Project ENGAGES

Library Information Session
June 6, 2016

This handout is available online at
http://libguides.gatech.edu/Project_ENGAGES
(guide box -- top, left column)
Library Assistance

• **Bette Finn**, Subject Librarian, Georgia Tech Library
  
  Email: [bette.finn@library.gatech.edu](mailto:bette.finn@library.gatech.edu)
  Phone: 404-894-1790

  **Quick and in-depth assistance searching the Library databases.**
  By e-mail or in-person by appointment
Library Assistance

• **Expert Consultation Center (ECC)**
  
The ECC has been **suspended for summer** semester 2016, but **will resume** at the beginning of **fall** semester 2016.

  Beginning this fall semester 2016, Librarians will be available for quick reference assistance on a drop-in basis. Location: Library 1st floor west, nearby the Clough building entrance. Hours: Monday-Friday noon to 4pm (when GT classes are being held)

• **Library Services Desk**

  Library associates provide book check-out assistance. Location: 1st floor west (long counter, near the Library Rotunda entrance). Phone: 404-894-4530
Step 1. Develop a topic

- Select a Topic | Develop Research Questions | Identify Keywords | Find Background Information | Refine a Topic

Step 2. Locate information

- Books & E-Books | Videos & Images | Articles | Websites | Grey Literature | Search Strategies
The Research Process
A Step-by-Step Guide (Continued)
http://libguides.gatech.edu/researchprocess

• Step 3. Evaluate and analyze information
  – Evaluate Sources | Primary vs Secondary | Types of Periodicals

• Step 4. Write, organize, and communicate information
  – Take Notes | Outline the Paper | Incorporate Source Material | Annotated Bibliographies | Lit Reviews

• Step 5. Cite sources
  – Avoid Plagiarism | How to Read a Citation | APA Style | Chicago/ Turabian Style | MLA Citation Style | Other Citation Styles
The Research Process
A Step-by-Step Guide
http://libguides.gatech.edu/researchprocess

Writing Literature Reviews
compiled by William Baer
http://www.prism.gatech.edu/~bw21/Writing_Lit_Rev.pdf
Research/Writing/Citing Sources

http://libguides.gatech.edu/research

• How to Do Research
• Writing & Grammar
Citation Styles, Tutorials, and Tools
http://libguides.gatech.edu/citationtools

- Why Cite?
- About Plagiarism
- How to Read a Citation
- APA Style
- Chicago/ Turabian
- MLA Style
- Other Citation Styles
- EndNote Guide (Georgia Tech subscription software)
- Citation Tools for Undergrads
- Research Management Tools
Georgia Tech Library homepage
http://www.library.gatech.edu/
**Off-campus: Need the proxy server**

- **Start at the Library home page**
  
  [http://www.library.gatech.edu/](http://www.library.gatech.edu/). The Georgia Tech Library proxy server will be automatically initiated if you begin at the Library home page ([Catalog, Databases, etc.](http://www.library.gatech.edu/)).

- **Linking to Library Resources**
  
  [http://www.library.gatech.edu/services/linking.php](http://www.library.gatech.edu/services/linking.php)
  
  - Add GT Proxy Bookmark
  - LinkMaker
Research Tools

http://www.library.gatech.edu/search/index.php

Archives
Articles
Bestsellers, DVDs, Newspapers & Magazines
Books
  Library Catalog
  GIL Universal Catalog
  WorldCAT
  Popular Materials
  eBooks
Citation Linker
Citation Style Guides
Conference Proceedings
Course Reserves
Databases
DVDs, Videos, Feature Films
eBooks
eResource Policies

GALILEO
  Get GALILEO Password
Government Information
Institutional Repository
  SMARTech Repository
Journals
Maps
Patents & Trademarks
Research Guides
Science Fiction Collection
Standards & Codes
Technical Papers & Reports
  Government Funded Technical Reports
Theses & Dissertations
  GT Authors
  Other Authors
Tutorials
“Research Guides”
are organized
By Subject, By Type, All Guides
http://libguides.gatech.edu/
Research Guides
By Type -- Topic Guide -- Project ENGAGES
Project ENGAGES (Engineering) Research Guide

http://libguides.gatech.edu/Project_ENGAGES

Project ENGAGES, Engineering. Presentation handout. June 6, 2016, 9:00 AM

Ask for Assistance!

- Bette Finn, Subject Librarian. Email: bette.finn@library.gatech.edu; phone: 404-894-1790. Assistance searching the Library's databases. By e-mail or in-person by appointment
- Expert Consultation Center. Research assistance is available for individuals or small groups at the Library’s Expert Consultation Center. We welcome drop-ins for brief consultations. Located on 1st floor West, next to the entrance to the 4th floor of the Clough Commons, the center is staffed 12 pm – 4 pm Monday through Friday (when classes are being held). Staffed by librarians.
- Book check-out assistance: Library associates at the Library Services Desk, 1st floor west (long counter, near the Library Rotunda entrance), and rovers. Phone: 404-894-4530.

Project ENGAGES (Engineering): Databases and Guides

Primary Databases

- Georgia Tech Library Catalog: books, titles of journals collection; print and electronic
- Research Library (ProQuest): general database (all text); full text. Find it @GT links to selected full text Library subject bibliographic fields (not full text fields).
- Compendex and Inspect (Engineering Village): search engineering, electrical engineering, computer science journal/conference articles
- ProQuest databases can be combined together. NTIS Database, Materials Research. Do not limit to "Peer Reviewed" databases do not have full text or peer reviewed capability. Database. Use "ALL" to search bibliographic fields (not full text fields). Thomson Reuters science databases; indexes to journals. Science Core Collection (Science and Social Science Citation) and Medline (biomedical)
- Selected engineering databases, arranged by topic (with lists). For photocopics of individual articles in journals and conference papers, request form at http://illiad.library.gatech.edu/ (a separate
BY SUBJECT

<table>
<thead>
<tr>
<th>About the Library</th>
<th>City Planning</th>
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<tr>
<td>Aerospace Engineering</td>
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<td>Conference Proceedings</td>
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<td>Archives and Records Management</td>
<td>Earth and Atmospheric Sciences</td>
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<td>Business and Management</td>
<td>Electrical and Computer Engineering</td>
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<td>Chemical and Biomolecular Engineering</td>
<td>Government Information</td>
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<td>Chemistry and Biochemistry</td>
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“Research Tools” -- “Research Guides”
http://libguides.gatech.edu/

**BY SUBJECT** (Continued)

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<tr>
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<td>Patents &amp; Trademarks</td>
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<td>International Affairs</td>
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<td>Maps and Geospatial Data</td>
<td>Public Policy</td>
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<td><strong>Materials Science and Engineering</strong></td>
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<tr>
<td>Mathematics</td>
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<td><strong>Mechanical and Nuclear Engineering</strong></td>
<td>Standards (ASTM &amp; IEEE)</td>
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<td>Statistics</td>
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<td></td>
<td>Technical Reports</td>
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</tbody>
</table>

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Research Guides

http://libguides.gatech.edu/

Finding articles, books, and other resources

Georgia Institute of Technology / Research Guides / Electrical and Computer Engineering / Home

Electrical and Computer Engineering: Home

ECE Databases, Hints, Services

For one-on-one in-depth and quick Library database search assistance, and customized instruction sessions for courses, lab groups or project groups, contact:
Bette Finn, ECE Subject Librarian, Georgia Tech Library
Phone: 404-894-1790
Email: bette.finn@library.gatech.edu

- ECE Databases, by Subject (in-depth descriptions, arranged by research topic)
- ECE Databases, Alphabetical List
- ECE Database Search Hints and Examples
- Database Tutorials

ECE Database List (Core and Related)

- Catalog - GT Catalog, Georgia Tech Library’s online catalog more...
- Inspec (electrical engineering, computer engineering, physics) more...
- Compendex (engineering) more...
- NTIS (technical research reports) more...
- Aerospace Database more...
- Applied Science and Technology Abstracts
Library Catalog
Search for books/ e-books, theses, journal TITLES, media, archival materials, maps, and other material in the Library collection.

Print and Electronic

“Research Tools”
“Library Catalog”

http://www.library.gatech.edu
Library Catalog. Simple or Advanced Search

Search Tips:

• For **phrases** use **quotation marks**: "global warming"

• For **truncated searches** use an **asterisk**: vaccinat* to find vaccination, vaccinate, etc.

• To **include any word or phrase** use **OR**: airplane OR helicopter

• To **group terms** (Boolean logic) use **brackets**: (airplane OR helicopter) NOT (jet) (electric* AND engineering AND handbook*)

• To search for the name (title) of a **journal** enter it into the search box and choose “Library Catalog” and “Journal”

• To exclude a term use **NOT**: cheese NOT cheddar
Library Catalog

• “Get It” – physical item (print book). “Sign In” and “Request” book to be delivered by choosing “Pickup Location”
• “View It” or “View Online” – view electronic full text
• A book or journal record can have both print and electronic full text formats: “Online access. The library also has physical copies.”
• The electronic full text and print formats of materials can have separate Catalog records
• Details – subject headings, table of contents (when available), etc.
Conduct a search, limiting to only “Library Catalog”

“SHOW ONLY” (“Refined by”)

– “Full Text Online”
  “Online access” or “View It” or “View Online”

– “Available in Print”

Physical items (usually print – hard copy)
located in one of the GT Library locations (Main Library, Architecture Library, Library Services Center, Library Records Center, Archives …)
"Simple Search"

"Advanced Search"  
For drop-down menus

"Details"  - this record has table of contents
Catalog – Advanced Search

- Simple search - robotics - 3,742 for Books
- **Advanced Search** – can limit by field (**Title**, **Subject** etc.), can limit to only **electronic**, can sort by **Date-newest**
- Below: searched for **Books**, using **Robot* in Subject** field and added **Title** field keywords: (**handbook* OR guide* OR introduct* OR fundamental* )

119 books: 70 print and 54 electronic
“View It” or “View Online” (electronic full text)
“Open source in a new window”
Each GT school/unit selected 1000 print book titles for the “Core Collection.”

After a broad Catalog search, click on “Core Collection” (left column – “Refine My Results”).
“Get It” for print books

This print book is in the “Core Collection” 4th floor west, on-campus Main Library. Each GT School/unit selected 1000 print titles for the Core Collection.
You can ask an associate at the Library Service Desk (1st floor west counter, 404-894-4530) to Recall a checked out print book. A **checked-out book** is subject to **Recall** after 21 days.
“Sign In” “Get It” “Request” “Pickup Location” or specific book chapter

This book is in the “Library Service Center” remote storage location. You can “Request” for “Pick-up” at the Central Campus “Main Library”
“SORT” (Relevance, Date-newest)

“Actions” -- “Permalink” – url link to a Catalog record
“Sign-In” -- “My Account” "Personal Settings" "Queries” “e-Shelf (basket)"

Change "Number of results per page" to 50 per page
Handbooks

- **Engineering Handbook databases** (many handbooks combined into one database):
  - [Knovel](#) ("My Subscription")
  - [CRCNetBase](#)
- Search the Georgia Tech Library [Catalog](#) for both print and electronic handbooks, guides, etc.
“Research Tools” -- “Find Databases”

http://gtsearch.library.gatech.edu/search/

Find **individual** articles, conference papers, technical reports, patents, dissertations, and other research material on your topic
Find Databases

http://gtsearch.library.gatech.edu/search/

- **Databases A-Z:**
  Browse databases by name

- **Databases by Subject:**
  Search databases specific to your area of study for articles and more
Databases A-Z:
Browse databases by name.

A B C D E F G H I J K L M N O P R S T U V W ALL

WARNING: Certain types of use prohibited. Please see Policy for Use of Online Info.

Databases by Subject:
Search databases specific to your area of study for articles and more.

- Applied Physiology
- Architecture
- Biology
- Business and Management
- Chemistry and Biochemistry
- Computing
- Earth and Atmospheric Sciences
- Economics
- Education
- Engineering, Aerospace
- Engineering, Biomedical
- Engineering, Chemical and Biomolecular
- Engineering, Civil and Environmental
- Engineering, Electrical and Computer
- Engineering, Industrial and Systems
- Engineering, Materials Science
- Engineering, Mechanical and Nuclear
- Government Information
- History, Technology and Society
- International Affairs
- Literature, Media and Communication
- Mathematics
- Medicine/Health Sciences
- Modern Languages
- Music
- Physics
- Psychology
- Public Policy
### Databases

**Primary Databases**

- Inspec (Ei Village 2)
- Aerospace Database (ProQuest)
- Compendex (Ei Village 2)
- NTIS (ProQuest)

**Related Databases**

- Applied Science & Technology Abstracts (EBSCO)
- BIOSIS Citation Index (Thomson Reuters)
- Derwent Innovations Index (Thomson Reuters)
- Energy Citations Database (Dept. of Energy)
- IEEE Xplore
- Materials Research Database with METADEX (ProQuest)
- MathSciNet (AMS)
- MEDLINE (ISI)
- PapersFirst (OCLC)
- Patent and Trademark Office (US Patents)
- SciFinder
- Web of Science Core Collection (Thomson Reuters)
- WorldCat (OCLC)

**Theses and Dissertations**

- ProQuest Dissertations and Theses A&I (ProQuest)

**Reference Sources**

- CRCnetBASE (formerly ENGnetBASE)
- Knovel Library
## Selected Library Databases by Topic

http://www.prism.gatech.edu/~bw21/databases.htm

<table>
<thead>
<tr>
<th>Photocopies of articles and interlibrary loan</th>
<th>Aerospace</th>
<th>Agriculture</th>
<th>Automotive</th>
<th>Associations and Research Centers</th>
<th>Bioengineering, Medicine, Biology, Health</th>
<th>Books</th>
<th>Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citation Indexes (Cited References)</td>
<td>Company, Product, and Industry Information, Business, Management</td>
<td>Computers, Controls, Automation, Modeling</td>
<td>Contract Awards and Solicitations; Funding Opportunities</td>
<td>Copyright, Fair Use, Data Management, Repository, Open Access, Scholarly Communication</td>
<td></td>
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</tr>
<tr>
<td>Energy</td>
<td>Engineering</td>
<td>Environment and Pollution</td>
<td>Geophysics and Geoscience</td>
<td>Government Information</td>
<td>Handbooks</td>
<td>Industrial Engineering</td>
<td>Linking to Library Resources</td>
</tr>
<tr>
<td>Materials and Metals</td>
<td>Mathematics</td>
<td>Mechanical Engineering</td>
<td>Medicine, Health Physics</td>
<td>Nuclear Engineering</td>
<td>Paper Science</td>
<td>Patents</td>
<td>Physics &amp; Optics</td>
</tr>
<tr>
<td>Psychology</td>
<td>Public Policy and other Social Sciences</td>
<td>The Research Process; Citation Styles, Tutorials, and Tools; Writing Literature Reviews; Research Tools; EndNote</td>
<td>Standards</td>
<td>Systems Engineering</td>
<td>Technical Research Reports</td>
<td>Transportation</td>
<td>Water</td>
</tr>
<tr>
<td>Proxy Server and GT Account ID</td>
<td>Current Awareness Alerts</td>
<td>All Databases (all topics)</td>
<td>All Research Guides (all topics)</td>
<td>One-on-one database assistance and group instruction</td>
<td>Services for students (Interlibrary Loan, etc.)</td>
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</table>

**Database Tutorials** Guide. Most vendors will also offer search hints, tips, training, or help information for their databases.
Examples of Databases

- **Compendex and Inspec** databases (check both boxes). Indexes individual journal articles and conference papers. Subject areas include all areas of engineering, physics, computer science, and more.
- **NTIS (ProQuest)**. Indexes technical research reports.
- **Web of Science**. Indexes individual articles in major journals, selected conference proceedings, and selected recent books. Subject areas include science (such as biology and chemistry), technology, social sciences, and humanities.
- Many other databases, covering a wide variety of topics, such as patents, business & management, all engineering, biology, chemistry, physics, etc.
**Engineering Village – ** **Compendex** and **Inspec**

- **Inspec and Compendex: Indexes to individual conference and journal papers** (check both boxes)
  - **Inspec** – physics; electrical **engineering** and electronics; computers and control; information technology for business; and mechanical and production engineering
  - **Compendex** – All areas of **engineering**
  - Search both Inspec and Compendex (check both boxes)
  - 20% overlap between Inspec and Compendex

**PaperChem**: Pulp & paper index with chemical emphasis
Fast Searches in Inspec and Compendex

Browsing for a few papers on a topic

- **Limit By** (Drop down menus)
  - “Journal article” (Document Type)
    - Find It @ GT works properly for most journal papers, but seldom works for conference papers
  - “English” (Language)
  - **Date** (recent range of years)

- Add synonyms to your search strategy. Check:
  - Title, Abstract, Subject heading fields
  - Thesauri (online)
  - Bibliographies/references and footnotes in similar papers

- Turn Autostemming **ON**
**Inspec and Compendex** (check both boxes)

- **Limit by field**: Title, Author, Controlled Term (different online thesaurus terms for Compendex and Inspec), “Subject/Title/Abstract” etc.
- **Proximity operators** *(near/ x)*
- **Truncation** (* asterisk*)
- **Search History**. Manipulate previous search statements with Boolean logic operators and keywords.
  
  Example: #5 and ((simulat* or model*) wn TI)
  
  Example: (#1 or #3) not #2

- Open **Word** file and keep track of search **statement numbers**

- **Alerts** and **Save Search** – **one line only**
Inspec and Compendex (combined)

- **Sort by date** or relevance
- **Remove duplicate** records (approximate 20% overlap)
- Format of **author** names can **differ** from database to database (initials, full first name, spaces, periods)
- **Subject** headings – **different thesaurus** terms for Inspec and Compendex databases
  
  Each database has its **own thesaurus online**

- Display **100 records** at a time
- For downloading or saving, use **detailed** or **abstract format** (brief format has incomplete information)
- E-mail or Print or Download records to avoid being **timed out**, or **register** (free) to save search lines and records
“Find IT@GT will often work correctly for “journal” articles but will frequently not work for conference papers (even though the Library may own them, either in print or electronically, or both)
“Combine Searches” can also include keywords

Example:  

#1 AND #2 AND #3 AND ((Ehrfeld OR Borenstein) wn au)

Save one line at a time (if register). Copy and paste search into Word file
Title: Modern spectral analysis techniques for blood flow velocity and spectral measurement using pulsed Doppler ultrasound

Authors: David, J.-Y.; Jones, S.A.; Giddens, D.P.

Author affiliation: Georgia Inst. of Technol., Atlanta, GA, USA

Source title: IEEE Transactions on Biomedical Engineering


Volume: 38

Issue: 6

Publication date: June 1991

Pages: 589-96

Language: English

ISSN: 0018-9294

CODEN: IEBEAX

Document type: Journal article (JA)

Country of publication: USA

Abstract:

Four spectral analysis techniques were applied to pulsed Doppler ultrasonic quadrature demodulated signals to compare the relative merits of each technique for estimation of flow velocity and Doppler shift. The four techniques were (1) the fast Fourier transform method, (2) the maximum likelihood method, (3) the Burg autoregressive algorithm, and (4) the modified covariance approach to autoregressive modeling. Both simulated signals and signals obtained from an in vitro flow system were used for comparison. Optimal parameter values (e.g., model orders) were determined for each method, and the signal-to-noise ratio and signal bandwidth were investigated. The modern spectral analysis techniques were shown to be superior to Fourier techniques in most circumstances, primarily due to their ability to offer a continuous spectrum.
four techniques were (1) the fast Fourier transform method, (2) the maximum likelihood method, (3) the Burg autoregressive algorithm, and (4) the modified covariance approach to autoregressive modeling. Both simulated signals and signals obtained from an in vitro flow system were studied. Optimal parameter values (e.g. model orders) were determined for each method, and the effects of signal-to-noise ratio and signal bandwidth were investigated. The modern spectral analysis techniques were shown to be superior to Fourier techniques in most circumstances, provided the model order was chosen appropriately. Robustness considerations tended to recommend the maximum likelihood method for both velocity and spectral estimation. Despite the restrictions of steady laminar flow, the results provide important basic information concerning the applicability of modern spectral analysis techniques to Doppler ultrasonic evaluation of arterial disease.
• “Find It @ GT” will work for most (but not all) journal articles.
• IEEE Xplore database: IEEE or IEE or IET journal & conference papers 1988 to present; selected papers before 1988. Look in Catalog for print volumes for joint conferences and for before 1988 (standing orders).

Modern Spectral Analysis Techniques for Blood Flow Velocity and Spectral Measurements with Pulsed Doppler Ultrasound

Jean-Yves David, Steven A. Jones, Member, IEEE, and Don P. Giddens

Abstract—Four spectral analysis techniques were applied to pulsed Doppler ultrasonic quadrature signals to compare the relative merits of each technique for estimation of flow velocity and Doppler spectra. The four techniques were 1) the fast Fourier transform method, 2) the maximum likelihood method, 3) the Burg autoregressive algorithm, and 4) the modified capo-
<table>
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<tr>
<td><strong>Title:</strong></td>
<td>Numerical study of an asymmetrical stenosis</td>
</tr>
<tr>
<td><strong>Authors:</strong></td>
<td>Jin, Suo; Giddens, Don P.</td>
</tr>
<tr>
<td><strong>Author affiliation:</strong></td>
<td>Georgia Inst of Technology and Emory Univ Sch of Medicine, Atlanta, GA, USA</td>
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<tr>
<td><strong>Source title:</strong></td>
<td>American Society of Mechanical Engineers, Bioengineering Division (Publication) BED ASME Bioeng Div Publ BED</td>
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<td><strong>Abbreviated source title:</strong></td>
<td>v 39</td>
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<tr>
<td><strong>Monograph title:</strong></td>
<td>Advances in Bioengineering</td>
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<tr>
<td><strong>Publication year:</strong></td>
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<td><strong>Pages:</strong></td>
<td>p 63-64</td>
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<td>English</td>
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<td><strong>CODEN:</strong></td>
<td>ASMBEP</td>
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<td><strong>Document type:</strong></td>
<td>Conference article (CA)</td>
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<tr>
<td><strong>Conference name:</strong></td>
<td>Proceedings of the 1998 ASME International Mechanical Engineering Congress and Exposition</td>
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<tr>
<td><strong>Conference date:</strong></td>
<td>Nov 15-20 1998</td>
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<td><strong>Conference location:</strong></td>
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<td>ASME</td>
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<tr>
<td><strong>Publisher:</strong></td>
<td>ASME, Fairfield, NJ, USA</td>
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</table>
“Find It GT” works for most (but not all) journals, but often does **not** work for conference proceedings, technical reports, and patents.

The Library **owns this conference paper**, even though the “Find It @ GT” does **not** find it.
Technical Research Reports

- **NTIS (ProQuest)** indexes technical reports (federal government sponsored research)
  - Can sort by date. Can limit by date, by field (title, subject etc.). Example: **TI,SU**(model* and simulat*). Combine multiple search lines. Do NOT check the box for “Peer reviewed” ProQuest --use “ALL” to search (drop down)

- **Full text availability** Selected full text technical reports
  - Library’s large **microfiche** reports collection
  - **SciTech Connect**. Department of Energy. Full text energy technical reports from 1995+
  - **NASA**. Aerospace and aeronautics technical reports. Selected full text. “Advanced Search” - “Availability Type:” Drop down menu “Online Full-Text”
  - **DTIC**. Department of Defense public technical reports. Selected full text
  - **NTRL** provides 10 free document downloads per session, for the U.S. Public NTRL. Selected technical reports can be downloaded immediately in PDF format without charge. Registration is required. Georgia Tech users should use the subscription **NTIS (ProQuest)** database to search for technical reports, instead of NTRL
Database Search Hints Chart

http://www.prism.gatech.edu/~bw21/chart.htm

- Native databases provide records of publications not available in Primo “Everything”/”Articles” searches (search box on Library home page)
- Native databases such as Engineering Village Compendex/Inspec, ProQuest databases (NTIS, Aerospace, etc.), and Web of Science (biology, chemistry, etc.) provide powerful search software:
  - Complex searches using nested Boolean operators (AND OR NOT)
  - Multiple search statements (Search history, Recent searches). Recombine with statement numbers and keywords
  - Proximity operators, such as NEAR/ # (within # words) or exact quotes (“exact phrase”)
  - Truncation (often *), wildcards
  - Limit to Title, Subject headings fields, Author, etc.
  - Avoid searching full text fields. ProQuest databases – use “ALL”
  - Combine multiple databases together into one search
  - Peer Reviewed or Full Text does not apply to databases with technical reports (NTIS, Aerospace Database, etc.) and other document types
- Most databases have tutorials, often vendor supplied
Search Example:

1. model* OR simulat* OR algorithm*
2. bioengineer* OR biotech* OR ((biolog* or biomed*) and engineer*)
3. micromechan* OR nanoelectr* or (micro mechan*) or (nano electr*)
4. (bioeng* OR ("biomedical engineering")) wn TI
5. ((bioeng* OR biomed*) wn CV) or ((bioeng* OR biomed*) wn FL)
6. (1 and 2 and 3) or ((4 or 5) and 3)

(A1 or A2) AND (B1 or B2)

"OR" Boolean operator: "A1 or A2" -- Keywords/phrases -- at least one of them must be in the record

Red - Set A and Set B and Set C
Narrow and Broaden Search Strategy

- If you retrieve **too many records**, narrow your search by
  - Creating an *additional set* \((A1 \text{ or } A2) \text{ AND } (B1 \text{ or } B2) \text{ AND } (C1 \text{ or } C2)\)
  - **Restricting** keywords to
    - **Title Field**, using title field codes such as TI=, wn TI, TI:
    - **Subject Headings (Thesaurus and Identifier Fields)**, such as Controlled Terms, Uncontrolled Terms, wn CV, wn FL, DE=, SU=, ID=, MH:, TI:
      - Use of **Proximity Operators** for adjacency, same field, within the same subfield, phrase searching, etc., such as quotes " ", SAME, NEAR/x, n2, w3, etc.
- If you retrieve **too few records**
  - Check for **similar** concepts in the **title**, **abstract** and **subject heading** fields (**synonyms**, etc.)
  - Look for concepts which have **equal importance** \((A1 \text{ or } A2) \text{ AND } (B1 \text{ or } B2 \text{ or } D1 \text{ or } D2)\)
- **Spell out acronyms** and **abbreviations**.
- Include **alternative spellings** such as modeled or modelling, fiber or fibre (British and American)
- Ask for help with **author names** (spaces commas and format/variant differences).
- Check for **truncation** symbols (* ? +) and proximity operators
- Check for the ability to **manipulate previous search statements** or search history, such as (#7 or (#8 and engineer*)) not #6. Some systems allow combinations of search statement numbers and keywords.
- To broaden a search, combine terms using OR (results contain any specified term). To narrow the scope of a search, combine terms using AND (results contain all specified terms). To eliminate previous search statement numbers from a search, use the NOT operator. You can use parentheses to specify the order of operation. Terms and operations within the parenthesis are executed before terms and operations outside the parenthesis.
- Watch for truncation overflows.
PDFs of Articles; Printing; Scanning; Copying

• **Photocopies of articles: ILLiad request form.** Use the ILLiad form to request photocopies of individual papers in journals or conference proceedings (one request form for each article). [http://illiad.library.gatech.edu/](http://illiad.library.gatech.edu/)

• **Printing (OIT clusters and CentralPS)**

• **Scanning** (free). [Commons](http://commons.library.gatech.edu/) and [Multimedia Studio](http://multimedia.library.gatech.edu/)

• **Library Productivity Commons**
General Databases (all topics)

- **Research Library (ProQuest)**
  - "Advanced Search"
  - Limit records to "**Peer reviewed**"
  - Limit to “**ALL**” using the drop down menu (do not search full text fields)
  - Limit to **English** language
  - Sort by “More Recent First” (date)
  - Can limit by publication date

- **Academic Search Complete (EBSCO)**

- Approximately half of the “journal” article records will already be full text, while full text of other journal articles may be available by clicking on “Find It@GT”
(Zika NEAR/0 virus) AND (prevent* OR control)

Note: Other ProQuest databases do not support "Limit to:" ("Full Text" or "Peer reviewed"). Both are supported here, in the Research Library. Limiting to "Full text" will miss full text records retrieved by Find IT@GT.
The Convergence of a Virus, Mosquitoes, and Human Travel in Globalizing the Zika Epidemic


...to be associated with Zika virus infection. How the disease
...Emergency Committee on Zika Virus and Observed Increase
...globalization of the Zika virus was made possible by

References (23)

Abstract/Details

Infected mosquitoes could fight Zika


Abstract/Details

Zika must remain a high priority


...Are this summer’s Olympic Games under threat from the Zika virus? Or, more

Abstract/Details
Search Results: 1 - 8 of 8

1. Let's Kill the Mosquito.
   Subjects: Genetic engineering -- Moral & ethical aspects; Genetic engineering -- Research; Genetic engineering; Regulation and Administration of Communications, Electric, Gas, and Other Utilities; Exterminating and Pest Control Services; Mosquito control -- Research; Aedes aegypti

3. CDC Offers Zika Virus Prevention Tips.
   Subjects: Centers for Disease Control & Prevention (U.S.); Pan American Health Organization; Administration of Public Health Programs; Zika virus infections

4. CAN TECHNOLOGY STOP THE SPREAD OF THE ZIKA VIRUS?
   Subjects: Pathogenic microorganisms; Zika Virus Epidemic, 2015-; Aedes aegypti -- Prevention, Mosquitoes -- Diseases, Brazil -- Environmental conditions
Search multiple ProQuest databases at one time.

Click on any ProQuest database

Click on "Change databases"

Check relevant database name boxes

Advanced Search

- ABI/INFORM
- Biology Database
- Health & Medical Collection
- Health Management Database
- Nursing & Allied Health Database
- Psychology Database
- Public Health Database
- Research Library
- ProQuest Environmental Science Collection
Advanced Search: Drop down menu

"Anywhere except full text - ALL"      "Peer reviewed"
"Language -- English"     "Sort results by -- Most recent first"

"Items per page -- 100"

Check relevant record boxes ;    Email Print or Save

86 Results Search within

Most recent first

Select 1-86  4 Selected items  Clear

Zika virus: An update on epidemiology, pathology, molecular biology, and animal model

... Zika virus (ZIKV) was first described in 1947, and became a health
... by Centers for Disease Control and Prevention (CDC) in the United States. To