

Useful Tools for Study & Research

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Where to Look for Information



Are these sources
reliable?

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Google in Books & Papers



Books Showing: All books

- 

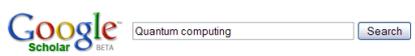
Semiconductor Spintronics and Quantum Computation
by David D. Awschalom, Daniel Loss, Nitin Samarth - Science - 2002 - 311 pages
This is likely to play a crucial role in the information technologies in the 21st century.
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Concepts in Spin Electronics - Page 43
by Srdanovich Mestkova - Technology & Engineering - 2006 - 398 pages
2 Bipolar spintronics Igor Zutic and Jaroslav Fabian 2.1 Preliminaries
2.1.1 Introduction Spintronics, or spin electronics, involves the study of active ...
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Spin Electronics: Final Report - Page 95
by David D. Awschalom, World Technology Evaluation Center, Robert A. Buhrman, Daughton, Stephan Von Molnar, Michael L. Rourke - Technology & Engineering - In The Netherlands none of the main funding agencies have defined programs dedicated directly to the field of spintronics. This accounts for the Dutch ...
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Quantum computation with quantum dots - [► arxiv.org](#) [PDF]
D Loss, DP DiVincenzo - Physical Review A, 1998 - APS
... The initial realization of the model that we introduce here would correspond to only a modest step towards the realization of quantum computing, but it would at ...
[Cited by 2328](#) - [Related articles](#) - [Web Search](#) - [BL Direct](#) - [All 15 versions](#)

[PDF] **Quantum Information**
Chuang, MOC Nielsen - 2000 - mit.edu
... Quantum Information Joining the Foundations of ... The Quantum Computer All our machines must be realized as physical devices that obey the laws of physics. ...
[Cited by 132](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#)

[PDF] **A silicon-based nuclear spin quantum computer**
BE Kane - NATURE LONDON, 1998 - physics.princeton.edu
... A silicon-based nuclear spin quantum computer ... The states of spin 1/2 particles a two-level systems that can potentially be used for quantum computation. ...
[Cited by 1671](#) - [Related articles](#) - [View as HTML](#) - [Web Search](#) - [BL Direct](#) - [All 21 versions](#)

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Databases of Research Papers




Published or Preprint



Search for: it
Example: oil spill* mediterranean

Published Cited References

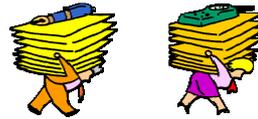
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How Do You Organize These Papers?



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In File Folders?



In A File Cabinet?



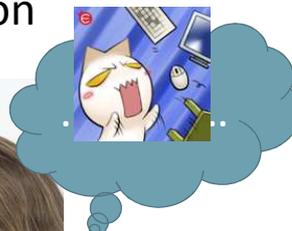
Feel Like Sinking in Sea of Papers?

Help!



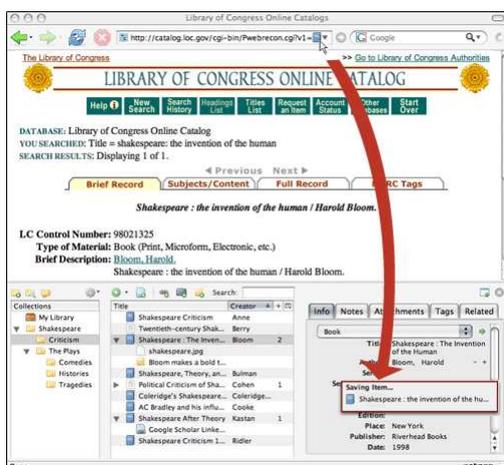
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When Start to Writing Your Report Or Prepare Your Presentation Or Write Your Thesis



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A Convenient Tool - Zotero



A free, easy-to-use Firefox extension to help you collect, manage, and cite your research sources. It lives right where you do your work — in the web browser itself.

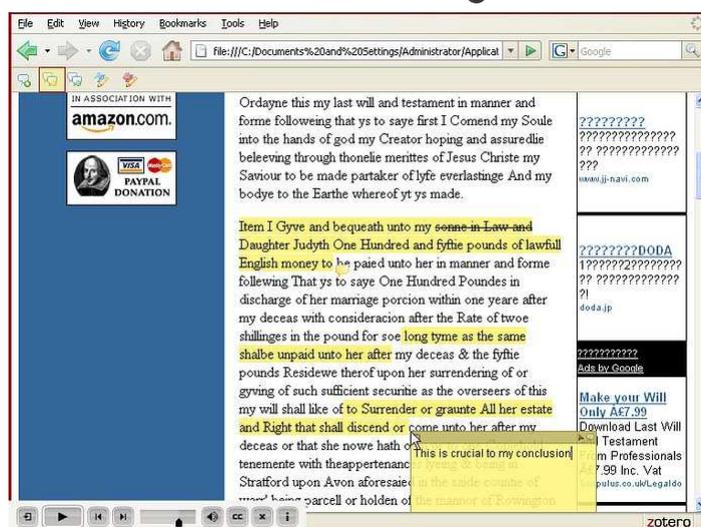
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Zotero's Features

-  Automatic capture of citation information from web pages
-  Storage of PDFs, files, images, links, and whole web pages
-  Flexible notetaking with autosave
-  Fast, as-you-type search through your materials
-  Playlist-like library organization, including saved searches and tags
-  Runs right in your web browser
-  Formatted citation export (style list to grow rapidly)
-  Free and open source 
-  **Integration with Microsoft Word and OpenOffice**

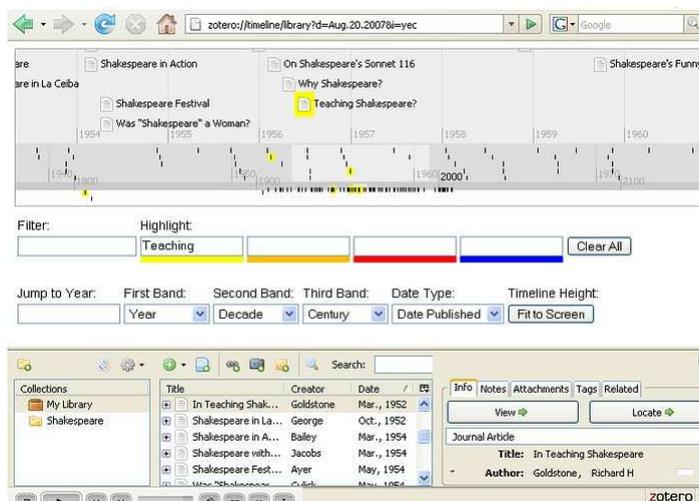
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Annotation of Web Pages



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Collection History – Timeline



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Export for Report

Can generate the list of bibliographies and switch the style

In Word, OpenOffice Write

In Google Docs

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A Helper to Manage References



- Software Handling the Bibliography Entries
 - Search functions
 - Import of various Formats
 - Built-in and custom export formats
 - Classification of entries
 - Automatic Key generation
 - Support for XMP Metadata in PDFs
 - Advanced BibTeX editor
 - Customization of BibTeX fields
 - Integrates to your environment

JabRef

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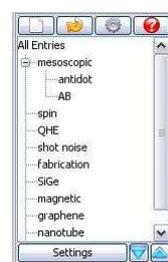
How To Use JabRef

- Toggle Interface
 - Entry preview
 - Search box
 - Groups
- Edit BibTeX entry
 - Advance editing
- Customize interface
 - BibTeX key, entry types, general fields
 - Journal abbreviations
- Mark entries
- Add bibliography entries
 - Import to current/new database
 - Auto generate BibTeX key ([author][year])
 - File link with an entry

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Using Groups in JabRef

- Structure a BibTeX database in a tree-like way similar to File Explorer
 - Two main differences:
 - Multiple-group entries
 - Dynamical group assignment
 - Examples
 - Create a group and assign entries to it
 - Use “keywords” to group entries
 - Use free-form search to define a group
 - Combine multi groups (“AND”, “OR”)
 - Identify overlapping group



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Using Search in JabRef

- Ctrl-F
 - Open & focus on Search box
 - Toggle search modes
 - Press “Esc” or click “Clear Search” to end any mode
- Incremental Search
 - Searches immediately each time you press a letter
- Normal Search
 - Search for all occurrences of the words in your search string
- Field specification, logical operators
 - E.g. `author = miller or title | keywords = “quantum hall”`



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More About Export

- XML
 - BibTeXML
 - Docbook
 - MODS
 - MS Office 2007
- OpenDocument
 - OpenDocument Spreadsheet
 - OpenOffice Calc
- HTML
 - Simple
 - With Table (A/N abstract)
 - Rich Text Format
 - Harvard
 - MIS Quarterly
 - Customized Export Filter
 - Reviews of Modern Physics (Lin's)

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Which is the Best For Me?



Use this if you
need BibTeX

Work directly with LaTeX + BibTeX
Customize RTF export filter

v.s.




Use this if you don't
need BibTeX

Currently cannot customize
bibliography styles

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Thank You for Your Attention



Note:

- 因為時間的關係，無法一一介紹JabRef & Zotero的功能。
 - 希望你們因此開始認識這兩個超強的Open Source軟體。絕對不輸給EndNote。
 - 有需要我的JabRef設定及export filter (Reviews of Modern Physics)，可與我連絡。也歡迎你分享你做的export filter。
 - Zotero有很多示範影片可以查看。Some good news:
 - PC Magazine將Zotero納入Best Free Software Applications of 2008。(第二次了!)
 - 已有超過60個Institutes推薦Zotero，包括MIT。
- PS: Zotero也可以直接import期刊的書目資料(default setting)。只是對BibTeX上有部分轉換的問題(BibTeX key & date etc)。

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Cornell Note-taking Method - Lifehacker.com

Cues

- * Main ideas
- * Questions that connect points
- * Diagrams
- * Prompts to help you study

WHEN:
After class
during review

Notes

- * Record the lecture here, using
 - * Concise sentences
 - * Shorthand symbols
 - * Abbreviations
 - * Lists
- * Skip lots of space between points

WHEN:
During class

How to Take Great Note

2.5 inches

6 inches

Summary

WHEN:
After class during review

- * Top level main ideas
- * For quick reference

2"

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LaTeX(-related) Free Tools

- LaTeX environment
 - MikTeX (Windows); Tex Live (linux); MacTeX (Mac)
- LaTeX IDE
 - Windows: [TexnicCenter](#), LaTeX Editor (LEd)
 - Mac: [TexShop](#), [iTExMac](#)
 - Linux: [Kile](#)
 - Cross-platform: [Texmaker](#)
- Reference Manager
 - Mac: [BibDesk](#)
 - Others: [RefDB](#), [Pybliographer](#)
- XeTeX

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