

What is Scopus? www.scopus.com

**Largest abstract & citation database of
international peer-reviewed literature**

- 22 000 peer-reviewed journals
- 360 trade publications
- 120 000 books (with 10 000 added/year)
- >57 million records, back to 1823
- 6.4 million conf papers from proceedings & jrnl
- 350 million scientific web pages indexed by Scirus
- 25.2 million patent records
- “Articles-in-Press” from >3850 journals

Searching for a topic

Scopus

Search Alerts My list

Chrome 45 cease support of Scopus Document Download Manager

Document search | Author search | Affiliation search | Advanced search | Browse Sources | Compare journals

superconductivity AND "broken symmetry" Article Title, Abstract, Keywords

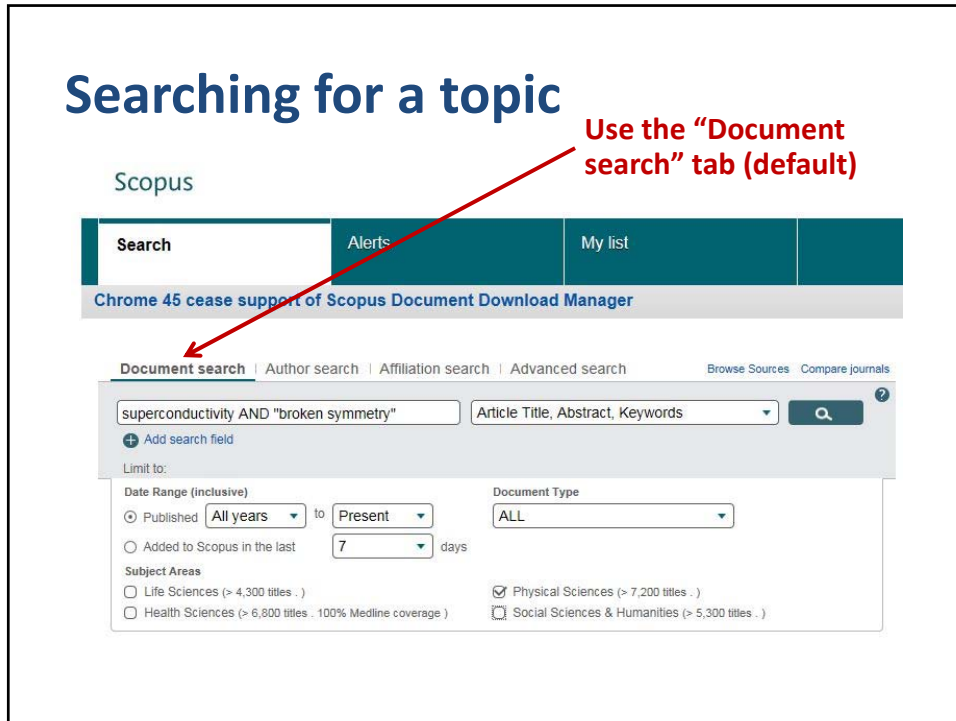
+ Add search field

Limit to:

Date Range (inclusive)
 Published All years to Present
 Added to Scopus in the last 7 days

Document Type
ALL

Subject Areas
 Life Sciences (> 4,300 titles . .)
 Health Sciences (> 6,800 titles . . 100% Medline coverage)
 Physical Sciences (> 7,200 titles . .)
 Social Sciences & Humanities (> 5,300 titles . .)



Searching for a topic

Scopus

Search Alerts My list

Chrome 45 cease support of Scopus Document Download Manager

Document search | Author search | Affiliation search | Advanced search | Browse Sources | Compare journals

superconductivity AND "broken symmetry" Article Title, Abstract, Keywords

+ Add search field

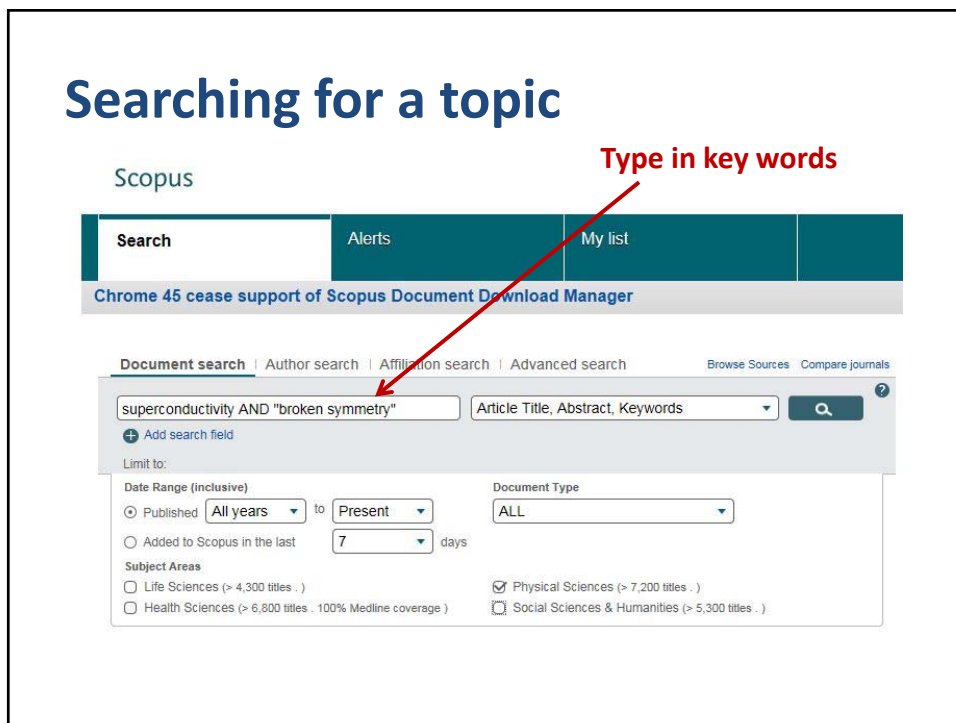
Limit to:

Date Range (inclusive)
 Published All years to Present
 Added to Scopus in the last 7 days

Document Type
ALL

Subject Areas
 Life Sciences (> 4,300 titles . .)
 Health Sciences (> 6,800 titles . . 100% Medline coverage)
 Physical Sciences (> 7,200 titles . .)
 Social Sciences & Humanities (> 5,300 titles . .)

Type in key words



Searching for a topic

Use Boolean operators to add or narrow terms, or add more search fields

Scopus

Search Alerts My list

Chrome 45 cease support of Scopus Document Download Manager

Document search | Author search | Affiliation search | Advanced search | Browse Sources | Compare journals

superconductivity AND "broken symmetry" Article Title, Abstract, Keywords

+ Add search field

Limit to:

Date Range (inclusive)
 Published All years to Present Document Type ALL

Added to Scopus in the last 7 days

Subject Areas
 Life Sciences (> 4,300 titles . .)
 Health Sciences (> 6,800 titles . . 100% Medline coverage)
 Physical Sciences (> 7,200 titles . .)
 Social Sciences & Humanities (> 5,300 titles . .)

Or use the "add field" button

Searching for a topic

Use quotation marks to search for exact phrases

Scopus

Search Alerts My list

Chrome 45 cease support of Scopus Document Download Manager

Document search | Author search | Affiliation search | Advanced search | Browse Sources | Compare journals

superconductivity AND "broken symmetry" Article Title, Abstract, Keywords

+ Add search field

Limit to:

Date Range (inclusive)
 Published All years to Present Document Type ALL

Added to Scopus in the last 7 days

Subject Areas
 Life Sciences (> 4,300 titles . .)
 Health Sciences (> 6,800 titles . . 100% Medline coverage)
 Physical Sciences (> 7,200 titles . .)
 Social Sciences & Humanities (> 5,300 titles . .)

Searching for a topic

Scopus

Use the drop-down menu
to specify where to search

The screenshot shows the Scopus search interface. At the top, there are navigation tabs for 'Search', 'Alerts', and 'My list'. Below this is a banner for 'Chrome 45 cease support of Scopus Document Download Manager'. The main search area includes a search bar with the text 'superconductivity AND "broken symmetry"', a dropdown menu for search scope (currently set to 'Article Title, Abstract, Keywords'), and a search button. Below the search bar, there are options to 'Add search field' and 'Limit to:'. The 'Limit to:' section includes 'Date Range (inclusive)' with radio buttons for 'Published' (selected) and 'Added to Scopus in the last' (7 days), and 'Document Type' set to 'ALL'. There are also checkboxes for 'Subject Areas' such as 'Life Sciences', 'Health Sciences', 'Physical Sciences', and 'Social Sciences & Humanities'.

Searching for a topic

Scopus

Specify the date range

This screenshot is identical to the one above, showing the Scopus search interface. However, a red arrow points to the 'Published' radio button in the 'Date Range (inclusive)' section, indicating that the user should specify the date range.

Searching for a topic

Turn off irrelevant subject areas to speed up searches

The screenshot shows the Scopus search interface. At the top, there are navigation tabs for 'Search', 'Alerts', and 'My list'. Below this is a search bar containing the query 'superconductivity AND "broken symmetry"'. The search results are limited to 'All years' from 'Present' to 'Present', with a document type of 'ALL'. Under the 'Subject Areas' section, the following options are visible:

- Life Sciences (> 4,300 titles .)
- Health Sciences (> 6,800 titles . 100% Medline coverage)
- Physical Sciences (> 7,200 titles .)
- Social Sciences & Humanities (> 5,300 titles .)

A red arrow points from the text 'Turn off irrelevant subject areas to speed up searches' to the 'Subject Areas' section.

Results can be refined by many search parameters

The screenshot shows the Scopus search results page for the query 'superconductivity AND "broken symmetry"'. The page displays 117 document results. On the left side, there are several filter sections:

- Year:** A list of years from 2011 to 2015 with checkboxes.
- Author Name:** A list of author names with checkboxes.
- Subject Area:** A list of subject areas with checkboxes.
- Document Type:** A list of document types with checkboxes.
- Source Title:** A list of source titles with checkboxes.
- Keyword:** A list of keywords with checkboxes.
- Affiliation:** A list of affiliations with checkboxes.

On the right side, there is a table of search results. The first row shows a result from 'Nature' by 'Cohen, S., Szapiro, M., He, F., J., & Szewczyk, 2010'. The table includes columns for the document title, author, year, and source. There are also several red circles highlighting specific elements on the page, such as the 'Search' tab, the '117 document results' count, and the 'Refine' button.

And Scopus will analyze the results in many different ways

The screenshot shows the Scopus search results page. At the top, there are navigation tabs for Search, Alerts, My list, and My Scopus. Below the search bar, the search criteria are displayed: TITLE=ABSTRACT (superconductivity AND 'broken symmetry') AND SUBAREA((mat OR chem OR comp OR eng OR med OR art OR eng OR med OR stat OR math OR phys)). The search results are filtered to 117 documents. A table shows the number of documents per year from 2001 to 2015. A line graph titled 'Documents by year' shows the trend from 1984 to 2012. The graph shows a general upward trend with some fluctuations, peaking around 2012.

Year	Documents
2015	6
2014	8
2013	6
2012	12
2011	9
2010	9
2009	9
2008	1
2007	4
2006	4
2005	3
2004	5
2003	9
2002	2
2001	2

Click the title—abstract, link to full paper, citations, references, and related docs

The screenshot shows the Scopus article page for the paper 'Symmetry of charge order in cuprates'. The abstract discusses the discovery of charge order in various cuprate families and its relationship to superconductivity. The keywords include 'Ground state', 'Transition metal compounds', 'Transition metals', 'X-ray scattering', 'Yttrium barium copper oxides', 'Charge ordered state', 'Complex phase diagrams', 'Microscopic description', 'Momentum structure', 'Resonant X-ray scattering', 'Spatial modulations', 'States of matter', and 'Transition-metal oxides'. The references section lists several related papers, including one by Yoshizawa et al. (2014) and another by Tranquada et al. (2010).

Symmetry of charge order in cuprates (2015)

Corbin, R. M., Subarti, R. T., He, F. T., Da Silva Neto, E. H., Chazavira, L., Fitaña, A., Liang, R., Hardy, W. N., Bonn, D. A., Yoshida, Y., Eisaki, H., Achkar, A. J., Hawthorn, D. O., Kerner, B., & Sawatzky, G. A. (2015). *Physical Review B - Condensed Matter and Materials Physics*.

Abstract

Charge-ordered ground states permeate the phenomenology of 3d-based transition metal oxides, and more generally represent a distinctive hallmark of strongly correlated states of matter. The recent discovery of charge order in various cuprate families has fuelled new interest into the role played by this incipient broken symmetry within the complex phase diagram of high-T_c superconductors. Here, we use resonant X-ray scattering to resolve the main characteristics of the charge-modulated state in two cuprate families: Bi₂Sr₂Zn₂La₂CuO₈ (B2201) and YBa₂Cu₃O_{6-y} (YBCO). We detect no signatures of spatial modulations along the nodal direction in B2201, thus clarifying the inter-unit-cell momentum structure of charge order. We also resolve the intra-unit-cell symmetry of the charge-ordered state, which is revealed to be best represented by a bond order with modulated charges on the O-2p orbitals and a prominent d-wave character. These results provide insights into the origin and microscopic description of charge order in cuprates, and its interplay with superconductivity. © 2015 Macmillan Publishers Limited.

Indexed keywords

Engineering controlled terms: Ground state, Transition metal compounds, Transition metals, X-ray scattering, Yttrium barium copper oxides

Charge ordered state: Complex phase diagrams, Microscopic description, Momentum structure, Resonant X-ray scattering, Spatial modulations, States of matter, Transition-metal oxides

Engineering main heading: Copper compounds

1536: 14781322 CODEN: NMAA-C Source Type: Journal Original language: English
DOI: 10.1038/nmat3295 Document Type: Article
Publisher: Nature Publishing Group

References (50)

Yoshizawa, H., Kawano, H., Tomooka, Y., Tokura, Y.,
1 Neutron-diffraction study of the magnetic-field-induced metal-insulator transition in Pn_{0.7}Ca_{0.3}MnO₃ (1995) *Physical Review B*, 52 (15), pp. R13145-R13145. Cited 244 times.
doi: 10.1103/PhysRevB.52.R13145

Tranquada, J.J.F., Bhattar, D.J., Scharf, V.,

You can also search by author

Scopus

Search Alerts My list

Chrome 45 cease support of Scopus Document Download Manager

Document search | **Author search** | Affiliation search | Advanced search | Browse Sources | Compare journals

Fradkin E

Affiliation... e.g. University of Toronto... Show exact matches only

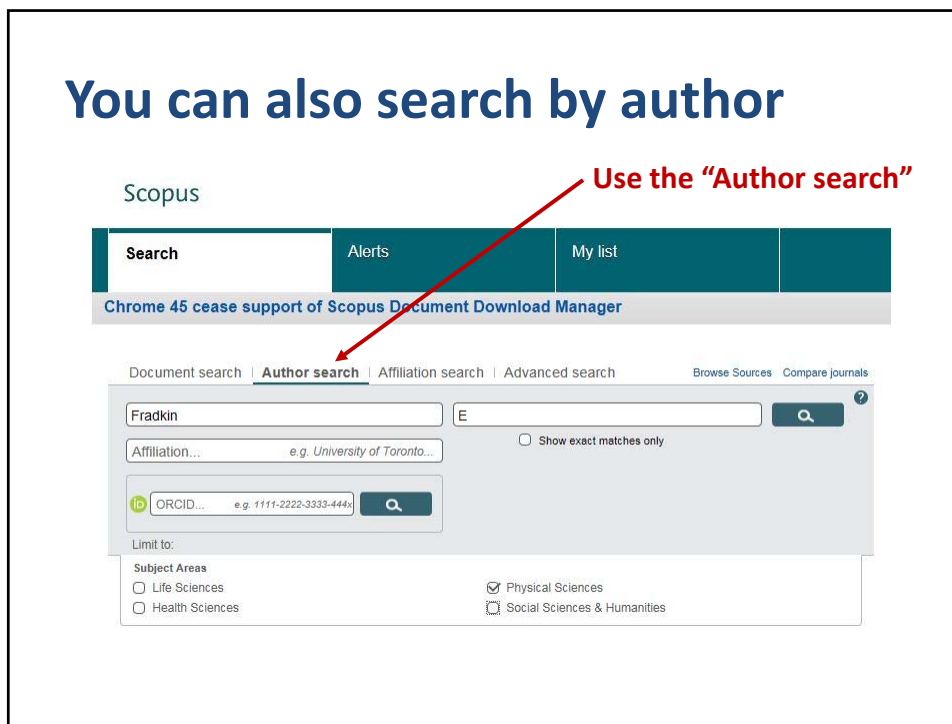
ORCID... e.g. 1111-2222-3333-4444

Limit to:

Subject Areas

Life Sciences Physical Sciences

Health Sciences Social Sciences & Humanities



You can also search by author

Scopus

Search Alerts My list

Chrome 45 cease support of Scopus Document Download Manager

Document search | **Author search** | Affiliation search | Advanced search | Browse Sources | Compare journals

Fradkin E

Affiliation... e.g. University of Toronto... Show exact matches only

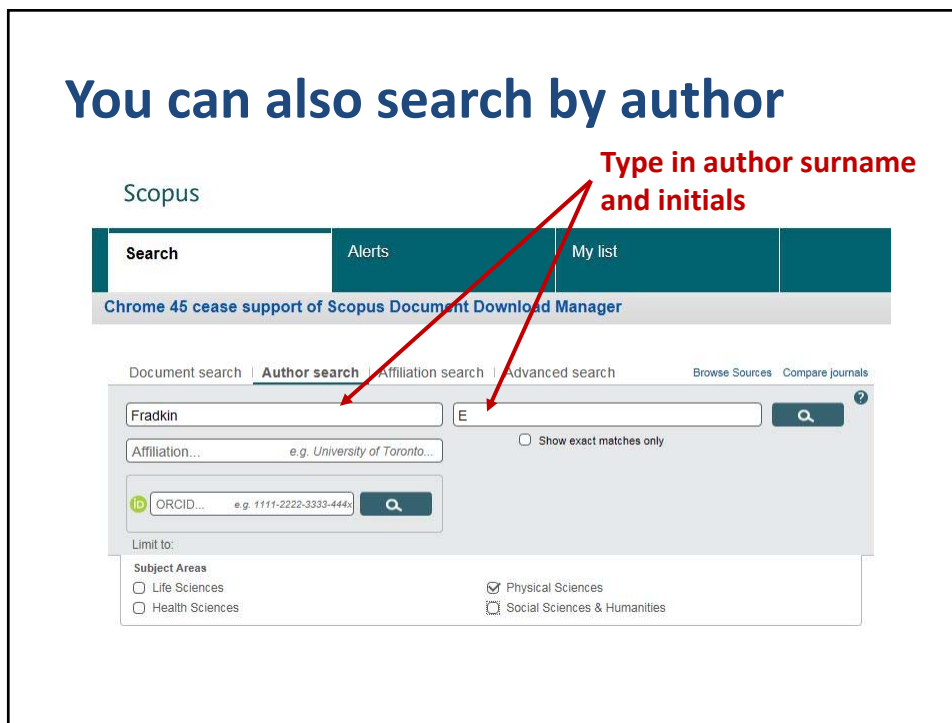
ORCID... e.g. 1111-2222-3333-4444

Limit to:

Subject Areas

Life Sciences Physical Sciences

Health Sciences Social Sciences & Humanities



You can also search by author

Scopus

Turn on "exact matches"
to narrow search

The screenshot shows the Scopus search interface. At the top, there are navigation tabs: Search, Alerts, and My list. Below this is a banner for 'Chrome 45 cease support of Scopus Document Download Manager'. The main search area has tabs for Document search, Author search (selected), Affiliation search, and Advanced search. There are also links for Browse Sources and Compare journals. The search input field contains 'Fradkin' and the 'E' field is empty. A red arrow points from the text 'Turn on "exact matches" to narrow search' to the 'Show exact matches only' checkbox, which is checked. Below the search fields are 'Limit to:' options for Subject Areas: Life Sciences, Health Sciences, Physical Sciences (checked), and Social Sciences & Humanities.

You can also search by author

Leave "Affiliation" blank
for more results

Scopus

The screenshot shows the Scopus search interface. At the top, there are navigation tabs: Search, Alerts, and My list. Below this is a banner for 'Chrome 45 cease support of Scopus Document Download Manager'. The main search area has tabs for Document search, Author search (selected), Affiliation search, and Advanced search. There are also links for Browse Sources and Compare journals. The search input field contains 'Fradkin' and the 'E' field is empty. A red arrow points from the text 'Leave "Affiliation" blank for more results' to the 'Affiliation...' field, which is blank. Below the search fields are 'Limit to:' options for Subject Areas: Life Sciences, Health Sciences, Physical Sciences (checked), and Social Sciences & Humanities.

You can also search by author

Turn off irrelevant subject areas to speed up searches

The screenshot shows the Scopus search interface. At the top, there are tabs for 'Search', 'Alerts', and 'My list'. Below this is a notification banner: 'Chrome 45 cease support of Scopus Document Download Manager'. The main search area includes a search bar with 'Fradkin' entered, an affiliation field with 'e.g. University of Toronto...', and an ORCID field with 'e.g. 1111-2222-3333-4444'. There are also search buttons and a 'Show exact matches only' checkbox. Below the search area is a 'Limit to:' section with 'Subject Areas' and three checkboxes: 'Life Sciences', 'Health Sciences', and 'Physical Sciences' (which is checked). There is also a checkbox for 'Social Sciences & Humanities'. A red arrow points from the text 'Turn off irrelevant subject areas to speed up searches' to the 'Physical Sciences' checkbox.

Select the correct author...

The screenshot shows the Scopus search results page for the author 'Fradkin, Eduardo H.'. The page displays 10 author results, each with a checkbox, a list of publications, and the author's affiliation. The first result is circled in red. The search filters on the left include 'Source Title', 'Affiliation', 'City', and 'Country/Territory'. The first result is for 'Fradkin, Eduardo H.' with 180 publications in 'Physics and Astronomy; Mathematics Science' at the 'University of Illinois at Urbana-Champaign' in 'Urbana, United States'. The other results are for 'Fradkin, E. S.', 'Fradkin, D. E.', 'Fradkin, E. E.', 'Fradkin, E. I.', 'Fradkin, L. E.', and 'Fradkin, Eugenia Guda'.

...and click on "Show documents"

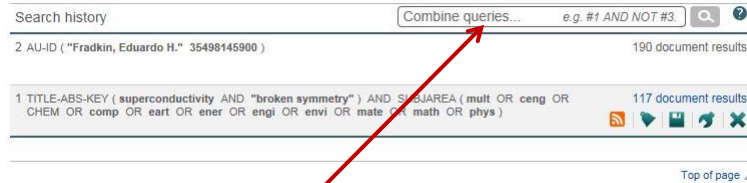
The screenshot shows the Scopus search interface. At the top, there are navigation tabs for Search, Alerts, My list, and My Scopus. Below the search bar, the author's name 'Fradkin, Eduardo H.' is displayed. A red circle highlights the 'Show documents' button. The main results area shows 10 author results, with the first result being '190 Physics and Astronomy, Materials Science, Mathematics, ...' from the University of Illinois at Urbana-Champaign. The left sidebar contains various filters such as Source Title, Affiliation, City, and Country/Territory.

And we get Eduardo's 190 papers

The screenshot shows the Scopus search results for 'Fradkin, Eduardo H.' with 190 document results. A red arrow points to the 'Sort on' dropdown menu, which is currently set to 'Date'. Another red arrow points to the 'Cited by' column. The results list includes titles, authors, years, and journal names. The left sidebar shows various filters such as Year, Author Name, Subject Area, Document Type, and Keyword. A red arrow points to the 'Document Type' filter.

which can also be sorted in a variety of ways

Scopus saves up to 50 searches per session automatically



which can be combined

Free registration gives access to additional services

Scopus

Scopus Sc/Val Register Login Help

Search Alerts My list

Register

Registration is quick and free. It allows you to personalize these Elsevier Products if you have access. For example you can stay up-to-date with Search Alerts and Document Citation Alerts or keep track of your research with Saved Searches.

(*)required fields

Create a unique log in to use in Elsevier products

Your details [Privacy policy](#)

First name:

Family name:

Email and password

Enter a password between 5 and 200 characters. Your e-mail address will be your username

E-mail address:

Password:

Other settings

I wish to receive information from Elsevier B.V. and its affiliates concerning their products and services

I have read and understood the Registered user agreement and agree to be bound by all of its terms.

Register

Automatic search alerts

Automatic citation alerts

Saved searches

Want to use Scopus* from home?

Log in through the Library gateway

<http://www.library.illinois.edu/phx/>



*or any of the Physics electronic resources



cm Elliott@illinois.edu

<http://physics.illinois.edu/people/Celia>