

# Publication List (refereed)

R Srama

until Dec 2010

## References

- Altobelli, N., Dikarev, V., Kempf, S., Srama, R., Helfert, S., Moragas-Klostermeyer, G., Roy, M., and E. Gruen 2007. Cassini/Cosmic Dust Analyzer in situ dust measurements between Jupiter and Saturn. *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS* 112(A7).
- Altobelli, N., Kempf, S., Landgraf, M., Srama, R., Dikarev, V., Kruger, I., Moragas-Klostermeyer, G., and E. Grün 2003. Cassini between Venus and Earth: Detection of interstellar dust. *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS* 108(A10).
- Auer, S., Gruen, E., Kempf, S., Srama, R., Srowig, A., Sternovsky, Z., and V. Tschernjawska 2008. Characteristics of a dust trajectory sensor. *REVIEW OF SCIENTIFIC INSTRUMENTS* 79(8).
- Auer, S., Grün, E., Srama, R., Kempf, S., and R. Auer 2002. The charge and velocity detector of the cosmic dust analyzer on Cassini. *PLANETARY AND SPACE SCIENCE* 50(7-8), 773–779.
- Auer, S., Lawrence, G., Gruen, E., Henkel, H., Kempf, S., Srama, R., and Z. Sternovsky 2010. A self-triggered dust trajectory sensor. *NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPEC-TROMETERS DETECTORS AND ASSOCIATED EQUIPMENT* 622(1), 74–82.
- Cuzzi, J. N., Burns, J. A., Charnoz, S., Clark, R. N., Colwell, J. E., Dones, L., Esposito, L. W., Filacchione, G., French, R. G., Hedman, M. M., Kempf, S., Marouf, E. A., Murray, C. D., Nicholson, P. D., Porco, C. C., Schmidt, J., Showalter, M. R., Spilker, L. J., Spitale, J. N., Srama, R., Sremcevic, M., Tiscareno, M. S., and J. Weiss 2010. An Evolving View of Saturn’s Dynamic Rings. *Science* 327(5972), 1470–1475.
- Esser, N., Benne, I., Srama, R., and W. Richter 1992. The surface dipole contribution to the work function for Sb on GaAs(110) - A comparative study by Kelvin probe and Raman spectroscopy. *SURFACE SCIENCE* 269(Part B), 1037–1040.
- Fujii, S., Armes, S., Jeans, R., Devonshire, R., Warren, S., McArthur, S., Burchell, M., Postberg, F., and R. Srama 2006. Synthesis and characterization of polypyrrole-coated sulfur-rich latex particles: New synthetic mimics for sulfur-based micrometeorites. *CHEMISTRY OF MATERIALS* 18(11), 2758–2765.

- Goldsworthy, B., Burchell, M., Cole, M., Armes, S., Khan, M., Lascelles, S., Green, S., McDonnell, J., Srama, R., and S. Bigger 2003. Time of flight mass spectra of ions in plasmas produced by hypervelocity impacts of organic and mineralogical microparticles on a cosmic dust analyser. *ASTRONOMY & ASTROPHYSICS* **409**(3), 1151–1167.
- Goldsworthy, B., Burchell, M., Cole, M., Green, S., Leese, M., McBride, N., McDonnell, J., Muller, M., Grun, E., Srama, R., Armes, S., and M. Khan 2002a. Application of new, low density projectiles to the laboratory calibration of the Cassini Cosmic Dust Analyser (CDA). In *DUST IN THE SOLAR SYSTEM AND OTHER PLANETARY SYSTEMS* (Green, SF and Williams, IP and McDonnell, JAM and McBride, N Ed.) pp. 300–304, Vol. 15 of *COSPAR COLLOQUIA SERIES*. IAU Colloquium 181 on Dust in the Solar System and Other Planetary Systems, CANTERBURY, ENGLAND, APR 04-10, 2000.
- Goldsworthy, B., Burchell, M., Cole, M., Green, S., Leese, M., McBride, N., McDonnell, J., Muller, M., Grun, E., Srama, R., Armes, S., and M. Khan 2002b. Laboratory calibration of the Cassini Cosmic Dust Analyser (CDA) using new, low density projectiles.. In *EXPLORATION OF SMALL SOLAR SYSTEM OBJECTS: PAST, PRESENT AND FUTURE* (Thomas, N Ed.) pp. 1139–1144, Vol. 29 of *ADVANCES IN SPACE RESEARCH*. B1 1-D0 3 Symposium of COSPAR Scientific Commission B held at the 33rd COSPAR Scientific Assembly, WARSAW, POLAND, JUL, 2000.
- Grün, E., Baguhl, M., Hamilton, D., Riemann, R., Zook, H., Dermott, S., Fechtig, H., Gustafson, B., Hanner, M., Horanyi, M., Khurana, K., Kissel, J., Kivelson, M., Lindblad, B., Linkert, D., Linkert, G., Mann, I., McDonnell, J., Morfill, G., Polanskey, C., Schwehm, G., and R. Srama 1996. Constraints from Galileo observations on the origin of Jovian dust streams. *NATURE* **381**(6581), 395–398.
- Grün, E., Hamilton, D., Riemann, R., Dermott, S., Fechtig, H., Gustafson, B., Hanner, M., Heck, A., Horanyi, M., Kissel, J., Krüger, H., Lindblad, B., Linkert, D., Linkert, G., Mann, I., McDonnell, J., Morfill, G., Polanskey, C., Schwehm, G., Srama, R., and H. Zook 1996. Dust measurements during Galileo's approach to Jupiter and Io encounter. *SCIENCE* **274**(5286), 399–401.
- Grün, E., Krüger, H., Dermott, S., Fechtig, H., Graps, A., Zook, H., Gustafson, B., Hamilton, D., Hanner, M., Heck, A., Horanyi, M., Kissel, J., Lindblad, B., Linkert, D., Linkert, G., Mann, I., McDonnell, J., Morfill, G., Polanskey, C., Schwehm, G., and R. Srama 1997a. Dust measurements in the Jovian magnetosphere. *GEOPHYSICAL RESEARCH LETTERS* **24**(17), 2171–2174.
- Grün, E., Krüger, H., Graps, A., Hamilton, D., Heck, A., Linkert, G., Zook, H., Dermott, S., Fechtig, H., Gustafson, B., Hanner, M., Horanyi, M., Kissel, J., Lindblad, B., Linkert, D., Mann, I., McDonnell, J., Morfill, G., Polanskey, C., Schwehm, G., and R. Srama 1998. Galileo observes electromagnetically coupled dust in the Jovian magnetosphere. *JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS* **103**(E9), 20011–20022. Conference on Magnetospheres of the Outer Planets, BOULDER, COLORADO, MAR 17-21, 1997.
- Grün, E., Krüger, H., Srama, R., Kempf, S., Auer, S., Colangeli, L., Horanyi, M., With-

- nell, P., Kissel, J., Landgraf, M., and H. Svedhem 2002. Dust telescope: A new tool for dust research.. In *DUST IN THE SOLAR SYSTEM AND OTHER PLANETARY SYSTEMS* (Green, SF and Williams, IP and McDonnell, JAM and McBride, N Ed.) pp. 181–194, Vol. 15 of *COSPAR COLLOQUIA SERIES*. IAU Colloquium 181 on Dust in the Solar System and Other Planetary Systems, CANTERBURY, ENGLAND, APR 04-10, 2000.
- Grün, E., Landgraf, M., Horanyi, M., Kissel, J., Krüger, H., Srama, R., Svedhem, H., and P. Withnell 2000. Techniques for galactic dust measurements in the heliosphere. *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS* **105(A5)**, 10403–10410. ISSI Workshop on Interstellar Dust and the Heliosphere, BERN, SWITZERLAND, 1998.
- Grün, E., Srama, R., Altobelli, N., Altwegg, K., Carpenter, J., Colangeli, L., Glassmeier, K.-H., Helfert, S., Henkel, H., Horanyi, M., Jäckel, A., Kempf, S., Landgraf, M., McBride, N., Moragas-Klostermeyer, G., Palumbo, P., Scholten, H., Srowig, A., Sternovsky, Z., and X. Vo 2009. DuneXpress. *EXPERIMENTAL ASTRONOMY* **23(3)**, 981–999.
- Grün, E., Srama, R., and DuneXpress Sci Team 2007. DuneXpress, in situ analysis of interstellar dust. *GEOCHIMICA ET COSMOCHIMICA ACTA* **71(15, Suppl. S)**, A358. 17th Annual V M Goldschmidt Conference, Cologne, GERMANY, AUG, 2007.
- Grün, E., Srama, R., Krüger, H., Kempf, S., Dikarev, V., Helfert, S., and G. Moragas-Klostermeyer 2005. 2002 Kuiper prize lecture: Dust astronomy. *ICARUS* **174(1)**, 1–14.
- Grün, E., Staubach, P., Baguhl, M., Hamilton, D., Zook, H., Dermott, S., Gustafson, B., Fechtig, H., Kissel, J., Linkert, D., Linkert, G., Srama, R., Hanner, M., Polanskey, C., Horanyi, M., Lindblad, B., Mann, I., McDonnell, J., Morfill, G., and G. Schwehm 1997b. South-North and radial traverses through the interplanetary dust cloud. *ICARUS* **129(2)**, 270–288.
- Hillier, J. K., Green, S. F., McBride, N., Altobelli, N., Postberg, F., Kempf, S., Schwanethal, J., Srama, R., McDonnell, J. A. M., and E. Gruen 2007a. Interplanetary dust detected by the Cassini CDA chemical analyser. *ICARUS* **190(2)**, 643–654.
- Hillier, J. K., Green, S. F., McBride, N., Schwanethal, J. P., Postberg, F., Srama, R., Kempf, S., Moragas-Klostermeyer, G., McDonnell, J. A. M., and E. Gruen 2007b. The composition of Saturn’s E ring. *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY* **377(4)**, 1588–1596.
- Hillier, J. K., McBride, N., Green, S. F., Kempf, S., and R. Srama 2006. Modelling CDA mass spectra. *PLANETARY AND SPACE SCIENCE* **54(9-10)**, 1007–1013.
- Hillier, J. K., Sestak, S., Green, S.F., Postberg, F., Srama, R., and M. Trieloff 2009. The production of platinum-coated silicate nanoparticle aggregates for use in hypervelocity impact experiments. *Jour. of Geophys. Res.* p. in press.
- Hsiang-Wen Hsu, Kempf, S., Postberg, F., Srama, R., Jackman, C., Moragas-Klostermeyer, G., Helfert, S., and E. Gruen 2010. Interaction of the solar wind and stream particles, results from the Cassini dust detector. In *AIP Conference Proceedings*

- ence Proceedings* pp. 510–13, Vol. 1216, American Institute of Physics, USA. Twelfth International Solar wind Conference, 21-26 June 2009, Saint-Malo, France.
- Jones, G. H., Roussos, E., Krupp, N., Beckmann, U., Coates, A. J., Crary, F., Dandouras, I., Dikarev, V., Dougherty, M. K., Garnier, P., Hansen, C. J., Hendrix, A. R., Hospodarsky, G. B., Johnson, R. E., Kempf, S., Khurana, K. K., Krimigis, S. M., Krueger, H., Kurth, W. S., Lagg, A., McAndrews, H. J., Mitchell, D. G., Paranicas, C., Postberg, F., Russell, C. T., Saur, J., Seiss, M., Spahn, F., Srama, R., Strobel, D. F., Tokar, R., Wahlund, J. E., Wilson, R. J., Woch, J., and D. Young 2008. The dust halo of Saturn's largest icy moon, Rhea. *SCIENCE* **319(5868)**, 1380–1384.
- Kempf, S., Beckmann, U., Moragas-Klostermeyer, G., Postberg, F., Srama, R., Economou, T., Schmidt, J., Spahn, F., and E. Gruen 2008. The E ring in the vicinity of Enceladus - I. Spatial distribution and properties of the ring particles. *ICARUS* **193(2)**, 420–437.
- Kempf, S., Beckmann, U., Srama, R., Horanyi, M., Auer, S., and E. Grün 2006. The electrostatic potential of E ring particles. *PLANETARY AND SPACE SCIENCE* **54(9-10)**, 999–1006.
- Kempf, S., Srama, R., Altobelli, N., Auer, S., Tschernjawska, V., Bradley, J., Burton, M., Helfert, S., Johnson, T., Krüger, H., Moragas-Klostermeyer, G., and E. Grün 2004. Cassini between Earth and asteroid belt: first in-situ charge measurements of interplanetary grains. *ICARUS* **171(2)**, 317–335.
- Kempf, S., Srama, R., Horanyi, M., Burton, M., Helfert, S., Moragas-Klostermeyer, G., Roy, M., and E. Grün 2005a. High-velocity streams of dust originating from Saturn. *NATURE* **433(7023)**, 289–291.
- Kempf, S., Srama, R., Postberg, F., Burton, M., Green, S., Helfert, S., Hillier, J., McBride, N., McDonnell, J., Moragas-Klostermeyer, G., Roy, M., and E. Grün 2005b. Composition of saturnian stream particles. *SCIENCE* **307(5713)**, 1274–1276.
- Kempf, S., Beckmann, U., and Srama, R. 2009. How the Enceladus dust plumes form Saturn's E ring. *Icarus* (revised).
- Kröger, H., Altobelli, N., Anweiler, B., Dermott, S. F., Dikarev, V., Graps, A. L., Grün, E., Gustafson, B. A., Hamilton, D. P., Hanner, M. S., Horanyi, M., Kissel, J., Landgraf, M., Lindblad, B. A., Linkert, D., Linkert, G., Mann, I., McDonnell, J. A. M., Morfill, G. E., Polanskey, C., Schwehm, G., Srama, R., and H. A. Zook 2006a. Five years of Ulysses dust data: 2000-2004. *PLANETARY AND SPACE SCIENCE* **54(9-10)**, 932–956.
- Kröger, H., Bindschadler, D., Dermott, S. F., Graps, A. L., Grün, E., Gustafson, B. A., Hamilton, D. P., Hanner, M. S., Horanyi, M., Kissel, J., Lindblad, B. A., Linkert, D., Linkert, G., Mann, I., McDonnell, J. A. M., Moissl, R., Morfill, G. E., Polanskey, C., Schwehm, G., Srama, R., and H. A. Zook 2006b. Galileo dust data from the jovian system: 1997-1999. *PLANETARY AND SPACE SCIENCE* **54(9-10)**, 879–910.
- Krueger, H., Bindschadler, D., Dermott, S. F., Graps, A. L., Gruen, E., Gustafson, B. A., Hamilton, D. P., Hanner, M. S., Horanyi, M., Kissel, J., Linkert, D., Linkert, G., Mann, I., McDonnell, J. A. M., Moissl, R., Morfill, G. E., Polanskey, C., Roy,

- M., Schwehm, G., and R. Srama 2010a. Galileo dust data from the jovian system: 2000 to 2003. *PLANETARY AND SPACE SCIENCE* **58(7-8)**, 965–993.
- Krueger, H., Dikarev, V., Anweiler, B., Dermott, S. F., Graps, A. L., Gruen, E., Gustafson, B. A., Hamilton, D. P., Hanner, M. S., Horanyi, M., Kissel, J., Linkert, D., Linkert, G., Mann, I., McDonnell, J. A. M., Morfill, G. E., Polanskey, C., Schwehm, G., and R. Srama 2010b. Three years of Ulysses dust data: 2005 to 2007. *PLANETARY AND SPACE SCIENCE* **58(7-8)**, 951–964.
- Krüger, H., Geissler, P., Horanyi, M., Graps, A., Kempf, S., Srama, R., Moragas-Klostermeyer, G., Moissl, R., Johnson, T., and E. Grün 2003. Jovian dust streams: A monitor of Io's volcanic plume activity. *GEOPHYSICAL RESEARCH LETTERS* **30(21)**.
- Krüger, H., Grün, E., Graps, A., Bindschadler, D., Dermott, S., Fechtig, H., Gustafson, B., Hamilton, D., Hanner, M., Horanyi, M., Kissel, J., Lindblad, B., Linkert, D., Linkert, G., Mann, I., McDonnell, J., Morfill, G., Polanskey, C., Schwehm, G., Srama, R., and H. Zook 2001a. One year of Galileo dust data from the Jovian system: 1996. *PLANETARY AND SPACE SCIENCE* **49(13)**, 1285–1301.
- Krüger, H., Grün, E., Hamilton, D., Baguhl, M., Dermott, S., Fechtig, H., Gustafson, B., Hanner, M., Horanyi, M., Kissel, J., Lindblad, B., Linkert, D., Linkert, G., Mann, I., McDonnell, J., Morfill, G., Polanskey, C., Riemann, R., Schwehm, G., Srama, R., and H. Zook 1999a. Three years of Galileo dust data: II. 1993-1995. *PLANETARY AND SPACE SCIENCE* **47(1-2)**, 85–106.
- Krüger, H., Grün, E., Landgraf, M., Baguhl, M., Dermott, S., Fechtig, H., Gustafson, B., Hamilton, D., Hanner, M., Horanyi, M., Kissel, J., Lindblad, B., Linkert, D., Linkert, G., Mann, I., McDonnell, J., Morfill, G., Polanskey, C., Schwehm, G., Srama, R., and H. Zook 1999b. Three years of Ulysses dust data: 1993-1995. *PLANETARY AND SPACE SCIENCE* **47(3-4)**, 363–383.
- Krüger, H., Grün, E., Landgraf, M., Dermott, S., Fechtig, H., Gustafson, B., Hamilton, D., Hanner, M., Horanyi, M., Kissel, J., Lindblad, B., Linkert, D., Linkert, G., Mann, I., McDonnell, J., Morfill, G., Polanskey, C., Schwehm, G., Srama, R., and H. Zook 2001b. Four years of Ulysses dust data: 1996-1999. *PLANETARY AND SPACE SCIENCE* **49(13)**, 1303–1324.
- Meidinger, N., Aschenbach, B., Brauninger, H., Drolshagen, G., Englhauser, J., Hartmann, R., Hartner, G., Srama, R., Struder, L., Stubig, M., and J. Trumper 2003. Experimental verification of a micrometeoroid damage in the PN-CCD camera system aboard XMM-Newton. In *X-RAY AND GAMMA-RAY TELESCOPES AND INSTRUMENTS FOR ASTRONOMY, PTS 1 AND 2* (Trumper, JE and Tananbaum, HD Ed.) pp. 243–254, Vol. 4851 of *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*. Conference on X-Ray and Gamma-Ray Telescopes and Instruments for Astronomy, WAIKOLOA, HI, AUG 24-28, 2002.
- Miyachi, T., Fujii, M., Hasebe, N., Kobayashi, M., Kuraza, G., Nagashima, A., Nakamura, Y., Nogami, K., Iwai, T., Sasaki, S., Muranaga, K., Ohashi, H., Hasegawa, S., Yano, H., Shibata, H., Grun, E., Srama, R., Okada, N., and T. Tou 2005. Velocity-

dependent wave forms of piezoelectric elements undergoing collisions with iron particles having velocities ranging from 5 to 63 km/s. *APPLIED PHYSICS LETTERS* 86(23).

- Miyachi, T., Fujii, M., Hasebe, N., Kuraza, G., Mori, K., Okudaira, O., Yamashita, N., Sasaki, S., Iwai, T., Nogami, K., Matsumoto, H., Ohashi, H., Shibata, H., Minami, S., Takechi, S., Onishi, T., Grun, E., Srama, R., and N. Okada 2008a. Response of a pentagonal PZT element as a component of a 4 pi-real-time detector. *ADVANCES IN SPACE RESEARCH* 41(7), 1147–1151. 50th Conference of the Committee-on-the-Peaceful-Uses-of-Outer-Space, Vienna, AUSTRIA, JUN 06-15, 2007.
- Miyachi, T., Fujii, M., Hasebe, N., Miyajima, M., Okudaira, O., Takechi, S., Onishi, T., Minami, S., Shibata, H., Ohashi, H., Iwai, T., Nogami, K.-i., Sasaki, S., Grun, E., Srama, R., and N. Okada 2008b. Measurement of temperature after hypervelocity collision of microparticles in the range from 10 to 40 km/s. *APPLIED PHYSICS LETTERS* 93(17).
- Miyachi, T., Kuraza, G., Nagashima, A., Fujii, M., Hasebe, N., Yamashita, N., Nogami, K.-i., Iwai, T., Ohashi, H., Shibata, H., Minami, S., Takechi, S., Onishi, T., Grun, E., Srama, R., and N. Okada 2008c. Position Sensitive Element for Hypervelocity Microparticles Using a Piezoelectric Plate. *JAPANESE JOURNAL OF APPLIED PHYSICS* 47(5, Part 1), 3772–3775.
- Müller, M., Goldsworthy, B., McBride, N., Green, S., McDonnell, J., Srama, R., Kempf, S., and E. Grun 2002. CDA cruise science: Comparison of measured dust flux at 1AU with models. In *DUST IN THE SOLAR SYSTEM AND OTHER PLANETARY SYSTEMS* (Green, SF and Williams, IP and McDonnell, JAM and McBride, N Ed.) pp. 160–163, Vol. 15 of *COSPAR COLLOQUIA SERIES*. IAU Colloquium 181 on Dust in the Solar System and Other Planetary Systems, CANTERBURY, ENGLAND, APR 04-10, 2000.
- Nogami, K., Fujii, M., Ohashi, H., Miyachi, T., Sasaki, S., Hasegawa, S., Yano, H., Shibata, H., Iwai, T., Minami, S., Takechi, S., Grün, E., and R. Srama 2009. Development of the Mercury dust monitor (MDM) onboard the BepiColombo mission. *Plan. Space Sci.* p. in press.
- Postberg, F., Kempf, S., Hillier, J. K., Srama, R., Green, S. F., McBride, N., and G. E. 2008. The E-ring in the vicinity of Enceladus II. Probing the moon's interior - The composition of E-ring particles. *ICARUS* 193(2), 438–454.
- Postberg, F., Kempf, S., Schmidt, J., Brilliantov, N., Beinsen, A., Abel, B., Buck, U., and R. Srama 2009. Sodium salts in E-ring ice grains from an ocean below the surface of Enceladus. *NATURE* 459(7250), 1098–1101.
- Postberg, F., Kempf, S., Srama, R., Green, S., Hillier, J., McBride, N., and E. Grün 2006. Composition of jovian dust stream particles. *ICARUS* 183(1), 122–134.
- Postberg, F., Kempf, S., Rost, D., Stephan, T., Srama, R., Trieloff, M., Mocker, A., and M. Goerlich 2009. Discriminating Contamination from Particle Components in Spectra of Cassini's Dust Detector CDA. *Plan. Space Sci.* 57, 1359–1374.
- Rachev, M., Srama, R., Fettig, R., Kohler, U., Maas, D., and E. Grün 2005. Development of an ion-to-electron converter. *REVIEW OF SCIENTIFIC INSTRUMENTS* 76(6).

- Ratcliff, P., Gogu, F., Grün, E., and R. Srama 1995. Plasma production by secondary impacts - Implications for velocity measurements by in-situ dust detectors. In *IN-SITU IMPACT DETECTION TECHNIQUES, INTERPLANETARY DUST, AND FUTURE MARS EXPLORATION* (Masson, PL and Kissel, J and McDonnell, JAM Ed.) pp. 111–115, Vol. 17 of *ADVANCES IN SPACE RESEARCH*. B1 Symposium and B1.1, B1.3 Meetings of COSPAR Scientific Commission B, at the 13th COSPAR Scientific Assembly, HAMBURG, GERMANY, JUL 11-21, 1994.
- Spahn, F., Schmidt, J., Albers, N., Horning, M., Makuch, M., Seiss, M., Kempf, S., Srama, R., Dikarev, V., Helfert, S., Moragas-Klostermeyer, G., Krivov, A., Sremcevic, M., Tuzzolino, A., Economou, T., and E. Grün 2006. Cassini dust measurements at Enceladus and implications for the origin of the E ring. *SCIENCE* **311(5766)**, 1416–1418.
- Spahn, F., Thiessenhusen, K., Colwell, J., Srama, R., and E. Grün 1999. Dynamics of dust ejected from Enceladus: Application to the Cassini dust detector. *JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS* **104(E10)**, 24111–24120.
- Srama, R. 2010a. *Cassini-Huygens and Beyond - Tools for Dust Astronomy*. Habilitation, University Stuttgart.
- Srama, R. 2010b. Micrometeoroids. In *Encyclopedia of Aerospace Engineering* (R. Blockley and W. Shyy Eds.) pp. 3413–3424. Wiley, Chichester.
- Srama, R., Ahrens, T., Altobelli, N., Auer, S., Bradley, J., Burton, M., Dikarev, V., Economou, T., Fechtig, H., Gorlich, M., Grande, M., Graps, A., Grün, E., Havnes, O., Helfert, S., Horanyi, M., Igenbergs, E., Jessberger, E., Johnson, T., Kempf, S., Krivov, A., Krüger, H., Mocker-Ahreep, A., Moragas-Klostermeyer, G., Lamy, P., Landgraf, M., Linkert, D., Linkert, G., Lura, F., McDonnell, J., Mohlmann, D., Morfill, G., Muller, M., Roy, M., Schafer, G., Schlotzhauer, G., Schwehm, G., Spahn, F., Stubig, M., Svestka, J., Tscherjawski, V., Tuzzolino, A., Wasch, R., and H. Zook 2004a. The Cassini Cosmic Dust Analyzer. *SPACE SCIENCE REVIEWS* **114(1-4)**, 465–518.
- Srama, R., Altobelli, N., de Kam, J., Kempf, S., Krüger, H., Lera, S., Moragas-Klostermeyer, G., Rachev, M., Srowig, A., Landgraf, M., Vo, Q., and E. Grün 2006a. DUNE-eXpress - Dust astronomy with ConeXpress. *ADVANCES IN SPACE RESEARCH* **38(9)**, 2093–2101.
- Srama, R. and S. Auer 2008. Low-charge detector for the monitoring of hyper-velocity micron-sized dust particles. *MEASUREMENT SCIENCE & TECHNOLOGY* **19(5)**.
- Srama, R. and E. Grün 1996. The Cosmic Dust Analyzer for the CASSINI mission to Saturn. In *PHYSICS, CHEMISTRY, AND DYNAMICS OF INTERPLANETARY DUST* (Gustafson, BAS and Hanner, MS Ed.) pp. 227–231, Vol. 104 of *ASTRONOMICAL SOCIETY OF THE PACIFIC CONFERENCE SERIES*. 150th Colloquium of the International-Astronomical-Union on Physics, Chemistry, and Dynamics of Interplanetary Dust, GAINESVILLE, FL, AUG 14-18, 1995.
- Srama, R. and E. Grün 1997. The dust sensor for CASSINI. In *HYPERVERELOCITY IMPACTS IN SPACE AND PLANETOLOGY* (McDonnell, JAM and Spohn, T and Mohlmann, D and Klinger, J Ed.) pp. 1467–1470, Vol. 20 of *ADVANCES IN SPACE*

*RESEARCH*. BO.8, BO.3 and BO.5 Symposium of COSPAR Scientific Commission B on Hypervelocity Impacts in Space and Planetology, at the 31st COSPAR Scientific Assembly, BIRMINGHAM, ENGLAND, JUL 14-21, 1996.

- Srama, R., Kempf, S., Moragas-Klostermeyer, G., Helfert, S., Ahrens, T. J., Altobelli, N., Auer, S., Beckmann, U., Bradley, J. G., Burton, M., Dikarev, V. V., Economou, T., Fechtig, H., Green, S. F., Grande, M., Havnes, O., Hillier, J. K., Horanyi, M., Igenbergs, E., Jessberger, E. K., Johnson, T. V., Krueger, H., Matt, G., McBride, N., Mocker, A., Lamy, P., Linkert, D., Linkert, G., Lura, F., McDonnell, J. A. M., Moehlmann, D., Morfill, G. E., Postberg, F., Roy, M., Schwehm, G. H., Spahn, F., Svestka, J., Tschernjawska, V., Tuzzolino, A. J., Waesch, R., and G. E. 2006b. In situ dust measurements in the inner Saturnian system. *PLANETARY AND SPACE SCIENCE* **54(9-10)**, 967–987.
- Srama, R., Kempf, S., Moragas-Klostermeyer, G., Landgraf, M., Helfert, S., Sternovsky, Z., Rachev, M., and E. Grün 2007a. Laboratory tests of the Large Area Mass Analyser. In *Workshop on Dust in Planetary Systems* pp. 209–212, Vol. 643 of *ESA SPECIAL PUBLICATIONS*. Workshop on Dust in Planetary Systems, Kauai, HI, SEP 26-30, 2005.
- Srama, R., Rachev, M., Srowig, A., Dikarev, V., Helfert, S., Kempf, S., Linkert, D., Moragas-Klostermeyer, G., and E. Grün 2005a. Performance of an advanced dust telescope. In *Proceedings of the 4th European Conference on Space Debris* (Danesy, D Ed.) pp. 171–176, Vol. 587 of *ESA SPECIAL PUBLICATIONS*. 4th European Conference on Space Debris, Darmstadt, GERMANY, APR 18-20, 2005.
- Srama, R., Srowig, A., Auer, S., Harris, D., Helfert, S., Kempf, S., Moragas-Klostermeyer, G., and E. Grün 2007b. A trajectory sensor for sub-micron sized dust. In *Workshop on Dust in Planetary Systems* pp. 213–217, Vol. 643 of *ESA SPECIAL PUBLICATIONS*. Workshop on Dust in Planetary Systems, Kauai, HI, SEP 26-30, 2005.
- Srama, R., Srowig, A., Rachev, M., Grün, E., Kempf, S., Moragas-Klostermeyer, G., Conlon, T., Harris, D., Auer, S., Glasmachers, A., Helfert, S., Linnemann, H., and V. Tschernjawska 2005b. Development of an advanced dust telescope. *EARTH MOON AND PLANETS* **95(1-4)**, 211–220. Meteoroids 2004 Conference, London, ENGLAND, AUG 16-20, 2004.
- Srama, R., Stephan, T., Grün, E., Pailer, N., Kearsley, A., Graps, A., Laufer, R., Ehrenfreund, P., Altobelli, N., Altwege, K., Auer, S., Baggaley, J., Burchell, M. J., Carpenter, J., Colangeli, L., Esposito, F., Green, S. F., Henkel, H., Horanyi, M., Jaeckel, A., Kempf, S., McBride, N., Moragas-Klostermeyer, G., Krueger, H., Palumbo, P., Srowig, A., Trieloff, M., Tsou, P., Sternovsky, Z., Zeile, O., and H.-P. Roeser 2009. Sample return of interstellar matter (SARIM). *EXPERIMENTAL ASTRONOMY* **23(1)**, 303–328.
- Srama, R., Stübig, M., and E. Grün 2004b. Laboratory detection of organic dust with the Cassini-CDA instrument. In *SPACE LIFE SCIENCES: SEARCH FOR SIGNALURES OF LIFE, AND SPACE FLIGHT ENVIRONMENTAL EFFECTS ON THE NERVOUS SYSTEM* (Horneck, G and LevasseurRegourd, AC and Rabin, BM and

- Slenzka, KB Ed.) pp. 1289–1293, Vol. 33 of *ADVANCES IN SPACE RESEARCH*. 2nd World Space Congress/34th COSPAR Scientific Assembly, HOUSTON, TX, OCT 10-19, 2002.
- Srama, R., Woiwode, W., Postberg, F., Armes, S.P., Fujii, S., Dupin, D., Ormond-Prout, J., Sternovsky, Z., Kempf, S., Moragas-Klostermeyer, G., Mocker, A., and E. Grün 2009. Mass spectrometry of hyper-velocity impacts of organic micrograins. *Rapid Commun. Mass Spectrom.* **23**, 3895–3906.
- Sternovsky, Z., Amyx, K., Bano, G., Landgraf, M., Horanyi, M., Knappmiller, S., Robertson, S., Gruen, E., Srama, R., and S. Auer 2007. Large area mass analyzer instrument for the chemical analysis of interstellar dust particles. *REVIEW OF SCIENTIFIC INSTRUMENTS* 78(1).
- Stübig, M., Schäfer, G., Ho, T., Srama, R., and E. Grün 2001. Laboratory simulation improvements for hypervelocity micrometeorite impacts with a new dust particle source. *PLANETARY AND SPACE SCIENCE* **49**(8, Sp. Iss. SI), 853–858.
- Stübig, M., Schäfer, G., Ho, T., Srama, R., and E. Grün 2002. A new dust source for the Heidelberg dust accelerator. In *DUST IN THE SOLAR SYSTEM AND OTHER PLANETARY SYSTEMS* (Green, SF and Williams, IP and McDonnell, JAM and McBride, N Ed.) pp. 290–295, Vol. 15 of *COSPAR COLLOQUIA SERIES*. IAU Colloquium 181 on Dust in the Solar System and Other Planetary Systems, CANTERBURY, ENGLAND, APR 04-10, 2000.
- Takechi, S., Nogami, K., Miyachi, T., Fujii, M., Hasebe, N., Iwai, T., Sasaki, S., Ohashi, H., Shibata, H., Gruen, E., Srama, R., and N. Okada 2009a. Laboratory calibration measurements of a piezoelectric lead zirconate titanate cosmic dust detector at low velocities. *ADVANCES IN SPACE RESEARCH* **43**(6), 905–909.
- Takechi, S., Onishi, T., Minami, S., Miyachi, T., Fujii, M., Hasebe, N., Mori, K., Nogami, K., Ohashi, H., Sasaki, S., Shibata, H., Iwai, T., Gruen, E., Srama, R., and N. Okada 2008a. Investigation on piezoelectric lead zirconate titanate detector bombarded obliquely with hypervelocity iron particles. *PLANETARY AND SPACE SCIENCE* **56**(9), 1309–1313.
- Takechi, S., Onishi, T., Minami, S., Miyachi, T., Fujii, M., Hasebe, N., Mori, K., Nogami, K., Ohashi, H., Sasaki, S., Shibata, H., Iwai, T., Gruen, E., Srama, R., and N. Okada 2008b. Response of piezoelectric lead zirconate titanate detector to oblique impact with hypervelocity iron particles. *EARTH PLANETS AND SPACE* **60**(12), 1187–1190.
- Takechi, S., Onishi, T., Minami, S., Miyachi, T., Fujii, M., Hasebe, N., Mori, K., Nogami, K., Ohashi, H., Sasaki, S., Shibata, H., Iwai, T., Gruen, E., Srama, R., and N. Okada 2009b. Characteristics of piezoelectric lead zirconate titanate multilayered detector bombarded with hypervelocity iron particles. *ADVANCES IN SPACE RESEARCH* **43**(3), 455–459.
- Takechi, S., Onishi, T., Minami, S., Miyachi, T., Fujii, M., Hasebe, N., Nogami, K.-i., Ohashi, H., Sasaki, S., Shibata, H., Iwai, T., Grun, E., Srama, R., and N. Okada 2008c. Measurement of incident position of hypervelocity particles on piezoelectric lead zirconate titanate detector. *REVIEW OF SCIENTIFIC INSTRUMENTS* 79(4).

- Westphal, A. J., Allbrink, A., Allen, C., Bajt, S., Bastien, R., Bechtel, H., Bleuet, P., Borg, J., Bowker, S., Brenker, F., Bridges, J., Brownlee, D. E., Burchell, M., Burghammer, M., Butterworth, A. L., Campanile, A., Cloetens, P., Cody, G., Ferroir, T., Ferrari, K., Floss, C., Flynn, G. J., Frank, D., Gainsforth, Z., Gruen, E., Harmer, M., Hoppe, P., Kearsley, A., Kulkarni, S., Lai, B., Lemelle, L., Leroux, H., Lettieri, R., Marchant, W., McCreadie, B., Nittler, L. R., Ogliore, R., Postberg, F., Rigamonti, C., Sandford, S. A., Schmitz, S., Silversmit, G., Simionovici, A., Sperry, G., Srama, R., Stadermann, F., Stephan, T., Stroud, R. M., Susini, J., Sutton, S., Thompson, V., Toucoulou, R., Trieloff, M., Tsou, P., Tsuchiyama, A., Tyliczszak, T., Vekemans, B., Vincze, L., Warren, J., Yahnke, T., Zevin, D., Zolensky, M. E., and 27000 Stardust Home Dusters 2010. Non-destructive search for interstellar dust using synchrotron microprobes. In *X-RAY OPTICS AND MICROANALYSIS, PROCEEDINGS* (Denecke, MA and Walker, CT Ed.) pp. 131–138, Vol. 1221 of *AIP Conference Proceedings*, Res Ctr Karlsruhe Program NUCLEAR; European Joint Res Ctr Inst Transuranium Elements; Deutsch Forschungsgemeinsc; European Microbeam Anal Soc, AMER INST PHYSICS, 2 HUNTINGTON QUADRANGLE, STE 1NO1, MELVILLE, NY 11747-4501 USA. 20th International Congress on X-Ray Optics and Microanalysis, Karlsruhe, GERMANY, SEP 15-18, 2009.
- Zahn, D., Maierhofer, C. H., Winter, A., Reckzuegel, M., Srama, R., Thomas, A., Horn, K., and W. Richter 1991. The growth of cubi CdS on InP(110) stuied in situ by Raman-spectroscopy. *Jour. of Vacuum Science and Techn. B* **9**(4), 2206–2211.
- Zahn, D. R. T., Maierhofer, C., Winter, A., Reckzuegel, M., Srama, R., Rossow, U., Thomas, A., Horn, K., and W. Richter 1992. In-situ monitoring of heterostructure growth by optical spectroscopies - CdS on InP(110). *Appl. Surface Sci.* **56-8(Part B)**, 684–690. 3rd intern. conf. on the formation of semiconductor interfaces (ICFSI-3), Rome, Italy, 1991.