Part 2: Finding scholarly literature

Concepts associated with scholarly literature
  Accepted by one’s peers - Editors and/or referees

Types in STM
  Primary – original research articles
  Secondary – review articles (derived from others work)

Sources for finding
  Abstracting & Indexing (A&I) (human mediated) - subject, author, citation
  Citation (citation tracking chronologically) (algorithms) – keyword, author, citation
  Full-text producers (FT)

Selecting the best tool available -

Library Resource Guides by subject, department, or program

Compiled by subject specialists
Discovering STM Information: A Workshop for Researchers

Engineering Resource Guide

Check out Tutorials (handouts from workshop)

E-journals specifically for Engineering

E-books by collection name; sortable by subject

Internet resources (freely accessible)

Updating essential to account for dropped and added resources, subscription and free.
Google Scholar still BETA (not linked to Brown University Library’s collection)


Cannot sort by anything especially date or cited by.

BL direct is the British Library’s service to search journal titles and buy articles.

Recent Articles again algorithm not known.
Google Scholar (Brown connection)

Depending on producer's format, just click title and go the BUL subscription FT document

If this does not work, notice find it@brown

Click find it@brown
Refining the search

Recall at least 50 results – Recall check to improve precision
Find Google Scholar entries for 2000.
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Scholar Preferences
Bibliography Manager

Select Refworks

Online access to library subscriptions is usually restricted to patrons of that library. You may need to login with your library password, use a campus computer, or configure your browser to use a library proxy. Please visit your library's website or ask a local librarian for assistance.

Number of Results
Google's default (10 results) provides the fastest results. Display 10 results per page.

Results Window
Open search results in a new browser window.

Bibliography Manager
Don't show any citation import links.
Show links to import citations into RefWorks.

Save your preferences when finished and return to search.

Done
If off-campus or wireless, VPN is needed to access SFX software (find it, InfoGate, Google Scholar) and access to subscriptions. Best idea – turn on VPN as soon as computer is ready if off-campus or wireless.
Compendex

1969-present, Compendex® is the most comprehensive interdisciplinary engineering database in the world. Compendex references over 5,000 international engineering sources including journal, conference, and trade publications.

Nanotechnology; autostemming off; sort by Publication year

Check out:
Search tips
Help
Sort by relevance (algorithm) or date
Limit by document type, treatment type, languages, dates
Autostemming off
Browse indexes
Discovering STM Information: A Workshop for Researchers

Check out:
Refine results by
Author
affiliation
Controlled
vocabulary,
etc.

<table>
<thead>
<tr>
<th>Search Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1339 records in Components for 1998-2006</td>
</tr>
</tbody>
</table>

**Refine Results**

- **Author**
  - Luther, Chad A. (72)
  - Ongwall, P. (69)
  - Ongwall, R. (51)
  - Panuwatwanich, K. (48)
  - Panuwatwanich, K. (40)
  - Li, Ching (53)
  - Zhao, Yan (37)
  - Warren, G. Julius (34)
  - Vanalek, William K. (34)
  - Laures, I. (33)
  - Armstrong, N. (33)

- **Author affiliation**
  - Department of Chemistry, Institute for Nanotechnology, Northwestern University (10)
  - Laboratory for Micro- and Nanotechnology, Paul Scherrer Institute (14)
  - Osaka University (17)
  - Center for Nanotechnology, NASA Ames Research Center (19)
  - National University of Singapore (17)
  - Institute of Microelectronics and Nanotechnology (20)
  - Institute of Microelectronics, National Institute of Advanced Science and Technology (21)
  - National Institute of Advanced Science and Technology (21)
  - National Institute of Advanced Science and Technology (21)
  - National Institute of Advanced Science and Technology (21)

- **Controlled Vocabulary**
  - Nanotechnology (100)
  - Nanomaterials (88)
  - Computer simulation (79)
  - Atomic force microscopy (79)
  - Carbon nanotubes (78)

**Results Manager**

- **Select all**
- **Select range**
- **Clear all**
- **Clear all selections**

- **Choose format**
  - Citation
  - Abstract
  - Detailed record
  - E-mail
  - Print
  - Download
  - Save search

- **View Results**
  - Abstract
  - Detailed

**Search Results**

1. **Patterned nanoscale features using the 2-step NEMIO nanolithography process**

2. **Laser-induced patterning of Co nanostructures under ambient conditions**

3. **Industry and academia join hands in search for post-CMOS logic**

4. **Magneto-properties and microstructure of Fe3Pt-SiO2 nanocomposite films fabricated by nanocluster beam technology**

5. **Big picture solutions start very small**

6. **Monte Carlo based simulation of surface light emission profiles from AlGaInP light emitting diodes**
Use controlled vocabulary to limit search to articles about carbon nanotubes.

Click “Include” button.
Discovering STM Information: A Workshop for Researchers

Check out:

Ei indexing
Main headings
(very precise)

Controlled terms
(precise)

Uncontrolled terms =
keywords
Search history:
Excellent functionality for improving recall and precision – get what you need as well as want.

2006
Web Of Science
1978-present; The Web of Science includes the three ISI citation indexes: Arts and Humanities Citation Index, Social Science Citation Index, and Science Citation Index. Keeps track of who cites whom. Not recommended to be used alone for keyword search. Algorithm enters the citation data only from articles published in 5000+ journals in a master list. No controlled vocabulary.

Check only Science Citation Index Expanded; search all available years
author search: pedersen la*
<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Author(s)</th>
<th>Journal/Media</th>
<th>Year</th>
<th>Cited Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Attrition-resistant and metal-resistant fluid cracking catalyst prepared with alumina powder in the matrix</td>
<td>PEDERSEN LA, LOWE JA, MATOCHA CK</td>
<td>ACS SYMPOSIUM SERIES 411: 414-429 1989</td>
<td>1989</td>
<td>1</td>
</tr>
</tbody>
</table>
Sort by times cited:


Discovering STM Information: A Workshop for Researchers

1. **PEDERSEN LA, LUNSFORD JH**
   - *STUDY OF RUTHENIUM IN ZEOLITE-Y BY X-RAY PHOTOELECTRON-SPECTROSCOPY*
   - Times Cited: 69
   - SFX

2. **Ju JF, Pederson-Lane J, Maley F, et al.**
   - *Regulation of p53 expression by thymidylate synthase*
   - PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA 96 (7): 3769-3774
   - MAR 30 1999
   - Times Cited: 46
   - SFX

3. **ROMANIKOV VN, JONE KG, PEDERSEN LA**
   - *TRANSFORMATIONS OF HYDROCARBONS ON ZEOLITES OF TYPE-Y-3: HYDROGENATION OF UNSATURATED HYDROCARBONS ON PD-CONTAINING, PT-CONTAINING, AND RU-CONTAINING ZEOLITES*
   - Times Cited: 22
   - SFX

4. **TERRELL RE, BEARDSLEY JD, FICK NH, et al.**
   - Times Cited: 4
   - SFX

5. **PEDERSEN LA, LOWE JA, MATOCHA CK**
   - *ATTRITION-RESISTANT AND METAL-RESISTANT FLUID CRACKING CATALYST PREPARED WITH ALUMINA POWDER IN THE MATRIX*
   - ACS SYMPOSIUM SERIES 411: 414-429 1989
   - Times Cited: 1
   - SFX
A study of ruthenium in zeolite-Y by X-ray photoelectron spectroscopy

Lee A. Pedersen and Jack H. Lunsford

Department of Chemistry, Texas A&M University College Station, Texas 77843, U.S.A.


Abstract

Ruthenium-exchanged NaY zeolites were studied with X-ray photoelectron spectroscopy in order to determine changes in the location and state of the Ru after subjecting the samples to both oxidizing and reducing environments. When O2 was excluded from the system, ruthenium remained inside the zeolite cations following reduction in H2 and after the zeolite had catalyzed the methanation reaction. At elevated temperatures, before or after reduction, the presence of O2 resulted in the formation of RuO2 on the external surface of the zeolite. The peak intensity of the Ru 3d5/2 line increased by more than a factor of five when the ruthenium migrated to the surface.
Direct export to Refworks
Discovering STM Information: A Workshop for Researchers

Cited reference search

ISI Web of Knowledge

Select database(s) and timespan:

- Science Citation Index Expanded
- Social Sciences Citation Index
- Arts & Humanities Citation Index
- Web of Science

Cited Reference Search

Find the citations to a person’s work by entering the person’s name, the work’s source, and/or publication year.

CITED AUTHOR: Enter the name of the cited author (see cited author index).
Example: O’BRIAN C* OR O'BRIAN C*

CITED WORK: Enter the abbreviated journal/book title in which the work appeared, a patent number, or another work (see cited work index) or view the Thomson ISI list of journal abbreviations.
Example: J Comput Appl Math*

CITED YEAR(S): Enter year, or range of years, the cited work was published.
Examples: 1943 or 1943-1945

Check out: Citation errors
Discovering STM Information: A Workshop for Researchers

Cited by:

   Times Cited: 0

   Times Cited: 0

   Times Cited: 6

   Times Cited: 13

Refworks and Web of Science not compatible at this time: Import procedure is currently according to Refworks http://www.refworks.com/Refworks/help/Refworks.htm#

Web of Science (ISI)

1. From your search results, select the items you wish to save by clicking in the checkbox to the left of the appropriate citations. Then click Submit Marks.

2. A new button labeled Marked List appears once you have marked and submitted items. Click this button.

3. On the Web of Science Marked Records Output Options Form, leave the bold fields checked. Check the abstract field if you want to include it in your database.

4. Click the Save to File button. You should leave the option as Field Tagged. Select Text as the Save As file type.

5. Log in to RefWorks.

6. Select References/Import from the toolbar.

7. Select ISI (Institute for Scientific Information) as the data source and Web of Science as the database.

8. Browse to find the text file you saved to your computer and click on Open.

9. Click Import.

10. Your records should appear in the Last Imported Folder.
Check out more tools available:

**PubMed**
1966–present; the National Library of Medicine’s MEDLINE search system, includes unique features such as phrase searching and automatic term mapping using the Unified Medical Language System (UMLS). Citations link to related articles and if appropriate, to genetic and molecular modeling data. *PubMed* has the ability to store searches for later automatic updating. [This resource is publicly available.] A&I with some FT access.

**SciFinder Scholar**
1907 – present, comprehensive database of chemical literature from CAS databases produced by Chemical Abstracts Service. It covers the full spectrum of chemistry-related information, including chemical structures, properties, biosequences, polymers, analysis, materials, and life sciences. Coverage includes journals, trade magazines, dissertations, patents, conferences, etc. To use software must be downloaded from CIS onto each computer. 5 concurrent users at a time. A&I with some FT access

**IEEE/IET Electronic Library Online (IEL)**
1988- present, using the IEE Xplore interface, the IEEE/IET Electronic Library provides libraries and researchers a single source to almost a third of the world's current electrical engineering and computer science literature. Resources include: IEEE journals, transactions, letters, and magazines from 1988 with select content back to 1952; IEEE conference proceedings from 1988 with select content back to 1953; IEEE standards from 1988; IEEE journals, letters, and magazines from 1988 and IEE conference proceedings from 1988. FT