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The abstract of the manuscript should not exceed **350** words. Please minimize the use of abbreviations and do not cite references in the abstract. Below are guideline summaries.

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**Figures** should be provided as separate files, not embedded in the text file. Each figure should include a single illustration and should fit on a single page in portrait format. In contrast, **tables** **should be** embedded in the text file. Please do not upload your tables as additional files (supplementary files), if your tables are parts of the main manuscript.

**Keywords**

Three to ten keywords representing the main content of the article.

**Background (or Introduction)**

The Background section should be written in a way that is accessible to researchers without specialist knowledge in that area and must clearly state - and, if helpful, illustrate - the background to the research and its aims. The section should end with a brief statement of what is being reported in the article.

For citing a reference, please follow “Basic Springer Reference Style”. For example, Miller (1998a), Miller and Smith (2001), Miller et al. (1999) are for papers with one, two and more than two authors. You may also write the citations like this (Miller 1998a, b; Miller and Smith 2001; Miller et al. 1999).

Figures should be uploaded as separate files and should not be embedded in the manuscript. A figure is referenced as “Figure 1”. In contrast, tables must be embedded in the manuscript file as below (Table 1). If you upload your table files as “additional files”, they will not appear in the final PDF version.

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The methods section should include the design of the study, the type of materials involved, a clear description of all comparisons, and the type of analysis used, to enable replication.

For further details of the journal's data-release policy, see the policy section in ['About this journal'](http://www.earth-planets-space.com/about).

**Results and Discussion**

The Results and discussion may be combined into a single section or presented separately. The Results and discussion sections may also be broken into subsections with short, informative headings.

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This should state clearly the main conclusions of the research and give a clear explanation of their importance and relevance. Summary illustrations may be included.

**List of abbreviations**

If abbreviations are used in the text they should be defined in the text at first use, and a list of abbreviations can be provided, which should precede the competing interests and authors' contributions.

**Competing interests**

A competing interest exists when your interpretation of data or presentation of information may be influenced by your personal or financial relationship with other people or organizations. Authors must disclose any financial competing interests; they should also reveal any non-financial competing interests that may cause them embarrassment were they to become public after the publication of the manuscript.

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**Acknowledgements**

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Endnotes should be designated within the text using a superscript lowercase letter and all notes (along with their corresponding letter) should be included in the Endnotes section. Please format this section in a paragraph rather than a list.

**References**

Examples of the *Earth, Planets and Space* reference style as below.

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Smith J, Jones M Jr, Houghton L (1999) Future of health insurance. N Engl J Med 965:325-329

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Mod Genomics J (1998) Rodent genes. Mod Genomics J 14(6):126-233

Book chapter, or an article within a book

Brown B, Aaron M (2001) The politics of nature. In: Smith J (ed) The rise of modern genomics, 3rd edn. Wiley, New York

Complete book, authored

South J, Blass B (2001) The future of modern genomics. Blackwell, London

Complete book, edited

Smith J, Brown B (eds) (2001) The demise of modern genomics. Blackwell, London

Complete book, also showing a translated edition [Either edition may be listed first.]

Adorno TW (1966) Negative Dialektik. Suhrkamp, Frankfurt. English edition: Adorno TW (1973) Negative Dialectics (trans: Ashton EB). Routledge, London

Chapter in a book in a series without volume titles

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Chapter in a book in a series with volume titles

Smith SE (1976) Neuromuscular blocking drugs in man. In: Zaimis E (ed) Neuromuscular junction. Handbook of experimental pharmacology, vol 42. Springer, Heidelberg, pp 593-660

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Saito, Yukio, and Hyuga, Hiroyuki. (2007) Rate equation approaches to amplification of enantiomeric excess and chiral symmetry breaking. Topics in Current Chemistry. doi:10.1007/128\_2006\_108.

Proceedings as a book (in a series and subseries)

Zowghi D (1996) A framework for reasoning about requirements in evolution. In: Foo N, Goebel R (eds) PRICAI'96: topics in artificial intelligence. 4th Pacific Rim conference on artificial intelligence, Cairns, August 1996. Lecture notes in computer science (Lecture notes in artificial intelligence), vol 1114. Springer, Heidelberg, p 157

Article within conference proceedings with an editor (without a publisher)

Aaron M (1999) The future of genomics. In: Williams H (ed) Proceedings of the genomic researchers, Boston, 1999

Article within conference proceedings without an editor (without a publisher)

Chung S-T, Morris RL (1978) Isolation and characterization of plasmid deoxyribonucleic acid from Streptomyces fradiae. In: Abstracts of the 3rd international symposium on the genetics of industrial microorganisms, University of Wisconsin, Madison, 4-9 June 1978

Article presented at a conference

Chung S-T, Morris RL (1978) Isolation and characterization of plasmid deoxyribonucleic acid from Streptomyces fradiae. Paper presented at the 3rd international symposium on the genetics of industrial microorganisms, University of Wisconsin, Madison, 4-9 June 1978

Patent

Norman LO (1998) Lightning rods. US Patent 4,379,752, 9 Sept 1998

Dissertation

Trent JW (1975) Experimental acute renal failure. Dissertation, University of California

Book with institutional author

International Anatomical Nomenclature Committee (1966) Nomina anatomica. Excerpta Medica, Amsterdam

In press article

Major M (2007) Recent developments. In: Jones W (ed) Surgery today. Springer, Dordrecht (in press)

Online document

Doe J (1999) Title of subordinate document. In: The dictionary of substances and their effects. Royal Society of Chemistry. Available via DIALOG. http://www.rsc.org/dose/title of subordinate document. Accessed 15 Jan 1999

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Healthwise Knowledgebase (1998) US Pharmacopeia, Rockville. http://www.healthwise.org. Accessed 21 Sept 1998

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Doe J (2000) Title of supplementary material. http://www.privatehomepage.com. Accessed 22 Feb 2000

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Doe J (1999) Title of preprint. http://www.uni-heidelberg.de/mydata.html. Accessed 25 Dec 1999

FTP site

Doe J (1999) Trivial HTTP, RFC2169. ftp://ftp.isi.edu/in-notes/rfc2169.txt. Accessed 12 Nov 1999

Organization site

ISSN International Centre (2006) The ISSN register. http://www.issn.org. Accessed 20 Feb 2007

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For further details, please refer to the following web pages.

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