Sirsi Resolver: From Soup To Soupe Aux Truffes Noires

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Please take a moment to

turn off

your cell phone,

or switch to

silent mode.

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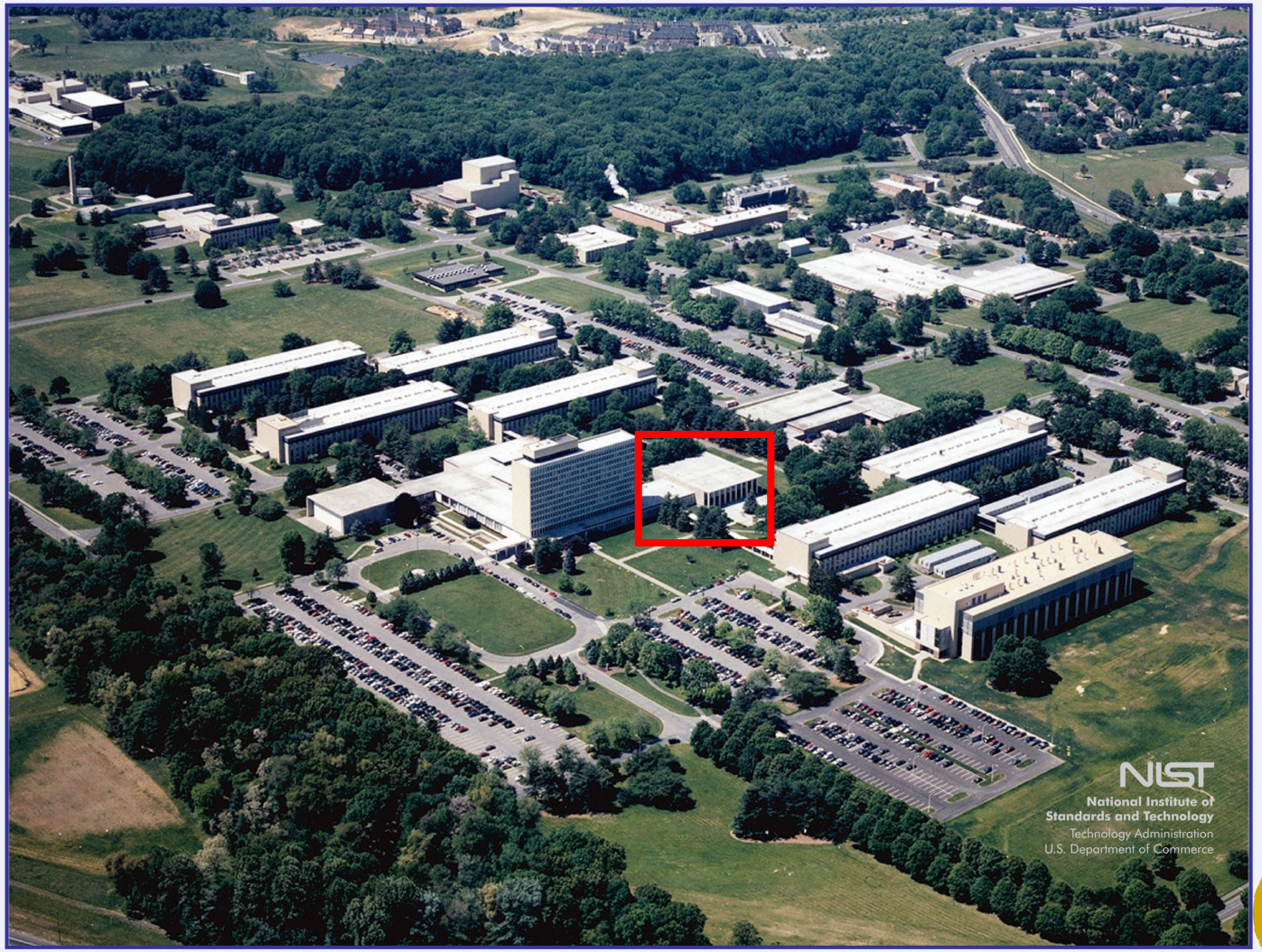
Gaithersburg Campus



Information Services Division

http://nvl.nist.gov

Research Library and Information Group

Electronic Information and Publications Group

NIST Museum and History Program
http://museum.nist.gov

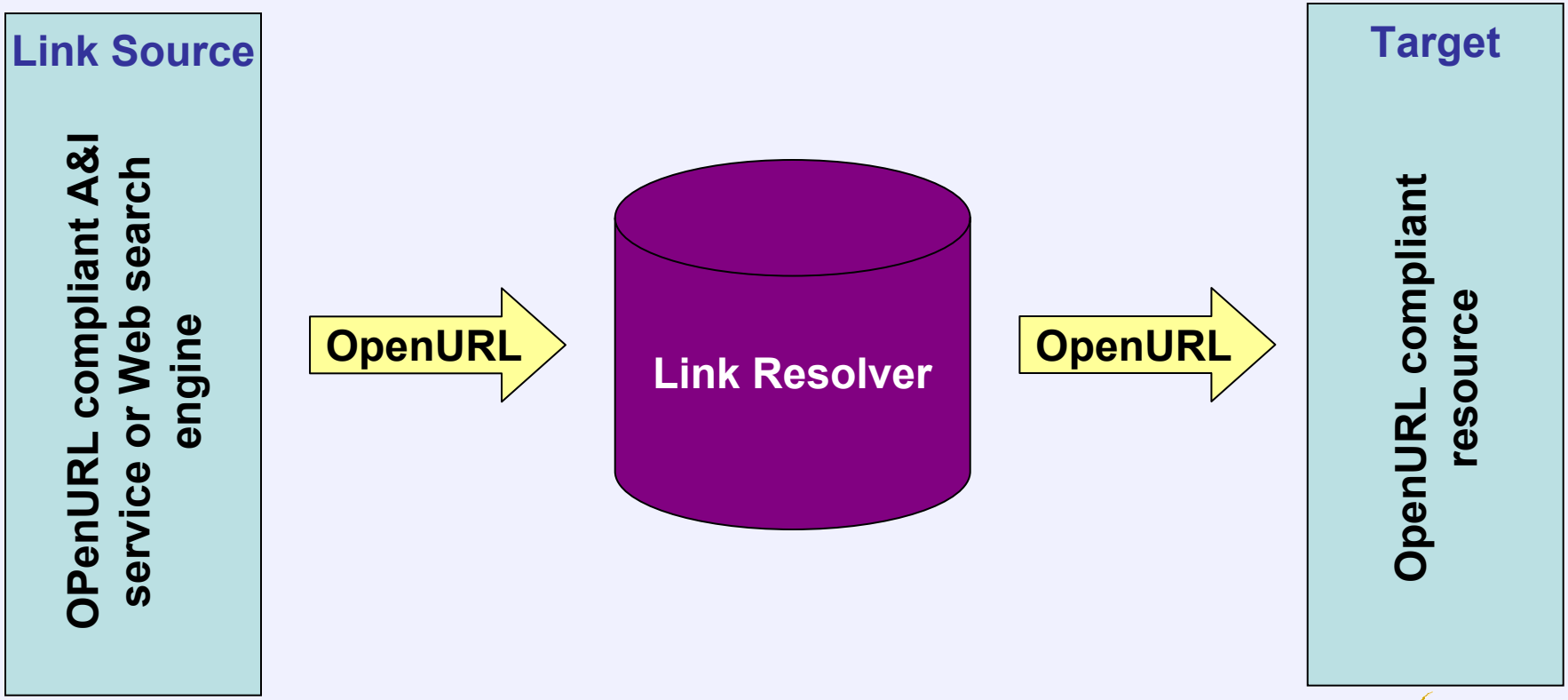
Our Customers

- Primarily, the researchers in the NIST laboratory programs at the Gaithersburg location.
- Approximately 1,500 NIST researchers.
- Approximately 1,700 guest researchers and post-doctoral students.
- Physical, chemical, and engineering scientists.

Presentation Outline

- Brief explanation of Sirsi Resolver.
- Our implementation process.
- Some OpenURL issues.
- Extending Sirsi Resolver's functionality--injecting resolver links into other people's content.

What Is A Link Resolver?



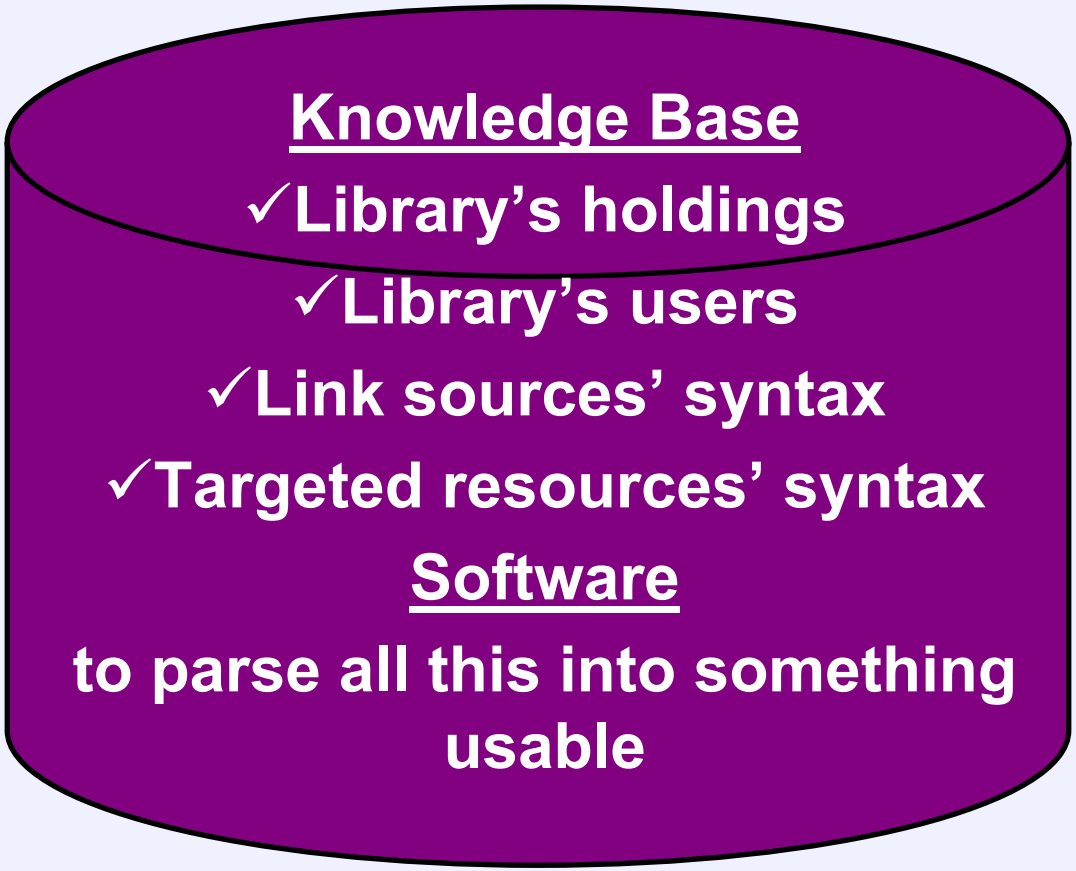
Metadata Sent From Link Source

Link Source

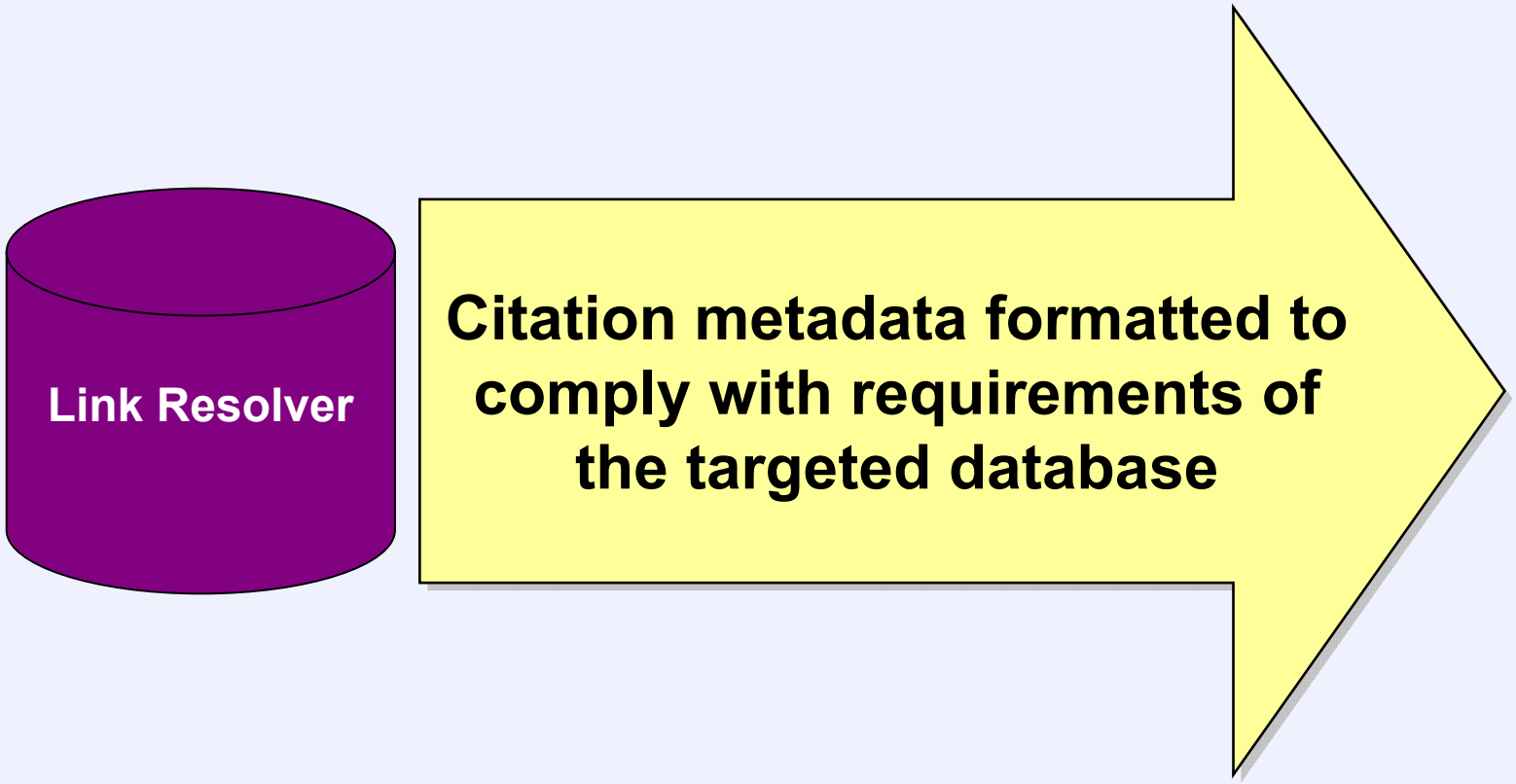
OPenURL compliant A&I service or Web search engine

- ✓Identifying information about the source of the citation
- ✓Citation metadata
- ✓Unique record ID for the citation within the link source

Link Resolver Processes Information



Metadata Sent To Targeted Resource



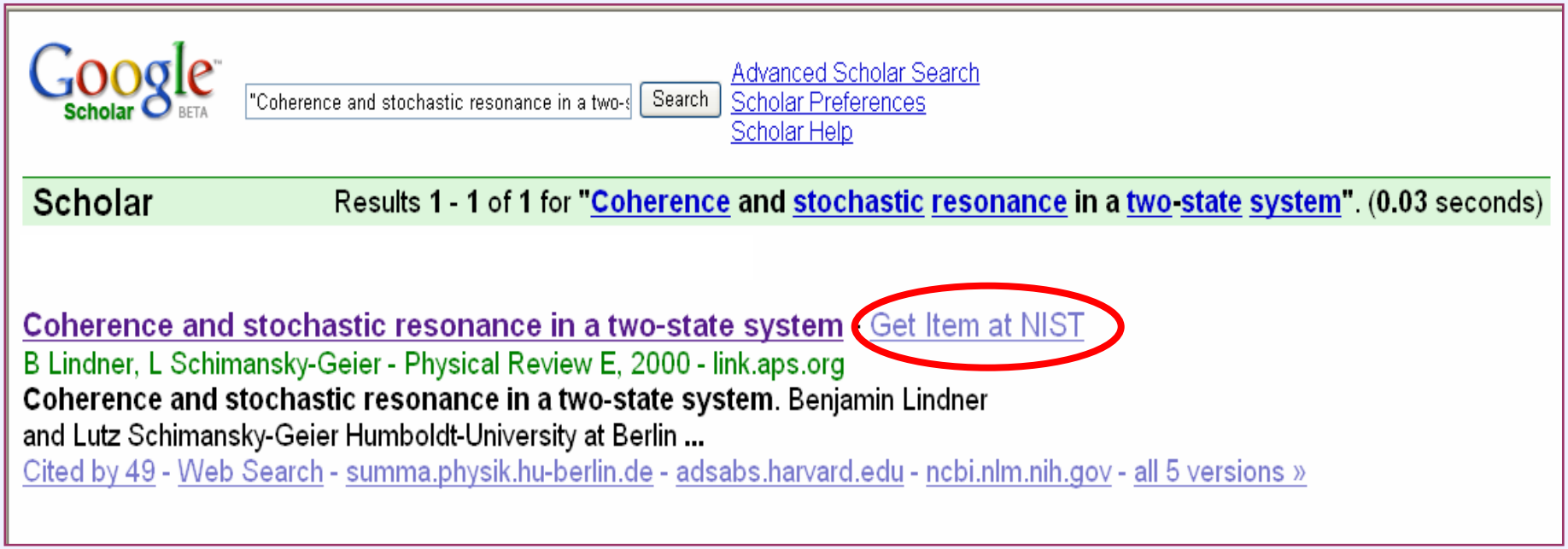
Sirsi Resolver

Software built by Openly Informatics, Inc.
http://www.openly.com/
1Cate (One Click Access To Everything)

Suite of OpenURL link server software

- **SQL back end (creates, modifies and retrieves data from relational and object-relational databases).**
- **XML middleware (general-purpose markup language for creating special-purpose markup languages).**
- **Link.Openly (OpenURL parser and dynamic text generator) built on Tomcat which is open source.**

Google Scholar Display



What's Under The Hood

Coherence and stochastic resonance in a two-state system - Get Item at NIST

http://scholar.google.com/url?sa=U&q=http://nist-resolver.sirsi.net/%3F**sid**%3Dgoogle%26**aulast**%3DLindner%26**auinit**%3DB%26**atitle**%3DCoherence%2Band%2Bstochastic%2Bresonance%2Bin%2Ba%2Btwo-state%2Bsystem%26**id**%3Dpmid:11088283&**oi**=institution

Or, send the following metadata to NIST's link resolver:

Reference source=google
Author last name=Lindner; Author initial=B
Article title=Coherence and stochastic resonance in a two-state system
ID=PubMed ID:11088283; Object iterator=institution

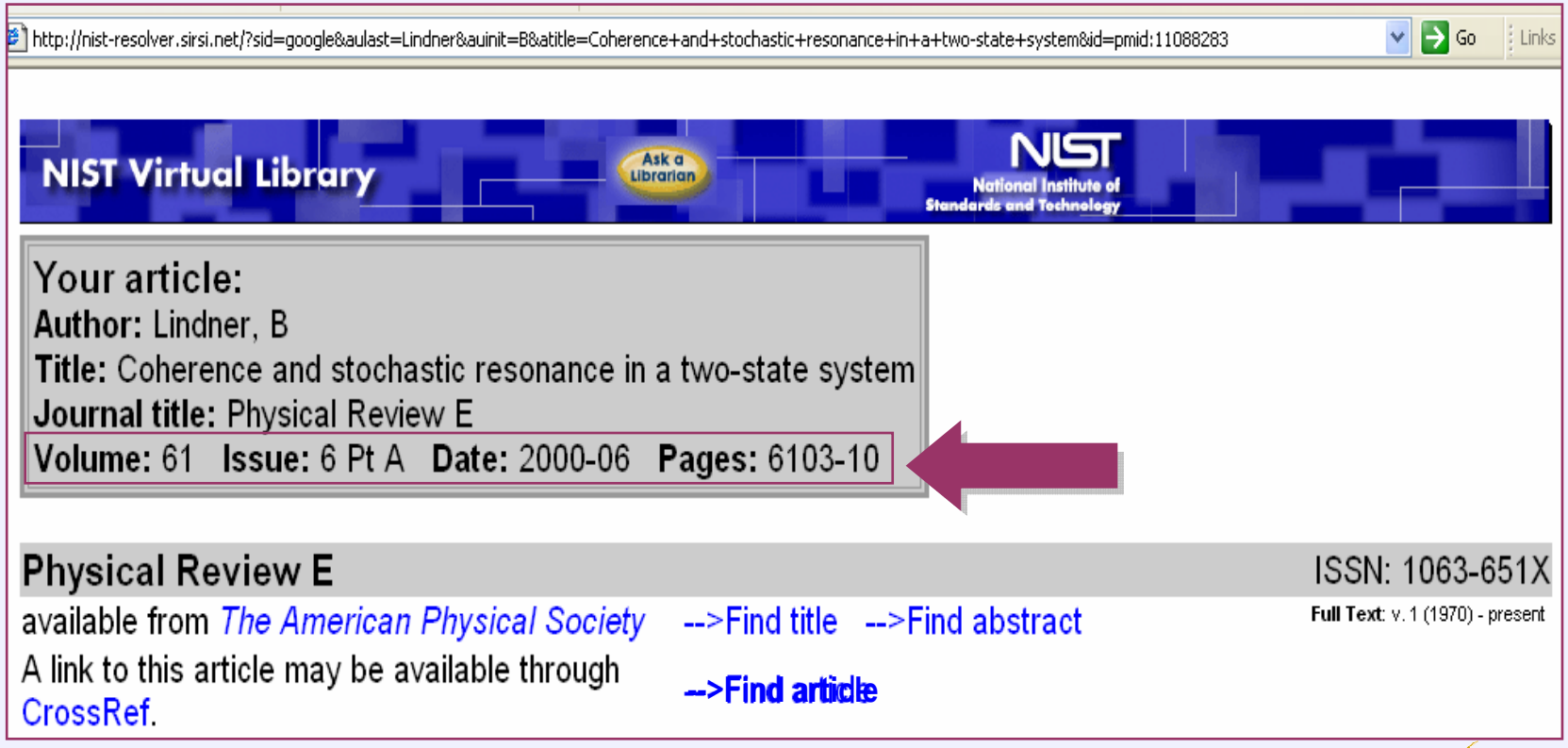
Sirsi Resolver Restates Google's OpenURL

%3F**sid**%3Dgoogle%26**aulast**t%3DLindner%26**auinit**%3DB%26**atitle**%3DCoherence%2Band%2Bstochastic%2Bresonance%2Bin%2Ba%2Btwo-state%2Bsystem%26**id**%3Dpmid:11088283&**oi**=institution

It translates two-digit hexadecimals into ASCII and removes any information it will not use.

?**sid**=google&**aulast**=Lindner&**auinit**=B&**atitle**=Coherence+and+stochastic+resonance+in+a+two-state+system&**id**=pmid:11088283

Additional Information Is Collected



OpenURL Is Re-parsed To Accommodate The Target

-->Find article

crossref?**ISSN**=1063-651X&**title**=Physical+Review+E&**atitle**=Coherence+and+stochastic+resonance+in+a+two-state+system&**date**=2000&**issue**=6 Pt A&**volume**=61&**spage**=6103&**aulast**=Lindner

Is adapted to American Physical Society's link syntax.

http://prola.aps.org/abstract/PRE/v61/i6/p6103_1

What Else Is Under The Hood at Google Scholar

Coherence and stochastic resonance in a two-state system - Get Item at NIST

Coherence and stochastic resonance in a two-state system

http://prola.aps.org/abstract/PRE/v61/i6/p6103_1

Implementation Process (1)
Complete Ejournal Holdings Worksheet

- Identify all holdings that matched resources included in Openly Informatics Knowledgebase.
  - Aggregated services--Openly Informatics' UHF Holdings Data Service includes 81 providers.
  - Ejournals--Genamics-Openly JournalSeek DataBase includes over 85,000 titles.
- Compile list of all other ejournals--titles, ISSNs, publishers, URLs, and holdings information.

Implementation Process (2)
Let Everybody Know

- Contact all publishers.
  - SirsiDynix provides a form letter for requesting publishers to enable OpenURL linking.
- Register with CrossRef
  - Official DOI registration agency for scholarly and professional publications.
  - Free for libraries.
- Register baseURL with bibliographic database services that support OpenURL. (After set-up is complete.)

Implementation Process (3)
SirsiDynix and Openly Informatics Do Their Parts

- Resolver instance is created on hosted server (sirsi.net).
- Holdings and authentication method(s) are loaded.
- Quality control check completed by SirsiDynix Project Manager assigned to our installation.
- Distance training on administrator's Web interface is provided.

Implementation Process (4)
Maintaining Holdings

This is done through the administrator interface.

Admin Tools

(Live Demo)

Implementation Time

- The total time of our active involvement in the implementation process was about 6 months.
- The most time consuming tasks included:
  - Compiling list of custom holdings (titles not included in aggregated collections/packages).
  - Identifying issues, notifying SirsiDynix, and following up to be sure issues had been addressed.

The ISD Players

- **Sirsi Administrator: Lead the effort, acted as liaison between the Research Library and SirsiDynix, and tested the resolver.**
- **Two Librarians and two Library Technicians: Compiled information about our electronic holdings.**
- **Digital Librarian: Created tools to enhance the visibility of our holdings.**

Implementation Choice: Hosting

Considerations:

- **Lack of resources (money and time) required to purchase and maintain another server.**
- **Amount of time required for maintaining the linking information contained in the knowledge base. (SirsiDynix loads knowledge base updates monthly.)**
- **Tradeoff--lack of control over speed at which modifications to the end-user interface are made.**

☑Hosted by SirsiDynix

Implementation Choice: Authenticating Users

The options for authentication include using a proxy server, authenticating through Unicorn (iBlink), or by IP address.

Considerations:

- **NIST employees can get VPN access to the NIST network, allowing them to appear as though they are coming from a NIST IP address even when they are off campus.**
- **Did not want to require our users to log-in to yet another interface.**

☑Authentication by IP address

Implementation Choice: Extended Services

SirsiDynix offers the choice of including a variety of Web search engines, booksellers, and bibliographic databases in the knowledge base.

Considerations:

- **Sirsi Resolver does not have a very sophisticated search interface.**
- **We plan to implement Single Search which seems like a more appropriate place for these options.**

☑Exclude extended services from Sirsi Resolver

Implementation Choice: Google Scholar Project Description

- SirsiDynix supplies Google Scholar with individual library's holdings (updated "periodically").
- When viewing Google Scholar from a NIST IP address, users see a Get Item at NIST link (next to the title) if we own it.
- When viewing Google Scholar from a non-NIST IP address, users identify their preferred library (or libraries) by going to the Scholar Preferences page. (Demo)

Implementation Choice: Google Scholar Project Continued

Considerations:

- **Google Scholar has some deficiencies.**
  - **Articles are not current.**
  - **Older citations float to the top.**
  - **Difficult to assess comprehensiveness.**
- **No additional work on our part.**
- **Helps to maintain our visibility.**
- **Users like the direct link to full text.**

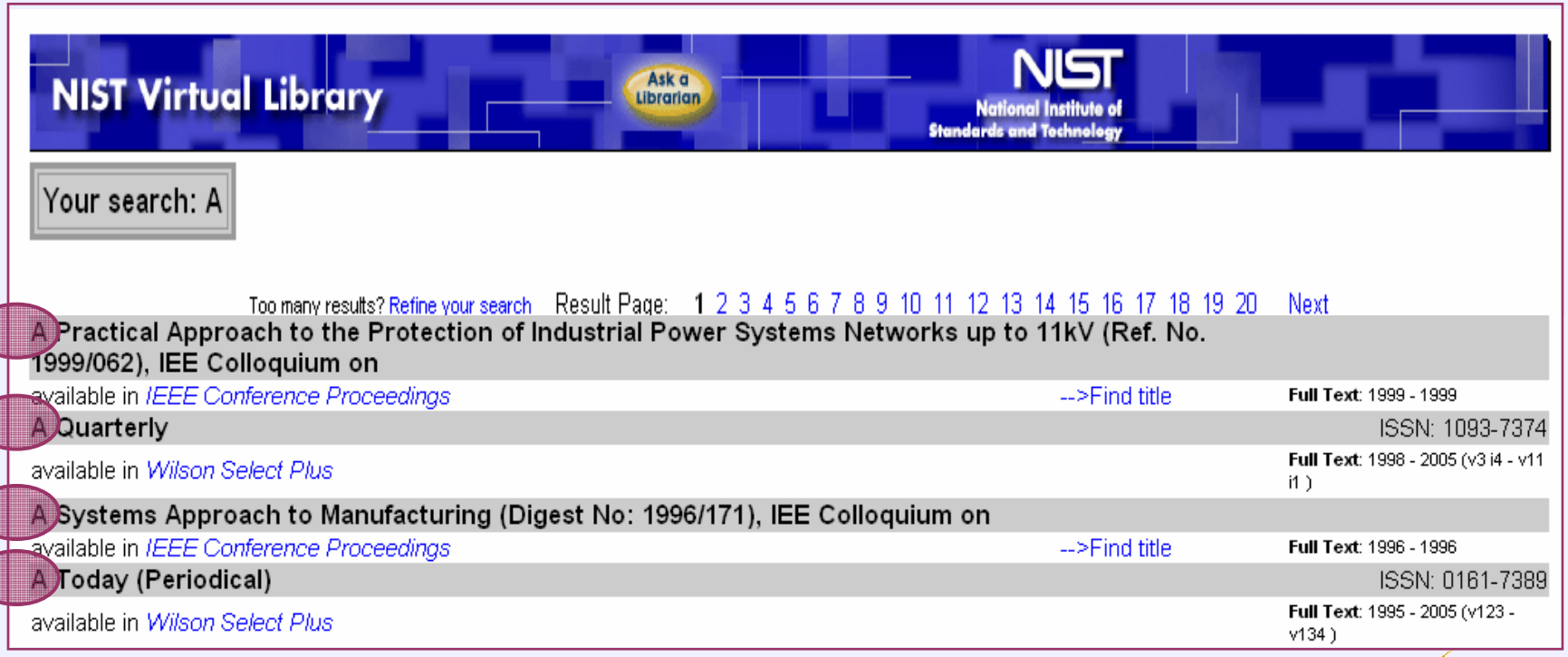
☑Participate in Google Scholar Project.

Implementation Frustrations

- Why didn't you just ask?
  - What banner should appear on the Resolver pages?
  - What is the name of your library?
  - What is the URL for your OPAC?
- Who's minding the store?
  - Broken OpenURL link into OPAC.
- Who's on first?
  - Okay we registered with CrossRef, now what?
  - What *does* "enable OpenURL linking" mean?

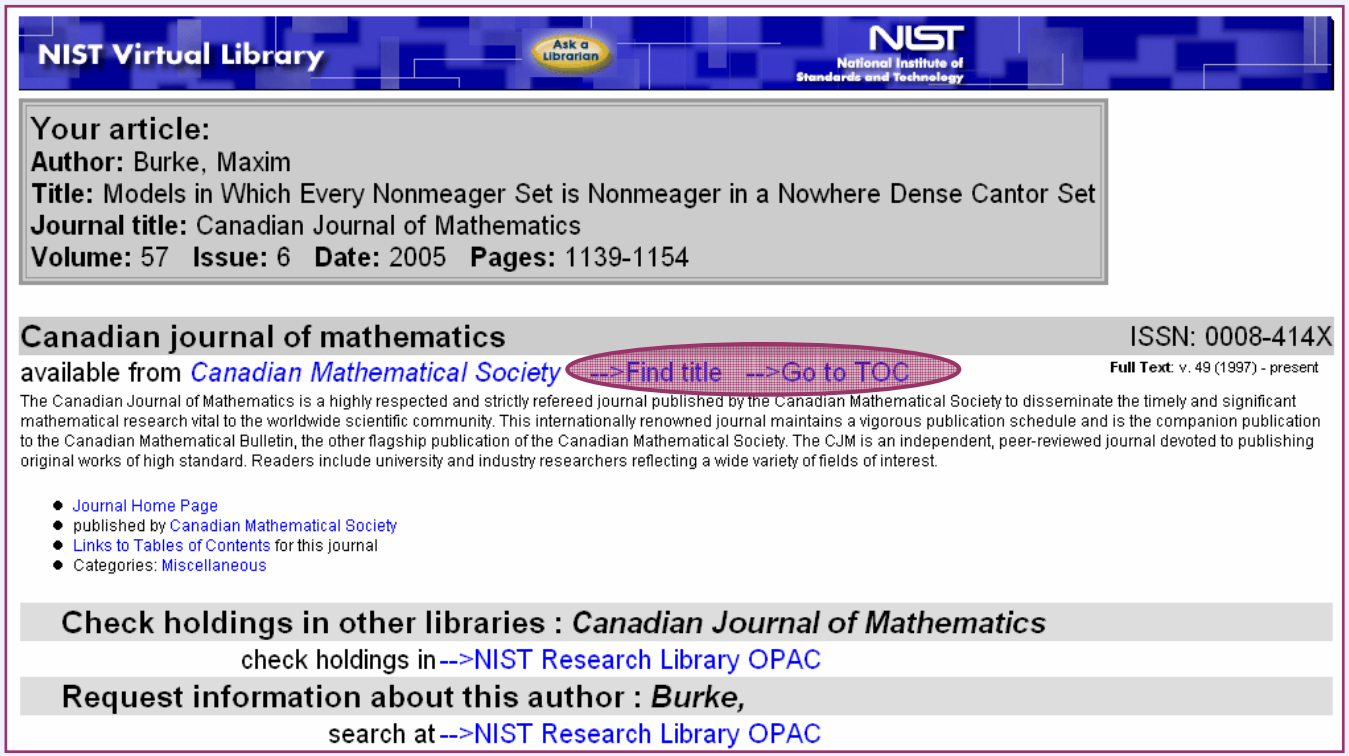
A-to-Z List Issues: Be Careful What You Wish For

A-to-Z List Issues: You Can Never Find A MARC Indicator When You Need One



OpenURL Issues:
Don't You Just Wish Everybody Did It

While most of the larger publishing companies and aggregators are OpenURL compliant, many of the smaller publishers are not. (Demo)



OpenURL Issues: The Reign Of The IVIP Model

- In the absence of a unique resource identifier, the IVIP (ISSN, Volume, Issue, Page) is often required for matching a target because it is less ambiguous than other options.
- However:
  - Reference lists rarely include an ISSN, and may or may not include an issue number.
  - Even when an issue number is included, varying notations for special issues, supplements, and combined issues can create matching problems.

And Yet…It's Still Worth It!

- Link resolvers are important technology enablers that will continue to become more refined and sophisticated.
- Link resolvers provide the obvious final step of searching activity.
- Barring any disruptive technological advances, link resolvers will become an essential back-end ingredient in library services.

> *"Perfection is a trifle dull."*
> -W. Somerset Maugham

So Now What?

- You have an OpenURL Resolver and it works in Google Scholar but there is more to the web than Google, right?
- How do you assert your OpenURL Resolver and library branding into other resources?

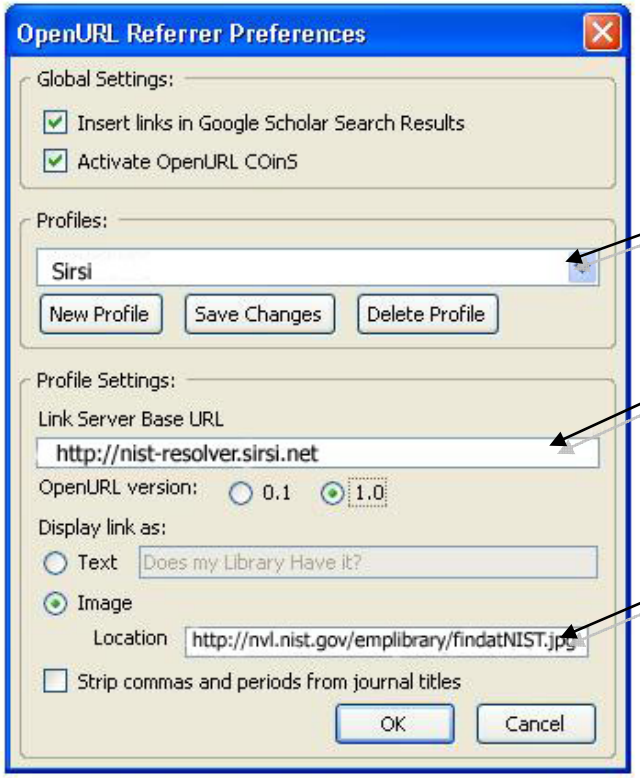
Marketing Resolver – How Do You Do That?

- Firefox extensions for Sirsi Resolver:
  - Openly Informatics' extension
    - Pros/Cons
  - Custom NIST extension based on Openly's extension
    - Pros/Cons
  - Custom NIST Greasemonkey scripts
    - What's a greasemonkey?
    - Pros/Cons

Marketing Resolver – Our Decision

- We chose to use the Openly Informatics extension.
  - Wrote installation instructions and published on our website.
- Also using greasemonkey scripts as a supplement.
  - Create OpenURLs or access points for those pages that don't supply them.

Setup Of The Openly Informatics Extension



Choose Sirsi selection

Type in the URL of your resolver

We chose to use an image to send people to our Resolver. @NIST

Openly Informatics Extension How Does It Work?

- It activates COinS.
  - What are COinS?
    - ContextObjects in Spans or metadata packages that describe a reference to a journal article, book, etc…
    - E.g. :

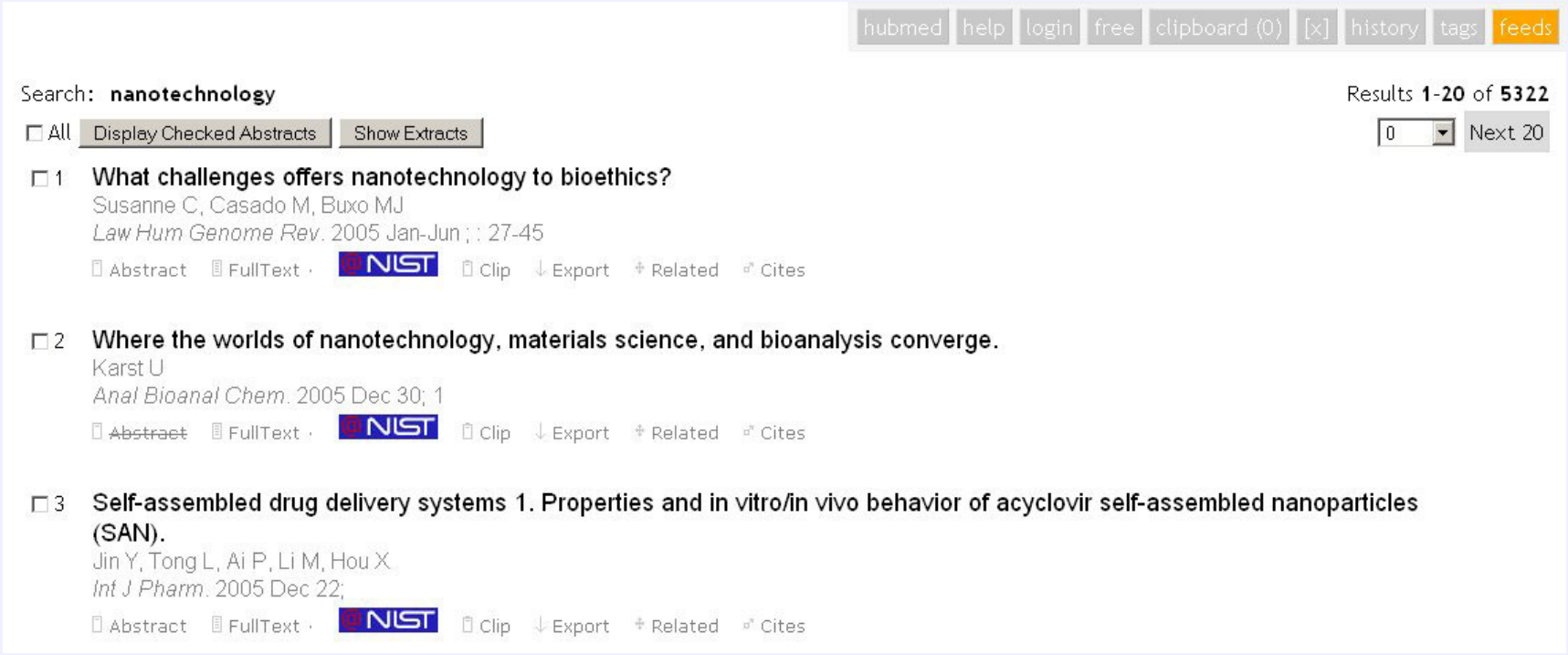
Openly Informatics Extension How Does It Work?

- Who is using COinS?
  - Not many people
    - Citeulike.org
    - HubMed Pro
    - The Canary Database
    - MRS Internet Journal of Nitride Semiconductor Research Reference Database Pages
    - Wikipedia Book Sources Page - Experimental
    - Some bloggers
      - Utter Futility

Openly Informatics OpenURL Extension

Citeulike.org

Openly Informatics OpenURL Extension



HubMed.org – an alternative interface to PubMed Medical Literature Database

Openly Informatics OpenURL Extension

The Canary Database

Resolver : A Success

NIST Virtual Library — Ask a Librarian — NIST National Institute of Standards and Technology

Your article:
Author: Quake, SR
Title: From Micro- to Nanofabrication with Soft Materials
Journal title: Science
Volume: **Issue:** **Date:** 2000 **Pages:**

Too many results? Refine your search Result Page: 1 2 3 4 5 6 Next

Science ISSN: 0036-8075

available from *American Association for the Advancement of Science* -->Find title -->Go to TOC -->Find abstract -->Find article **Full Text**: April, 1997 - present

- Journal Home Page
- published by American Association for the Advancement of Science
- Links to Tables of Contents for this journal
- Links to Abstracts for this journal
- Links to Full Text for this journal

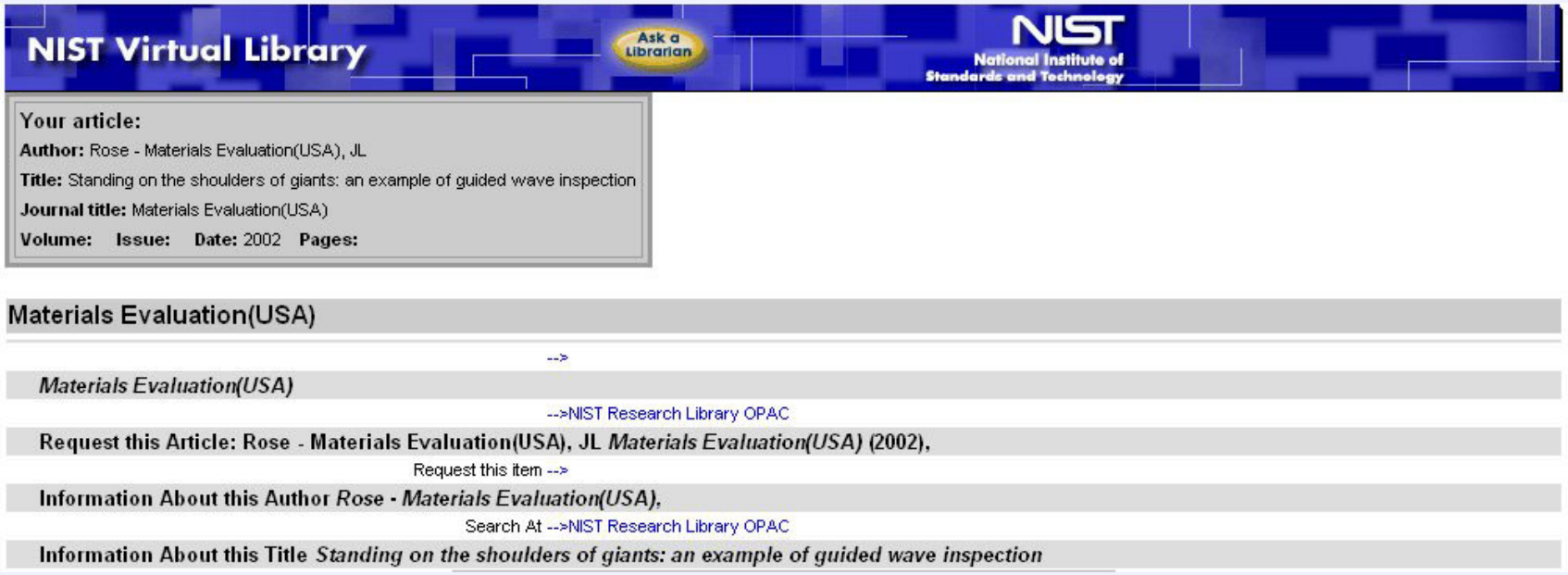
Science Activities ISSN: 0036-8121

available in *Wilson Select Plus* **Full Text**: 1996 - 2005 (v32 - v42 i1)

Recognized by Washington Edpress for overall excellence in a journal, Science Activities offers a wealth of creative science projects and curriculum ideas for the K-12 classroom teacher. Written by educators, the articles cover a wide range of topics in the biological, physical, environmental, and behavioral sciences. The teacher-tested activities described are inexpensive and provide true hands-on experiences for students. Regular departments include news notes (on exhibits, films, videos, and contests), computer news, classroom aids, and book reviews.

- Journal Home Page
- published by Heldref Publishing
- Categories: Teacher Education Curriculum Studies

Resolver : A “Failure”



NIST Virtual Library

Ask a Librarian

NIST National Institute of Standards and Technology

Your article:

Author: Rose - Materials Evaluation(USA), JL

Title: Standing on the shoulders of giants: an example of guided wave inspection

Journal title: Materials Evaluation(USA)

Volume: **Issue:** **Date:** 2002 **Pages:**

Materials Evaluation(USA)

-->

Materials Evaluation(USA)

-->NIST Research Library OPAC

Request this Article: Rose - Materials Evaluation(USA), JL *Materials Evaluation(USA)* (2002),

Request this item -->

Information About this Author *Rose - Materials Evaluation(USA),*

Search At -->NIST Research Library OPAC

Information About this Title *Standing on the shoulders of giants: an example of guided wave inspection*

Those Websites Not Participating

- For those sites not supplying links to CrossRef/others or COinS some massaging of their content using Greasemonkey scripts may occur.
- This occurs on a site by site basis.
  - Pros/Cons

Other Marketing Methods

- WAG the Dog Web Localizer – a PHP application from Georgia Tech.
- LibX – Virginia Tech Firefox extension.

Thanks For Listening

Questions?

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