



# COMPUTER PHYSICS COMMUNICATIONS

An International Journal and Program Library for Computational Physics and Physical Chemistry

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### DESCRIPTION

*Computer Physics Communications* publishes research papers and computer program descriptions in **computational physics** and **physical chemistry**: the focus is on **computational methods** and **techniques** rather than results. All contributions are peer reviewed. Special issues are published on an occasional basis; enquiries should be directed to a member of the [Editorial Board](#). Some papers describe computer programs that are deposited in the CPC Program Library which, with over 2,000 programs contributed since 1969, is a major computational resource for the community. Programs are available at <http://cpc.cs.qub.ac.uk> and are free to members of institutions with an institutional journal subscription.

Articles cover:

- computational models and programs in physics and physical chemistry;
- computational models and programs associated with the design, control and analysis of experiments;
- **numerical methods** and **algorithms**;
- **algebraic computation**;
- the impact of **advanced computer architecture** and special purpose computers on computing in the physical sciences; and
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### AUDIENCE

Experimental and theoretical physicists and chemists in all fields of physics working with computational techniques.

### IMPACT FACTOR

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## ABSTRACTING AND INDEXING

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Zentralblatt MATH  
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## GUIDE FOR AUTHORS

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### INTRODUCTION

An International Journal and Program Library for Computational Physics and Physical Chemistry

*Computer Physics Communications* (CPC) publishes research papers and computer program descriptions in computational physics and physical chemistry.

#### *Useful Links*

The journal's home page is located at <http://www.elsevier.com/locate/cpc>

The CPC Program Library is located at <http://cpc.cs.qub.ac.uk>

The Elsevier Editorial System (EES) is located at <http://ees.elsevier.com/cpc>

#### *Scope*

Articles cover: computational models and programs in physics and physical chemistry; computational models and programs associated with the design, control and analysis of experiments; numerical methods and algorithms; algebraic computation; the impact of advanced computer architecture and special purpose computers on computing in the physical sciences; and software topics related to the physical sciences.

#### **Types of contribution**

Computer Physics Communications publishes the following types of papers. Special issues and conference proceedings are published on an occasional basis; enquiries should be directed to a member of the Editorial Board.

*Computational Physics Papers (CP)*. These are research papers in any area of computational physics or computational physical chemistry.

*Computer Programs in Physics Papers (CPIP)*. These are full papers describing new or revised programs to be placed in the CPC Program Library. A description of the CPC Program Library is available at <http://cpc.cs.qub.ac.uk>.

*Features articles*. These articles, which are normally arranged by invitation from an editor, are used to highlight a topical subject or to provide a review of an important body of research work that is of interest to the readership.

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*Program submission*. Manuscripts that describe computer programs and NVAs must be accompanied by: the program source code; job control scripts, where applicable; a README file giving the names and a brief description of all the files that make up the package and clear instructions on the installation and execution of the program; sample input and output data for at least one comprehensive test run; and, where appropriate, a user manual.

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[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, *J. Sci. Commun.* 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

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[3] G.R. Mettam, L.B. Adams, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing, Inc. New York, 2009, pp. 281–304.

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