S., Brinkfeldt, K., Gunell, H. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 448-463 16 s.

Energiakeskustelu ja fyysikkoyhteisö: pääkirjoitus
Koskinen, H., 2006, I: Arkhimedes. 2006, 6, s. 3

First ENA observations at Mars: subsolar ENA jet
Futaana, Y., Barabash, S., Grigoriev, A., Holmström, M., Kallio, E. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 413-423 11 s.

First ENA observations at Mars: ENA emissions from the martian upper atmosphere
Futaana, Y., Barabash, S., Grigoriev, A., Holmström, M., Kallio, E., C son Brandt, P., Gunell, H., Brinkfeldt, K., Lundin, R., Andersson, H., Yamauchi, M., McKenna-Lawler, S., Winningham, J. D., Frahm, R. A., Sharber, J. R., Scherrer, J. R., Coates, A. J., Linder, D. R., Kataria, D. O. & Sales, T. och 27 andra, Riihela, P., Schmidt, W., Koskinen, H., Kozyra, J., Luhmann, J., Roelof, E., Williams, D., Livi, S., Curtis, C. C., Hsieh, K. C., Sandel, B. R., Grande, M., Carter, M., Sauvaud, J.-A., Fedorov, A., Thocaven, J.-J., Orsini, S., Cerulli-Irelli, R., Maggi, M., Wurz, P., Bochsler, P., Galli, A., Krupp, N., Woch, J., Fraenz, A., Asamura, K. & Dierker, C., 2006, I: Icarus. 182, 2, s. 424-430 7 s.

First ENA observations at Mars: Charge exchange ENAs produced in the magnetosheath
Gunell, H., Brinkfeldt, K., Holmström, M., C son Brandt, P., Barabash, S., Kallio, E., Ekenback, A., Futaana, Y., Lundin, R., Andersson, H., Yamauchi, M., Grigoriev, A., Winningham, J. D., Frahm, R. A., Sharber, J. R., Scherrer, J. R., Coates, A. J., Linder, D. R., Kataria, D. O. & Sales, T. och 27 andra, Riihela, P., Schmidt, W., Koskinen, H., Kozyra, J., Luhmann, J., Roelof, E., Williams, D., Livi, S., Curtis, C. C., Hsieh, K. C., Sandel, B. R., Grande, M., Carter, M., Sauvaud, J.-A., Fedorov, A., Thocaven, J.-J., McKenna-Lawler, S., Orsini, S., Cerulli-Irelli, R., Maggi, M., Wurz, P., Bochsler, P., Krupp, N., Woch, J., Fraenz, M., Asamura, K. & Dierker, C., 2006, I: Icarus. 182, 2, s. 431-438 8 s.

Fysiikan uranuurtaja Suomessa ja vähän surullisen hahmon ritarikin: kirja-arvostelu
Koskinen, H., 2006, I: Arkhimedes. 2006, 4, s. 29-30 2 s.

Geoeffectivity of coronal mass ejections
Koskinen, H. E. J. & Huttunen, E., 2006, I: Space Science Reviews. 124, s. 169-181 13 s.

IMF direction derived from cycloid-like ion distributions observed by Mars Express
Yamauchi, M., Futaana, Y., Fedorov, A., Dubinin, E., Lundin, R., Sauvaud, J.-A., Koskinen, H. & Kallio, E., 2006, I: Space Science Reviews. 126, 1-4, s. 239-266 28 s.

Ion escape at MARS: comparison of a 3-D hybrid simulation with Mars Express IMA/ASPERA-3 measurements
Kallio, E., Fedorov, A., Budnik, E., Säles, T., Janhunen, P., Schmidt, W. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 350-359 10 s.

Ionospheric plasma acceleration at Mars: ASPERA-3 results
Lundin, R., Winningham, D., Barabash, S., Frahm, R. A., Andersson, H., Holmstrom, M., Grigoriev, A., Yamauchi, M., Borg, H., Sharber, J. R., Sauvaud, J.-A., Fedorov, A., Budnik, E., Thocaven, J.-J., Asamura, K., Hayakawa, H., Coates, A. J., Linder, D. R., Kataria, D. O. & Curtis, C. och 25 andra, Hsieh, K. C., Sandel, B. R., Grande, M., Carter, M., Reading, D. H., Koskinen, H., Kallio, E., Riihela, P., Schmidt, W., Sales, T., Kozyra, J., Krupp, N., Woch, J., Fraenz, M., Luhmann, J., McKenna-Lawler, S., Cerulli-Irelli, R., Orsini, S., Maggi, M., Roelof, E., Williams, D., Livi, S., C son Brandt, P., Wurz, P. & Bochsler, P., 2006, I: Icarus. 182, s. 308-319 12 s.

Kumpulan avaruuskeskus aloitti toimintansa
Koskinen, H., 2006, I: Arkhimedes. 2006, 2, s. 4-5 2 s.

Mass composition of the escaping plasma at Mars
Carlsson, E., Fedorov, A., Barabash, S., Budnik, E., Grigoriev, A., Gunell, H., Nilsson, H., Sauvaud, J.-A., Lundin, R., Futaana, Y., Holmstrom, M., Andersson, H., Yamauchi, M., Winningham, J. D., Frahm, R. A., Sharber, J. R., Scherrer, J., Coates, A. J., Linder, D. R. & Kataria, D. O. och 27 andra, Kallio, E., Koskinen, H., Sales, T., Riihela, P., Schmidt, W., Kozyra, J., Luhmann, J., Roelof, E., Williams, D., Livi, S., Curtis, C. C., Hsieh, K. C., Sandel, B. R., Grande, M., Carter, M., Thocaven, J.-J., McKenna-Lawler, S., Orsini, S., Cerulli-Irelli, R., Maggi, M., Wurz, P., Bochsler, P., Krupp, N., Woch, J., Franz, A., Asamura, K. & Dierker, C., 2006, I: Icarus. 182, s. 320-328 9 s.

New interpretation of magnetospheric energy circulation
Pulkkinen, T. I., Palmroth, M., Tanskanen, E. I., Janhunen, P., Koskinen, H. E. J. & Laitinen, T. V., 2006, I: Geophysical Research Letters. 33, 4, s. L07101

Numerical interpretation of high-altitude photoelectron observations
Liemohn, M. W., Frahm, R. A., Winningham, J. D., Ma, Y. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 383-395 13 s.

Observations of magnetic anomaly signatures in Mars Express ASPERA-3 ELS data
Soobiah, Y., Coates, A. J., Linder, D. R., Kataria, D. O. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 396-405 10 s.

On the characterization of magnetic reconnection in global MHD simulations
Laitinen, T. V., Janhunen, P., Pulkkinen, T. I., Palmroth, M. & Koskinen, H. E. J., 2006, I: Annales Geophysicae. 24, s. 3059-3069 11 s.

Plasma acceleration above Martian magnetic anomalies
Lundin, R., Winningham, D., Barabash, S., Frahm, R., Holmström, M. & Koskinen, H., 2006, I: Science. 311, s. 980-983 4 s.

Plasma intrusion above Mars crustal fields - Mars Express ASPERA-3 observations
Fränz, M., Winningham, J. D., Dubinin, E., Roussos, E., Woch, J., Barabash, S. & Koskinen, H. E. J., 2006, I: Icarus. 182, 2, s. 406-412 7 s.

Romahtavia kattoja ja sortuvia moottoritienpientareita, kiitos! pääkirjoitus
Koskinen, H., 2006, I: Arkhimedes. 2006, 3, s. 3

Solar wind plasma protrusion into the martian magnetosphere: ASPERA-3 observations
Dubinin, E., Winningham, D., Fränz, M., Woch, J., Lundin, R., Barabash, S., Fedorov, A. & Koskinen, H., 2006, I: Icarus. 182, 2, s. 343-349 7 s.

Space research in Finland: report to Cospar 2006
Koskinen, H. (Redaktör), Merikallio, S. (Redaktör) & Stigell, P. (Redaktör), 2006, Helsinki: Tekes. 70 s.

Space Weather: from solar eruptions to magnetospheric storms
Koskinen, H. E. J., 2006, *Solar eruptions and energetic particles.* [usa]: American Geophysical Union, s. 375-385 11 s.

Spes patriae: pääkirjoitus
Koskinen, H., 2006, I: Arkhimedes. 2006, 2, s. 1

Structure of the martian wake
Fedorov, A., Budnik, E., Sauvaud, J.-A., Mazelle, C., Barabash, S., Lundin, R., Acuna, M., Holmstrom, M., Grigoriev, A., Yamauchi, M., Andersson, H., Thocaven, J.-J., Winningham, D., Frahm, R., Sharber, J. R., Scherrer, J., Coates, A. J., Linder, D. R., Kataria, D. O. & Kallio, E. och 25 andra, Koskinen, H., Sales, T., Riihela, P., Schmidt, W., Kozyra, J., Luhmann, J., Roelof, E., Williams, D., Livi, S., Curtis, C. C., Hsieh, K. C., Sandel, B. R., Grande, M., Carter, M., McKenna-Lawler, S., Orsini, S., Cerulli-Irelli, R., Maggi, M., Wurz, P., Bochsler, P., Krupp, N., Woch, J., Fraenz, M., Asamura, K. & Dierker, C., 2006, I: Icarus. 182, s. 329-336 8 s.

Tiede innovaatiouskon palveluksessa: pääkirjoitus
Koskinen, H., 2006, I: Arkhimedes. 2006, 4, s. 3

Tieteellisen tutkimukseen perustuva opetus: pääkirjoitus
Koskinen, H., 2006, I: Arkhimedes. 2006, 5, s. 3

Time history effects at the magnetopause: Hysteresis in power input and its implications to substorm processes
Palmroth, M., Pulkkinen, T. I., Laitinen, T. V., Koskinen, H. E. J. & Janhunen, P., 2006, *Substorms VIII: Proceedings of the 8th International Conference on Substorms.* Syrjäsuo, M. & Donovan, E. (red.). Calgary: Institute for Space Research, University of Calgary, s. 219-223 5 s.

Todella suuria kysymyksiä
Koskinen, H., 2006, I: Arkhimedes. 2006, 1, s. 22-24 3 s.

Tutkimusetiikka ja hyvien tapojen noudattaminen: pääkirjoitus
Koskinen, H., 2006, I: Arkhimedes. 2006, 1, s. 3

39. Fysiikan päivät Dipolissa Espoossa 17.-19.3.2005
Koskinen, H., 2005, I: Arkhimedes. 2005, 2, s. 16-18 3 s.

Cluster observations of sudden impulses in the magnetotail caused by interplanetary shocks and pressure increases
Huttunen, E., Slavin, J., Collier, M., Koskinen, H. E. J., Szabo, A., Tanskanen, E., Balogh, A., Lucek, E. & Reme, H. R., 2005, I: Annales Geophysicae. 23, 2, s. 609-624 16 s.

Einsteinin jalanjäljissä keväisessä Bernissä
Koskinen, H., 2005, I: Arkhimedes. 2005, 3, s. 6-7 2 s.

Energetic particle losses from the inner magnetosphere
Koskinen, H., 2005, *Geophysical Monograph Series: The Inner Magnetosphere, Physics and Modeling.* Pulkkinen, T. I., Tsyganenko, N. A. & Friedel, R. W. H. (red.). Washington, D.C.: American Geophysical Union, Vol. 155. s. 25-31 (Geophysical Monograph Series; vol. 155).

Energetics of a substorm on 15 August, 2001: Comparing empirical methods and a global MHD simulation
Tanskanen, E. I., Palmroth, M., Pulkkinen, T. I., Koskinen, H. E. J., Janhunen, P., Østgaard, N., Slavin, J. A. & Liou, K., 2005, I: Advances in Space Research. 36, 10, s. 1825-1829 5 s.

Fysiikan vuosi meni - mitä jäi käteen? pääkirjoitus
Koskinen, H., 2005, I: Arkhimedes. 2005, 6, s. 3

Korkeatasoisia tohtoreita ikään katsomatta
Koskinen, H., 2005, I: Arkhimedes. 2005, 2, s. 3

Kymmenes Suomen avaruustutkijoiden kokous (FinCOSPAR): Kokousjulkaisu
Siili, T. (Redaktör), Huttunen, E. (Redaktör), Koskinen, H. (Redaktör) & Toivanen, P. (Redaktör), 2005, Helsinki: Finnish Meteorological Institute. 56 s. (Raportteja / Ilmatieteen laitos; nr. 2005:3)

Maa ja planeetat aurinkotuulessa
Koskinen, H., 2005, I: Dimensio. 69, 4, s. 12-15 4 s.

Magnetosfäärin pyrstön rekonnektioalue MHD-simulaatiossa
Laitinen, T., Pulkkinen, T. I., Palmroth, M., Janhunen, P. & Koskinen, H. E. J., 2005, *Geofysiikan päivät XXII.* Helsinki: Geofysiikan seura

Magnetospheric substorms are strongly modulated by interplanetary high-speed streams
Tanskanen, E. I., Slavin, J. A., Tanskanen, A. J., Viljanen, A., Pulkkinen, T. I., Pulkkinen, A., Eastwood, J. & Koskinen, H. E. J., 2005, I: Geophysical Research Letters. 32, s. L16104 4 s.

Menestyä vai tuhoutua? pääkirjoitus
Koskinen, H., 2005, I: Arkhimedes. 2005, 4, s. 3

Missä kaikki ovat?
Koskinen, H., 2005, I: Arkhimedes. 2005, 6, s. 26-27 2 s.

Properties and geoeffectiveness of magnetic clouds in the rising, maximum and early declining phases of solar cycle 23
Huttunen, E., Schwenn, R., Bothmer, V. & Koskinen, H. E. J., 2005, I: Annales Geophysicae. 23, 2, s. 625-641 17 s.

Rohkeutta ja riskinottoa
Koskinen, H., 2005, I: Arkhimedes. 2005, 1, s. 3

Suomalaisen avaruustutkimuksen juhlavuosi 2005
Koskinen, H. E. J., 2005, *Mitä missä milloin 2006* . Helsinki: Otava, 6 s.

Tapelkaa pojat niin saatte tupakkaa
Koskinen, H., 2005, I: Arkhimedes. 2005, 3, s. 3

The magnetotail reconnection region in a global MHD simulation
Laitinen, T., Pulkkinen, T., Palmroth, M., Janhunen, P. & Koskinen, H., 2005, I: Annales Geophysicae. 23, 12, s. 3753-3764 12 s.

The magnetotail reconnection region in a globl MHD simulation
Laitinen, T. V., Pulkkinen, T. I., Palmroth, M., Janhunen, P. & Koskinen, H. E. J., 2005, I: Annales Geophysicae. 23, 12, s. 3753-3764 12 s.

Uutta ajoainetta kansainvälistymiseen: pääkirjoitus
Koskinen, H., 2005, I: Arkhimedes. 2005, 5, s. 3

Importance of post-shock streams and sheath region as drivers of intense magnetospheric storms and high-latitude activity
Huttunen, K. E. J. & Koskinen, H. E. J., 2004, I: Annales Geophysicae. 22, 5, s. 1729-1738 10 s.

Ionospheric energy input as a function of solar wind parameters: global MHD simulation results
Palmroth, M., Janhunen, P., Pulkkinen, T. I. & Koskinen, H. E. J., 2004, I: Annales Geophysicae. 22, 2, s. 549-566 18 s.

Ionospheric power consumption in global MHD simulation predicted from solar wind measurements
Palmroth, M., Koskinen, H. E. J., Pulkkinen, T. I. & Janhunen, P., 2004, I: IEEE Transactions on Plasma Science. 32, 4, s. 1511-1518 8 s.

Role of solar wind dynamic pressure in driving ionospheric Joule heating
Palmroth, M., Pulkkinen, T. I., Janhunen, P., McComas, D. J., Smith, C. W. & Koskinen, H. E. J., 2004, I: Journal of geophysical research : Space Physics. 109, s. - 7 s.

Solar wind-induced atmospheric erosion at Mars: First results from ASPERA-3 on Mars Express
Lundin, R., Barabash, S., Andersson, H., Holmstrom, M., Grigoriev, A., Yamauchi, M., Sauvaud, J. A., Fedorov, A., Budnik, E., Thocaven, J. J., Winningham, D., Frahm, R., Scherrer, J., Sharber, J., Asamura, K., Hayakawa, H., Coates, A., Linder, D. R., Curtis, C. & Hsieh, K. C. och 25 andra, Sandel, B. R., Grande, M., Carter, M., Reading, D. H., Koskinen, H., Kallio, E., Riihela, P., Schmidt, W., Sales, T., Kozyra, J., Krupp, N., Woch, J., Luhmann, J., McKenna-Lawler, S., Ceruw-Irelli, R., Orsini, S., Maggi, M., Mura, A., Milillo, A., Roelof, E., Williams, D., Livi, S., Brandt, P., Wurz, P. & Bochslers, P., 2004, I: Statistical Science. 305, s. 1933-1936 4 s.

Scientific rationale for the D-CIXS X-ray spectrometer on board ESA's SMART-1 mission to the Moon
Dunkin, S. K., Grande, M., Casanova, I., Fernandes, V., Heather, D. J., Kellett, B., Muinonen, K., Russell, S. S., Browning, R., Waltham, N., Parker, D., Kent, B., Perry, C. H., Swinyard, B., Perry, A., Feraday, J., Howe, C., Phillips, K., McBride, G.

& Huovelin, J. och 28 andra, Muhli, P., Hakala, P. J., Vilhu, O., Thomas, N., Hughes, D., Alleyne, H., Grady, M., Lundin, R., Barabash, S., Baker, D., Clark, P. E., Murray, C. D., Guest, J., d'Uston, L. C., Maurice, S., Foing, B., Christou, A., Owen, C., Charles, P., Laukkanen, J., Koskinen, H., Kato, M., Sipila, K., Nenonen, S., Holmstrom, M., Bhandari, N., Elphic, R. & Lawrence, D., 2003, I: Planetary and Space Science. 51, s. 435-442 8 s.

The D-CIXS X-ray mapping spectrometer on SMART-1
Grande, M., Browning, R., Waltham, N., Parker, D., Dunkin, S. K., Kent, B., Kellett, B., Perry, C. H., Swinyard, B., Perry, A., Feraday, J., Howe, C., McBride, G., Phillips, K., Huovelin, J., Muhli, P., Hakala, P. J., Vilhu, O., Laukkanen, J. & Thomas, N. och 28 andra, Hughes, D., Alleyne, H., Grady, M., Lundin, R., Barabash, S., Baker, D., Clark, P. E., Murray, C. D., Guest, J., Casanova, I., d'Uston, L. C., Maurice, S., Foing, B., Heather, D. J., Fernandes, V., Muinonen, K., Russell, S. S., Christou, A., Owen, C., Charles, P., Koskinen, H., Kato, M., Sipila, K., Nenonen, S., Holmstrom, M., Bhandari, N., Elphic, R. & Lawrence, D., 2003, I: Planetary and Space Science. 51, s. 427-433 7 s.

April 2000 magnetic storm: Solar wind driver and magnetospheric response
Huttunen, K. E. J., Koskinen, H. E. J., Pulkkinen , T. I., Pulkkinen, A., Palmroth, M., Reeves, E. G. D. & Singer, H. J., 2002 , I: Journal of Geophysical Research. 107, A12, s. article number 1440 21 s.

Dissipation to the joule heating: Isolated and stormtime substorms
Tanskanen, E., Koskinen, H. E. J., Pulkkinen, T. I., Slavin, J. A. & Ogilvie, K., 2002, I: Advances in Space Research. 30, s. 2305-2311 7 s.

Magnetospheric energy budget and the epsilon parameter
Koskinen, H. E. J. & Tanskanen, E. I., 2002, I: Journal of geophysical research : Space Physics. 107, A11, s. article number 1415 10 s.

Substorm energy budget during low and high solar activity: 1997 and 1999 compared
Tanskanen, E., Pulkkinen, T. I., Koskinen, H. E. J. & Slavin, J. A., 2002, I: Journal of geophysical research : Space Physics. 107, A6, s. article number 1086 11 s.

Variability of magnetospheric storms driven by different solar wind perturbations
Huttunen, K. E. J., Koskinen, H. E. J. & Schwenn, R., 2002, I: Journal of geophysical research : Space Physics. 107, A7, 8 s.

Johdatus plasmafysiikkaan ja sen avaruussovellutuksiin
Koskinen, H., 2001, Helisinki: LIMES. 256 s.

Space physics
Sucksdorff, C., Bösinger, T., Kangas, J., Mursula, K., Nygren, T., Kauristie, K. & Koskinen, H., 2001, I: Geophysica. 37(1-2), s. 309-355 47 s.

A semiempirical magnetosheath model to analyze the solar wind-magnetosphere interaction
Kallio, E. J. & Koskinen, H. E. J., 2000, I: Journal of geophysical research : Space Physics. 105, A12, s. 27469-27479 11 s.

Loading-unloading processes in the nightside ionosphere
Kallio, E. I., Pulkkinen, T. I., Koskinen, H. E. J., Viljanen, A., Slavin, J. A. & Ogilvie, K., 2000, I: Geophysical Research Letters. 27, s. 1627-1630 4 s.

Observations of plasma entry into the magnetosphere at late magnetic local times
Koskinen, H. E. J., Malkki, A. M., Pulkkinen, T. I., Sandahl, I., Budnik, E. Y., Fedorov, A. O., Greenwald, R. A., Baker, K. B., Frank, L. A., Sigwarth, J. B. & Peterson, W. K., 2000, I: Advances in Space Research. 25, s. 1617-1622 6 s.

A test particle simulation of the motion of oxygen ions and solar wind protons near Mars
Kallio, E. & Koskinen, H., 1999, I: Journal of geophysical research : Space Physics. 104, A1, s. 557-579 23 s.

Evolution of mesoscale auroral cavities before substorm onset
Mäkelä, J. S., Mälkki, A. M., Koskinen, H. E. J., Clemmons, J. H., Erlandson, R. E., Holback, B. & Eliasson, L., 1999, I: Journal of geophysical research : Space Physics. 104, A8, s. 17201-17215 15 s.

First results from the hot plasma instrument PROMICS-3 on Interball-2
Sandahl, I., Barabash, S., Borg, H., Budnik, E. Y., Dubinin, E. M., Eklund, U., Koskinen, H., Lundin, K., Lundin, R., Malkki, A., Pellinen, R., Pissarenko, N. F., Pulkkinen, T. & Zakharov, A. V., 1999, I: Annales Geophysicae. 17, 5, s. 659-673 15 s.

Processes leading to plasma losses into the high-latitude atmosphere
Lyons, L. R., Koskinen, H. E. J., Blake, J. B., Egeland, A., Hirahara, M., Oieroset, M., Sandholt, P. E. & Shiokawa, K., 1999, I: Space Science Reviews. 88, s. 85-135 51 s.

Time-dependent modeling of particles and electromagnetic fields during the substorm growth phase: Anisotropy of energetic electrons
Toivanen, P. K., Pulkkinen, T. I., Friedel, R. H. W., Reeves, G. D., Korth, A., Mouikis, C. & Koskinen, H. E. J., 1999, I: Journal of geophysical research : Space Physics. 104, s. 10205-10220 16 s.

Dispersive magnetosheath-like ion injections in the evening sector on January 11, 1997
Sandahl, I., Koskinen, H. E. J., Mälkki, A. M., Pulkkinen, T. I., Budnik, E. Y., Fedorov, A. O., Frank, L. A. & Sigwarth, J. B., 1998, I: Geophysical Research Letters. 25, 14, s. 2569-2572 4 s.

Ion acceleration in the Martian plasma environment
Kallio, E. & Koskinen, H., 1998, I: Advances in Space Research. 21, 4, s. 573-582 10 s.

Mapping between the ionospheric and the tail electric fields in a time-dependent Earth's magnetosphere
Toivanen, P. K., Koskinen, H. E. J. & Pulkkinen, T. I., 1998, I: Journal of geophysical research : Space Physics. 103, s. 9153-9164 12 s.