



[Browse](#) [Search](#) [My Settings](#) [Alerts](#) [Help](#)

[Home](#)

**Quick Search** Title, abstract, keywords Author e.g. j s smith  
 ? search tips Journal/book title Volume Issue Page Clear 



## Advances in Space Research

Copyright © 2007 Committee on Space Research  
 Shortcut URL to this page: <http://www.sciencedirect.com/science/journal/02731177>

[Alert me about new Journal Issues](#)


[Add to Favorites](#)

[Apply](#) 

[Sample Issue Online](#) | [About this Journal](#) | [Submit your Article](#)

This journal has a free companion journal: [COSPAR Information Bulletin](#)

 = Full-text available

 = Non-subscribed

? [What does this mean?](#)

### **Articles in Press**

#### **Volume 39 (2007)**

#### **Volume 38 (2006)**

##### [Volume 38, Issue 12](#)

pp. 2661-3032 (2006)  
 Spectra and Timing of Compact X-ray Binaries

##### [Volume 38, Issue 11](#)

pp. 2301-2660 (2006)  
 Middle and Upper Atmospheres, Active Experiments, and Dusty Plasmas

##### [Volume 38, Issue 10](#)

pp. 2139-2300 (2006)  
 Remote Sensing of Oceanographic Processes and Land Surfaces; Space Science Education and Outreach

##### [Volume 38, Issue 9](#)

pp. 1903-2138 (2006)  
 Small Bodies in the Solar System; Space Debris

##### [Volume 38, Issue 8](#)

pp. 1569-1904 (2006)  
 Magnetospheric dynamics and the international living with a star program

##### [Volume 38, Issue 7](#)

pp. 1273-1568 (2006)  
 Galactic and Extragalactic Astrophysics

##### [Volume 38, Issue 6](#)

pp. 1013-1272 (2006)  
 Space life sciences

##### [Volume 38, Issue 5](#)

pp. 829-1012 (2006)  
 Solar Activity Cycle and Particle Acceleration

##### [Volume 38, Issue 4](#)

pp. 561-828 (2006)  
 Mercury, Mars and Saturn

##### [Volume 38, Issue 3](#)

pp. 389-560 (2006)  
 Coronal Mass Ejections and Solar Particle Events in Solar Cycle 23

##### [Volume 38, Issue 2](#)

pp. 115-388 (2006)  
 The Great Historical Geomagnetic Storm of 1859: A Modern Look

##### [Volume 38, Issue 1](#)

pp. 1-114 (2006)  
 Dynamical Processes in Critical Regions of the Heliosphere

- [+ Volume 37 \(2006\)](#)
- [+ Volume 36 \(2005\)](#)
- [+ Volume 35 \(2005\)](#)
- [+ Volume 34 \(2004\)](#)
- [+ Volume 33 \(2004\)](#)
- [+ Volume 32 \(2003\)](#)
- [+ Volume 31 \(2003\)](#)
- [+ Volume 30 \(2002\)](#)
- [+ Volume 29 \(2002\)](#)
- [+ Volume 28 \(2001\)](#)
- [+ Volume 27 \(2001\)](#)
- [+ Volume 26 \(2000\)](#)
- [+ Volume 25 \(2000\)](#)
- [+ Volume 24 \(1999\)](#)
- [+ Volume 23 \(1999\)](#)
- [+ Volume 22 \(1998\)](#)
- [+ Volume 21 \(1998\)](#)
- [+ Volume 20 \(1997\)](#)
- [+ Volume 19 \(1997\)](#)
- [+ Volume 18 \(1996\)](#)
- [+ Volume 17 \(1996\)](#)
- [+ Volume 16 \(1995\)](#)
- [+ Volume 15 \(1995\)](#)
- [+ Volume 14 \(1994\)](#)
- [+ Volume 13 \(1993\)](#)
- [+ Volume 12 \(1992\)](#)
- [+ Volume 11 \(1991\)](#)
- [+ Volume 10 \(1990\)](#)
- [+ Volume 9 \(1989\)](#)
- [+ Volume 8 \(1988\)](#)
- [+ Volume 7 \(1987\)](#)
- [+ Volume 6 \(1986\)](#)
- [+ Volume 5 \(1985\)](#)
- [+ Volume 4 \(1984\)](#)
- [+ Volume 3 \(1983 - 1984\)](#)
- [+ Volume 2 \(1982\)](#)
- [+ Volume 1 \(1981\)](#)

Volume 38, Issue 9, Pages 1903-2138 (2006)


[• Previous vol/iss](#) [Next vol/iss •](#)

**Small Bodies in the Solar System; Space Debris**




Edited by J.-C. Worms, L. Jorda and L. Anselmo

**Article List**

**Full Abstracts**

 [Add to my Quick Links](#)

articles 1 - 38

-  1. **Interpretation of the remote and in situ observations of small bodies • EDITORIAL**  
*Page 1905*  
Maria-Teresa Capria and Jean-Claude Worms  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(71 K\)](#)
  
-  2. **67P/Churyumov–Gerasimenko nucleus model: Portrayal of the Rosetta target • ARTICLE**  
*Pages 1906-1910*  
M.C. De Sanctis, M.T. Capria and A. Coradini  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(581 K\)](#)
  
-  3. **Multidimensional physicochemical models of the near-nucleus coma: Present achievements and requested future developments • ARTICLE**  
*Pages 1911-1922*  
J.-F. Crifo  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(10290 K\)](#)

-  4. **Time-dependent, three-dimensional fluid model of the outer coma, with application to the comet Hale-Bopp gas spirals** • ARTICLE  
*Pages 1923-1927*  
A.V. Rodionov and J.-F. Crifo  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(4641 K\)](#)
-  5. **Sulfur chemistry in cometary comae** • ARTICLE  
*Pages 1928-1931*  
S.D. Rodgers and S.B. Charnley  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(132 K\)](#)
-  6. **The effect of local topography and self-heating on the sublimation rate of cometary nuclei** • ARTICLE  
*Pages 1932-1939*  
A.V. Ivanova and L.M. Shulman  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(418 K\)](#)
-  7. **New peculiarities of cometary outburst activity** • ARTICLE  
*Pages 1940-1945*  
V.S. Filonenko and K.I. Churyumov  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(372 K\)](#)
-  8. **Varuna: Thermal evolution** • ARTICLE  
*Pages 1946-1951*  
O.B. Shchuko, A. Coradini, R. Orosei and S.D. Shchuko  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(180 K\)](#)
-  9. **Spatial distribution of the neutral carbonaceous compounds glow in the sunward Halley comet coma** • ARTICLE  
*Pages 1952-1957*  
V. Guineva, R. Werner, P. Stoeva and I. Kostadinov  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(574 K\)](#)
-  10. **Physical parameters of the plasma tail of Rosetta target comet 67P/Churyumov-Gerasimenko** • ARTICLE  
*Pages 1958-1960*  
K.I. Churyumov  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(160 K\)](#)
-  11. **Numerical simulations of asteroid signals on the GAIA focal plane** • ARTICLE  
*Pages 1961-1967*  
A. Dell'Oro and A. Cellino  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(2752 K\)](#)
-  12. **Crystallinity and temperature of icy grains in comet C/2002 T7 (LINEAR)** • ARTICLE  
*Pages 1968-1971*  
Hideyo Kawakita, Takafumi Ootsubo, Reiko Furusho and Jun-ichi Watanabe  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(165 K\)](#)
-  13. **Evidence for pyroxene dust grains in C/2001 C2 sungrazing comet** • ARTICLE  
*Pages 1972-1975*  
A. Bemporad, G. Poletto and J.C. Raymond  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(314 K\)](#)
-  14. **A new approach for modeling the dust dynamics in the near-nucleus coma** • ARTICLE  
*Pages 1976-1982*  
G.A. Lukyanov, J.F. Crifo, V.V. Zakharov and A.V. Rodionov  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(9368 K\)](#)
-  15. **Forbidden oxygen emission lines of Comet 116P/Wild 4 at 2.4 AU** • ARTICLE  
*Pages 1983-1986*  
R. Furusho, H. Kawakita, T. Fuse and J. Watanabe  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(177 K\)](#)
-  16. **V-type asteroids: A mineralogical study** • ARTICLE  
*Pages 1987-1990*  
René Duffard, Daniela Lazzaro, Javier Licandro, Maria Cristina De Sanctis and Maria Teresa Capria  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(155 K\)](#)

17. **Multi-wavelength spectral study of asteroids in cometary orbits** • ARTICLE  
Pages 1991-1994  
J. Licandro, J. de León, N. Pinilla and M. Serra-Ricart  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(135 K\)](#)
18. **A newborn asteroid 832 Karin with old and new surfaces – SUBARU spectroscopy** • ARTICLE  
Pages 1995-1999  
Sho Sasaki, Takanori Sasaki, Jun-ichi Watanabe, Fumi Yoshida, Hideyo Kawakita, Naruhisa Takato, Budi Dermawan, Tetsuharu Fuse, Takashi Ito and Tomohiko Sekiguchi  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(331 K\)](#)
19. **Rotational properties of asteroids from Gaia disk-integrated photometry: A “genetic” algorithm** • ARTICLE  
Pages 2000-2005  
A. Cellino, M. Delbò, V. Zappalà, A. Dell’Oro and P. Tanga  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(1039 K\)](#)
20. **PROGRA<sup>2</sup> experiment: New results for dust clouds and regoliths analogs** • ARTICLE  
Pages 2006-2012  
E. Hadamcik, J.-B. Renard, A.C. Levasseur-Regourd and J.-C. Worms  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(809 K\)](#)
21. **Lessons learned from planetary science archiving** • ARTICLE  
Pages 2013-2022  
J. Zender and E. Grayzeck  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(505 K\)](#)
22. **Philae (Rosetta Lander): Experiment status after commissioning** • ARTICLE  
Pages 2025-2030  
J. Biele, R. Willnecker, J.P. Bibring and H. Rosenbauer  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(832 K\)](#)
23. **Infrared observations of comets with the Spitzer Space Telescope** • ARTICLE  
Pages 2031-2038  
R.D. Gehrz, W.T. Reach, C.E. Woodward and M.S. Kelley  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(1665 K\)](#)
24. **Ceres: High-resolution imaging with HST and the determination of physical properties** • ARTICLE  
Pages 2039-2042  
J.W. Parker, L.A. McFadden, C.T. Russell, S.A. Stern, M.V. Sykes, P.C. Thomas and E.F. Young  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(361 K\)](#)
25. **Dawn Discovery mission to Vesta and Ceres: Present status** • ARTICLE  
Pages 2043-2048  
C.T. Russell, F. Capaccioni, A. Coradini, U. Christensen, M.C. De Sanctis, W.C. Feldman, R. Jaumann, H.U. Keller, A. Konopliv, T.B. McCord, *et al.*  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(790 K\)](#)
26. **Modelling the large particle environment of comet 67P/Churyumov–Gerasimenko** • ARTICLE  
Pages 2049-2053  
J. Agarwal, M. Müller, H. Böhnhardt and E. Grün  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(391 K\)](#)
27. **Planetology and classification of the solar system bodies** • ARTICLE  
Pages 2054-2059  
Leszek Czechowski  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(138 K\)](#)
28. **The APIES mission to explore the asteroid belt** • ARTICLE  
Pages 2060-2067  
P. D’Arrigo and S. Santandrea  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(288 K\)](#)

-  29. **Synchrotron X-rays in situ analysis of extraterrestrial grains trapped in aerogel** • ARTICLE  
Pages 2068-2074  
J. Borg, Z. Djouadi, F. Grossemy, D. Eichert, G. Martinez-Criado, A.J. Westphal, D. Deboffle, C.J. Snead and A. Somogyi  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(597 K\)](#)
-  30. **The new Jettison Policy for the International Space Station** • ARTICLE  
Pages 2077-2083  
Nicholas L. Johnson  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(1312 K\)](#)
-  31. **Two-site orbit determination: The 2003 GEO observation campaign from Collepardo and Mallorca** • ARTICLE  
Pages 2084-2092  
Manfredi Porfilio, Fabrizio Piergentili and Filippo Graziani  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(981 K\)](#)
-  32. **DUNE-eXpress – Dust astronomy with ConeXpress** • ARTICLE  
Pages 2093-2101  
R. Srama, N. Altobelli, J. de Kam, S. Kempf, H. Krüger, S. Lera, G. Moragas-Klostermeyer, M. Rachev, A. Srowig, M. Landgraf, *et al.*  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(1132 K\)](#)
-  33. **Collision activities in the future orbital debris environment** • ARTICLE  
Pages 2102-2106  
J.-C. Liou  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(228 K\)](#)
-  34. **Collision avoidance manoeuvres during spacecraft mission lifetime: Risk reduction and required  $\Delta V$**  • ARTICLE  
Pages 2107-2116  
Noelia Sánchez-Ortiz, Miguel Belló-Mora and Heiner Klinkrad  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(186 K\)](#)
-  35. **Introduction of a nozzle throat diameter dependency into the SRM dust size distribution** • ARTICLE  
Pages 2117-2121  
S. Stabroth, P. Wegener, M. Oswald, C. Wiedemann, H. Klinkrad and P. Vörsmann  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(177 K\)](#)
-  36. **Gravity field of Jupiter's moon Amalthea and the implication on a spacecraft trajectory** • ARTICLE  
Pages 2125-2130  
Gudrun Weinwurm  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(379 K\)](#)
-  37. **Precise orbit determination for GRACE using accelerometer data** • ARTICLE  
Pages 2131-2136  
Z. Kang, B. Tapley, S. Bettadpur, J. Ries and P. Nagel  
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(595 K\)](#)
-  38. **Author Index** • INDEX  
Pages 2137-2138  
[PDF \(18 K\)](#)

[Browse](#)

[Search](#)

[My Settings](#)

[Alerts](#)

[Help](#)

[Home](#)



[About ScienceDirect](#) | [Contact Us](#) | [Terms & Conditions](#) | [Privacy Policy](#)