Optimization of Known-Item Discovery

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Director of Discovery and Delivery Strategy

St. Louis, MO ◆ April 1, 2014
Here is the Challenge
• hydraulic fracturing
• laser material processing
• vitamin d deficiency
• doctor Faustus
• agriculture
• modern industry
• yahoo
• dna binding proteins
• materials science and engineering an introduction
• universal design
• open source
• due diligence
• dragon ball
• employee retention
• henitiuk, v. 2008. going to bed with waley how murasaki shikibu does and does not become world literature. in comparative literature studies, 451
• mao Zedong
• linguistics
• playfulness
• historian
• berlyne
• clinical psychomotor skills assessment tools for nursing students 4th ed.
• experience and objective thought the problem of the body
• Algeria
• tourism management
• Birmingham
• Mercosur
• somatoform disorder
• health care marketing
• african feminism
• parkinsons disease
• gravity assist
• shaken baby syndrome
• paranoid schizophrenia
• web of science database
• on the concept of available potential energy?
• american mathematical society
• thompson, r. 1976, meep meep, in b nichols ed
• intervention, media and human rights
• international english language testing system
1. How does the system find the results that match a query?

2. In what order does the system display the results?
Modes of Interaction (Belkin et al., 1995)

- Scanning
  - Searching
- Learning
  - Selecting
- Recognition
  - Specification
- Information
  - Meta-information

Literature Search

- Scanning
- Learning
- Recognition
- Information

- Searching
- Selecting
- Specification
- Meta-information

Method of Interaction
Goal of Interaction
Mode of Retrieval
Resource Considered
Known-item Search

Scanning

Learning

Recognition

Information

Method of Interaction

Goal of Interaction

Mode of Retrieval

Resource Considered

Searching

Selecting

Specification

Meta-information
• henitiuk, v. 2008. going to bed with waley how murasaki shikibu does and does not become world literature. in comparative literature studies, 451
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Broad-topic searches
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User Studies within Easy Search

- Focused on identifying search assistance features through the user log analysis
- Study looked at data from 2011 including 320,000,000 million clickthroughs
- Under IMLS and others

Transaction Log Study

- 56% of users come from off-campus
- 66% of searches use default single-entry search box
- 51% are “known-item” searches – title searches critical
- 4.4 terms per query – this is much higher than other studies report
- Much cutting and pasting of titles, citations
- Used search assistance in 32% of all sessions & 58% of all sessions w > 1 query
Broad-topic Search

Results 1 - 10 of 126,118 for Everything

1. French and Indian War
   2012
   on French and Indian War. visit Britannica.com. Copyright © 1994-2012... French and Indian War Seven Years' War North America King William's War...
   Full text available

2. The French and Indian War
   Alfred A. Cave
   2004
   Available at Bizzell Library Stacks (E 199 .C36 2004)

3. French and Indian War
   The Hutchinson Encyclopedia
   2013
   French and Indian War continued as a major part of the Seven Years' War [link: http://www.credoreference.com/entry.jsp?xrefid=3309.129012575] (1755-63)
   No full-text

4. French and Indian War
   Britannica Concise Encyclopedia
   2012
   Indian alliances predominated. In 1754 the French ousted a... North American phase of a war between France and...
   No full-text

5. French and Indian War
   The Hutchinson Unabridged Encyclopedia with Atlas and Weather guide
   2010
   French and Indian War continued as a major part of the Seven Years' War (1755-63) between the European powers over their colonial possessions. The conflict
   No full-text

Find Item Details
How do people search for known-items?

- Title search:
  - *Temporal Profiling of the Secretome during Adipogenesis in Humans*

- Words from the title + author name(s):
  - *Harriet Tubman the road to freedom*

- Same, with punctuation:
  - *Introduction to Special Relativity, rindler*

- Words from the title (+ author names(s)) + year:
  - *Growth of electronic journals Norman 2007*

- Citation:
What Counts Most for Known-Item Searches?

- Exact title match*
- Getting close to an exact match
- Match of title, \{ \{author\}, \{year\}, \} 
- Journal name, \{ \{year\}, \{volume\}, \{issue\} ... \} 

- Some tolerance is expected!

* The more words, the merrier!
Coronary endothelial dysfunction in patients with early coronary artery disease is associated with the increase in intravascular lipid core plaque

Choi, Byoung-Joo; Prasad, Abhiram; Gulati, Rajiv; Best, Patricia J.; Lennon, Ryan J.; Barsness, Gregory W.; Lerman, Lilach O.; Lerman, Amir


is associated with the lipid core plaque (LCP) in patients with early coronary artery disease. Methods and results A total of

Full text available

Endothelial dysfunction over the course of coronary artery disease

Gutti and Enrique; Flammer, Andreas J.; Lennon, Lilach O.; Elhamed, zaga, Jaime; Lerman, Amir; Ferndes and Ana; Ausrid, Francisco


Endothelial dysfunction in patients with chronic heart... Endothelial dysfunction in stable coronary artery disease...

Full text available

Long-term endothelin receptor antagonist attenuates coronary plaque progression in patients with early atherosclerosis

Yoon, Myeong Ho; Rahani, Martin; Mario, Goessl; Rihal, Charnjit; Gulati, Rajiv; Lennon, Ryan; Tifford, Jonella M.; Lerman, Lilach O.; Lerman, Amir

International Journal of Cardiology [Peer Reviewed Journal]

Full text available
### Winter journal; 1st ed.
*Author*: Auster, Paul  
Published: 2012 New York, N.Y.: Henry Holt and Company  
Location: Not on shelf at Mugar Memorial Library Stacks (PS3551.U77 246 2012)

- [Get it](#)  
- [More Information](#)  
- [Virtual Browse](#)

### EXCERPTS FROM A CNM'S JOURNAL: KOSOVO, WINTER 2000
*Authors*: Raisler, Jeanne; Hammes, Barbara  
Location: Full text available

- [View all versions](#)

### What's Up in Urology Journal, Winter 2012?
*Author*: Urology Journal  
Location: Full text available

- [View it](#)  
- [More Information](#)

### Winter Journal: Winnipeg Dream
*Author*: Beardsley, Doug  
Published: The American Poetry Review, 1987, Vol 16(1), on 32

- [View it](#)  
- [More Information](#)
the neural correlates of direct and reflected self-knowledge
Results 1 - 10 of 225,162 for Primo Central

Sorted by: Relevance

Show only: Oxford Subscription Journals (190,181)

1. Why does play matter?
   - Suomi, Stephen J.
   - as if it should matter for something. The question becomes “why does play matter... play Why does play matter? Stephen J. Suomi Department of Psychology
   - View Online · Details · Reviews & Tags · Recommendations · More

2. Does ragging play a role in medical student depression — Cause or effect?
   - Castaldelli-Maia, João Maurício; Martins, Silvia Sabia; Elugra, Diónei; Machado, Marcelo Polazzo; Andrade, Arthur Queara de; Alexandrino-Silva, Clóvis; Baldassini, Sérgio; de Toledo Pereira Alves, Tania Córrea
   - considered a party as the students play drums, listen to music and consume... play Among Pakistani medical students with a small sample, Rab et al.,
   - View Online · Details · Reviews & Tags · Recommendations · More

3. Understanding maternal smoking during pregnancy: Does residential context matter?
   - Shoff, Carla; Yang, Tze-Chuan
   - Social Science & Medicine [Peer Reviewed Journal]
   - Social Science & Medicine [article]
   - does not support this adjustment ( Dedrick et al., 2009... Before we discuss the reasons why we hypothesize
   - rurality... age of the woman also play a role
   - View Online · Details · Reviews & Tags · More
<table>
<thead>
<tr>
<th>Title</th>
<th>Journal/Conference</th>
<th>Year</th>
<th>Full text available</th>
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<tbody>
<tr>
<td>1. Persuasive writing</td>
<td>The Journal of Special Education [Peer Reviewed Journal]</td>
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<td>Yes</td>
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<tr>
<td>2. Fluent Persuasive Writing With Counterarguments for Students With Emotional Disturbance</td>
<td>The Journal of Special Education [Peer Reviewed Journal]</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>5. Vacation in space (Persuasive Writing)</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
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Show bX Hot Articles

Results 1 - 10 of 12 for Discover

1. "On the Differences Between a Child and a Kitten"
   Tait, Cindy
   Full text available

2. "2010 AAHPERD National Convention and Exposition, Indianapolis, Indiana. (Research Consortium Conference)"
   (Conference notes)
   An (F) denotes Fellow status in the AAHPERD Research Consortium as of November 2009; Tuesday, March 16, 2010 7:30-8:45 p.m. 2010 P. Tait...
   Full text available

3. "Comparing and Understanding Legal Aid Priorities: a Paper Prepared for Legal Aid Ontario"
   Mary-Jane Mossman with Karen Schuchter; Claudia Schmeing
   Full text available

4. "Program"
   Electromagnetic Compatibility, July 2010, pp.1-100
   We maintain a wide variety of clamp- on and toroid... with charts on a digital projector of the speaker’s... EMC methods and technologies. EMC is a mirror of
   Full text available
Autocomplete: Known-Item Search Aid

Context-sensitive autocomplete
- Frequent searches
- Content
- Availability
Recognition, when specification is not specific enough
Looking at the Result List
Irreversible compressible work and available potential energy dissipation in turbulent stratified fluids

Taillieu, Rémi
Mixing and available potential energy in... available potential energy (APE) dissipation... available potential energy dissipation.
- Full text available

Further statistics on the modes of release of available potential energy

- Full text available

A unified theory of available potential energy

Shepherd, Theodore.
Taylor & Francis Group
1966. Available potential energy and the... concept of available potential energy could... extend the concept of available potential energy.
Browsing

BU Libraries Search BETA

By title
the life and times

Browse

Browse "the life and times" in titles list

<table>
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<th>No. of records</th>
<th>Entry</th>
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<td>1</td>
<td>The Life and times of seven major British writers</td>
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<td>1</td>
<td>The Life and times of seven major British writers. Gibboniana, 1</td>
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<tr>
<td>1</td>
<td>The Life and times of seven major British writers. Popeiana 23</td>
</tr>
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</table>

Browse "Aström" in authors list

<table>
<thead>
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<th>No. of records</th>
<th>Entry</th>
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<tr>
<td>2</td>
<td>Aström, K. E. (Karl Erik), 1920-</td>
</tr>
<tr>
<td>3</td>
<td>Aström, Karl J. (Karl Johan), 1932-</td>
</tr>
<tr>
<td>1</td>
<td>Aström, Kell, 1920-</td>
</tr>
<tr>
<td>1</td>
<td>Aström, Lena, 1932-</td>
</tr>
<tr>
<td>41</td>
<td>Aström, Paul</td>
</tr>
</tbody>
</table>
Virtual Browse

Romeo & Juliet
William Shakespeare 1564-1616. David M Bevington, Barbara Gaines c2005
Available at Volcano Campus Fun Library General collection (PR2831.A2 M26 2005 )

The tragedy of Romeo and Juliet
Recommendations

Thomas Hardy
Morgan, Rosemarie

Full text available

View It  More Information  Recommendations

bx Users interested in this article also expressed an interest in the following:

1. Levinson, Marjorie OBJECT-LOSS AND OBJECT-BONDAGE: ECONOMIES OF REPRESENTATION IN HARDY'S POETRY_ElH 73.2 549-580
2. Hook, Andrew Reviews Notes and Queries 41.4 (1994) 386-387
5. Lee, Amy THEN AND NOW TLS, the Times literary supplement 5470 (2007) 16-16
Thank You!

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