Institute of Physics (IoP) (http://www.iop.org/EJ)*

Institute of Physics, popularly known as IoP, is a well-known dedicated resource of high quality information in physical sciences. The Institute has a world-wide membership and is a major international player in scientific publishing and electronic dissemination of physics, setting professional standards for physicists and awarding professional qualifications, promoting physics through scientific conferences, education and science policy advice. The IoP electronic database comprises of journals on various topics like bio-inspiration, biometrics, biomedical materials, astronomy, astrophysics, chemical physics and theoretical physics. Member of N-LIST Programme can access IoP archive consisting of 49 journals (including 7 in open access) from Vol.1 issue.1 onwards.

Browse

To browse the IOP electronic journals, click on Journals option from navigation bar as shown below:

* Do not log on to the URL directly. First log on to N-LIST website with your user ID and password, and then select Institute of Physics for accessing its journal.
Clicking at “journals”, a user will be given three options, namely, i) current journal list; ii) view by subject; and iii) archives. A screenshot of current journals arranged alphabetically is given below:

To view content of a journal, click on the journal name e.g. **Journal of Physics A: Mathematical and Theoretical**. On clicking at the journal name, a user will get screen as shown below. Home page of journal provides option to view most read, most cited or latest articles. A user can access either current journals or back journals, select appropriate option as shown below:
Select appropriate option to view abstract or full-text PDF / HTML articles as shown below. Select “This journal only” option from Quick search and enter term in text entry box to search within this journal.

Search

IOP facilitates four types of search, namely i) Content finder; and ii) Quick Search iii) PACS/MSC Search and iv) Advance Search

1. Find Content

The Find Content is a flexible tool, which can be used to find articles or groups of articles in a number of quick and easy ways. Content finder can be found at the right hand side of every page.
2. Quick Search

Quick Search is located at homepage or from the top right of every page. The default is set to search all fields, but user can narrow it down by title/abstract, author, affiliation and/or full text, as well as date range. User can also restrict their search by selecting period from drop down menu.

3. PACS/MSC Search

PACS is a hierarchical subject classification scheme for physics and astronomy, which provides an essential tool for classification and efficient retrieval of literature in physics and astronomy. While MSC codes are used to categories items covered by the two reviewing databases, Mathematical Reviews (MR) and Zentralblatt MATH (Zbl).

If user knows the PACS or MSC code, He/She can enter it into the search box. It will display subject term relevant with codes. Select relevant codes and click on View Selected to view search results of relevant code. User can also enter search term to find the relevant codes.

4. Advanced Search
User can pre-filter their search by selecting title/abstract, author, affiliation, full text and PACS/MSC codes. Additionally search can be restricted by date range, subject and journal.

**Searching Just One Field From Title/Abstract**

Enter keyword(s) in the first text entry box. Select search field from drop-down menu and Click on **Search** button. For example: To search a string **Nanotechnology** in the title of an article from the period 2006 to 2009, enter **Nanotechnology** in the first text entry box, select **Title/ Abstract** from drop-down box and then enter 2006 in **From** text entry box and 2009 in **to** text entry box as shown below:

Use logic operators AND, OR and NOT to define the relationship between search terms. User can also structure their search by using parentheses e.g. (stress OR strain) AND function. Example given below will search all articles on “**Microscopy**” And “**Electron**” in Title or abstract.
**Search Results**

The screenshot given below gives the search result of the previous query, which will return three sets of results, to expand research scope even further:

1. Search results under Search tab contain regular peer-reviewed content from IOP science.
2. e-prints provide search result from eprintweb.org, which is a free e-print service based on Cornell University’s arXiv.org.
3. News and analysis provides result from IOP’s community websites

**Filter Search**

User can drill down further by expanding each filter category such as PACS code, date, subject, journal and author. Enter a further full-text search term within initial set of results to refine search.

**Manage Search Results**

1. **Save your search results**: You can save your search to re-run at a later date, and set up an RSS feed or e-mail alert to notify you of new results that meet your search criteria.

2. **Export selected results**: User has an option to export/email all or selected results in a variety of formats to their mail box.

3. **Tag this article**: User can Tag any article for future reference.

A user can access the full text articles in PDF or HTML format and also access the abstract of the articles or references.
Full Text Article

On clicking at the “Full Text PDF” in the first record given above, the screenshot of full text is given below:

**Grain size effect on the magnetic cluster-glass properties of La$_{0.88}$Sr$_{0.12}$CoO$_3**

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Abstract

We report the grain size effect of hole-doped cobaltite, La$_{0.88}$Sr$_{0.12}$CoO$_3$, where average sizes are varied from ~35 to ~210 nm. The bulk compound is a cluster glass (CG) composed of short range ferromagnetic (FM) clusters embedded in the spin-glass (SG) matrix at low temperature. The short range FM clusters are still retained in the nanocrystalline compound with average size ~35 nm which are associated with the SG component, displaying CG-like spin dynamics at low temperature. The exchange bias (EB) effect manifestation by the shift in the hysteresis loop is observed due to the field cooling where EB effect is weakened systematically with decreasing grain size. The decrease in the fraction of the FM component is found to be consistent with the weakening of the EB effect with decreasing grain size. Interestingly, the signature of the EB phenomenon due to the field-cooled effect is also

**MY IOP Science**

A user is required to create an account and obtain username and password to use the services of My IOP Science, mentioned below:
1. Email Alert

A user can subscribe to e-mail alerts to get periodic emails with links to new content automatically when new article are published. It also provides option to change the preference or delete the alert.

2. Tagged articles: User can Tag articles of interest, view all the articles that have labeled with that tag or remove any articles.

3. My searches: A user can save the search in My searches for future use, so that he/she can return to it and rerun it or set up the alerts.

4. Downloads: View articles that have been downloaded in the last three months.